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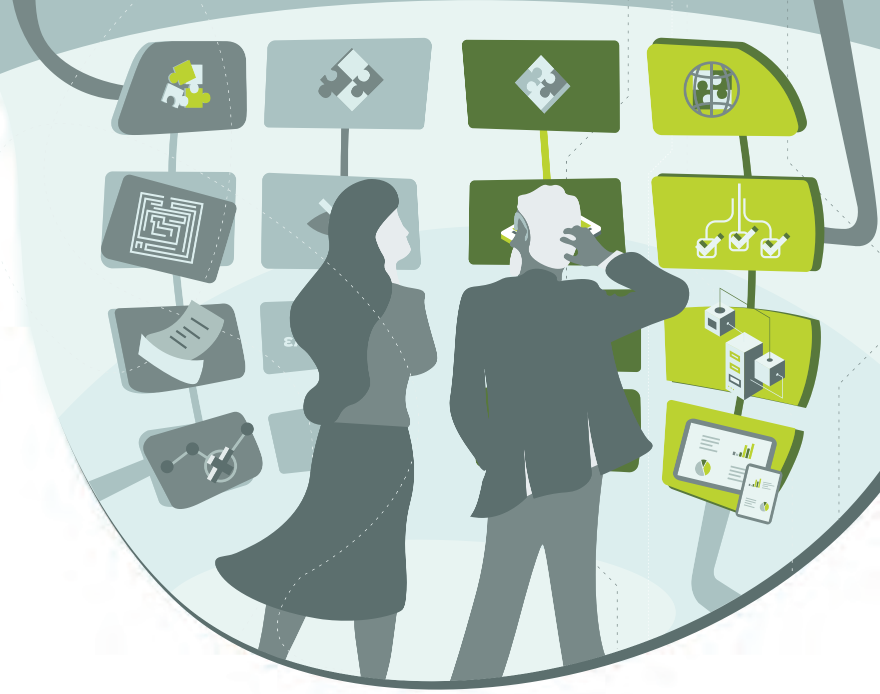

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Editor's Words

It's 2021 and ERP buyers are getting serious about their tech choices. They have several decades of experience to inform their next big purchasing decisions and many are making brave choices.

Twelve months ago I wrote an article entitled 'It's no longer a two-horse race' that set out why I thought enterprise leaders had more choice than ever and how smaller vendors had largely caught up in terms of outright functionality. While it remains true that SAP and Oracle lead the field in terms of completeness of cloud capability many CxOs are asking themselves if all that functionality is actually going to help them move the needle.

In the vast majority of ERP implementations only a fraction of the functionality is ever used. Vendors have spent a decade refining their products and building ever more complex and sprawling applications which in demo format are compelling – but transfer that complexity and richness into an enterprise and see how much of it is being used 12 months post go-live.

As ERP applications have evolved they have become harder to manage, not easier. They are less integrated, not more. They are more complex to deploy, not simpler. And the icing on the cake is that all that complexity sits with the customer. If you are a global enterprise it is likely that you have at least two, possibly three or four, big technology stacks coupled with several public cloud platforms and your own data centre. The technology landscape has turned into a hairball and many enterprises that adopted pieces of technology as and when they emerged may well be left scratching their heads and asking; 'How much time, money and attention are we spending on technology when we should be focussed on running our business?'

ERP architecture has to be simplified. In the same way that on-premise applications accrued customisations and technical debt over many years of use, cloud landscapes are being weighed down with the same burden, albeit from a different source. Technology was developed and implemented without the benefit of hindsight and many enterprises are now juggling an increasingly complex mish-mash of platforms, application suites and infrastructure models which are severely diminishing the effectiveness of the intended solution.

We are already twenty years into the cloud revolution – is it time to start again? I am certain that plenty of CIOs wish they could start with a blank piece of paper and reconsider some of the choices they made over the last two decades.

Today, enterprise leaders need their ERP applications to deliver consumer-grade experiences. They need intuitive and touchless processes that provide a positive experience for employees and exceptional moments of service to customers. They need to remove complexity and abstract it away from their business so that they can focus on high value tasks. They need to get back to driving their business forward rather than managing a circuitous technology landscape. Above all else they need to remember what technology is developed for; to make things quicker, easier and better – and then find a partner able to deliver on that.

Paul

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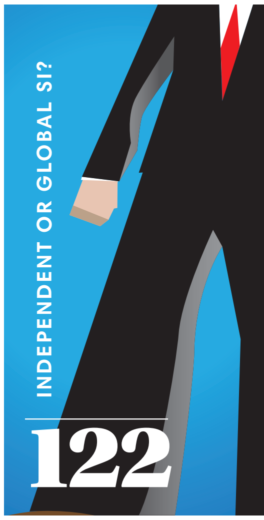

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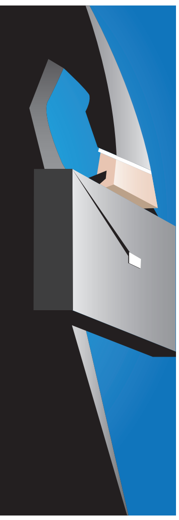

23 SEPTEMBER 2021

FUNDRAISER
ASCOT
RACECOURSE

COVID-19
URGENT APPEAL

NHS CHARITIES
TOGETHER

"This is an opportunity for the whole community to come together and show support and appreciation for those who have been on the front-line during the pandemic. Everyone has had it tough but the enterprise tech sector has actually thrived during the crisis – we don't need to be embarrassed by that but we do need to do something to pay back into society and help those who have suffered the most." **PAUL ESHERWOOD, EDITOR, ERP TODAY**

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FUNDRAISER ASCOT RACECOURSE

ERP TODAY AND ITS PARTNERS are proud to announce details of our first annual fundraiser to be held at Ascot Racecourse on 23 September 2021. For the first time, the ERP community will come together and act as one for the benefit of a worthwhile charity. It goes without saying that the inaugural beneficiary will be the NHS COVID-19 Urgent Appeal.

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A SUMMER GARDEN PARTY in the splendour of Ascot Racecourse with a programme of competitive events, fun activities and entertainment in aid of the NHS COVID-19 Urgent Appeal. ALL funds raised will go directly to the charity.

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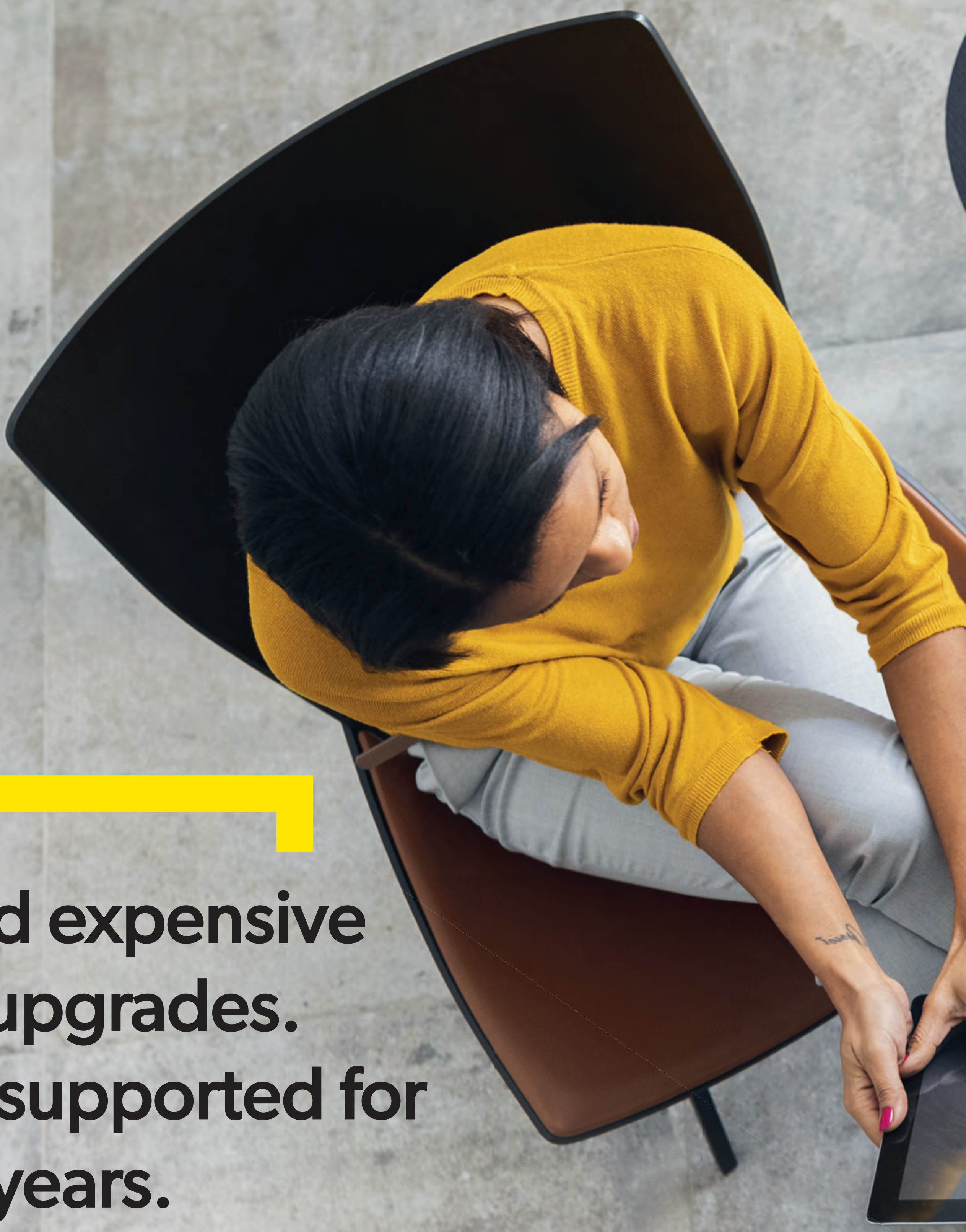

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Will SAP Rise or Fall?

SAP's five year search for a solution to S/4 adoption has culminated in the launch of a new bundle of services called RISE with SAP. It is essentially a repackaging of existing products and services combined with some new capability that will be offered 'as a Service' to drive digital transformation.

RISE with SAP has been designed to provide a path to what SAP call the 'Intelligent Enterprise' and has been designed to support customers irrespective of their starting point or complexity. It will be offered on a subscription basis and features automation services, process re-engineering capabilities and a host of migration and integration tools.

The announcement was broadly supported by user groups and partners but it is too early to say how much impact it will have for the vast majority of SAP customers who are stubbornly delaying a move from ECC6. Whilst RISE offers many of the tools that customers will need to make a more informed decision about S/4 it still doesn't appear to solve the four biggest challenges to S/4 uptake: it's very expensive, it takes a long time, there aren't enough skilled SAP consultants, and most customers are happy on ECC6.

SAP's efforts to move its install base to S/4HANA have been hampered by a number of factors all of which have been compounded by the global pandemic. While coronavirus has accelerated the need for digital transformation it has not provided a springboard for SAP customers to sign up to their latest offering - **UKISUG** reported that 30 percent of respondents in a survey had delayed their S/4HANA plans.

If moving to S/4 was a simple process then most customers would have pushed the button already. But S/4 migration is not a simple process – it is a uniquely complicated activity – and business leaders that are already in turmoil do not seem minded to add to their woes with a disruptive ERP project that will strip resources away from the task of keeping the lights on.

To add to these challenges, SAP is battling against the narrative that is being controlled by its partners at both ends of the equation. At one end, it is the hyperscalers that are quarterbacking the move to the cloud while the GSIs (which increasingly own the customer relationship) are spearheading process re-engineering. This leaves SAP stuck in the middle without clear line of sight to the customer and with less influence over the direction of travel.

Time is running out for SAP to find a solution for the rank and file user base. RISE will likely be a valuable tool for large enterprises that can maximise the process re-engineering capability – driven by SAP's recent acquisition of **Signavio**. But what about the tens of thousands of mid-sized SAP customers that simply cannot find a business case to justify the investment? SAP won't maintain its position as the global ERP leader with a solution that only works for the top 10 percent of its customers. Developing a cost-effective migration path for the majority of its customers has to be SAP's top priority in 2021. Time will tell whether RISE can deliver on that.

News Deals & Wins

DANIEL DINES
CEO OF UIPATH

UiPath raises $750m at staggering $35bn valuation

Robotic process automation (RPA) platform **UiPath** has announced it has closed a $750m series F funding round at a staggering post-money valuation of $35bn. UiPath recorded sales of $360m in its last financial year and it is clear that investors are betting big that the firm, along with other RPA vendors, can continue the momentum as enterprises look to automate their back office functions.

The round was co-led by existing investors **Alkeon Capital** and **Coatue**, and included returning investors **Altimeter Capital**, **Dragoneer**, **IVP**, **Sequoia**, **Tiger Global**, and funds and accounts advised by **T. Rowe Price Associates**, Inc.

UiPath claims to be 'on a mission to unlock human creativity and ingenuity by enabling the fully automated enterprise and empowering workers through automation.' Its automation platform is designed to transform the way humans work, providing customers with a robust set of capabilities to discover automation opportunities and build and manage automations across departments within an organisation.

Abhi Arun, managing partner at investor Alkeon Capital, said: "Automation has become a strategic imperative that is fundamentally changing the way organisations operate. We are excited to co-lead this round of funding, as well as continue to team up with the UiPath team during an important phase for the company."

Accenture boosts SAP capabilities with acquisition of Edenhouse

Accenture has acquired **Edenhouse**, a UK-based SAP partner, for an undisclosed sum.

The deal will scale Accenture's capabilities in the UK to address increased demand for SAP's cloud-based solutions. Founded in 2008 and an SAP platinum partner, Edenhouse specialises in the sale, implementation, support and hosting of SAP products and services to mid-sized businesses.

Edenhouse's team of 220 professionals will join Accenture's SAP business group in the UK to support the local business while benefitting from access to global resources and skills.

John Erik Ellingsen, Accenture intelligent platform services lead for the UK and Ireland, said: "Now that Edenhouse is part of Accenture, we're in an even stronger position in the UK to help our clients harness change and accelerate their transformational journeys. The global pandemic has increased demand for SAP's cloud-based solutions and the additional skills we now have access to will enable us to rapidly meet the needs of our clients, helping them to progress more quickly on their path to value and become more sustainable businesses for the future."

Paul Solomon, Edenhouse CEO, added: "Together, Accenture and Edenhouse are a great fit. Being part of Accenture will provide amazing opportunities for our staff and our clients. We have similar shared values, including putting business outcomes at the heart of everything we do to deliver value for clients and leveraging our deep relationships with SAP. We're excited to be able to bring the combination of our people, technology and industry excellence to take digital transformation to the next level for our clients."

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UNIT4 RESULTS DELIVER A STRONG OUTLOOK FOR 2021

GORDON STUART CFO AT UNIT4

Unit4 has announced solid financial results for the fourth quarter and full year ending 31 December 2020, with the company achieving significant strategy milestones throughout the course of last year.

Cloud bookings growth was up 43 percent year-on-year for the full year and 82 percent in Q4, with annual recurring revenue from cloud up 20 percent for the year. Cloud subscription revenue grew 15 percent to $119.9m for the full year and 12 percent in Q4 year-on-year to $29.6m. The company also reported 18 percent growth in total bookings for the full year and 20 percent in Q4.

Unit4 experienced strong global growth in 2020, including in North America, where it saw an increase in demand for the Unit4 Cloud ERP platform and its new ERPx solution. In December, **Americares** was revealed as Unit4's first global non-profit ERPx customer and one of 10 customers signing in advance of its March 2021 release date.

The company also secured a number of major new mid-market customer wins in all regions in 2020 and Q4, including **The Norwegian Post**, **Aramark**, **Qvantel**, **Levio**, **Northamptonshire Police** and **Surrey County Council**. With over 200 customers successfully going live on Unit4 products in 2020, the company's focus for 2021 remains on supporting customers on their digital transformation journeys.

Gordon Stuart, CFO at Unit4, said: "Mid-market services organisations are more important to the economy now than ever and we're proud to support them to build resiliency for the future. Q4 2020 was a record quarter and, despite a challenging year, we exceeded many of our targets for full year 2020. As the world reacts to the challenges of the global pandemic, I am confident that we have the infrastructure, technology and ambition to continue this growth trajectory and to increase market share in our focus markets in 2021."

MICROSOFT CLOUD STRENGTH DRIVES SECOND QUARTER RESULTS

Microsoft has announced its financial results for the quarter ended 31 December 2020. Compared to the same period last year, revenue increased by 17 percent to $43.1bn, with operating income up by 29 percent to $17.9bn. Net income increased 33 percent to $15.5bn, whilst diluted earnings per share was $2.03 – a increase of 34 percent.

Microsoft continues to benefit from investments in strategic, high-growth areas, with a rise in demand for its differentiated offerings driving commercial cloud revenue to $16.7bn, up 34 percent year-on-year.

Satya Nadella, Microsoft CEO, said: "What we have witnessed over the past year is the dawn of a second wave of digital transformation sweeping every company and every industry. Building their own digital capability is the new currency driving every organisation's resilience and growth. Microsoft is powering this shift with the world's largest and most comprehensive cloud platform."

SATYA NADELLA / MICROSOFT CEO

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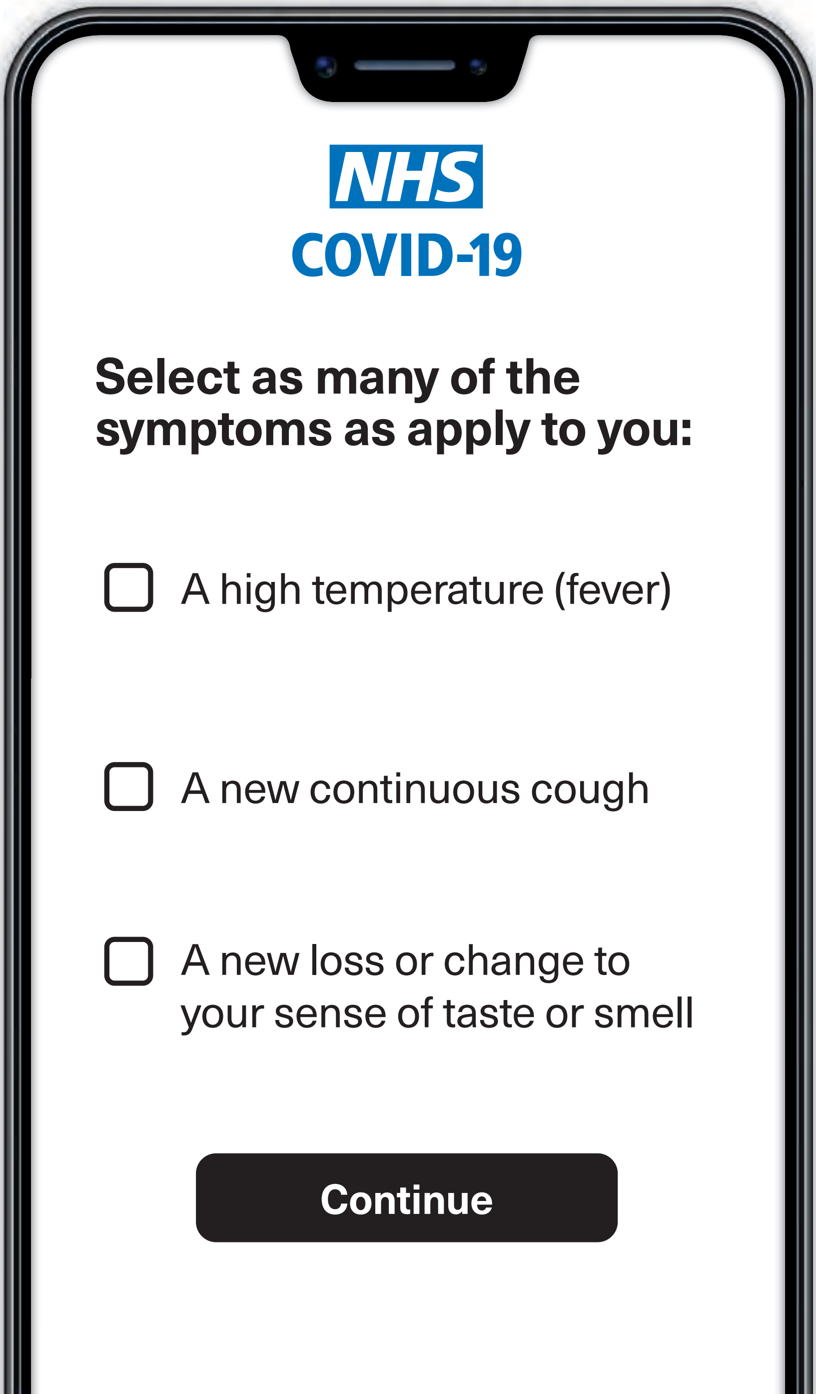

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App functionality as of 20/10/20

ServiceNow results surpass expectations

ServiceNow has announced a solid set of results for both the fourth quarter and full year ended 31 December 2020.

Q4 saw ServiceNow's subscription revenues increase 32 percent year-on-year to $1.18m. During the quarter, ServiceNow closed 89 transactions with more than $1m in net new annual contract value (ACV).

The company now has 1093 total customers with more than $1m in ACV, representing 23 percent year-on-year growth in customers.

During the quarter, ServiceNow saw continued progress and customer adoption across its IT, employee, and customer workflows, as well as with its AI and machine learning capabilities. Its acquisition of **Element AI**, which closed in January, brings world-class technical talent to ServiceNow and reinforces its commitment to be the leader in AI-enabled workflows.

Bill McDermott, ServiceNow president and CEO: "ServiceNow delivered a market leading 2020 and significantly beat expectations across the board. The secular tailwinds of digital transformation, cloud computing, and business model innovation have all intersected at the perfect moment in time. ServiceNow is the platform for digital business, enabling seamless workflows that create the great experiences people deserve. Now, we are focussed on managing the world's greatest workflow challenge: helping convert vaccines into vaccinations. We are changing the world one workflow at a time and are well on our way to becoming the defining enterprise software company of the 21st century."

Gina Mastantuono, ServiceNow CFO added: "We delivered another fantastic quarter to cap a very strong 2020, ending the year with nearly $9bn in remaining performance obligations. These outstanding results continue to demonstrate ServiceNow's strong platform and product portfolio, our focus on building deep customer relationships, and commitment to enabling their digital transformations. I'm extremely proud of our team's performance and their unrelenting execution in a turbulent year. We are well on our way to becoming a $10bn revenue company. I'm excited about the opportunities ahead of us in 2021."

WE ARE CHANGING THE WORLD ONE WORKFLOW AT A TIME

BILL MCDERMOTT
SERVICENOW

ONESTREAM AND PWC JOIN FORCES

Corporate software company **OneStream Software** and **PwC UK** have entered into a strategic alliance for the UK market.

The partnership will leverage PwC's business and technology expertise and OneStream's cloud-based CPM software to support activities ranging from project delivery to marketing and strategic business collaboration.

As part of the partnership, PwC UK will further develop its OneStream implementation practice to serve joint customers in the UK but also across the EMEA region. PwC UK will use its industry and domain expertise to create industry specific solutions with OneStream for clients across the market.

Stephanie Cramp, senior vice president of global alliances at OneStream Software, said: "The UK is an important market for OneStream Software and we are excited to welcome PwC UK to our partner ecosystem. We look forward to working with PwC to help organisations in the UK and across the EMEA region conquer complexity and transform their finance processes by leveraging our intelligent finance platform to replace multiple legacy applications, as well as point solutions and spreadsheets."

Matt Rodgers, senior vice president and EMEA managing director at OneStream Software, added: "We are thrilled about our alliance with PwC UK, specifically due to the domain expertise and best practices this will bring to OneStream customers in this important market. This partnership will enable OneStream to extend its delivery capabilities in EMEA and supports our mission of delivering 100 percent customer success worldwide."


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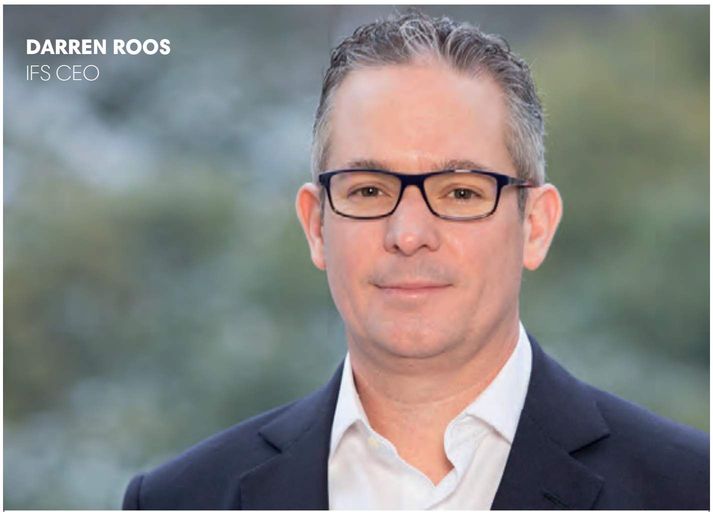
Leap in software revenue for IFS

IFS has announced its financial results for the year ending 31 December 2020 and they make for impressive reading.
Its service management licence revenue increased by 105 percent, which it attributes to the growing need for companies to adopt digital business models as a result of market disruption caused by the COVID-19 pandemic.
The company also reports a 26 percent increase in software revenue, a 60 percent increase in cloud revenue and a 43 percent increase in recurring revenue year-on-year.
IFS sells its products and services into asset-heavy industries and focusses on five key verticals including aerospace and defence, energy, manufacturing engineering and services. It has added some notable logos to its customer base such as **Carlsberg**, **Panasonic** and the **US Navy** and continues to make inroads on the territory historically occupied by **SAP** and **Infor**.
The culmination of three year's hard work will be revealed in early March when IFS will unveil its new IFS cloud offering – we anticipate this will be a unification of the various IFS product lines – IFS Applications, Maintenix and its field service offering – bringing a common look and feel to the IFS front end and a much tighter integration of the products on the back end.



DARREN ROOS
IFS CEO

Darren Roos, IFS CEO, said: "I think that every CEO will have been affected one way or another by 2020. Like many, we had to adapt as individuals and as a business, but the passion this team has for our customers continued to shine. I am hugely proud of that. I am also really proud to see that a significant part of our licence revenue has come from new logos, customers who have moved away from their legacy vendor; this combined with our performance in recurring revenue points to the performance of a very strong business. 2021 will be a hugely important year for IFS as we launch IFS Cloud on March 10th."
Constance Minc, IFS chief financial officer, added: "This is the third consecutive year that IFS has delivered double digit revenue growth, and over this period we have grown recurring revenue by 250 percent. This consistency, together with the improved revenue mix, reveals a strong business that continues to deliver with all the right ingredients to capitalise on our investment cycle. We have real strength in our service proposition, demonstrated by license revenue growing at 105 percent in 2020, as well as an industry focus in sectors like aerospace and defence that will ensure that we continue to deliver value to our customers."

EVERY CEO WILL HAVE BEEN AFFECTED ONE WAY OR ANOTHER BY 2020.

Workday launches COVID-19 vaccine management solution

Workday has launched a COVID-19 vaccine management solution that provides HR and business leaders with the insights needed to help ensure the health and safety of remote and on-site workers.
The vaccine management solution expands on Workday's 'return to workplace' offering and helps companies to securely access worker immunisation insight, plan return to workplace scenarios, support worker wellbeing and establish new operating models to adapt as vaccines become available. Customers also have the configurability to control and securely manage the data and protect their employees' privacy.
Commenting on the initiative, Pete Schlampp, Workday executive vice president of product development, said: "We understand the complexity that comes with exploring the safest way to return to the workplace, which is why we're doubling down on delivering innovative solutions like vaccine management that truly support customers' evolving needs so that they're prepared and focussed on what matters most - their people."

Atos throws DXC a lifeline

Atos has made an unsolicited approach to acquire **DXC Technology**. The French firm made an offer late on Wednesday 6 January and an Atos statement confirmed that the offer was a 'friendly transaction' although DXC later described it as 'unsolicited, preliminary and non-binding'.
Atos has a long track record of acquisitions and acquired US-based **Syntel** for nearly $4bn in 2018 – a takeover of DXC would likely cost twice that. Both firms are publicly quoted and DXC shares rose 10 percent on the news while Atos shares tumbled 12 percent.
The deal could represent a lifeline for DXC which has been struggling against rising debt over recent years. Last year it sold off its healthcare technology business for $5bn but that doesn't seem to have been enough to stave off pressures.
DXC was formed in 2017 through the merger of **CSC** and **HPE**'s enterprise service business. It has annual revenues of nearly $20bn – which is slightly down on 2019 which in turn was also down on the year before.
Although its revenues have only fallen slightly, coupled with rising debt and a ferociously competitive market for the attention of big enterprises, a takeover could be the ticket they are looking for.

UNIVERSITY OF EDINBURGH MOVES TO THE CLOUD

The University of Edinburgh has successfully completed its migration of core IT systems to the **Oracle Cloud** with the support of **Inoapps**, making it the first higher education institution in Scotland to complete such a move.
From today, the first stage of the university's people and money programme goes live with payroll and finance scheduled in two further phases of the project. The migration is a key aspect of the university's service excellence programme – a multi-million-pound investment which aims to enhance key professional services operations to benefit students and staff.
Gavin Ian McLachlan, vice principal and chief information officer at the University of Edinburgh said: "Migrating our core systems to the

cloud is a ground-breaking development which will transform our service delivery capabilities across the university, benefitting students and staff. Inoapps has proved to be a very effective business partner in delivering phase one of this complex project. They've developed a thorough understanding of our culture, which has been applied at all levels of the new cloud solution, and have worked collaboratively with us throughout the project to keep us on track."
Andrew Norris, commercial head at Inoapps, said: "We're delighted to support the University of Edinburgh in achieving the first phase of its Oracle Cloud migration project. Inoapps' consultants and the team at the university worked collaboratively throughout the project to deliver successfully in the face of complex challenges posed by the backdrop of a national lockdown.
The university is another step closer to having an integrated HR and finance solution in the cloud from which they will draw benefits for many years to come."

NewsDeals&Wins

ERP Today partners with Lumenia at the virtual HEADtoHEAD event

ERP Today is once again acting as media partner to **Lumenia Consulting** for their virtual vendor selection event taking place on 23rd and 24th March. Fourteen ERP vendors will go head-to-head to demonstrate their ERP solutions in a structured environment that can be attended by business leaders that are considering their ERP options.

The virtual event will feature live streaming, live polling and Q&A sessions, as well as real-time networking. The delegate platform will provide all the information needed about the event and the software being presented, plus the contact details for each ERP vendor to allow for interaction pre and post-event. Content will also be available on-demand after the event.

ERP solutions suitable for various organisation sizes will be represented and can be efficiently reviewed and compared, including SAP S/4HANA, SAP Business ByDesign, Oracle NetSuite, Epicor, Sage X3, Microsoft Dynamics 365 Business Central, IFS Applications, SAP Business One, Microsoft Dynamics 365 F&O, Sage Intacct, QAD Adaptive ERP, Unit 4 ERP, Acumatica, and FinancialForce.

At the start of day one, all vendors take part in an 'elevator speech', where they will present a summary of their USPs to convince delegates why it would be a good idea to attend their live online demo. Delegates can then choose to attend live sessions focussed on finance, production, procurement, supply chain, projects or sales.

Over the two days, attendees can also hear vendor-independent presentations from Lumenia on 'Are you ERP Ready?', 'Preparing Business Processes for ERP' and 'Characteristics of Successful ERP Projects'. There is also a panel discussion on 'Avoiding ERP Implementation Mistakes', along with vendor sponsored VIP round-table sessions on both days.

For further information, pricing discounts and how to register check out the event website or send an email to info@erpheadtohead.com.

Oracle facilitates safe return to work

Oracle has updated the Employee Care Package to help businesses prioritise workforce safety and prepare for the post-COVID workplace.

The latest updates to the Employee Care Package, which was launched to help HR leaders navigate new workforce demands, include new COVID-19 testing and vaccine tracking capabilities for HR teams and automated guidance for employees as they return to the workplace. The latest additions are included in a new 'Return to the Workplace Journey' that is designed to help keep employees safe by guiding them through new processes, training, and safety protocols, while enabling HR leaders to analyse critical workforce data such as testing and vaccination records.

"The COVID-19 pandemic has forced organisations to prioritise the health and safety of employees and this has put HR leaders front and centre as they help their teams adjust to change and address new challenges," said Chris Leone, senior vice president of development, Oracle Cloud HCM. "Our Return to the Workplace Journey will help our customers meet this challenge and is designed to help organisations ensure the health and safety of their workers."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SAP reveals preliminary Q4 and full year results

SAP has announced its preliminary financial results for the fourth quarter and full year ended 31 December 2020, reporting a record year for cash flow in every single quarter and the full year. All 2020 figures listed are approximate due to the preliminary nature of the announcement.

Q4 results show SAP's business performance sequentially improved even as the COVID-19 crisis persisted and lockdowns were reintroduced in many regions. Current cloud backlog was up 7 percent year on year to €7.15bn, with cloud revenue up 8 percent to €2.04bn (IFRS) and 7 percent to €2.04bn (non-IFRS).

IFRS operating profit and operating margin were positively impacted in the fourth quarter by lower share-based compensation expenses compared to the prior year period. Operating profit increased by 26 percent year-on-year to €2.65bn (IFRS) and was down 3 percent to €2.77bn (non-IFRS), while operating margin increased by 9.1 percentage points year over year to 35.2 percent (IFRS) and increased 1.4 percentage points year-over-year to 36.7 percent (non-IFRS).

For the full year, SAP's IFRS operating profit and operating margin were beneficially impacted by significantly lower restructuring charges as well as lower share-based compensation expenses compared to 2019. Operating profit increased by 48 percent year-on-year to €6.62bn (IFRS) and was up 1 percent to €8.28bn (non-IFRS), while operating margin increased 8.0 percentage points year over year to 24.2 percent (IFRS) and increased 0.6 percentage points year over year to 30.3 percent (non-IFRS) for the full year.

Cloud revenue grew 17 percent year-on-year to €8.08bn (IFRS) and 15 percent to €8.09bn (non-IFRS) for the full year, while software licences revenue was down 20 percent year on year to €3.64bn. Operating cash flow is expected to stand at around €7bn, approximately doubling year on year and significantly above the raised outlook of approximately €6bn.

Christian Klein, CEO of SAP, said: "The world's leading companies are turning to SAP to become intelligent enterprises. We are reinventing how businesses run by accelerating our customers' transformation in the cloud. Our strong finish to the year and the upcoming launch of our new holistic business transformation offering position us well to meet our new outlook targets."

THIRD LOCKDOWN CAUSES FALL IN UK RETAIL SALES

Retail sales volumes fell a substantial 8.2 percent month-on-month in January due to the renewed closure of non-essential retailers in the third lockdown. This was double the 4 percent monthly fall in the November lockdown. The fall in sales occurred despite a significant rise in online sales, up 9.2 percent month-on-month and 72.7 percent year-on-year in value terms.

With lockdown likely to last through Q1, the **EY** ITEM Club expects the economy will experience a clear contraction this quarter and expects the economy to benefit progressively through 2021 from the roll-out of COVID-19 vaccines.

The group's winter forecast sees GDP growth of 5 percent in 2021 followed by expansion of 6.5 percent in 2022.

Howard Archer, chief economic advisor to the EY ITEM club said: "The strong indication is that the recurring restrictions on non-essential retailers have given extra impetus to an already rising underlying trend for online sales."

Read more about the retail sector, starting on page 54.

Salesforce challenges Microsoft with Slack megadeal

In the largest deal of its 21 year history, **Salesforce** has acquired workplace messaging app **Slack Technologies**, in a bid to offer a cohesive platform to match rival **Microsoft** and its Teams chatting service.

Valued at $27.7bn (£20.6bn), the deal will see Slack integrated into every Salesforce cloud as the new interface for Salesforce Customer 360, transforming how people communicate, collaborate and take action on customer information across Salesforce.

Under the terms of the agreement, Slack shareholders will receive $26.79 in cash and 0.0776 shares of Salesforce common stock for each Slack share, totalling $45.5 per share, based on Salesforce's closing price on 30 November.

Describing the deal as "a match made in heaven", Marc Benioff, chair and CEO at Salesforce, said: "Slack has built one of the most beloved platforms in enterprise software history, with an incredible ecosystem around it. Together, Salesforce and Slack will shape the future of enterprise software and transform the way everyone works in the all-digital, work-from-anywhere world. I'm thrilled to welcome Slack to the Salesforce Ohana once the transaction closes."

Though a deal between Microsoft and Slack was on the cards back in 2016, Microsoft opted instead to set up its own chat platform, Microsoft Teams, which includes a number of similar features to Slack's messaging application. Having struggled against the tech giant over the last four years, Slack made an official competition complaint in the European Union earlier this year, where it accused Microsoft of abusing its market dominance by illegally bundling Teams into its Office 365 suite in a way that blocks its removal by customers who may prefer other messaging options.

THIS IS THE MOST STRATEGIC COMBINATION IN THE HISTORY OF SOFTWARE

Stewart Butterfield, CEO and co-founder of Slack, said: "Salesforce started the cloud revolution, and two decades later, we are still tapping into all the possibilities it offers to transform the way we work. The opportunity we see together is massive. As software plays a more and more critical role in the performance of every organisation, we share a vision of reduced complexity, increased power and flexibility, and ultimately a greater degree of alignment and organisational agility. Personally, I believe this is the most strategic combination in the history of software, and I can't wait to get going."

Both Slack and Salesforce hope that the new deal will put them in a better position to compete with rivals like Microsoft in the cloud wars moving forward.

TECH KEY TO BUILDING RESILIENCE, SAYS DELOITTE

Deloitte has announced the key technology trends that will transform businesses in the next two years in its annual tech trends report.

According to the report, businesses will look to extract more value from their supply network data; adopt new tools like automation and AI to help deliver and measure the impact of diversity, equality and inclusion initiatives, as well as inform strategic decisions; analyse how employees are working remotely to improve the employee experience and modernise legacy enterprise systems and migrate them to the cloud.

Nick Smith, technology strategy and transformation partner at Deloitte, says: "The role of the technology leader has grown exponentially over the past 12-months and will continue to increase in importance as they act as guardians for both organisational resilience and transformation."


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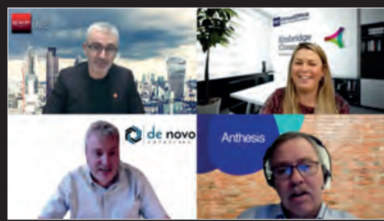
New ways to differentiate
between the ERP solutions

Danny Attias #1 ranked
CIO in the UK



Why you should choose an
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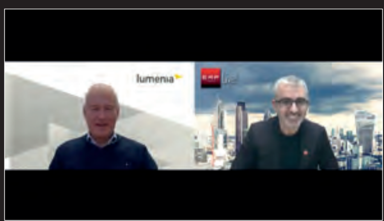
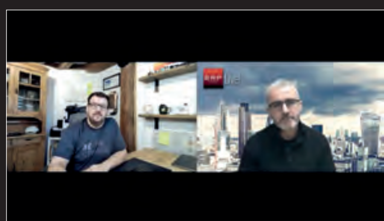


Don't let ego or bias
defeat your ERP project

Is consolidation in the SAP
ecosystem benefitting customers?

SAP Exclusive interview
with Michiel Verhoeven

Does the world need another
mid-market ERP solution?



How to get started with
digital workflows

When will ERP deliver
on its promise?

erp.today/live

NewsDeals&Wins

SUSE and Rancher unite to take on Red Hat

SUSE has completed the acquisition of **Rancher Labs** in a union that brings together the best in Kubernetes management, Linux and edge computing. The deal was sealed with a lavish Times Square takeover and both parties hope that the combination of their capabilities will help out-innovate their competition, specifically **IBM** and **Red Hat**. Together, the two open source leaders create the world's largest independent organisation dedicated exclusively to powering digital transformation with open source and cloud native solutions.

Rancher is the most widely adopted Kubernetes management platform, with 37,000 active deployments. Sharing SUSE's commitment to the true ethos of open source and the greater community, it delivers open source software that enables organisations to deploy and manage Kubernetes at scale, on any infrastructure across the data centre, cloud, branch offices and the network edge.

> OUR PURPOSE IS TO TURN OUR CUSTOMERS INTO INNOVATION HEROES

When ERP Today spoke with Melissa Di Donato, SUSE CEO, she said: "With the close of this acquisition, SUSE is ushering in a new era of innovation by giving our customers unmatched freedom and power to innovate everywhere – from the data centre, to the cloud, to the Edge, and beyond. Not only do SUSE and Rancher offer the industry's only adaptable Linux OS, but we are also the only company in the world that can manage any certified Kubernetes distribution. Together, our customers will be able to out-innovate their competition thanks to unparalleled choice – the choice to evolve their IT strategy based on business requirements instead of contractual obligations, and the ability to innovate quickly and transform according to their own plans and priorities. Our purpose as a newly combined company is simple: it is to turn our customers into innovation heroes."

WORKDAY SET TO ACQUIRE PEAKON

Workday has signed an agreement to acquire **Peakon** for $700m. The deal was announced at the end of January and is set to close in Workday's second quarter, or around April.

The cash transaction will allow Workday to provide organisations with a continuous listening platform. This platform includes real-time visibility into employee experience, sentiment and productivity, for the purposes of driving employee engagement and improving organisational performance.

According to a Workday statement, 'The combination will merge intelligent technology from Peakon that determines and distributes surveys and information to the right person at the right time, with the comprehensive employee insight in Workday, to help leaders continually discover and respond to evolving employee feelings, needs, and behaviours.'

Aneel Bhusri, co-CEO said: "Peakon is on the cutting edge of helping organizations turn

employee insights into more connected teams and stronger organisations. Bringing Peakon into the Workday family will be very compelling to our customers - especially following an extraordinary past year that has magnified the importance of having a constant pulse on employee sentiment in order to keep people engaged and productive."

The news of this acquisition has been met with a positive response. Josh Bersin, global industry analyst said: "Listening to employees has become one of the most urgent strategies to build agility, responsiveness, and growth. Workday's acquisition of Peakon will enable Workday customers to deploy a highly targeted and integrated employee listening strategy, addressing a top priority in employee experience today."

There's a fragile point in time during every business deal when the blood, sweat and tears are condensed into a single instance. The efforts made to secure the sale, the capital invested to deliver your product, and the time spent nurturing relationships are boiled down to a solitary moment when it all comes together or fails to meet expectations. This is the moment you either delight or disappoint.

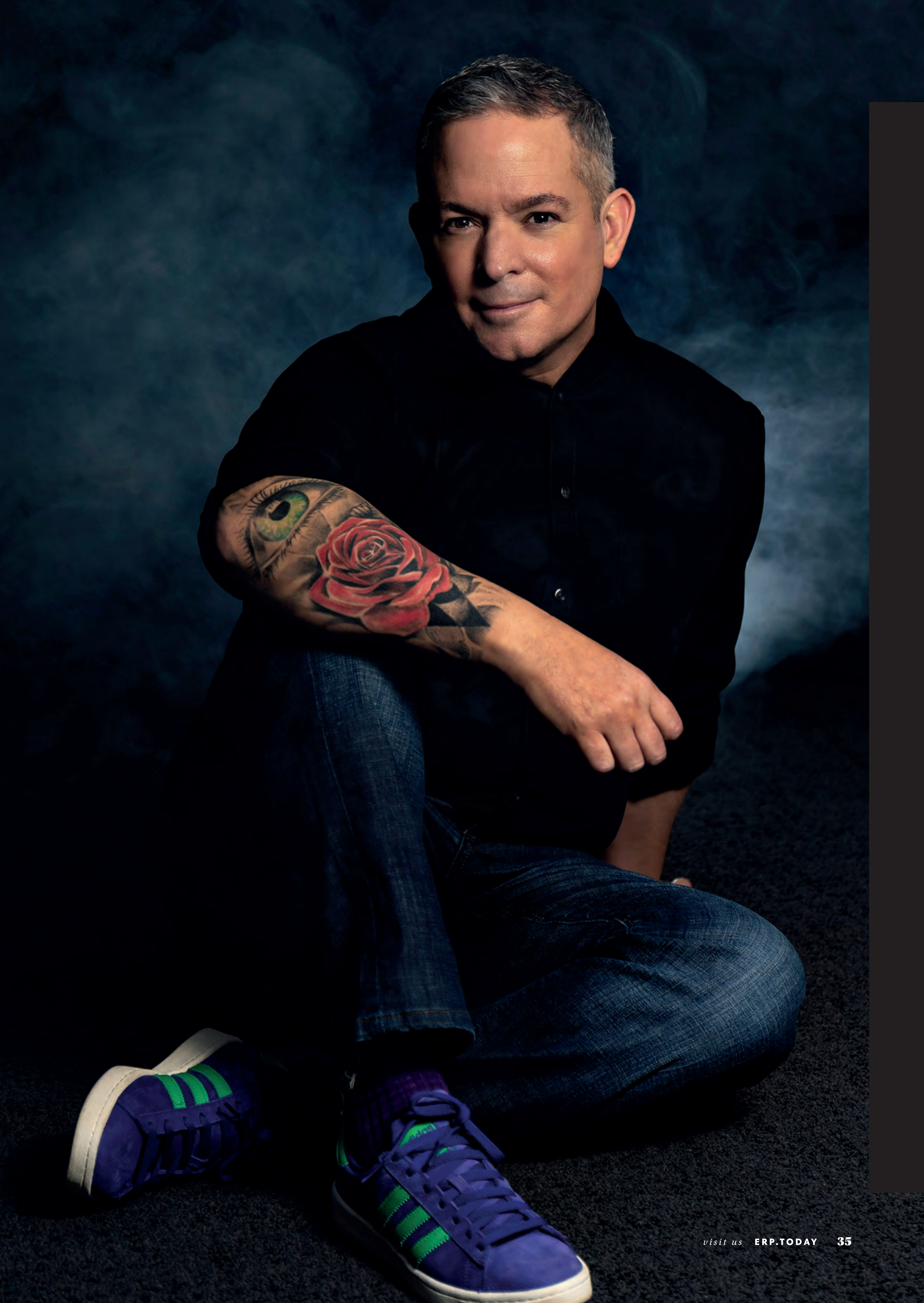
This is

THE MOMENT OF service

DARREN ROOS

WORDS BY PAUL ESHERWOOD

PHOTOS BY JOEL CHANT



DARREN ROOS

ERP vendors have a long history of failing to meet customer expectations.

Few industries have such a poor reputation for peddling expensive and troublesome products, wrapped up by an overbearing contract, deliberately confusing pricing, and impossibly inflexible terms - all of which are garnished with penalties, fines and sanctions for the most spurious of reasons. Put in such stark terms it is somewhat surprising that the ERP industry has survived at all, let alone flourished. Yet, for five decades it has continued its trajectory and spawned into one of the most lucrative sectors of commerce while giving rise to many of the most powerful companies in the world.
In the wake of this dismal record on customer satisfaction one ERP vendor is taking the rest of the industry to task with a bold new proposition that puts service at the heart of its purpose.

IFS has been selling software since 1983. The Swedish ERP company made its name developing maintenance solutions for industrial customers and in 1985 launched the first version of IFS Application – its ERP suite. Over the next three decades it meandered its way through a series of acquisitions, product launches, customer wins, forays into public ownership and ultimately was acquired in 2015 by **EQT**, a Swedish private equity company.

That short paragraph ultimately sums up a 30 year period in IFS' unremarkable history.

It wasn't until a few years after EQT acquired the business and appointed Darren Roos as the CEO that IFS started to develop its personality. In the short time since Roos has been at the helm, the number of marque customers that have joined IFS has accelerated, the identity and brand has been reborn and, with the launch of IFS Cloud, the company now has a product and service offering that can stand shoulder to shoulder with any technology vendor.

DR *"Back in 2018 IFS was irrelevant. It was just one of the ERP vendors and it really didn't matter. I believe that today we matter, that today when you look at the fact that we are outgrowing the market by a factor of three, we are relevant."*

I first met Roos a little under two years ago at the company's annual conference in Boston. Over the course of three days, I attended seminars, keynotes, customer sessions, met most of the IFS leadership team, and even managed to find time for a Duck Boat tour along the Charles River. There were any number of things that I could have taken away from that experience but the one that resonated with me the most was how clear Roos was about how he wanted to build his company. Yes, the customer testimonials were compelling, the augmented reality demonstrations for field service management were exciting, and the roadmap for IFS Applications was ambitious. But above all else, the thing that Roos impressed upon me the most was that he intended to use all his previous knowledge and experience to transform IFS into a different kind of ERP vendor – one that was built on trust, customer relationships, project success and delivering value.

Two years after our first meeting (and a full three years after Roos took on the role of CEO), I sat down with him again to find out how far he had come in achieving those lofty ambitions and to talk about the next evolution of IFS Application - IFS Cloud.

Functionality used to be the be-all and end-all for ERP vendors and most have spent decades selling raw capability as their USP. But in 2021, ERP buyers have a different set of priorities. Application functionality is simply table stakes – what sets one vendor apart from another is its ability to get the job done: to sell solutions rather than products, and above all else, to deliver measurable value.

Roos inherited a largely inapt company. It didn't really have a place in the market and although many of its customers had been loyal followers for decades, the reality was that IFS was a rudderless ship. It was extremely fragmented with eight separate regions all acting autonomously, the go-to-market strategy was disjointed, and its brand and messaging was dull and uninspiring. Roos had a big job on his hands to transform IFS from an incongruous ERP vendor with little or no SaaS proposition into the $1bn cloud business he had set his sights on.

DR *"When I came into the company it was a mixed bag. IFS was very fragmented and there was no global strategy. On the flip side, I was incredibly fortunate to find a business that had some great fundamentals, because if the product had not been great, if the customers hadn't been great, and if the people hadn't been great, it would have been a much more challenging turnaround."*

So, it wasn't all bad - one of the unintentional by-products of operating as a federated business for so long was that each region had to stand up on its own. It had to have capable people running the operations and excellent products to serve local customers.

DR *"What was good though is that we had really good people. I guess in devolving the responsibility down to the regions, we ended up with a lot of people in the regions that were very customer focussed."*

Roos had some of the fundamentals for his big turnaround but there were still sizeable gaps in leadership, product, and overarching proposition that would require significant attention. The task at hand was considerable and would be a major test of Roos' credentials. Afterall, he is a first time CEO and, although his previous experience included running large parts of much larger ERP vendors, the plain fact is Roos was untested at this level. His success was in part going to rest on his ability to win over and inspire those people who had formed the backbone of IFS for the last twenty years. I put it to Roos that it wasn't as though EQT had brought Bill McDermott in to run the show – a lot of senior IFS people had probably never heard of Darren Roos and no matter how good his plan was he was going to need the help, support and goodwill of a lot of people who were about to be disrupted by a big package of change.

DR *"I think there's no question everything you've said is correct. Coming in as an unproven CEO meant I needed to make an impact. However, I had run a very*

I believe that today we matter, that today when you look at the fact that we are outgrowing the market by a factor of three, **we are relevant**

large multi-billion business in one of our largest competitors and I came with a good amount of credibility as a result of the job that I'd done in the past. But I don't think that's what won me the hearts and minds. What won me the hearts and minds was an incredible amount of hard work. The changes that I made gained traction very quickly and we saw the results almost immediately. In 2018, which was the year I started, we saw revenue growth go from single digits to 32 percent."

The service proposition

What does service mean to you? We are all familiar with the idea of customer service and customer experience but can you build a software company around these concepts? Roos and his team will tell you that you can. In fact, they will tell you it's the only way to build a software company if you want to be relevant in 2021.

Service broadly falls into two categories: the service that ERP customers get directly from their software supplier (responsiveness, ease of use, ability to fix things, nice to deal with etc) and the service that the ERP customer can pass on to its own customers, enabled by that software (seamless experience, delivered on time, accurate billing etc). At its essence, enterprise software should be designed so that you, the end user, can delight your customers - so that everything you do which is enabled by that software delivers a perfect experience right from the point of sale through to the delivery and maintenance of your product. Historically, ERP software had been designed with the ERP customer in mind, not its customer's customer, and this shift in focus to the outcome rather than the action should be the number one priority for all ERP vendors.

DR *"Everybody strives for the highest possible customer satisfaction, high customer retention and higher advocacy. To achieve that, customers need to be served well at all stages. It's about providing them with the right quality products at the right time and this means produced on time by your manufacturing plant, delivered on time, sending an accurate invoice, having efficient call centres and providing great field service. When all that comes together, we call that the 'Moment of Service' and our goal is to enable you to deliver your moment of service."*

Face masks and elbow taps have become standard practice at cover shoots during the pandemic.

It may seem like a small shift in tone but it's actually a seismic leap in purpose. IFS' entire proposition is elevated from being a set of applications that manage finance, HR and assets to being an enterprise service solution that provides end-to-end tools to deliver for customers' customers.

What matters today is experience and a seamless service at all the touch points is the new benchmark that buyers expect - irrespective of the product. Poor service used to be tolerated in all walks of life and none more so than in the ERP industry. As consumers we accepted that goods and services were delivered when it was convenient for the vendor, not us. Then Amazon came along and changed the game for everyone. Now, even the smallest retailer has to meet a completely different set of standards because consumers' expectations have changed.

These new principles are now part and parcel of doing business and with the launch of IFS Cloud, underpinned by this deep commitment to service, IFS is pledging to its customers that they will be able to deliver Amazon-esque levels of service to their own customers. Whether it's sales, materials, people or aftercare, IFS Cloud enables customers to deliver when it matters the most.

This evolution in narrative could be a blow to the ego for some vendors because it takes core ERP out of the limelight and replaces it with a completely new message. The ERP industry has grown up being front and centre of an enterprise but now it has to respectfully fade into the background and become a silent service. We have been referring to cloud applications as software-as-a-service for a decade or more, but the emphasis has always been on the software part of the equation. ERP has to evolve into Service-as-a-Service

Roos and Esherwood discuss their matching wardrobe choices while Joel checks the pictures.

There's a very good reason why Oracle and SAP are not growing and that is that people don't like them, and that's just the reality. It shows in their NPS **numbers**

to meet the demands of a modern enterprises and IFS has stolen a march on the competition with this alternative narrative.

DR *"The core proposition - and this is the new messaging that we are launching with IFS Cloud - is that we go from being one of those ERP vendors where it's difficult to distinguish to being the one that is really focussed on helping our customers to deliver outstanding moments of service to their customers. That's the proposition. And it does move away from core ERP because to orchestrate an entire organisation across customers, across people, across assets, to deliver that moment of service, is a much more complex proposition."*

Functionality is not what sets one product or solution apart from another - how many ways do you think you can raise an invoice, record a timesheet or pay someone? What differentiates one ERP vendor from another falls in two categories: on the product side, ERP buyers are looking for ease of use and speed to implement coupled with an architecture that allows for simple integrations with other tools and applications. Away from the product, the requirements for enterprise leaders are focussed on a set of values that hark back to good old customer service; in its simplest terms, what is the vendor like to deal with? Do they have a sense of entitlement? How willing are they to go the extra mile? What level of genuine service are they offering?

DR *"I think there's no question that the whole nonsense of features and functions is just that. At the end of the day, no c-level executive believes that they can differentiate their business based on SAP or Oracle's GL versus IFS. What is going to make a difference is, 'Who is the vendor that is going to help them move the needle in their business?' And I don't see that from the others at the moment. My view is that we differentiate ourselves quite simply by being the vendor that you want to deal with. And that's how our customers feel about us. There's a very good reason why Oracle and SAP are not growing - in fact SAP is shrinking - and that is that people don't like them, that's just the reality. It shows in their NPS numbers."*

I've written many times before that the functional gap between the leading vendors is closer than two coats of paint and the thinnest of margins in core application functionality offers very little to end users in their quest to deliver their own moments of service. That only happens when everything falls into place and IFS Cloud is the glue that holds the components of a customer relationship together.

IFS Cloud

IFS Cloud represents the culmination of three years' work by Roos and his team to deliver a harmonised set of applications that are functionally rich, highly flexible and built on an underlying technology platform that provides choice for customers.

It has undoubtedly been a major undertaking but the big question is does the end result justify the effort and expense?

The first thing to note is that this isn't a completely new set of applications that have been built from the ground up. Vendors that have tried to start from

scratch know all too well the time and money that goes into that exercise – billions, not millions but billions, coupled with tens of thousands of man hours - and even then, the results aren't guaranteed. Just ask SAP how much was sunk into ByDesign and you will get a feeling for the scale of that thankless task. Or speak to Oracle which started from scratch with Fusion and took nearly a decade to reach functional parity with E-Business Suite - and they spend $5bn a year on product development.

DR *"None of the vendors that brought a new product or capability to market have thrown out what they had and started again. It takes decades to write it and therefore you can't just start over - you have to reuse what you have so that's what we did. However, where we've been very fortunate is that because of the way that technology has moved on, with the introduction of containerisation technologies, with the growth and sophistication of the hyperscalars, in our case Azure, with the tooling and automation, and the capability that Kubernetes brings us, we're able to do things with that old code line that we simply couldn't have done five years ago."*

So, IFS has learned from the mistakes and efforts of others and hasn't thrown the baby out with the bathwater. There are some who may argue that retooling existing code and then calling it cloud doesn't make it so – and in the case of some, I'd agree. But IFS' approach has been altogether different and Roos has done what was possible in the time he had and with the resources at his disposal.

IFS has taken the code line and existing functionality of its Apps 10 ERP and EAM offering, coupled with the acquired field service management and MRO products, and replicated that in IFS Cloud to give users the ability to deploy modules out of a basket of functionality which is presented as one application on a single database and common technology stack. Customers can deploy the solutions they need, when they need them, and expand by adding new capabilities seamlessly within one platform.

The new proposition represents a step change for existing customers and provides a genuinely credible alternative for potential new logos that may not like the look of their upgrade options from incumbent suppliers. IFS Cloud is essentially one application - whether you are using ERP, HR, EAM or FSM – there is one platform, one data model and one experience. This isn't a bunch of loosely coupled applications that are bolted together and given the same UI. Nor is it a complex set of integrations between application suites with the appearance of a unified code line. IFS

Instead of applications becoming more harmonised and easier to deploy, they've become more fragmented and more complex to deploy. And all of that complexity sits with **the customer**

Cloud is essentially a single product where components can be switched on or off without the need to integrate individual modules or artefacts. This new architecture abstracts the complexity of integrations away from the customer and allows them to focus on their business, their customers and delivering their own moments of service without needing to invest time, money and effort in managing a hairball application landscape.

DR *"Instead of applications becoming more harmonised and easier to deploy, they've become more fragmented and more complex to deploy. And all of that complexity sits with the customer. IFS Cloud delivers the full breadth of capability across all our solutions as a single harmonised application. I use the word 'harmonised' because I explicitly don't use the word 'integrated' because it's not integrated. It is one application. It is one solution set. Our competitors who have made acquisitions claim to be integrated but then you look there are multiple databases, multiple data models and they are tying them together in the background to make them work. That is not the case with IFS."*

The new platform offers complete functional parity whether it's deployed on-premise or in the cloud and that is a game changer for enterprises that need to move to the cloud on different timelines. Customers can seamlessly transition IFS Cloud between different environments due to containerisation in the application architecture giving complete portability to their IFS Cloud instance.

DR *"We listened to our customers and they told us they don't want to be prescribed whether they should deploy on-premise or in the cloud. Now, let's not be confused - we are very clear in our messaging that customers should deploy standard in the cloud whenever possible. That is where they will get the most value in the shortest amount of time at the lowest total cost of ownership. However, because of the sophistication and complexity of the customers we deal with, some want the flexibility to be able to deploy on-premise or deploy in a private cloud."*

Allied to this portability is the evergreen nature of the applications - whether you are utilising the on-premise version or the SaaS version, upgrades are delivered twice annually meaning there is no latency between moving off an on-premise application to a SaaS application – the product and service is exactly the same irrespective of deployment method ensuring all customers benefit from investment in R&D and new innovations. The layered architecture also means that customers that have developed personalisations such as custom fields, unique screens and integrations using APIs automatically carry over to the latest versions of the application.

DR *"Unlike many of our competitors, where if you deploy on-premise that's it, you're on-prem and you can't necessarily move because there isn't functional parity. That is completely different with IFS. For us it is the same application that we have tooled to provide complete flexibility."*

DARREN ROOS

> **The facts** are that in 2020, nearly 60 percent of our business came from net new customers. Nearly 300 enterprise customers, large enterprises like the US Navy, **chose IFS, not SAP or Oracle**

Conclusion

IFS has been through major surgery over the last three years and the patient is finally being discharged with a clean bill of health. The rebrand exercise at the end of February has given a more contemporary and aspirational feel to their offering while the release of IFS Cloud brings together 36 months of development effort into a coherent enterprise solution fit for 2021.

Its numbers are encouraging having reported $860m in total revenue for 2020 with $630m being attributed to software sales and an increase in cloud revenue by 60 percent compared to 2019. IFS has also shown some growth in its ecosystem and claims that partners were involved in at least 30 percent of their projects last year – a considerable leap forward from the previous year and a vital step in terms of moving away from their historic model of delivering projects directly.

However, despite a fresh look, new product and strong numbers, IFS' biggest challenge still remains: how do they break down the barriers that will put them in the same room as big enterprises that have been long-time customers of Oracle, SAP and Infor?

Roos and his team have bet the farm that the key to unlocking this problem is their service mantra and it's likely to be a message that resonates well with disgruntled ERP customers that don't get the same love and affection from their incumbent suppliers. But it's not just dissatisfied customers that Roos is hoping to lure away from his competitors. Last year more than half of IFS' total revenue came from net new names and he believes that IFS can beat the competition, even on their best day.

DR *"I don't spend any time worrying about our traditional competitors because I don't see them as being relevant today. There is a complacency, an arrogance, and that is why they're irrelevant. If they have one thing in their favour, it's the Stockholm Syndrome of their customers. The facts are that in 2020, nearly 60 percent of our business came from net new customers. Nearly 300 enterprise customers, large enterprises like the US Navy, chose IFS, not SAP or Oracle. So, if they don't see that as a threat, great.*

"One of the reasons that so many of the dinosaurs or the legacy vendors, as you know I refer to them, have continued to be successful is that there just aren't a lot of alternatives. If you're looking for a large-scale solution that crosses ERP, FSM, EAM, as ours does, there are very few that have the depth of functionality to run a large, complex multinational business. Very, very few, indeed."

Can IFS preserve these strong ideals and bullish sentiments as it scales? Well, that's the million-dollar question. Roos told me in our interview that he is personally on the hook when a customer engages with IFS and said: "Customers have my mobile number and I will be there in the breach if the project gets difficult." That kind of personal service is going to become difficult to maintain if IFS continues to grow at the same rate. But I don't see that as being a major concern; IFS has strengthened its leadership team considerably over the last three years with the likes of Michael Oussi as chief customer officer, Christian Pederson as chief product officer, and Marne Martin heading up the service management business.

The cloud-era has inadvertently opened up a raft of new opportunities for vendors like IFS as market conditions have forced enterprises to re-evaluate how they buy, use and interact with technology. ERP buyers have been conditioned over many decades into buying features and functions and IFS is trying to position itself ahead of the curve by appealing to a new generation of digital leaders that are less swayed by a logo or brand and more concerned with service, outcomes and value. It's a proposition that, on face value, is hard to ignore.

With the release of IFS Cloud, Roos has brought together a functionally-rich suite of applications built on a modern technology platform that offers choice, flexibility and long term certainty. Does all this mean that IFS is going to make a dent in the share price of its biggest competitors? Probably not. But it does move them up a league and if you're staring down the barrel of a three year S/4 upgrade, IFS Cloud may seem like a pretty attractive alternative. ■


HUGO

| DANNY ATTIAS |

N°1 ranked CIO in the UK

Anthony Nolan's Danny Attias has been ranked the number one CIO in the UK. A mid-sized organisation that is dedicated to saving the lives of people with blood cancer, the rapidly advancing digitisation of their business is poised to save more lives, in less time. Danny's trophy case of incredible achievements is full, and the star CIO does not only work with purpose, but with conscience too. Attias spoke to Paul Esherwood on ERP Today Live! earlier in January about the charity and how they've punched above their weight in the tech world.

The Q&A below is an abridged version of that live interview.

Danny, you've just been voted the number one CIO in the UK. That must be something you're particularly proud of.

DA "I was blown away. I didn't expect it and it's not my achievement alone. Although my name's on the listing, it's really the recognition of the work that I've done, the work that my team has done, and also the work that the business has done. If the business had said, 'No, we want to do things the old way,' we wouldn't have been able to achieve half the things that we've been able to do. I think the bit that we take away from that as a charity is the CIO 100 is a list including banking, retail, government – everyone. That we've been able to come out on top is just testament to the fact that it's much more of a level playing field now than it ever has been. Hopefully the perception that charities are a bit second class because it's like 'Well, they haven't really got enough money for technology...' changes, because we can actually punch above our weight!"

You have a chemical engineering and IT project management background - a very technical background. But the demands on a CIO today are far greater than just looking after IT. What skills and characteristics do you think the modern CIO really needs?

DA "I suppose I'd start with saying I don't think they have to come from a technical background. I think the fact that I come from a technical background is useful, but it's more about my ability to understand the business and the way that a business works. But that's not to say that you want a pure technical technology leader. It's a combination. I found myself in a rare position where I understood how infrastructure worked and how it came together. But I also understood the business and the business requirements, and I seemed to be one of the only people who could join the dots."

What do you have to do as a CIO to bring the rest of the business along on this digital transformation journey?

DA "Paul, you've touched on the single most important component in my opinion. You can have the most tech in the world, but if you haven't got employee engagement in the business you won't succeed. For me, it has to come from the top. It's about CEO and COO engagement and shifting the mindset of, 'Okay, how much is it going to cost and how long is it going to take?', to working with you right from the very beginning, ideating and developing.

"The thing that is important is shifting the conversation from 'how much is it going to cost and how long is it going to take' to looking backwards and saying, 'Is my investment paying off? Are you delivering value on a monthly, quarterly basis? If you are, let's continue to invest. If you're not, well, let's rethink this, or let's stop that programme.'"

What have you learned from your time and experience in implementing technology that you'd like to pass on to our readers?

DA "When you are faced with mounting legacy systems, platforms and data, my golden rule is that there are no quick wins.

"Part of it is managing expectations and it takes time. As you improve the quality of your data, improve your competency of software development, improve your back-office systems, then you can take advantage of things."

The expectations of a workforce have changed, and customers demand a completely different experience now - what do you think is actually driving this transformation tsunami?

DA "For us specifically, it's about saving more lives. We're a stem cell register, we help save the lives of people with blood cancer, and if we can do that more efficiently, and save money that we can put into research, and if we can do that faster, then we increase the likelihood of survival. And if we can expand our reach globally, then that helps save more lives.

"For other organisations, it's to make more money, or to stop making less money. And that goes both ways. I do think we should try and avoid doing things just because the vendors are telling us to. I've been in situations where I've had vendors say, 'Exciting new product. This is what you need,' and we're just going to say, 'But there's no real value. This is not going to make any tangible difference to our organisation. It's a hard pass.'

"I think it is important not to get sucked in by the kind of shiny sales piece and really ask, 'What is it that will deliver value to your organisation?'"

Tell me about the lens that you have to use when you look at these projects because there are lots of considerations for enterprise leaders around diversity inclusion, knowledge transfer and sustainability. When you're looking at a piece of tech, how much of your focus has to be on those considerations as well as what it will deliver?

DA "We hold ourselves to a higher standard when it comes to data privacy, for example, but that's not because we feel we have to. It's because we feel we should. We feel that that's the right thing to do, and as we handle a lot of medical data, that's really important to us. But I've certainly never been involved in a decision where it's held us back because we're trying to do the ethical thing or the right thing. We should be doing the right thing anyway, and everyone should be working towards sustainability.

"In terms of diversity, within our own technology team that's something - we're signatories of a Tech Talent Charter from last year and more than 50 percent of our developers are female in the team. We're looking to open up an apprenticeship scheme to get people from all inclusive backgrounds to be able to join the team as well. We're doing that because it makes sense. We're not doing that because we feel we need to, or it ticks a box. We're doing that because it really delivers more value to our team."

Okay, Danny, before we sign off, what is your next big project?

DA "There are two things and they're partly a coming of age. One of them from a project perspective is we're now ready to get really digital. We're ready to digitally engage our customer base, which are the NHS and stem cell transplantation services in the NHS, and also our stem cell donors. Providing them with tools that speed things up increases the chances of survival. That's going to need design thinking, that's going to need a whole different approach towards customer driven design. It's really exciting.

"And then the other thing that I'm going to really be investing heavily in is the digital competencies of the organisation. I don't mean developers or business analysts. I mean the whole organisation."

... literacy within the broader organisation?

DA "Absolutely. And it starts with data and it moves into design thinking, and it continues with agile working. There are a number of various pieces on the spectrum and we're not trying to reinvent the wheel. We're looking at who's doing that really well and trying to mimic that wherever we possibly can."

What's the one piece of advice that you'd give fellow CIOs to help them navigate these choppy waters of information and digitisation?

DA "My approach is to simplify everything. If I need a five-page paper to explain why we're doing something, then it's still too complex. You need to narrow things down and just break it into smaller chunks. Basically, simplify and remove dependencies."■


digital enablement
making existing services operate remotely during the pandemic
business transformation
rethinking and redesigning a business around new challenges

Are you really ready for the future?

The COVID-19 pandemic has intensified the pace of global change and the pressure on companies to respond. But, despite rapidly building their digital capabilities during the pandemic many organisations are yet to fully embrace transformation.

BY ANTHONY BYRNE

GUEST CONTRIBUTOR

THERE'S AN OLD saying that goes along the lines of, 'you cannot swim to a new shore until you first take your feet off familiar ground'. This rather neatly sums up the dilemma for businesses that desire change but often attempt to build it on the old foundations.

In many ways, we might expect the pandemic to change that. A new and challenging environment has both disrupted current practices and required technology enabled solutions.

Without wishing to diminish the stunning efforts of the many businesses that have risen to the challenge, it would be a mistake to categorise digital enablement as business transformation. One is about making existing services operate remotely during the pandemic while the other is about rethinking and redesigning a business around new challenges. From a systems point of view, it's the difference between replumbing an existing service or taking out all the pipes, fixtures and fittings and starting again.

Judging by the increasing enquiries we've had, COVID-19 is making businesses consider deeper change. They are now moving beyond the tactical shifts they've put in place during the pandemic to consider their business model for the future and how it will need to adapt to what are looking increasingly like longer-term shifts in customer behaviour.

Given this increased interest, it seems the right time to share some thoughts on how to bridge that gap between incremental and true transformation.

MAKING THE LEAP

Having worked on large transformation programmes for nearly 20 years, I've learned the importance of making clients aware of not only the length of the journey ahead, but also how bumpy the ride may be.

Typically, the CEO or other senior leader will have either, or both, of the following: a strong vision for the future and a burning platform that means change is vital. Both need to be carefully considered.

Firstly, if the vision is to become a reality it must be shared by the rest of the business or it risks getting stuck in the sand. Without buy-in, transformations can easily become system implementations. The end product of all the effort involved can become a digital capability that maps how you operate your business today, rather than a transformation to how you want to operate in the future.

Secondly, if the heat of the burning platform is intense, then the timescale of a full transformation – typically one or two years – may simply be too long.

BRIDGING THE GAP

The key to tackling the twin challenges of timescale and teamwork is to develop a clear plan.

The first stage is to put people at the centre of any business transformation, to win hearts and minds from the outset through engagement, then leverage their passion and understanding of every aspect of the business to identify pain points and create new paths, driven by adherence to an overall vision.

The next step is to deploy technology at speed. People don't want to wait 18 months or two years before seeing benefits from the transformation. Rapid prototyping and faster cycles create change and maintain morale through often challenging times.

Finally, innovation must not be a capability that sits on the side; it must be part of the culture. Rapid and decentralised transformation means that not every detail is in the design. Instead, it allows for individuals and teams to innovate because nobody knows their part of the business like the people who manage it every day.

At its best, this methodology provides the space and the tools to innovate, allowing the business to get on with its transformation.

TRY BEFORE YOU TRANSFORM

Whichever way you cut it, a transformation is a big financial and time commitment with risks as well as benefits. And it's likely to need a solid business case to win board approval.

This is where an initial scoping scan pays dividends. Bringing together the core management team to materialise the vision and assess the scale and shape of the transformation can be a great way to draw up a roadmap before taking the next steps.

THE PANDEMIC AND THE BIG PICTURE

As with any seismic event, the immediate reaction of businesses and their customers to the pandemic may only be the beginning of larger and less immediately apparent shifts.

In the heat of the firefighting process, near-term issues must be addressed, from logistics to liquidity. As the dust settles, a longer-term view must be taken. One that considers – and has the power to adapt to – the uncertainty and opportunities ahead.

As a result, organisations increasingly need to move from adjustment, albeit at a greater pace than ever before, to fundamental transformation.

What is the business model going to look like in three or five years, given the accelerated pace of change? How is demand shifting and what will supply chains look like? What will customers want and where and how will they want it? What emerging technologies can help us increase efficiencies and embrace new opportunities?

For example, as oil companies manage the shift to carbon zero and energy transition, and automotive suppliers adapt to the growth of the electric vehicles market, which requires fewer parts and less maintenance, is incremental change going to be enough? The ability to move rapidly, reshape quickly and pivot to new markets looks more necessary than ever.

PURPOSE-LED TRANSFORMATION

On an even bigger scale and from a more fundamental viewpoint, COVID-19 has really illuminated what companies 'stand for'. A company's purpose is the north star for any transformation. Like iron filings around a magnet, each individual element must be directed by it. That means building an enterprise solution around that purpose and empowering people to deliver it.

ON AN EVEN BIGGER SCALE AND FROM A MORE FUNDAMENTAL VIEWPOINT, COVID-19 HAS REALLY ILLUMINATED WHAT COMPANIES 'STAND FOR'.

COVID-19 has also highlighted the importance of our natural surroundings, making us more aware of, and motivated to address, climate change. What's that got to do with a technology-led transformation? The answer is that it has everything to do with it. If you're going to change your practices to reduce emissions, shake up your supply chain to promote sustainable behaviours and refocus your internal reporting to reflect new priorities, it's unlikely that you'll just need a rewiring. Instead, a fundamental shift is needed in what you do and how you measure it. Those still in any doubt might want to consider the growing expectations of investors when it comes to using environmental, social and governance (ESG) factors to assess companies' performance. Those who don't adapt risk losing the competition for capital just at the point when businesses are looking for funds to power their next growth chapter.

Changing public, investor and regulator expectations are making it critical for businesses to become more transparent and accountable as well as calculate different, non-financial metrics and satisfy a greater number of stakeholders. Again, legacy enterprise systems are unlikely to support those objectives as well as the blank sheet a new system offers.

SWIMMING IS SAFER THAN THE SHORE

So, to return to my opening analogy about the swimmer. No, the journey will not be easy and, yes, it should only be embarked on once you've measured the distance and the depth of the water. But starting the crossing may well be safer than staying on the shore. ■

Anthony Byrne, CEO at EY AgilityWorks

| CHRIS POPE |

Digital Workflows

ServiceNow is the digital workflow organisation that has been around for 15 years but has recently seen a huge rise in uptake for its services and has been catapulted into the media headlines following the arrival of high-profile CEO, Bill McDermott. Chris Pope, VP of Innovation at ServiceNow, joined Paul Esherwood on ERP Today Live! where he gave us the 'how-to' of digital workflows and explained why enterprises of all shapes and sizes need to embrace a better way of working.

The Q&A below is an abridged version of that live interview.

Chris, I want to take us back to basics in this session - in a nutshell, what is a digital workflow?

CP "Workflows today are very human centric; they're manual in many cases, and they're a bunch of steps to do things. Digital workflow is not just putting those steps on a platform - it's automating them, it's integrating them with other systems, and it's also providing them in an experiential way that the end user can self-serve or self-help. It removes a lot of the manual, mundane, repetitive work that exists by automating it end-to-end".

ServiceNow has been around for 15 years – why are we hearing so much about you now?

CP "I think we're more relevant than ever before because of ease of use, but also because of the ability to quickly configure the platform, to do the things you need it to do without being locked in or over customising. With two releases a year, we're always adding new innovation every six months, which, for many enterprises is still quite fast. They're getting complementary capabilities all the time and when you put that in a world class cloud with the availability numbers we have, they feel secure. Customers can actually get on with focussing, solving their problems, and not worrying about infrastructure, databases, upgrades and all that sort of tedious stuff of the past".

What are the main challenges that your customers are trying to overcome by implementing ServiceNow?

CP "It's interesting because the challenges are ongoing. I think many of them embarked on a digitisation journey, but actually, they're all individual parts. For example, an organisation may have put a new ERP platform into the finance department; they may have done something in IT on their journey to the cloud.

"But what it is, is bringing all of those processes together, connecting all of them into one seamless experience. That's really the holy grail, if you will, of digital transformation".

Do you think that there is a situation where CIOs are having to make a choice about where they spend their money right now because of budget constraints?

CP "Most organisations have maybe six or eight core platforms: usually an Office 365, an SAP or an Oracle. There's probably Salesforce or Dynamics in there, and a few others. Those are all great, but you get to the point where you want to know who can deliver value and outcomes quickly. In many cases, CIOs say to us, 'I need to deliver in the same year that we make the transaction.' That's really hard to do and by the time you get through your RFP process, half the year is probably already gone.

"For us it's about delivering meaningful impact with value. A good example would be if customers signed with us just before Christmas, within a week they'd have had their production and non-production environments up and running and ready to log in to. That's not unusual in the software as a service world, but at the same time there's prescriptive workflows that our other 7,000 customers have contributed to over time. It's not that we're following a particular methodology, if you will. It's guided by our customers in what they do, not what we think they should do. And therefore, they're up and running".

When you first switch ServiceNow on, does it come with pre-built configured workflows that you can just tap into immediately?

CP "Yes, absolutely. And like any platform, by the time you've configured your authentication, you need your people data and a few other things needed in any other platform, then you're up and running, and whether that's the core ITSM applications, incident, problem, change, CMDB, etc,

that's good. That's up and running. But if you turn on say, the HR application, you've immediately got the employee service centre, benefits portals, onboarding, offboarding, and so on".

What, in your experience, is a typical time frame from engaging with a new customer to them being productive, not just switching the lights on, but actually getting something meaningful out of using digital workflows?

CP "It's almost like you saw my 10 o'clock meeting in my diary from this morning. We had this conversation with an organisation with over 200,000 people. It's a really good question because it takes us back to the problem we're trying to solve and what is the benefit in solving it?

"Many organisations can quickly stand up that shopping cart experience, Amazon-esque, let's call it, and start to populate their services behind there. We've tried to do this with massive customer input and Fred, our founder, has a phrase that still lives with us today: "Listen, Learn and Act. And if you're not sure, go back to listening again." That's guided a lot of what we do and what we try to do. With every release, we have customers that give us input into where we're going, which is an ongoing maintenance, if you will.

"What that means is when we engage with a customer and they're deploying customer service management, or employee workflows, they're able to get up and running in six to eight months, live in production and start to see the benefit and the value". ■

5 THINGS YOU NEED TO KNOW ABOUT SERVICENOW

1 As of Q4 2020 ServiceNow had
- More than **13,000** employees
- **99%** subscription renewal rate

2 During the 2020 financial year:
- ServiceNow had **6,900** customers
- **80%** of Fortune 500 companies used ServiceNow
- ServiceNow had **1,093** customers with over $1m ACV
- ServiceNow had **$4.29bn** in subscription revenues
- ServiceNow experienced **32%** year-on-year growth

3 Now Platform Test and Trace for NHS Scotland
- NHS Scotland developed a ServiceNow CSM case management-based contact tracing app for test and trace in six weeks
- **COVID-19 vaccinations**: On 20th January, NHS Scotland launched their vaccine management system which was developed on the Now Platform and scheduled 220,000 vaccination appointments in its first 12 hours.

4 Safe Workplace Apps
- In May 2020, ServiceNow released a **four-app suite and dashboard**, free of charge, designed to help companies manage essential steps for returning employees to the workplace

5 Emergency Response Apps
- In March 2020, ServiceNow released **four COVID-19 emergency response apps**, free of charge, to help organisations across numerous verticals manage the crisis
- They were used by The City of San Francisco for organisational readiness in healthcare, law enforcement, fire and city essential services

HOW TECHNOLOGY CHANGE HAS BECOME A SOURCE OF HIGH STREET HOPE

RETAIL reborn

Technology can help reinvent the high street and deliver a new era of lean and mean retailers capable of capturing the imagination of a digital native generation.

RETAIL

Given the carnage of the last 12 months, it would be easy to dismiss retail, especially on the high street, as a spent force. The demise of Debenhams and Arcadia has understandably rocked the retail world but in fairness, this has been on the cards for some time. The COVID-19 pandemic has just accelerated what was already in motion, a retail market at a tipping point between the large, traditional stores of the past and the modern, digitally-driven stores of the future.

BY MARC AMBASNA-JONES

The emergence of online-only retailers **Asos** and **Boohoo** as buyers of the **Debenhams** and **Arcadia** brands just confirms the changing of the retail guard. This is now a digital retail age and everything from supply chain management through to customer engagement is being data-driven. The challenge for the larger, traditional high street stores is how to adapt and adapt quickly. Some, such as **Next**, have already been better at it than others but as history has taught us, technology change can be a great leveller.

It has enabled disruption across industries and in retail you get the sense that it has only just got started. According to Steve Ingram, a director and retail expert at **Deloitte**, Debenhams and Arcadia are just two examples of that shift, of brands that have 'lost touch' with the will and sentiment of the consumer market. And therein lies the problem. As Ingram adds: "Bad businesses are bad businesses, regardless of the pandemic and they were always going to be found out sooner or later."

So, what does this mean to other retailers? How can technology make them better businesses, more in-touch with their customers and more efficient and relevant places to work? And will technology help reshape the high street and lead to an emergence of more digitally-savvy and data intelligent omnichannel outlets?

One of the interesting trends that is emerging, at least according to Ingram, is the idea of digital partnering, bringing several brands together in one digital marketplace.

"That's what Boohoo is going to do with the brands it has bought from Debenhams, a sort of online department store," says Ingram. "It's about having a digital platform which is scalable, enabling them to bring in brands easily and efficiently, without disrupting existing business and loyalty."

Even for a seasoned online retailer such as Boohoo, this is still a moment of truth, and it will take time to get a return on investment. But if other outlets are a useful measure of the value of partnering, such as **Argos** and **Sainsburys**, Next's online store and, of course, the biggest of them all, **Amazon**, then it's an understandable tactic. The challenge however, for all these and other retail outlets is to grow and yet operate more efficiently, use the technology to increase accuracy in stock management and delivery and ensure, in the words of Alan Sugar, "smell what sells."

Amazon of course has been a master at this, blending customer knowledge with convenience, choice and great logistics and delivery. It has even reversed the trend and opened physical stores (there are now seven in the US, including **Amazon Go** grocery stores and bookshops) and of course owns the **Whole Foods** chain. If retailers are to learn anything from the Amazon success story it is to think differently about retail and the use of technology.

As Stuart Higgins, partner at **BearingPoint** says, "the stark reality is that the majority of retailers are still labouring with technology solutions geared towards store fulfilment," and this, in a nutshell, highlights the cultural challenges of turning years of entrenched retail processes on its head.

"Even before the COVID-19 pandemic, many retailers were struggling to meet the service expectations of increasingly tech savvy consumers seeking to blend their online and in-store experiences as part of a purchase journey," adds Higgins. "The accelerated uptake of digital sales channels combined with a desire for increasingly contactless transactions in-store has left many retailers struggling to find short term solutions to overcome more entrenched legacy IT issues."

So, how do retailers manage inventory deployment in multichannel outlets? How can retailers enrich the online purchasing experience to emulate store-based colleague interactions and advice? And how can they guarantee stock availability for click and collect transactions and move rapidly to seam-

BAD BUSINESSES ARE BAD BUSINESSES, REGARDLESS OF THE PANDEMIC AND THEY WERE ALWAYS GOING TO BE FOUND OUT

STEVE INGRAM
DELOITTE

less, contactless, payments in-store?

"Order Management Systems (OMS) are the key to unlocking the capability to fulfil online, from store stock," says Higgins, adding OMS is the critical enabler of true omni-channel retailing. "The latest breeds of OMS use AI to enhance forecast accuracy, manage inventory deployment and stock allocation to meet specific order demand and also orchestrate the order fulfilment journey. This means that distribution or store colleagues can manage the pick, pack and dispatch process within customer fulfilment lead time promises."

Of course, omni-channel fulfilment requires a high level of stock file accuracy and Higgins suggests that RFID (radio frequency identification) is therefore critical. It is, he says, being increasingly deployed, not only in distribution centres but in retail stores so that stock can be made available for online fulfilment. Of course, once RFID is deployed in a store environment, it is also a critical enabler of the future, contactless, customer offer.

According to Ingram at Deloitte, Spanish retailer **Zara** invested early in RFID and committed to having a tag on every product opening the way for a potential 'touchless' journey to the consumer, from supplier through distribution, store and checkout. RFID costs have plummeted in recent years making this possible but for many retailers it is not the focus, at least according to **Fujitsu**'s Global Retail Industry Digital Transformation 2020 study.

THE LATEST BREEDS OF OMS USE AI TO ENHANCE FORECAST ACCURACY

STUART HIGGINS
BEARINGPOINT

Retailers, says the report, are responding to these challenging times by recognising that digital transformations are now essential to survival, such has been the shift to online across markets. While times are undoubtedly tough, technology budgets are increasing, at least for just over a third (40 percent) of retailers. The spending emphasis is, it says on digital transformation (39.8 percent) but also communications and networking and cloud services.

To see change in action you need look no further than retail giant **Walmart,** which recently announced plans for localised, automated fulfilment centres to meet the dual demands of in-store and online shoppers. Using bots to retrieve items from the store, personal shoppers will then be able to assemble orders more quickly and efficiently. It's the sort of plan that feeds that idea of personalisation, a much-vaunted term but one that has yet to really blossom in retail.

According to Susanne Zander, partner at **Reply**, familiarity with online shopping has made customers more demanding. "They expect online experiences which focus on sustainability, convenience and creating experiences," she says. "Hyper-personalisation is at the core of this, meaning retailers can offer exclusive experiences to each customer, such as deals based on their shopping habits or showing suggestions for alternate brands which they might like in their weekly food shop."

[CUSTOMERS] EXPECT ONLINE EXPERIENCES WHICH FOCUS ON SUSTAINABILITY, CONVENIENCE AND CREATING EXPERIENCES

SUSANNE ZANDER
REPLY

So, how do retailers get there? What do they require more than anything to make this happen?

"Data-driven processes are key players in transforming this shopping experience with AI and ML enabling applications such as voice commerce, digital shopping assistants and interactive shop windows," adds Zander. "By using the available data to understand what a customer likes, retailers can predict their future needs. Therefore, stable and accurate algorithms must be put in place to ensure that retailers have the ability to use new technology, to deliver a more personal experience."

Ingram at Deloitte agrees. "Data is going to be everything," he says, "and many stores have had data for quite a while but it tends to be business operational data and they've struggled to use it or know how to use it. But this is the 'what' and stores need to know some of the 'why' to understand behaviours and trends."

As Jean Shin, director, strategy and content at communications firm **tyntec** suggests, retailers are now dealing with a new type of customer and it is imperative that they don't just get to know that customer intimately but they also have the tools and intelligence to deliver experiences.

"Online shopping makes it more difficult for customers to experience products in the same way they would in-store. Consumer emotions can range from satisfaction to frustration,

Microsoft Dynamics 365

Enabling intelligent retail

Dynamics 365 Commerce
Deliver unified, personalised and seamless shopping experiences

Know your customers

Empower your employees

Elevate your brand

Exceed customer expectations

RETAIL

which is why over 75 percent of shoppers choose to leave the site without completing a purchase," says Shin. "According to **SAP**, companies must move from the robotic, unfeeling interface of technology to an experience where the customer can sense the people and brand behind it all."

For many years now, technologies to improve human interaction have been talked up, not least augmented reality (AR) and virtual reality (VR). For Raymond Ma, general manager for Europe at **Alibaba Cloud**, AR is just part of a mix of technologies needed to improve online and in-store experiences. Alibaba, of course is a company well-versed in retail experience having grown to become the world's second largest retailer after Amazon, at least according to **Global Data**. In China it has a mix of grocery stores and physical retail stores, as well as online presence, and has been a pioneer in technology adoption, from digital payments using facial recognition through to automated service using robots. So, what does Ma see as some of the leading technologies that will not just invigorate consumer experiences but actually make products easier to try and buy?

ONLINE SHOPPING MAKES IT MORE DIFFICULT... EMOTIONS CAN RANGE FROM SATISFACTION TO FRUSTRATION

JEAN SHIN
TYNTEC

"Virtual shop assistants," he says. "These have been developed to understand and interact with consumers and bring a human element to the online shopping experience. They can bring products to life, by explaining product details and responding to certain inquiries, thereby helping to recreate a near human-like and more personalised shopping experience."

This experience is enhanced through livestreaming, which enables translation, while image search, he says, will improve browsing and remove frustrations when consumers try to find the products they want. AR, he adds, has a big role to play in "trying on different clothes and different outfits," enabling images to be shared to get opinions and then there is presenting the products themselves.

"Advanced 3D modelling technology has enabled the creation of virtual 3D products, which adds a whole new dimension to viewing products online," says Ma. "Thanks to great advances in Object Character Recognition (OCR) technology and visual AI, visually impaired shoppers can also navigate sites with ease, too. OCR makes understanding images and videos easier, which means shopping is more accessible and enjoyable for blind and partially-sighted customers."

Interestingly Ma talks about High Street retailers rethinking their stores completely, using the lockdowns as opportunities to reimagine stores. These retail spaces can become experience centres, that supplement an online store, offer special product displays and demonstrations, digital signage, VR/AR capabilities, play zones, relaxed seating and so on. Retailers, he says, need to be innovative, to not just drive sales but to drive interest and loyalty.

At the heart of this has to be digital transformation but when retailers consider technology change and the impact it will have on stores and consumers, it's also essential to think about the workforce. How can retailers ensure data accuracy, speed and efficiency in back office and supply chain processes? How can retailers change and plan?

According to David Starkings, business development director at corporate learning company **TTS**, people working in the background that have to use transformational technologies are often forgotten. TTS in Germany has worked with a number of su-

VIRTUAL SHOP ASSISTANTS HAVE BEEN DEVELOPED TO UNDERSTAND AND INTERACT WITH CONSUMERS

RAYMOND MA
ALIBABA CLOUD

permarket chains and retailers, usually following large scale SAP implementations. Starkings points out that this often-forgotten area of change can have huge and sometimes detrimental effects on the business unless retailers focus on ensuring accuracy from the start. By that he means giving users knowledge tools to enable accuracy, especially with data.

"Speed, accuracy of information and reduced errors in the back office will mean huge savings on the shop floor," he says, and he has a point. Accuracy in data will make or break operational and customer insight, and it's this sort of attention to detail through a transformation process that will surely empower retailers.

The transformational challenge was never going to be an easy one in an industry facing the double whammy of COVID-19 and a rapidly evolving consumer base. But there is considerable hope. The high street is not dead, and in fact, has an incredible opportunity to re-emerge post-COVID as a dynamic centre for change, if retailers are willing to lead that change. At the root of this is data. That will feed everything, from customer insights through to supply chain intelligence and operational efficiency but that data has to be accurate and well-structured.

As Ingram at Deloitte suggests, "there's no use making better decisions on the wrong data, because it will just send you in the wrong direction," and after the year retailers have had, that's the last thing they would want. ■

SPEED, ACCURACY OF INFORMATION AND REDUCED ERRORS IN THE BACK OFFICE WILL MEAN HUGE SAVINGS ON THE SHOP FLOOR

DAVID STARKINGS
TTS

CAPGEMINI LAUNCHES 'RETAIL INNOVATION STORE OF TOMORROW'

Capgemini and experience platform **SharpEnd** have launched a partnership with global media platform, **The Drum**, to launch a new retail innovation store, **CornerShop**. Located in London, CornerShop has been designed as a 'live testing environment' for brands, retailers and shoppers to get - post-COVID - hands-on with the latest technologies that reimagine the shopping experience across food and drink, cosmetics and fashion.

The new approach will support retailers and brands as they seek to understand how digital innovation can enable new ways to evolve the customer experience, improve in-store operations and allow consumers to rediscover the joy of in-person retail.

CornerShop is split into four sections, each exploring fundamental aspects of the shopping experience: the automated store, the augmented store, the purposeful store and the personalised store.

The shop will allow visitors to interact with different technologies and purchase products from various brands. As soon as a visitor enters the store, their mobile phone becomes the retail experience remote control, leading them through the space and allowing them to engage with new shopping concepts and technologies. Some of the shopping experiences currently testing in store include a customisable store environment, virtual try-on technology, a 'pay by the pick' in-store farm, social distancing automation, and more.

Commenting on the launch of the store, Steve Hewett, head of retail customer experience at Capgemini Invent, said: "While the long-term impact of the pandemic on retail stores is yet to fully reveal itself, the events of the past year have radically escalated retailers' needs to redefine the purpose and experience of the store and its connection to the ever-changing digital ecosystem that customers engage and shop within. This means it's never been more critical to build the digital capabilities required to underpin a new shopping reality. Providing a glimpse at what retail of tomorrow will be, CornerShop has been specially designed to bring to life the most innovative technologies and how they can blend the physical and digital to create a seamless, differentiated in-store experience."

Rob Hollands, managing director at SharpEnd, added: "As the change in consumer shopping behaviour continues to accelerate, brands must find new ways to connect, deliver relevant and engaging experiences and drive loyalty. From virtual-try-on to connected packaging, we've created an environment that allows brands and retailers to explore the technologies that provide the most engaging customer experience and the option to shop and interact in the way that best suits individual needs. CornerShop aims to help brands and retailers drive their transformation further and faster, explore the latest technologies and rapidly test and learn with real consumers, in the real world."

Gordon Young, founder of the The Drum, concludes: "The pandemic has thrown the high street into crisis. Against the odds, we've launched CornerShop in the midst of lockdown to prove to brands and retailers that there are inspiring solutions available. We are excited to showcase new experiences, industry innovation and pioneering technologies that can help retailers not just survive but thrive in the post-pandemic world."

The store is ready to host virtual tours and will welcome visitors in person in the near future, subject to government guidance.

ERP TODAY Live!

| CARL PHILLIPS |

AO.com beat retail blues

Everyone loves a good story. And this is a great story because it's almost impossible to believe. Who opens retail stores during a global pandemic (apart from Amazon, the world's richest retailer) that has seen high street giants collapse like a castle of cards? AO.com does, that's who. "AO, let's go!" will forever be embedded in your head as the jingle for the online retailer that swam upstream in very turbulent waters to open bricks and mortar retail spaces when everyone else was closing theirs down.

Hundreds of online retailers start out with the best intentions but fail to deliver what the ever-pickier customer wants - seamless service and experience. Twenty years ago, a young man called John Roberts who worked in the kitchen fitting business realised how inefficient the process of buying fridges, cookers and dishwashers was - and decided to do something about it. Discussing the issue in a pub with a group of friends, he claimed that he could build a website and revolutionise the way people bought white goods. One of the friends bet him £1 he couldn't and just like that **AO.com** (Appliances Online as it was then) was born.

From humble beginnings AO has grown into an online powerhouse. With revenues approaching £1bn and employing more than 3,000 staff, AO has operations in both the UK and Germany. It sells far more today than just kitchen white goods having branched into the full spectrum of consumer electrical products. It has also developed its own mobile phone offering, launched AO Finance, and recently recycled the millionth fridge at its Telford recycling centre.

On the back of this meteoric success, AO is now taking the bold step of moving from pure play ecommerce to shop front retailing through a partnership with **Tesco**. Straight from the **Amazon** playbook, AO is leveraging the power of its online retail experience and connecting with a new segment of customers, whom for a variety of reasons, they aren't servicing through existing channels.

Carl Phillips, group IT director at AO, said: "I understand that the global trend sees massive uptake in online grocery shopping but we are of the opinion that there is and will still be a place for supermarkets. We believe we can partner with Tesco, use our existing online platform and give our customers the best of both worlds. Being able to have that rich conversation with a sales assistant in-store together with being able to pick up your items there and then, but also knowing that the AO online experience is right there in terms of service offering."

AO's foray into real world shopping is part of a pilot scheme with Tesco that will see the online retailer start with five physical stores in flagship locations across the UK. The trial was due to start just as the first COVID lockdown kicked in and has been pushed back and postponed several times – making planning and orchestrating the technology a particularly challenging task. Six months ago, as lockdown measures eased during the summer, Tesco gave the green light

and AO had less than four months to stand up a completely new business and make it work.

In partnership with **Microsoft** and **HSO**, AO effectively started with a blank piece of paper. The opportunity to reach a new cohort of potential customers was far too valuable to turn down no matter how challenging the project. But, AO had never been a high street retailer. They had never fitted a store out, or managed inventory in multiple retail locations, or had sales staff on shop floors – in fact, they had never done any of it before.

David Little, managing director at HSO, said: "The big challenge was that having not done it before, they didn't have a big list of requirements. We couldn't go to somebody and say, 'How do you do this in the warehouse?' They actually had an empty space in the warehouse for the project and that was it. All of the things that normally anchor a project in terms of knowing how they do business today, albeit that businesses usually want to change, none of that existed."

A further complication was that AO took the decision to implement the new Microsoft cloud technology for the Tesco pilot as a completely standalone project. This wasn't an extension of an existing solution that just needed a new op-co creating. Finance, CRM, order management and warehousing – along with all the in-store tech – was implemented as a greenfield project away from the core business.

Phillips said: "The systems as they stand today are not the systems we would have if we rolled that trial into 200 or 300 stores. They're solid, they're robust, they're secure, but in terms of the scope and the limits of what we could offer customers, we've narrowed that to suit the needs of it just being a trial. As much as possible, we've done it as a standalone implementation with finance, our core CRM and order management platform and the mobile point of sale piece together with some other in-store technologies around the edges."

This allowed AO to ring-fence the project and gave them the opportunity to look at the latest Microsoft retail stack in isolation with a view to rolling out various components into the wider business at a later date.

Phillips continued: "Part of the beauty of doing it more standalone was that we got some real world feedback. We got our customers in the business to actually start to use it and pull the levers and compare it in terms of the business processes, but also in terms of the technology to what they've been using today in the rest of our business. I'm a big believer that the measure of progress when you're in a software industry is working software. Everything else, percentages on spreadsheets and stuff like that, you can keep it. Show me the working software."

HSO is a Microsoft Dynamics partner that specialises in ERP and CRM solutions and they played a key role in this incredible journey utilising their knowledge and expertise in real world retailing. Phillips said that they approached the project as a partnership in that HSO weren't just executing parts of the project that they were asked to do; they put skin in the game. He said: "We were really pleased with the way that all of the people from HSO were just as passionate and excited about the implementation of the trial as we were."

Whilst it's early days, our understanding is that so far trading has been successful and has exceeded their expectations. Watch this retail space... ■

We improve the

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RETAIL

Retail software &tech trends

BY RICHARD SANDERS

Ask any retailer what keeps them awake at night and the majority will probably answer **Amazon**. The combination of product range, price, availability and delivery infrastructure has caught many asleep at the wheel. Just when everyone thought ecommerce was king, along came Amazon with the acquisition of a bricks and mortar store format, plus alliances with the likes of **Morrisons** for grocery delivery. This reinforces the view that the holy grail for a retailer or brand is to achieve a single view of its customer across all retail, and ultimately social media channels.

"We'll continue to see marketplaces and traditional retailers converge. It's happening both ways, where market places like Amazon are moving to forms of traditional retail and traditional retailers ...are making the move to marketplaces to stay relevant in the digital economy," said Greg Chapman, SVP business development, **Avalara**.

This is now increasingly pushing innovation in retail technology with a continuing drive towards providing an infrastructure for retailers of all shapes and sizes to compete on level terms. This has been fuelled by COVID-19, which in many commentators' eyes, has just served to hasten the high street's demise by at least five years. The likes of **Shopify** have clearly been successful in building a white label proposition and they and many others increasingly look to build functionality and data insight to help retailers maximise their return from their consumers.

And just to add to the urgency of this, we are not alone in foreseeing a consumer bounce in the second half of 2021 as many consumers spend some of their savings accumulated over the last 12 months. Retailers that will have struggled in this period can ill afford to miss out on this potential windfall.

So what do we see coming down the track that helps level this playing field?

- **Top of the list** is increased sophistication in the delivery and returns space. Customers want product quickly and want an easily facilitated returns process for convenience, limited contact and low cost. Both of these factors drive customer loyalty, albeit at a price. There's an increasing drive towards autonomous delivery solutions on the outbound for example and on the returns side there has to be an increasing use of data on the consumer to ensure that the individual is a customer you wish to retain or grow - too many are habitual users of free returns and the cost of this needs to be properly understood. COVID-19 has also had a lasting impact on consumers' desire for BOPIS (buy online, pick up in-store) or Click and Collect which adds further complexity to customer visibility, payments and stock management. Supporting all of this is the emergence of automated warehousing, utilising digital and robotics technology for order fulfilment.
- **Reality tech** is gaining significant ground, reinforced by lockdowns, with consumers seeking real life experiences nearer to home and this is closely aligned to the gaming industry where we have seen a significant increase in M&A activity amongst gaming businesses.
- **Mobile shopping** will receive a further boost with the advent of 5G - even without this mobile shopping has been a net winner for some time and increased band width will continue this trend.

WE'LL CONTINUE TO SEE MARKETPLACES AND TRADITIONAL RETAILERS CONVERGE

GREG CHAPMAN
AVALARA

tity verification given the increasing security risks seen across the digital world. Many people will be familiar with facial recognition on their mobile devices and possibly voice recognition in their interactions with financial services. Increasingly we're seeing the use of two factor authentication to tackle the surge in online fraud.

• **Product customisation** will be increasingly prevalent. **Nike** has delivered this for some time now and with the rapidly reducing cost of 3D printing, we see much greater opportunity for customers to personalise what they buy, coupled with more flexible configuration software.

• **In addition** to all this is the rise of payment flexibility. **Klarna** are leading the way here with established operators such as **PayPal** also expanding their offering. That said, we believe it's inevitable that we'll see more political scrutiny over these models.

• **The sophistication** of advertising will increase significantly, driven by the introduction of more engaging content that builds brand equity and customer affinity. Content is increasingly becoming seen as the core plank of customer engagement and distributing this in a wide range of formats, brand compliant and in multiple languages across multiple channels is a real challenge to marketeers. Cracking this can really differentiate the consumer brand.

"Amazon continues to emphasise and release opportunities for brands to tell their story and build brand equity across its platform with content. With this comes the introduction and adoption of new-to-brand metrics and the beginning of tracking the impact of these efforts. I believe tracking metrics will inevitably become increasingly interested in understanding the impact of these efforts. I believe tracking metrics will inevitably need to continue to expand as brands become increasingly interested in understanding the impact their advertising and creative strategies have on attracting new consumers to purchase," said Zak Semitka, senior specialist, marketplaces at **Tinuiti**

• In the consumer space many categories are now well established online and it's easy to find categories where 10 percent and more of volumes are transacted online. There are other categories, typically larger ticket purchases, where penetration is much lower. A great example of this is automotive retail where circa 80 percent of browsing is done online and less than one percent is transacted. New arrivals such as **Cazoo**, **Hayfin**, **cinch** and **Drover** etc. are rapidly influencing consumer behaviour here in both the used and new car market. Also in the new car market, CaaS (Car-as-a-Service) is starting to gain more traction as technology facilitates the proper integration and tracking of services and assets. This has influenced a number of OEMs to look at adopting different models, such as **JLR**'s subscribe and drive package.

There's no doubt that the last 12 months has seen some seismic changes in the retail landscape and consumer behaviour that the software industry is responding to in exciting ways. ■

Richard Sanders is a partner at Alantra

AMAZON CONTINUES TO EMPHASISE AND RELEASE OPPORTUNITIES FOR BRANDS TO TELL THEIR STORY AND BUILD BRAND EQUITY

ZAK SEMITKA
TINUITI

Working from home

THE BIGGEST PRODUCTIVITY EXPERIMENT OF THE DECADE

BY DEBBIE WALTON

Will the way we work today be the way we work tomorrow?

In March 2017, a video of two young children interrupting their father's **BBC** interview about South Korea went viral. Professor Robert Kelly was quoted as saying: "I thought I'd blown it in front of the whole world," when his children entered his home office during the exceptionally stoic online interview. Kelly calmly was shown gently shoving his eldest away before his panicked wife ran into the room, grabbed the disruptors and removed them. This kind of interruption during an online meeting certainly was not the norm – and may even have been frowned upon. But fast forward a few years into a pandemic, disturbances like these are commonplace and they've become a standard part of the work-from-home landscape we all find ourselves in.

Eleven months ago, when news of national lockdowns across the world broke, uncertainty and fear rippled across the globe. Work-from-home orders were issued and those who could, set up temporary offices on dining room or kitchen tables, ready to tackle work in a very different way. Businesses scrambled to ensure all employees were set up properly at home, with access to high-speed internet connections, video conferencing software and comfortable office chairs. Working from home has arguably been every commuter and office-bound employee's dream and this quick shift from office-to-home work conditions was something of a welcome novelty. Early adopters of the work-from-home trend carried on as normal, unfazed by the shift around them.

> **"Managers should be taking special interest in the physical health of their staff and insisting that they leave their desks regularly**

The way we work has changed dramatically and business leaders have had to become more agile in their approach to managing their workforce. Managers need to take cognizance of the fact that some people in their workforce draw their productivity through extrinsic factors in the workplace. Some team members who thrive in a fast-paced, noisy office environment may find working in isolation challenging. It's important to remember that not every employee has the discipline, drive and emotional intelligence to produce their best work while not being corralled by office walls and routine. In these instances, regular, open channels of communication are essential and clear goal setting is of the utmost importance to ensure a team's success. Routine communication with staff will not only motivate them to succeed, it will make them feel valued and seen, and a positive employee experience will always lead to business success. It's never been more important to know your staff and the shift towards more casual interactions on video conferencing has certainly set the stage for this.

The philosophic concept of the separation of church and state can be used to compare the separation of work and home. Whilst historically we went to work, finished our day and came home and tried not to bring work home; our work now is literally and figuratively brought home. The relentlessness of lockdown and government mandated stay-at-home orders means that our church and state aren't separated at all. The results of this lack of separation of work and home have led to blurred working hours, far longer than eight hour working days, and lunch at our desks. Not to mention far more hours in front of a screen than is deemed healthy. There are many lessons to be learned from this. Managers should be taking special interest in the physical health of their staff and insisting that they leave their desks regularly during the workday, as well as taking walks outside or exercising often. Should the world of work return to some semblance of pre-COVID normality, companies should certainly be planning for higher levels of flexibility for their staff. Whilst the vast majority of people would certainly return to normal working conditions, they'd value the offering of split working, varying the days working from the office and at home.

Now more than ever it's imperative that we pay attention to work-life balance. Going forward, whether or not the way we conduct our work returns to a pre-COVID norm, perhaps it's time leaders relook at the way they manage their workforce and conduct business. We've met family members, even if by accident, we've learned that it's not always necessary to enforce strict working hours and micromanaging creates feelings of anxiety and mistrust. We've learned that while deadlines are important, not everyone does their best work between 9am and 5pm. Perhaps some workers operate optimally when their family is asleep or after they've gone for their much needed run. An important lesson learned during the last year is that flexibility in the way we live, and work is paramount when it comes to the health of self and of business.

"Routine communication with staff will not only motivate them to succeed, it will make them feel valued

According to **Harvard Business Review**, research conducted during COVID-19 shows that a large number of managers are struggling with the effective management of people working from home. This translates into workers feeling untrusted and unfortunately, micromanaged. There are enormous consequences of poor management during a crisis like this which have far-reaching negative effects, not only for employees and their families, but for businesses too. This suggests that managers need help to develop their managerial skills in this area. Merely bringing this to a manager's attention is unlikely to result in changed behaviour. Like staff need continuous professional development, so do managers and organisations need to implement this kind of training for high-level staff.

Here are five ways forward, according to Harvard Business Review, that will support managers who are finding it challenging to manage staff who are working remotely:

1. Implement change at the top. It is very difficult to expect managers to lead differently to their leaders. Managers who struggle leading remote teams have low job autonomy themselves and are likely managed by controlling bosses. Therefore, we must affect changes to leadership style right at the top of the business.

2. Provide effective communication and support. Organisations need to move past merely talking about supporting flexible working and actually support it. For example, ensure your staff have adequate equipment, encourage staff well-being by not expecting them to keep office working hours, and offer training in support of flexible working. These changes will not only help workers who are operating from home but will also help managers because they give a strong signal about the company's full commitment to the flexibility.

3. Educate managers and staff members about the potential benefits of well-designed remote working. Research has shown that it is possible for staff to be more productive while working from home. If autonomy is low and micromanagement high because of managerial mistrust, the benefits of remote working are unlikely to become evident. Why expect your staff to remain at their desks from 9-5 when they're living in their office? Managers need to understand the work designs that need to be put in place in order to support effective remote working.

4. Check in rather than check up on. Simply telling managers to trust their employees won't enact change. They need to learn the skills of delegation and empower their staff to do their best rather than controlling their output from afar. This will in turn promote overall employee satisfaction. Frequent, positive communication with staff is even more important now than ever. But rather than checking up on what your team is doing, perhaps check in to see how they are doing instead. Provide guidance, information and support and encourage autonomy in the process.

5. Manage by results not by input. Managers need to focus more on results and not hours worked. Managing by results goes hand-in-hand with job autonomy. When staff are given the discretion to work the way that suits their situation, they are more likely to yield excellent results.

Inviting colleagues and strangers into our homes via video conferencing certainly brought a much-needed human connection to the somewhat cold world of boardrooms, suits and formalities; not only because of isolating COVID-19 restrictions, but also because as humans we crave tangible interactions with other humans. While we are all kept apart, having access to video conferencing applications such as **Zoom**, and **Microsoft** Teams is a welcome replacement for office water cooler chats or a visit to the pub at the end of a long day. It relieves the monotony of lockdown and has brought us closer together and certainly made the world seem much smaller. For now. ■

—

Debbie Walton is deputy editor at ERP Today

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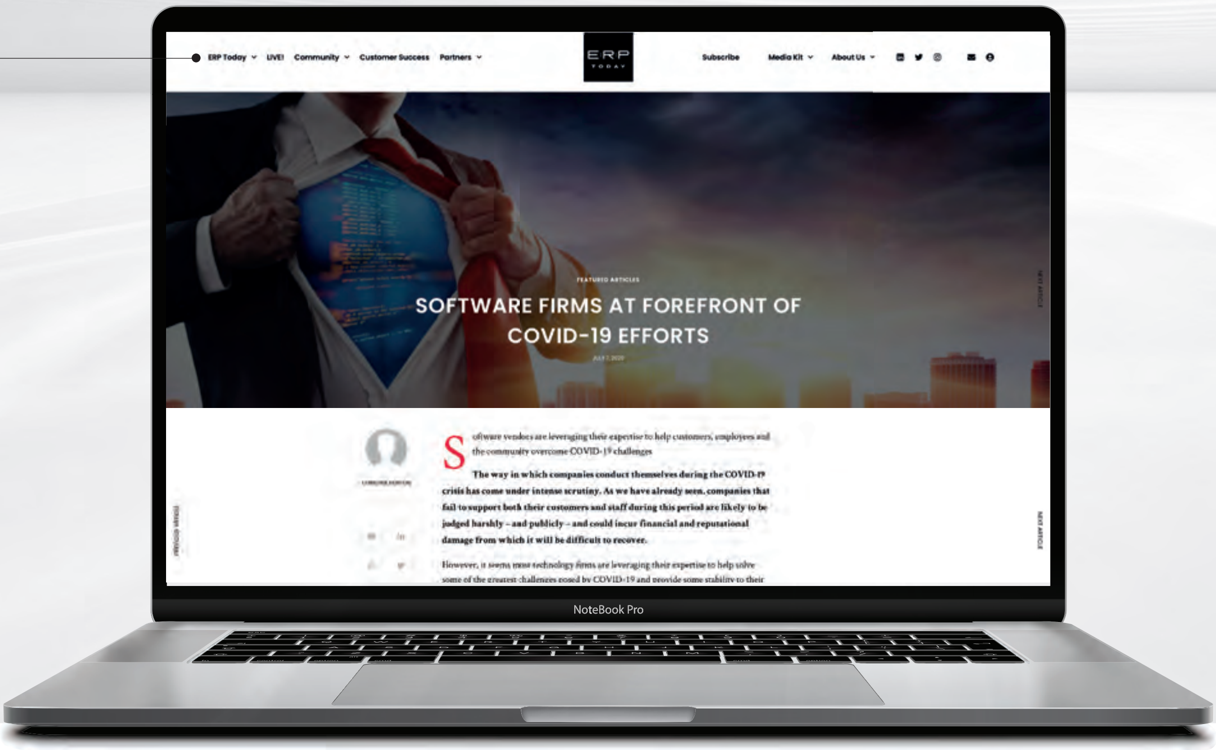

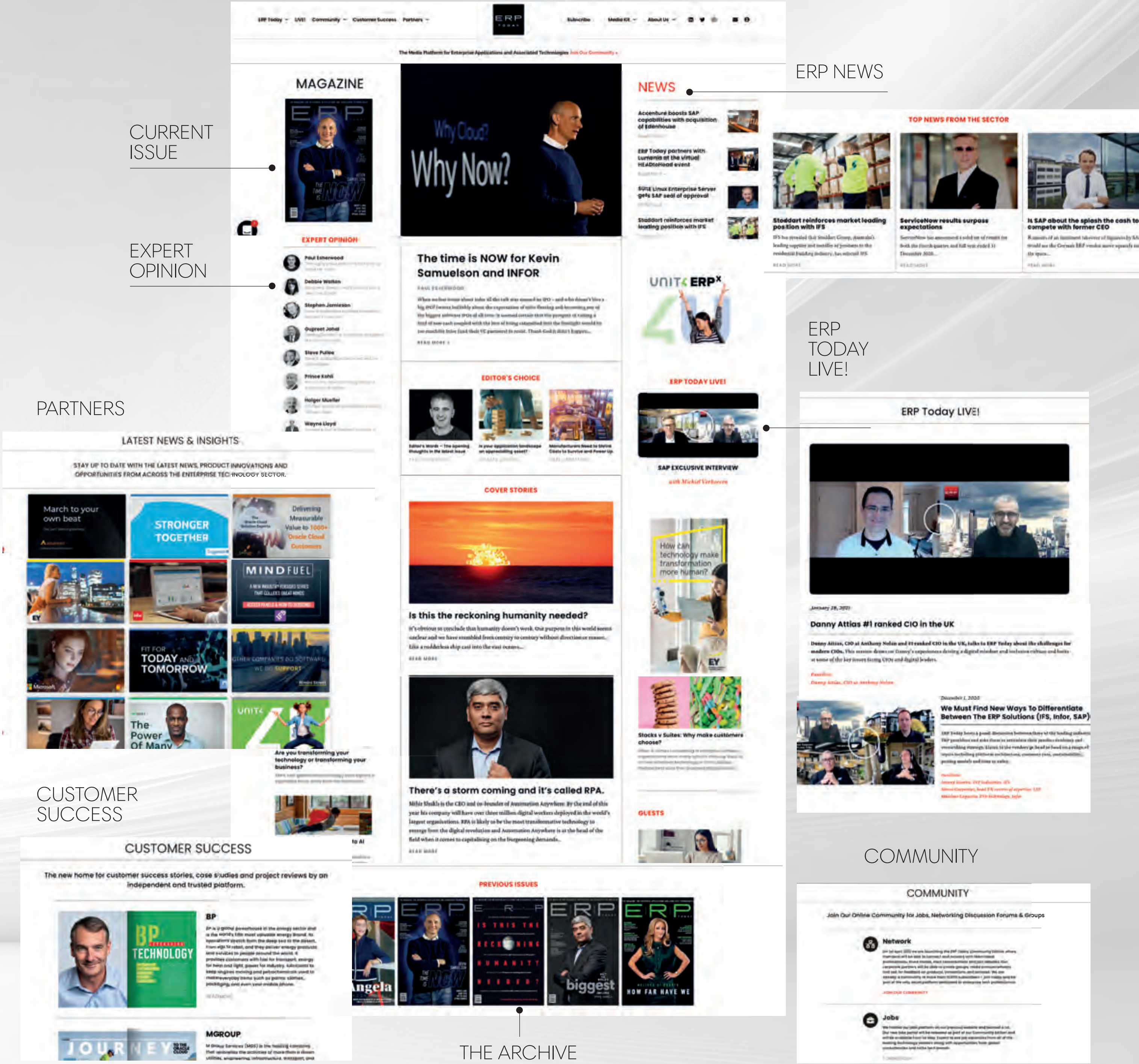

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ADVANCED

HUMAN

HOW ONE VENDOR

TO

HAS HUMANISED THE

HUMAN

SOFTWARE INDUSTRY

BY PAUL ESHERWOOD


partnership.
solutions.

GORDON WILSON

ADVANCED IS A SOFTWARE COMPANY THAT YOU MAY NOT HAVE HEARD OF, YET THEIR PRODUCTS AND SERVICES TOUCH THE LIVES OF MILLIONS OF PEOPLE. IF YOU HAVE CALLED NHS 111, TRAVELLED ON A SMART MOTORWAY, CAUGHT A TRAIN TO WORK, DONATED TO A CHARITY OR BOOKED TICKETS TO AN EVENT – IT'S MOST LIKELY THAT ADVANCED SOFTWARE POWERED THAT EXPERIENCE.

Advanced is not a typical ERP vendor. In fact they are more of a software vendor with ERP capabilities than a pure play ERP provider. Over the last 10 years they have acquired and developed a collection of applications and tools that, when combined, provide an organisation with a full suite of finance, HR, payroll and workforce management capabilities. They also sell industry specific solutions developed in particular niches such as conveyancing for the legal sector and membership management solutions for charities and venues.

Advanced is the third-largest software company in the UK with 20,000 customers operating predominantly in healthcare, blue-light services, legal, education, third-sector, sports and events. Their solutions enable care to be delivered to more than 40 million people in the UK, they (pre-COVID) help 10 million sports fans through the turnstiles, and manage more than £1bn in charitable donations. It's hard to imagine another software company that has such reach into the lives of UK citizens.

Five years ago, Gordon Wilson took over as the CEO and set Advanced on a mission to become the first and only software vendor that provided human-to-human services. In order to deliver on this, Advanced has developed a deep commitment to social and environmental responsibility. It has hired a youthful and dynamic workforce through innovative recruitment techniques that appeal to a younger audience. And, has invested heavily to create a culture and set of guiding principles that sit comfortably alongside their mission statement, 'to be the software vendor that makes a difference to millions of lives'.

From a technical perspective, Advanced has made significant strides towards reshaping their products and services so they are fit for the demands of modern organisations. They offer a choice of cloud and on-premise deployment options and present their tools and applications to users through a bespoke workflow management solution called MyWorkplace.

I caught up with Wilson at their flagship office in Birmingham to find out what was driving Advanced's strategy and to learn how he had turned the company around from a fairly non-descript software house with an incoherent collection of products to become one of the biggest success stories in UK software history

Gordon, you've been the CEO at Advanced for just over five years. What did the business look like when you first joined?

GW "Very different to how it looks today. There were 14 siloed businesses that had been acquired, all with their own MD and management team. In some cases, their own individual branding and their own message to the market. It was a good business, but it wasn't a great business, and it needed some work to simplify the internal structures and reshape the products with a focus on customers."

What were the first things that you put your hand to? What was top of page one in terms of reshaping the business?

GW "Well, there were quite a number of first things that were of equal importance and needed to be tackled. At the start we had the four Rs – to reorganise, to relocate, to recruit, and rebrand. I restructured the business by bringing the 14 separate companies into four sectors and operating as one organisation. We merged more than 40 offices into three flagship locations based at Heathrow, Birmingham and Manchester. We recruited literally hundreds of new people with the sort of DNA that we were looking for to inject the business with new vitality and fresh blood. And then we completely rebranded."

In terms of the products, how integrated were they or were they completely separate?

GW "They were completely separate products and there was only one cloud based solution back then. We had some great products, but there was little focus or strategy around the move to cloud. From that point of view, there was a lot of work to do."

If you think back over your first five years, how do you feel that you've measured up against some of the key challenges?

GW "We started running NPS in December of 2015. And the score came back with a rolled up weighted average of minus 16. That was basically saying, it's not a train crash but you need to pull your socks up.

"We continued to run it every six months and now we're plus 30. So a 46 point improvement over that five years. In NPS terms that's quite stellar. Our cloud products' NPS is plus 37, so even higher. We're starting to get close to what is a really good software standard but I won't rest until we're even higher."

What's been the main driver for that? What's had the biggest impact on that overall satisfaction?

GW "There was a whole raft of things we did but bringing us together on a common platform made a huge difference. Before we made the

changes, customers that used two or three of our products got a completely different service and experience depending on who they called or how they contacted us. We put a new system in place so that all our support activities were delivered on a common platform. Everyone has visibility of the customer relationship now. We all know what products they're using. We all know when they last called and what their problem was."

Where are you in the journey of retooling or re-platforming the legacy products that you inherited and that you've acquired?
GW "We're not at the end of the journey because it's a big job but we are well down the road. We now have 19 SaaS cloud offerings for all of our main customer product streams to migrate to. We still have thousands of customers that are sitting on legacy systems, but do you know what? An awful lot of these customers are very happy on them. And we're not forcing them to move to the cloud - what we are doing through good account management is allowing them to see the benefits and the opportunity of moving to a true SaaS cloud product."

One of the key differentiators with your applications is that they impact people in their every-day lives. Have you stumbled across that by accident or is that part of a defined strategy to build products and services that work for people in the community, citizens rather than for those in their working lives?

OUR CUSTOMER IS TECHNICALLY A PATIENT, A STUDENT, SOMEONE BUYING A HOUSE THAT'S HAVING CONVEYANCING DONE, A PASSENGER ON VIRGIN RAIL

GW "When I joined Advanced we asked ourselves a whole series of questions about what did we stand for and what was our mission? Is it just to talk about our solutions or is it actually to go past our customer, to our customers' customer, and be human to human rather than business to business?"

"Our customer is technically a patient, a student, someone buying a house that's having conveyancing done, a passenger on Virgin Rail - we literally touch millions of people's lives every single day without them knowing it.

"We're very proud of the way we can impact people and society. Take our response to the pandemic, for example. The 111 system which is the spine of the NHS is powered by Advanced software. 80 percent of all calls in England go through our systems and that has made a huge difference to people's lives. When the pandemic hit we had to stand up new environments to support the surge in demand – and we did it in record time - in a matter of days rather than weeks."

Advanced is co-owned by two VC funds - how invested are they in your vision to build a software company that focusses on human to human software rather than business to business?
GW "I'm not just saying this because it's an interview and I'm not just saying this because they appointed me. I'm saying it because it's true. They couldn't be more supportive and they're fully behind the business and what the business stands for.

"In fact, they are pushing us to do even more. We have started our ESG initiative and they are fully supportive of that. Who'd have thought 20 years ago that a PE firm would be so behind initiatives that are focussed on culture, sustainability, the environment and social responsibility?"

Purchasing decisions increasingly have a sustainability element to them – is that why Advanced has started these initiatives?

GW "The vast majority of public sector contracts talk about your ESG and they score you on that. So yes, it's important to do it, but don't just do it because you got to tick a box, do it because you believe in it. You have to believe in it and be able to drive the ideas through your internal culture and ultimately into your customer relationships."

Talking of customers, aside from NHS that we have already mentioned, which other notable customers are you helping?

GW "One of our big customers is London City Airport and they have been floored by the pandemic – it basically had to close. They have a managed service with us and they still have to have it in the background. Contractually they were obligated to keep paying for a service they weren't using but of course we helped them and allowed them to shut down without financial penalty and keep the lights on with a skeleton service. And in fairness to them, they extended our contract for that so we gave them something and they've given us something which will be downstream.

"We also work with Highways England and manage all the IT infrastructure for the gantries and signage. The systems behind all that the smart motorways are powered by Advanced software. There's so many touchpoints where our software and services impact our customers lives; the guy driving in his car, someone flying out of London City Airport, a citizen calling NHS 111. We take our impact and responsibility seriously and that why we have worked so hard to bring the quality of everything we do up to a level that exceeds expectations."

What's the one thing that you'd like people to know about Advanced?

GW "We are a people centric business with a strong social conscience. So that's our bedrock. And we will continue to develop great solutions that can be consumed by our customers to help their customers and they are patients, students, customers, passengers, the population of the UK and Ireland where we serve.

"We have a really laser-focus on quality to continually drive the quality agenda because I believe the overriding thing that all customers always want is quality product, and quality service. And if we don't continually have that focus, then I believe that will be a head wind to our future growth aspirations." ■

The procurement problem

UNLOCKING INNOVATION AND SUPPORTING SMES

BY EMMA SINCLAIR MBE

I recently spotted a tweet from Chris Bakke, an entrepreneur with a number of significant exits under his belt, that got me thinking. Why is procurement still such a challenging beast?

Large companies want to purchase and benefit from innovation to improve and enhance their businesses and startups and scaleups desperately want to sell to this market. Having founded an enterprise software business, this is an issue close to my heart and one I believe should be at the top of the corporate agenda.

Bakke's tweet kicked off a debate about heroes in large companies who bet on small business... then swiftly moved to tales of horror, mostly shared offline, about how small businesses are drowned by huge teams, months of grilling and complex testing.


Chris Bakke @ChrisJBakke · Dec 24, 2020

Shoutout to people at large companies with budget who bet on tiny companies.

The number of legal, finance, procurement, and integration hoops you have to jump through to take a bet on an unproven company is massive, and these people never get enough credit for believing early.

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Legal bills for SMEs working with in-house counsels who run aggressive processes were a common source of distress. SMEs often feel they must agree to harsh terms in order to close deals. It takes a robust SME to stand firm on key commercial terms when a large customer steadfastly refuses to be flexible.

Of course this is not a case of big corporations wanting to get in the way of progress. Companies are under such scrutiny for anti-corruption, anti-bribery, regulatory compliance, human rights goals, climate commitments, gender balance (often trying to make a difference where governments can't) and so much more, that it results in hugely complex sourcing and contracting processes. How can they vet tiny businesses to protect themselves from reputational and financial risk?

Robyn Dittrich, vice president of technology and innovation procurement at **BHP** told me that "with our supply chain spanning 60 countries, 10,000 partners with an annual spend of more than $30bn and sourcing 215,000 different types of materials for our Australian operations alone, doing business with integrity matters." Managing that risk is a challenge they bear. "Corruption misallocates resources, reinforces poverty, undermines the integrity of government and community decision making, and results in waste of the opportunities that arise from resource development." She told me: "At BHP, we have robust systems and controls to ensure we know who we're doing business with, and that we are operating ethically." They offer fair payment terms and procurement initiatives specifically designed to work with smaller businesses.

Steve Jarrett, former entrepreneur, now senior vice president of data and AI at **Orange Group,** added: "Large companies often overlook smaller, specialist vendors in procurement processes. Large RFI/RFP often favour the large vendors who can cover the many requirements and have the resources to engage with so many opportunities. I have found that identifying the focus areas that require significant and deep expertise and having less broad requirements on the secondary points allows smaller vendors to compete. I often find the combination of a large provider and a few smaller experts in those key areas works well."

And so I wondered... what can be done to make this easier? Why is it all so hard?

What are large companies doing? Innovation teams exist in many large companies to help SMEs navigate and find the right buyer. Whilst these teams are not always the ideal entry point for SMEs, those who do manage to secure a deal often benefit from being guided through procurement with internal support.

Many large companies offer generous payment terms as one way to support small businesses, including Net 10 payments in some cases (but require a two percent discount to do so). This is a win for the big customer with cash on deposit and a win for the small supplier needing it. That said, if a deal has taken 3-6-9 months of procurement to get to that point, the vendor being desperate for money and having to chip money off their price to get paid may not feel entirely fair!

What are governments doing? Some governmental bodies do have programmes to prioritise procurement from minorities to try and address vendor imbalances. In the USA, Industrial Strategy payments to large enterprises mandate income sharing with small and entrepreneurial businesses in their supply chain. And in Australia, **Supply Nation** works to connect over 2,500 verified indigenous businesses on **Indigenous Business Direct** with more than 450 paid corporate, government and not-for-profit members to enhance supplier diversity. These are positive steps but prioritising smaller organisations in procurement doesn't necessarily make the process to win business any easier once there.

In the UK, an independent review of the **Small Business Research Initiative** in 2017 found that different government departments procured services from small businesses in different ways, resulting in a real terms decrease in the amount of public funds being spent on small businesses.

Darren Jones MP, currently chair of BEIS (department for business, energy and industrial strategy) told me that "to secure innovation based economic growth, and a broader distribution of opportunities across the country, the government has to use the power of public procurement to support small and entrepreneurial businesses right across the UK. As the government reviews the industrial strategy - and the role of Innovate UK and the Small Business Research Initiative - my committee and I want to see a much stronger emphasis on supporting innovative SMEs in the delivery of our industrial missions."

At the very least, it is on the agenda.

What can SMEs do? Where possible, find a senior sponsor or advocate for advice and help navigating the procurement process. If you come up against what feels like an insurmountable challenge, ask your champion.

> **"Where possible, find a senior sponsor or advocate for advice and help navigating the procurement process. If you come up against what feels like an insurmountable challenge, ask your champion**

Take a leaf out of Uri Adoni's book on the importance of chutzpah. In *The Unstoppable Startup*, the VC and former CEO of **Microsoft Networks** Israel reveals how Israeli chutzpah – a bold, can-do, audacious attitude – is what accounts for the nation's incredible track record of success. That sort of attitude can help here too. If a contract term is too onerous, hold your nerve. If a process is impossible to manage, question whether it is vital and flag it if it's suffocating your organisation.

Harriet Minter, author of *WFH* (Working From Home): How to build a career you love when you're not in the office told me that working from home without a team around for support means small businesses might find it difficult to pump up their chest and stand firm against a Fortune 1000 legal team right now. Saying no to something vital when you can't see the whites of someone's eyes and get a sense of how much a certain point is non-negotiable can be nerve wracking.

That said, she told me: "The advantage of not being in the same room as the people you're negotiating with is that you can have your notes to hand. Put your key points and desired outcome on one piece of paper and your bottom line on another, so you can refer to them easily and have a constant reminder of what you're not going beyond. Whatever you do, don't write out a full script, you'll sound like you're reading it and instantly lose any sense of authority."

Conclusion

There is a procurement problem but no roadmap to a proper solution. Only the seeds of change, select independently organised initiatives (in governments and the private sector) and tools and tricks to help companies navigate appear to exist for now.

Can governments incentivise companies with tax breaks to buy from SMEs? Can companies run light versions of procurement processes expressly designed for small companies? Can large companies with chief procurement officers ensure they also have an SME procurement officer?

With SMEs representing about 90 percent of businesses and more than 50 percent of employment worldwide (World Bank SME Finance), unlocking this process and making it easier means boosting productivity, customer experience, employee satisfaction, tax revenue, employment and more in almost every corner of every country. It is in all of our interests to make procurement better. ■

Emma Sinclair MBE, co-founder of EnterpriseAlumni

going green with the cloud

We're encouraged to choose more sustainable options every day – and this extends to the decisions organisations make when purchasing technology.

SUSTAINABILITY

For any number of reasons, sustainability is an increasingly important factor in the IT decision making process today.

In many cases, firms will be looking to comply with legislation – the UK has set a net zero carbon emissions target by 2050. They may also be responding to pressure from customers and shareholders, or merely reflecting the viewpoint of a new generation of tech purchasers.

BY CHRISTINE HORTON

IDC research shows that 65 percent of IT executives in Europe plan to dedicate between 10-50 percent of their strategic budget to sustainable products and services in 2021 – a trend that is particularly prominent across large organisations.

"Data from our 2020 surveys shows that up to 60 percent of European RFPs were already asking for sustainability credentials from their IT providers. Both from the point of view of how sustainable the provider was but also how their specific technology solutions could help the customer become more sustainable itself," says Marta Munoz, who heads up IDC's EMEA sustainability practice.

Cloud: a quick win

Cloud is often used as part of this green argument. Though not without its own impact on energy usage and carbon emissions, the cloud is considered inherently more sustainable than traditional approaches to consuming IT.

'The adoption of cloud models and services presents organisations with an opportunity to demonstrate a relatively 'quick win' for cutting down emissions related to their operations,' notes **techUK** in its paper, Cloud 2020 and Beyond.

Transitioning from a traditional datacentre to cloud can be a rapid route to improving an organisation's eco-credentials, agrees James Kilby, senior consultant at cloud consultancy, **Xtravirt**.

"Flexible, on-demand access to different compute and storage capabilities shared across a cloud provider's customers means that there is a reduction in unused capacity and, once requirements have passed, resources are reused by other cloud customers effectively providing server recycling," he explains.

It also seems timely to talk about sustainability in the cloud, given the take up of cloud services to facilitate remote working during the pandemic. The **Cloud Industry Forum** reports that 55 percent of UK firms have increased their cloud adoption as a direct result of COVID-19.

> Transitioning to cloud can be a rapid route to improving an organisation's **ecocredentials**

JAMES KILBY
XTRAVIRT

"Alongside data sovereignty and security, we are seeing sustainability play an expanding role in the customer decision making process. It being a key section in every single RFP and accounting for up to 25 percent in the make-up of the final decision," says François Sterin, EVP and chief industrial officer at Europe's sole hyperscaler, **OVHcloud**.

"As we head towards the COP26 [UN Climate Change Conference UK] in Glasgow, November 2021, we can expect that sustainability and the circular economy will be key factors to consider when looking at post-COVID recovery in 2021."

It's not easy being green

It is undeniable that sustainability sells – and consumers are increasingly seeking out eco-friendly goods for which they are willing to pay a premium. But with that premium comes the temptation by the vendor or service provider to give the impression that its products and services are a more environmentally friendly option – which may not necessarily be true.

Indeed, last year the **Competition and Markets Authority** (CMA) launched a consultation on the impact of 'eco-friendly' claims in the promotion of goods and services.

So, what does that mean for cloud customers? Organisations increasingly rely on their IT service providers to help them incorporate sustainability targets into products and services they deliver. IDC notes that 60 percent of firms also see their IT partners as playing a crucial role in helping firms achieve their sustainability goals.

But with the accelerated take-up of cloud and the current global debate around sustainability, could there be a factor of 'greenwashing' by the cloud industry, too? The less-than-salacious answer is there is undoubtedly an element of greenwashing, as in every industry.

IDC's Munoz explains that there is a host of new regulations set to be introduced in Europe, including the European Green Deal, 2030 Climate Target Plan, New Circular Economy Action Plan, Non-Financial Reporting Directive and the Sustainable Corporate Directive. Organisations will see themselves increasingly having to report on these issues, not only for regulatory purposes but also to generate deals and business.

"This can be a relatively new area for some IT players (cloud providers included) who do not have the internal structures, goals or governance to support these initiatives, and there is a fair amount of greenwashing in the industry," she says.

"However, I would argue that the tools to enable increasing transparency when sharing this information, and the level of knowledge and sophistication from customers when requiring sustainability information, are certainly improving rapidly, so greenwashing is becoming easier to spot."

FRANÇOIS STERIN
OVHCLOUD

We are seeing **sustainability** play an expanding role in the customer decision making process

Bold bets on sustainability

Moreover, there appears to be real effort on the part of the public cloud giants to make sustainability a reality. **Microsoft Azure**, **AWS** and **Google Cloud** have all publicly announced ambitious environmental targets towards which they are working.

Most cloud providers already use 100 percent renewable energies in their datacentres, for example, and some are investing heavily in innovative technologies to allow them to migrate back up power to non-fossil fuel types of energy, such as hydrogen. Equally, transferring workloads to facilities that can make use of renewable energies is becoming a common practice ('chasing the sun' workloads) amongst the most advanced providers.

There are other ways, too, in which cloud providers are implementing sustainability into their model including recycling and remanufacturing of equipment and using excess heat for surrounding buildings.

Just recently, Microsoft Azure announced its intention to introduce a carbon tax for suppliers.

"Microsoft has always massively advocated for more sustainable futures, so we have very big, bold bets that we're making around sustainability ourselves around being carbon negative," says Glen Robinson, national technology officer at **Microsoft UK**.

"This is not just carbon neutral, we've made a commitment that by 2030 we will be carbon negative, and by 2050, we would have extracted all the carbon that our businesses ever expelled into the atmosphere."

Elsewhere, an AWS commissioned re-

This can be a relatively new area for some... there is a fair amount of **greenwashing** in the industry

MARTA MUNOZ
IDC

SUSTAINABILITY

report by **451 Research** claims that moving to the cloud platform can help customers reduce the carbon footprint of their IT operations by up to 88 percent.

Michael Chalmers, MD EMEA at cloud consultancy, **Contino** agrees that in comparison to legacy or on-premise tech, the public cloud - when used optimally - is far greener.

"The sustainability of the cloud lies in how it is architected: it's a distributed system that, firstly, is used by multiple tenants and, secondly, is highly conducive to automation. Multi-tenancy means that users share servers, gaining environmental efficiencies. Its capacity for automation means that any servers that are not being used can be automatically spun down to save resources. "The big three cloud companies – AWS, Microsoft, Google – are dedicated to sustainability, each having made great strides towards using 100 percent renewable energy to power their data centres. This doubles down upon the efforts that smaller businesses can make to reduce their carbon footprints."

Public vs. private cloud

It is, however, important to differentiate between private and public cloud adoption when it comes to making

GLEN ROBINSON
MICROSOFT

Microsoft has always massively advocated for more **sustainable futures**

sustainable choices.

"With a private cloud model, the focus is on ownership, meaning that companies rent rack space rather than its servers. This results in servers being switched on 24/7, as this doesn't cost any more – apart from the power which isn't entirely bank-breaking. Companies will keep the servers running continuously due to it being a lower risk as some may fail during a restart," explains Pete Watson, CEO of cloud managed service provider (MSP) and Microsoft Azure partner, **Atlas Cloud.**

"Therefore, the private cloud isn't exactly environmentally friendly and is certainly not a 'green' way of approaching the cloud."

However, he notes that public cloud models are consumption-driven, meaning it runs on a pay-per-second pricing model which works only when the server is needed and switched on. "MSPs like ourselves manage this and Microsoft has a responsibility to protect them from failure, with confidence and trust in its own pricing model," he says.

Interestingly, Robin Gardner, strategic services director at Xtravirt, notes that there are few organisations that can accurately quantify the environmental benefit of adopting the cloud, because, they don't have the full handle on the costs, environmental or otherwise, associated with running and managing a sprawling on-premise infrastructure.

"What is true, is that when it is set up correctly, a move to the cloud provides organisations with improved visibility over costs. Not only are repeatable billing mechanisms for example ideal for business reporting, cross charging, and budget forecasting, but environmental metrics and reporting can be put in place too."

It is important to remember too, that while it offers many benefits, the public cloud is not a suitable environment for all workloads. This is often the case for certain legacy applications, or if there are geographical or compliance issues around an organisation's data for example – and no amount of hard sell on sustainability will change that.

However, with sustainability playing an increasingly significant role in IT decision-making, the cloud will likely appear to be the green destination of choice for many organisations. ■

Christine Horton, freelance writer and editor

MICHAEL CHALMERS
CONTINO

The sustainability of the cloud lies in how it is architected

Companies will keep the servers running continuously due to it being a **lower risk**

PETE WATSON
ATLAS CLOUD

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GUEST CONTRIBUTOR

How to embrace organisational agility

COVID-19 forced businesses to make decisions about leadership, recruitment, finance and operations in a matter of hours. In the months following the initial shockwave of rapid change, fluctuating economic circumstances, and new consumer behaviours, it is now clear we live in a climate of continuous and unprecedented change. Instead of this being an obstacle, it should be seen as a catalyst. BY CAROLYN HORNE

After all, being agile when faced with change has always been a defining characteristic of companies that respond well to competitive threats. A recent Workday study on organisational agility revealed the top-performing companies were 10 times more likely to react quickly to market shifts, proving that agility is more often than not synonymous with performance. The pandemic has emphasised this.

It starts with the c-suite

To build agility into any organisation, and set it up for future success, the c-suite needs to lead the charge. The CEO, CFO, CIO and CHRO all play a pivotal role.

The CEO — As head of the company, CEOs must champion the entire business into taking an agile approach through strategy and execution. These leaders need to build agility into their vision for the business and engage the workforce to follow. But for the vision to turn into reality, CEOs will need the support of other c-suite leaders - and have to take on board their advice on how to close any gaps between the vision and current state of implementation in the business.

The CFO — The CFO is arguably the biggest driver in turning organisational agility into a reality, and is often the first port of call for managing risk and dealing with big changes. In fact, 37 percent of leaders agree that finance is the function most likely to influence an organisation's ability to accelerate digital growth. Inflexible technologies and legacy systems can no longer hold the CFO and finance team back from fulfilling this responsibility. Implementing technology solutions that enable company-wide data analysis and real-time planning should therefore be at the top of the CFO's agenda.

The CIO — While many CIOs still don't have access to the data and tools they need to measure the performance of new digital products and service lines, the majority now have a reason, and the backing of the business, to overhaul existing infrastructure. Yet, research shows that more than half of CIOs (52 percent) are planning to upskill fewer than half of their workers over the next five years. This has to change. It's critical that CIOs take the necessary steps to support digital transformation and agility. It will require these leaders to challenge legacy processes and seek better integration to ensure they have the right resources in place.

The CHRO — Finally, the CHRO plays a critical role by creating and communicating an agile culture across the business. With 88 percent of CHROs thinking that employee engagement influences their company's ability to succeed, breaking down silos and keeping the workforce engaged and moving away from bureaucratic cultures will be a top priority for HR teams striving for agility in 2021.

> 50 PERCENT OF ORGANISATIONS ARE ALREADY PLANNING TO UPSKILL THEIR WORKFORCE BY 2024 TO ADAPT TO THE CHANGES IN THE WORKING ENVIRONMENT

Agility needs to be baked in

Driven by the c-suite, organisational agility needs to be baked into the heart of the business – and its digital transformation agenda. Individuals, and teams, must be able to gain meaningful insights from data if they are to help future-proof revenue streams, improve operations, and ensure employees are well-managed and supported. There are five key behaviours proven by Workday's global organisational agility and digital growth survey that businesses should prioritise:

Be responsive — Companies need the ability to plan continuously and in real-time to overcome uncertainty. This means organisations will have to implement real-time scenario planning.

Be adaptable — Enterprises must create flexible organisational structures and processes that enable both the business and leadership to pivot quickly in the face of change.

Be skilled — Companies have to plan for upskilling the majority of their workforce and increasing employee engagement. 50 percent of organisations are already planning to upskill their workforce by 2024 to adapt to the changes in the working environment.

Be empowered — Businesses must empower decision-making at every level by equipping employees with the information and data they need to innovate and make independent, and yet informed decisions.

Take control — Organisations will need to be able to recognise failure and act on it. They should understand if something isn't working, switch gears and try a different approach. Finding ways to measure performance and pivot to avoid risk are essential traits in keeping agile.

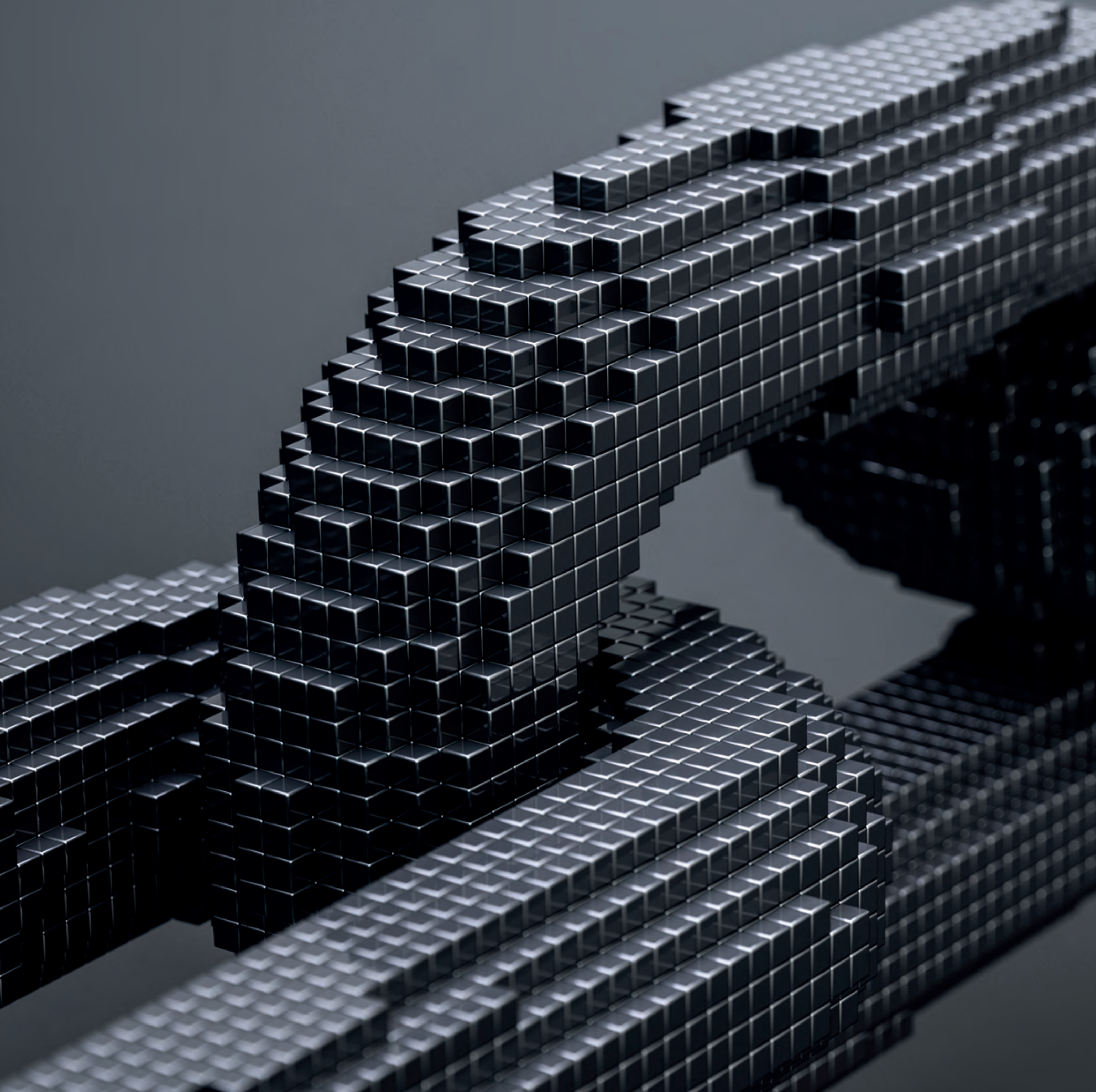
Embracing organisational agility in 2021

Last year taught businesses the importance of being able to rapidly adapt to change. In 2021, business leaders have the opportunity to consolidate their learnings from the pandemic by fully embracing an agile way of working for the long-term. Organisations that take the time to invest in agile practices across the business will reap the biggest rewards, and recover faster, as we head into an era that promises anything but normal. ■

Carolyn Horne, president of EMEA at Workday

COVID-19 has caused even the most robust supply chains to creak. What lessons can we learn and how should enterprises structure their supply chain so that digital technologies ensure goods and services flow?

BY ADRIAN BRIDGWATER



CREATING RESILIENT END-TO-END AGILITY IN THE NEW DIGITAL SUPPLY CHAIN

DIGITAL SUPPLY CHAINS

GUEST CONTRIBUTOR

ADRIAN BRIDGWATER

NOBODY NEEDS TO BE TOLD THAT 2020 WAS A YEAR OF MASSIVE DISRUPTION. THE WORLD CHANGED, LIVES CHANGED AND BUSINESS SYSTEMS CHANGED AS EVERYBODY WORKED TO ADAPT TO THE STILL-DYNAMIC AND INHERENTLY UNPREDICTABLE LANDSCAPE AROUND US ALL.

Like many things resulting from the global pandemic, our wider perception of language changed and expanded. Non-technical people started to talk about online collaboration tools, non-medical people started to talk about epidemiology... and non-business strategists started to understand what supply chains were.

This demystification of the supply chain meant that everyone started to understand and appreciate the fact that these systems extend much further back than the endpoint supply of some goods or service that an individual or company is normally exposed to.

TOILET PAPER TRIALS FROM TOP TO BOTTOM

Nobody 'just gets' toilet paper from the shops and stores anymore i.e. people appreciate that paper pulp is machined, factories operate, road haulage trucks distribute products, warehouse supplies are managed, shelves are stacked and home delivery palettes are filled before finally - if we are lucky - we get our hands on a package with a fluffy bear or puppy on it.

Going forward then, we can all take a more open appreciation for the importance of supply chains. As we now engineer to make these systems digital from the ground up, we can apply technology at various aspects of the coalface in order to make sure that future systems are even more capable than they already are.

In general terms, we can say that the digital supply chain of tomorrow will be driven by integrated, cloud-based, algorithm-enabled software platforms that make extensive use of IoT devices including drones, sophisticated sensors and advanced robotics.

In more specific terms, we can see that the factory or shop floor is integrating its digital supply chain parameters and functions into logical workflows. The management tier is also fully aware of the state of supply chain related operations and is using the data from these internal systems to steer the business. A deeper level of cross-functional and cross-organisational collaborative integration allows the digital supply chain to empower departments with the ability to navigate around crises.

But let's step back a moment and put our warehouse overalls on again. What are the actual mechanics playing out here in terms of the technologies being applied in the digital supply chains of tomorrow?

ELEMENTS OF DIGITAL SUPPLY CHAIN RESILIENCE

Key to building more resilient digital supply chains of tomorrow is the application of Artificial Intelligence (AI). Applied to every aspect of company workflows from demand prediction to equipment maintenance schedules to tracking the market's cyclical supply fluctuations, AI will now become regarded as both an operational fuel and foundational building block for modern business.

Closely related to the use of AI for daily operational task management within the digital supply chain is the ability to stress-test existing systems and run 'what if' scenarios. This allows organisations to take more immediate action aimed to provide resilience against all but the most unwieldy forces of nature in the future.

As the digital supply chain grows inside a working business, its ability to help de-risk the relationships that

"...SECTORS, LIKE RETAIL, ARE STILL REIMAGINING THEIR BUSINESS MODELS AND PLANNING FOR A FUTURE THAT MAY NOT EXIST YET."

CHRIS ANDREWS / EY CONSULTING UK&I

exist inside an organisation expands. These are relationships between suppliers and consumers, relationships between departments and machines... and relationships between people and people.

Suddenly, at this point, the term 'strategic partnership' graduates out of the marketing brochure's puff and fluff to actually start meaning something i.e. yes, says business X, we work in a strategic relationship with business Y because it connects us to supply resources A, B and C... not just because we want to give the firm an award on a piece of bent glass at our annual dinner.

Overall, there is a new observability and visibility advantage gleaned from the development of a resilient digital supply chain. As a core underpinning element within a higher-level ERP platform, nobody needs to pick up the phone to ask when the next goods (or tangible services) shipment is likely to drop, all that knowledge already exists in the system in the form of data.

Chris Andrews, director at **EY Consulting UK&I** reminds us that the events of the past 12 months have highlighted the complexities and vulnerabilities within the global supply chains of many industries. "While some sectors, such as consumer staples, have been able to double down on manufacturing output and progress planned investments, other sectors, like retail, are still reimagining their business models and planning for a future that may not exist yet," said Andrews.

Andrews explains that currently, when his firm engages with clients, themes of value chain risk, resilience and security of supply are at the forefront and leading the conversation. "As supply chain leaders wrestle with these themes, their requirements inevitably reach the CIO's desk and prompt the question: 'How do I assess 360-degree risk across my global supply chain and mitigate disruptions before they materialise?' With risk and resilience fast becoming established supply chain pillars, the race to harness the power of ERP systems, IoT and AI to address 360-degree risk will intensify," he added.

Enabling information access by policy-based identity management is a prerequisite, but that's another story in itself. The working result of all these technologies coming together brings with it an integration and orchestration challenge, but the end result is a more maneuverable corporate ship that can successfully mitigate for problems, create newer and faster streams of innovation which steer towards growth.

BEYOND THE FOUR WALLS OF BUSINESS

In terms of industry resonance here, Bryan Nella, senior director for financial supply chain at **Infor** points out that, "For years we've seen the outsourcing of essential supply chain tasks to suppliers, third party logistics providers, agents and even banks. Today, some of these decisions come back around to haunt manufacturers and retailers in the form of lack of control and visibility. Resilience and agility are priorities today but without the right tools or connective infrastructure to collaborate with trading partners, it's impossible to see and control operations beyond your four walls."

"TODAY, SOME OF THESE DECISIONS COME BACK AROUND TO HAUNT MANUFACTURERS AND RETAILERS IN THE FORM OF LACK OF CONTROL AND VISIBILITY."

BRYAN NELLA / INFOR

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DIGITAL SUPPLY CHAINS

Nelson Petracek, CTO at enterprise data company **Tibco**, agrees that a solid architectural core is a key component of any resilient supply chain. He asserts that this is a core that, in addition to being typically based on cloud and AI/ML related capabilities, can be augmented by the creation of parallel, real-time digital twins. These digital twins, by using capabilities related to integration, APIs, data management, data science - and even IoT or blockchain - can mirror, monitor and manage real world entity behaviour in a contextual manner.

"But digital twins are no longer just about IoT; they can also represent people, processes and entire departments or organisations, or set of organisations. Furthermore, these digital twins can act as passive listeners and track key events across a supply chain (e.g. for reporting or regulatory purposes), or they can be active and utilised to proactively drive supply chain behaviours. In short, digital twins have the ability to make the supply chain more dynamic, responsive, transparent and can shorten end-to-end decision latency when responding to opportunities or threats. All key attributes of tomorrow's supply chain," explained Tibco's Petracek.

"...DIGITAL TWINS ARE NO LONGER JUST ABOUT IOT; THEY CAN ALSO REPRESENT PEOPLE, PROCESSES AND ENTIRE DEPARTMENTS OR ORGANISATIONS."

NELSON PETRACEK / TIBCO

VP for manufacturing industries at **IFS** Colin Elkins reads from the same core mantra and agrees that the foundation of a solid digital supply chain is connected data. He asserts that with all that operational data out there comes opportunity i.e. opportunity to test, analyse and simulate disruption.

"We also see an opportunity to utilise technology like machine learning to enhance supply chain resilience and predict arrival and delivery times. Supply chain planning will make use of more and more data as cloud solutions make it easier to access. Information like ship docking times, GPS navigational data, IoT sensor data on products and transport will provide a global picture of the location and state of products and materials. Driven and augmented by AI, supply chain visibility will never be greater," said Elkins.

"SUPPLY CHAIN PLANNING WILL MAKE USE OF MORE AND MORE DATA AS CLOUD SOLUTIONS MAKE IT EASIER TO ACCESS."

COLIN ELKINS / IFS

There is a positive virtuous circle we can get to here and Elkins agrees that as companies adopt a circular economy strategy, we will see less pressure on global supply chains for virgin materials and new components. He concludes that this will be accompanied by an increased focus on 'internal' supply chains to manage returns, reuse, remanufacturing and recycling to keep more product and material under the control of the manufacturer and not suppliers and distributors.

SUPPLIES FOR TOMORROW AT WEB-SCALE

The application of these digital supply chain technologies is no plug-and-play affair; in very few cases are any of the software tools in this space plug-ins, add-ons or upgrades to many of the pre-existing systems that organisations across every vertical will already be running. While vendors in the space will advocate the virtues of cloud-based delivery and the advantages of Digital Supply Chain-as-a-Service (DSCaaS) technologies, there is a core ground level architectural planning phase that organisations will need to take on if they are to build for resilient scalable growth in the future.

That word scalable is important. Sometimes used to talk about the need for web-scale growth and adaptability, 2021 and onwards should be a time when every producer, supplier and consumer understands more clearly the need for a product that might one day be needed by the whole planet at large.

We can take some of the lessons from recent times and create a more intelligent, more adaptable and altogether more resilient global digital supply chain network that draws on computing power, but is equally twinned with greater empathy for real human needs. Whether it's toilet paper, tinned tuna, Toblerone, Tattinger or antitoxins, nobody should be left waiting in line. ■

SUPPLY CHAIN

BREAKING THE CHAIN

STRESS TESTING SUPPLY CHAINS IN 2021

BY ANDY COUSSINS

Over the last year, UK consumers have become increasingly aware of the impact of COVID-19 on retail supply chains. While the panic over empty supermarket shelves at the start of the first lockdown has subsided. In places concerns still remain over the resilience of our UK supply chains.

With the UK leaving the European Union, Brexit is one key issue that we'll see running alongside the impacts of COVID-19 for many months to come. December saw queues of more than 2,800 lorries in Kent, demonstrating the logistical threat to distribution arms making use of the Port of Dover.

Others across the country have suffered major pandemic-related difficulties, with stocks of government PPE at Felixstowe blamed for shipping delays over Christmas.

The December incidents could be considered transitional teething problems, yet issues continue. **Nissan** paused production at its Sunderland facility in January, citing 'supply chain disruption caused by the COVID-19 pandemic' and, while the UK government's acquisition of 367 million vaccine doses has been a success story, manufacturers have generally grappled with supply chain difficulties.

The situation is hitting smaller businesses, manufacturers and distributors hard too. **BBC** News recently reported that 71 pages of paperwork were required to approve one lorry of fish going to the EU, undermining a company's promise to get fresh fish from 'port to plate' in just 24 hours.

These stories are the consequences of multiple threats to the supply chain, and a stark reminder that businesses need to have resilience plans in place. The legislative hoops of Brexit have constantly changed; COVID-19 was unimaginable to many before 2020.

It's not about a 'best-in-time' approach, but about being the best we can be: more robust, more agile, better protected, and better prepared for unforeseen circumstances.

MISSING LINKS

While every organisation is different, there are broad links within every supply chain that need to be managed, from sourcing and manufacturing, to distribution, shipping and receiving, then reverse logistics as returns, recycling and disposal are managed.

In simple terms, the link between each is clear. If you can't source a product, you can't manufacture or distribute it; if you can manufacture a product but can't distribute it, you're stuck with a filling inventory and unsatisfied customers. If you can get products into a country but not out, your inability to deliver on a returns policy will cause legal, financial and reputational headaches.

Strengthening the supply chain to resist threats to these links is of paramount importance. It's not just a case of cost and supply, but about recognising the threats and their impact on different elements of the supply chain.

Businesses intent on futureproofing need to either strengthen priority links or develop a plan to mitigate the impact when they break.

THE IMPORTANCE OF STRESS TESTING

Stress testing – or performance testing – of the supply chain has never been more important. From my experience speaking to manufacturers across the UK and internationally, it's a fundamental step in validating their readiness to begin production.

Stress testing is a process of identifying the maximum pressure that each link in the supply chain can take to identify the links that need to be strengthened as a priority.

By simulating specific scenarios that could threaten each element of the network, from manufacturing errors to shipping delays to legislative change, organisations can understand the risks they face and the potential threat to their operation.

The process is unique to every company, but should be built upon the same foundations:

Planning and coordination – a framework for testing. The job of each user, the types of transactions taking place and the equipment used to execute them should all be set in stone to understand exactly what the results mean.

Communicating effectively – an open line of communication is paramount for every user involved in the stress test. Ideally, a stress test manager will be able to log queries and questions from everyone involved as they take place.

Production server – a network environment should be set up to closely resemble the company's production server, rather than relying on training and development data. The scenario needs to be as close to reality as possible, using the same network structure.

Third-party systems- this process also needs to accommodate the outsourced elements of production.

A LONG-TERM COMMITMENT

The pragmatic benefits of stress testing are obvious: you tackle the threats to your supply chain before they happen.

To take the aforementioned example of Nissan, the Japanese manufacturer has committed to building EV batteries in the UK. This avoids the legislative frustrations of ports learning to navigate Brexit, while diversifying its component supply chain, reducing the risk to its sourcing department.

In the longer term, however, it's a process of continuous improvement, not one of quick fixes. By continuously identifying a new priority for development, organisations are able to gradually but consistently raise the quality of their supply chain in every department.

A commitment to regular, comprehensive stress testing will result in driving up the durability and agility of the supply chain across the board, helping an organisation to protect itself during a period of near-unparalleled uncertainty.

A CATALYST FOR INDUSTRIAL TRANSFORMATION

This is particularly important in regard to new technologies, which demand a thorough audit before being introduced.

Take Industry 4.0 and the introduction of a multitude of IoT equipment as an example. The industrial IoT technologies need to 'speak' to one another, but this network has to be able to correctly 'voice' the performance of the manufacturing floor.

What we have witnessed with COVID-19 is the acceleration of this type of digital transformation, as organisations scrambled to re-design business models. Manufacturing organisations in particular have had to evolve rapidly and, according to **Gartner**, around a third (36 percent) have already realised above-average business value from IT spend in digitalisation.

The benefits of industrial transformation are there, but they won't be realised overnight.

Stress testing is a holistic commitment to higher standards of quality, enabling the quicker integration of digital technologies that improve the cost-effectiveness of manufacturers, while at the same time identifying and mitigating - or even eliminating - the obstacles that threaten them. ■

Andy Coussins, SVP & head of international, Epicor

THE PRAGMATIC BENEFITS OF STRESS TESTING ARE OBVIOUS: YOU TACKLE THE THREATS TO YOUR SUPPLY CHAIN BEFORE THEY HAPPEN

ERP TODAY

annual vendor review 2021

Advanced
Epicor
IFS
Infor
Microsoft
Oracle
QAD
SAP
Unit4
Workday

ERP buyers have never had it so complex

This year's vendor report takes a close look at the 10 key ERP vendors that are suited to mid-market and enterprise customers. The roll call of vendors has changed slightly from last year along with the emphasis of my introduction. BY PAUL ESHERWOOD

Last year I opened this report with the statement that 'ERP buyers have never had it so good'. And, although that still rings true – the fact is that ERP buyers have also never had it so complex. Cloud enterprise applications are 20 years old and during the last two decades vendors have developed ever-more sophisticated applications, architectures and platforms. In the same way that legacy on-premise applications accumulated complexity through customisations, so too has the cloud application landscape through a hairball of integrations. Many enterprises have developed an incredibly complicated labyrinth of applications and platforms which diminishes their effectiveness and takes considerable time, money and effort to manage.

The first flush of a seismic change is set to sweep the ERP landscape and those vendors that can adapt to the new priorities for ERP buyers will reap the benefits throughout the next major purchasing cycles.

During the last five years or so, technology has developed at an exponential rate. Automation, machine learning, containerisation – to mention just a few – have opened up a world of new possibilities for vendors and ERP customers. But, the rate of technological advancement has outstripped the pace of evolution within most ERP suites. Put simply, the majority of ERP vendors have been so busy retooling their legacy applications and trying to move their install base onto the latest version of their software that they haven't been able to keep pace with the rate of technical possibilities. Some are still trying to rewrite legacy code into a cloud product – by the time that process is complete the idea of SaaS 1.0 will be redundant.

The largest vendors, despite their immense financial power, cannot reinvent themselves every 12 months. They chart a course, like an oil tanker does, and set sail. Changing direction is simply not possible when there is so much invested in a particular direction of travel. Equally, at the smaller end of the market, niche players do not have the financial resources to be in a constant state of flux - their investments have to pay off and they can't move to the next big thing until the first has paid dividends.

This leaves an incredible opportunity for mid-market ERP vendors that have the financial headroom to invest ahead of the curve but are not weighed down by the trappings of a monolithic organisation.

It was once the case that these mid-market players were trapped in no-man's-land. Too small to eat at the top table and too expensive to play at the small end of the market. But today, it is precisely these organisations that have the product, leadership and ambition to deliver for ERP customers that have a completely different set of priorities than they did just a few years ago.

A word about our partners

__ERP TODAY__ has collaborated again with Lumenia on its second 'Annual ERP Vendor Review'. Lumenia is an independent boutique consultancy specialising in ERP and business systems strategy, vendor selection and deployment. Despite their size they are one of the most respected vendor-agnostic authorities of ERP knowledge in Europe. I have worked with the Lumenia team for over a decade and their expertise and impartial acumen sets them apart from all other sources of ERP know-how. Lumenia does not sell software and their independence means that they have no vested interest in pushing clients towards particular software solutions. They focus instead on how enterprise applications can best be used to transform business processes and deliver measurable business benefit to their clients, whether this is through the deployment of new software or by getting more value from systems that are already in use.

John Donagher

Ian O'Toole

Lumenia has developed unique methodologies that allow clients to undertake ERP and business change programmes using structured processes that maximise the likelihood of project success by promoting business ownership, minimising risk and controlling cost, while ensuring that planned business benefits are realised.

None of the vendors have paid for their inclusion and the analysis which follows is our collective independent view of the respective offerings.

ERP trends

lumenia

Lumenia is delighted to partner once again with ERP Today in the production of this vendor review. Ten of the leading providers are profiled in detail over the following pages. While the vendors may vary in scale, product range and industry focus, certain market trends are evident and worthy of commentary.

Functionality Trends

The days of difficult to use, clunky ERP systems may not be entirely gone but there has certainly been a massive leap forward over recent years in the standard of ERP user interfaces. ERP systems are becoming easier to use with the types of consumer-grade interfaces we are all familiar with from smartphones and browsers. Mobility continues to be a strong theme, with ERP solutions responding to the expectation that users are not sitting at the same desk all day. The trend is clearly towards systems that, as well as being user-friendly to work with, actually help to speed up business processes, through tools and technologies such as artificial intelligence, machine learning, robotic process automation, augmented reality and the internet of things. Every ERP vendor covered in this review is on this journey to some degree at least, and at this stage the direction of travel is clear to all.

Cloud Trends

As ERP consultants working with mid-market and enterprise clients on a daily basis, deployment strategy is a recurring topic. In terms of trends, we have seen a huge swing over the last ten years from on-premise to cloud. Clients have changed from 'having a look' at cloud options, but almost inevitably opting for on-premise, to insisting on cloud deployments right from the start. There are still sectors where on-premise is actively considered or even favoured for various reasons, but cloud – in its many different flavours – is now dominant for organisations implementing a new ERP solution.

The other cloud-related trend – as you will see in the reviews – is the move of the market in general towards cloud-based architectures, rather than on-premise type solutions hosted in the cloud. These are often enabled by technology delivered by hyperscalers such as Microsoft Azure or Amazon Web Services. In this review alone we see the launch of new platforms from IFS, QAD and Unit4.

Architectural Trends

A recurring theme for those involved in selling, planning, delivering or managing ERP solutions has always been how best to deal with gaps in ERP functionality. Many vendors address this by focussing on specific verticals and delivering the 'last mile' of functionality. In reality that still often falls short, even for those vendors with years of experience in a sector, as new challenges will always arise. Customisation is a dirty word, leaving a legacy of applications that organisations fear to upgrade due to the prohibitive cost and complexity. Integrating best of breed or niche solutions is always an option, but can be costly to build and maintain.

Add to that the challenges posed by the digital world. Organisations are clamouring to take advantage of digital technologies, but this demands a solid core ERP system interacting with systems around the edges or externally.

The good news from the authors of modern ERP solutions is that the cloud-based architectures make it much easier to configure, extend and connect, both within the application and externally to other applications.

Commercial Market Trends

The inexorable trend in the ERP market is towards subscription-based licensing models. While many ERP vendors still offer perpetual licensing it is likely that the attraction of a long term subscription revenue stream, and an increased general acceptance of the subscription model for consuming services, will mean that the perpetual licensing model will fade away.

The ERP market is often viewed as pretty staid, yet every year most of the vendors covered in this review will make acquisitions to enhance their offerings. The transition to cloud-based architectures described earlier facilitates the integration of acquired solutions into an overall ERP offering.

Finally, we have recently seen Acumatica and Sage Intacct enter the UK and Ireland ERP market. Though not covered in this review, both products are well-established names in North America and offer cloud-based ERP solutions.

Advanced is one of the largest providers of business software and services based in the UK. They boast 19,000 UK customers across a very broad spectrum of sectors and organisation sizes. Their product range stretches beyond what would traditionally be considered ERP to cover line-of-business and sector-specific solutions across a broad range of business areas. Their cloud solutions include Cloud Financials, Cloud HR, OpenPeople (payroll), Workforce Management, Clear Review (employee performance management and engagement), eMarketplace (online supplier catalogue) and Contract and Tender Management (procurement). Perhaps uniquely, Advanced also provides a unified platform, MyWorkplace, that allows multiple products from their portfolio to be deployed in one user interface with a single sign-on. Like many vendors they facilitate the extension of their core products with a variety of additional apps and widgets. Advanced products are delivered in the cloud, on hybrid models and on-premise. They offer a full range of managed services to support their applications and infrastructure.

Key products

Cloud Financials

Cloud HR

OpenPeople (Payroll)

Workforce Management

Clear Review

eMarketplace (Online Supplier Catalogue)

Contract & Tender Management (Procurement)

They can be combined with vertical solutions:

Cloud Engage (Membership and Fundraising)

DRS, InfoSuite and Workhub (Social Housing and Field Service - Resource Scheduling, Business intelligence reporting and Workforce Management)

Talent (Sports - Ticketing)

StaffPlan (Social Care - Rostering) **and Care Director** (Social Care Case Management)

ProSuite and Cloud School (MIS - Education)

Docman (Document Management)

Carpe Diem (Time)

LINES OF BUSINESS

Public, mid and lower mid-market: Finance, HR/payroll, procurement, document management, vertical solutions for third sector, membership and sports.

Health and Care: Out-of-hours, urgent and unplanned care, document management / workflow for primary and secondary care, EHR community and clinical decision support.

Legal: Case management solutions for solicitors and barristers, plus legal forms software.

Education: Student information systems for schools, academies / Multi Academy Trusts, further education and private training providers.

Business type suitability

Advanced's broad product range means that there are solutions within the portfolio that are suitable for many types of organisations of different scales with different requirements. Of their 'horizontal' back-office solutions - i.e., ones that are broadly applicable across many business sectors - they offer financial and procurement solutions ranging in suitability from small and medium business up to enterprise level. In the HR space they have a number of enterprise level solutions as well as mid-market and SME offerings including workforce management, time and attendance, payroll and access control.

SIZE OF BUSINESS

- Advanced sells its products and services into a range of different sized business, depending on the solution, ranging from lower mid-market up to enterprise scale customers.

Vertical suitability

While the mix of horizontal solutions and vertical-specific solutions means that Advanced can address most verticals, it is worth highlighting some of the key solutions which make Advanced somewhat unique in their focus. Advanced has a number of solutions targeting each of the following sectors – education, organisations requiring field service management, charities and membership organisations, health and care organisations, sports and entertainment, professional services and legal. These range from core back office solutions to those that address specific HR and workforce management needs to the niche service delivery and management needs of some of these sectors.

VERTICAL MARKETS
Public and Private Sector
Legal
Education
Health and Care
Third Sector

Go-to-Market strategy

Advanced sells and implements directly as well as through a dedicated partner channel. They have 43 active channel resellers in the UK. The size of this channel reflects the breadth of solutions and verticals served and allows Advanced to wrap their solutions in service delivery that is really close to the verticals and customer types served, thus bringing additional value to the core product proposition.

Advanced works with its UK technology channel partners through a programme it calls TruePartner. Its product development teams engage with independent software vendor (ISV) partners to ensure that its cloud product sets facilitate further development by ISVs enabling enhanced product specialisation.

Licensing and pricing

Naturally, Advanced cloud solutions are priced on a subscription model and this applies to most of their product range. However, some products are also available on more traditional perpetual licence and services model. A significant proportion of the client base is still on a perpetual model reflecting longevity of tenure in many cases. It can be expected that the proportion of SaaS customers will increase steadily over the coming years as more and more migrate to new cloud-based solutions.

Customers

BURNLEY FC is a sports and entertainment ticketing customer of Advanced and a user of their Cloud HR platform. They were an early adopter of the MyWorkplace unified platform.

NUGENT CARE is a longstanding Advanced customer that has moved from an on-premise finance solution from Advanced to their Cloud-based solution, Cloud Financials. They also adopted the MyWorkplace unified platform.

LANGWORTHY MEDICAL PRACTICE Real-life testing for an AI algorithm to read patient letters in conjunction with Advanced's cloud-based Docman solution and only highlight those to GPs that require their input. Advanced has worked on this with researchers led by academic GP Dr Ben Brown and in collaboration with Spectra Analytics. They plan to extend the trial across the whole of England during 2021.

KEY STRENGTHS OF THE PRODUCT

Because of the breadth of solutions available from Advanced it is impossible to list the benefits of each here. Suffice to say that the very breadth of focus is a key strength. It is not breadth in a 'one-size-fits-all' sense, rather it is in the sense of a wide portfolio of very focussed solutions. This can be attractive to organisations wishing to avoid the square peg/round hole challenge of adapting processes to more generalist solutions. Some of the verticals served by Advanced – legal and education are two that stand out – are not typically well served by more traditional ERP or back-office solutions so Advanced can provide particularly strong options here. Advanced continues to broaden its stable of line-of-business solutions as the recent acquisitions of Mitrefinch (workforce management) and Tikit (time management solution for the legal market) illustrate.

Furthermore, with its portfolio of line-of-business solutions, Advanced is well positioned to have a presence in organisations that also have larger ERP solutions in place.

Although this focus on niche verticals and line-of-business solutions might suggest that Advanced products tend to be used in smaller organisations exclusively, it lists organisations such as the NHS, the BBC and Harvey Nichols as customers.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

With such a broad range of solutions available from Advanced it is difficult to say anything definitive that applies to all. However, as most are now cloud-deployed SaaS solutions many technical deployment considerations are simplified. In terms of deployment effort, the very fact that the solutions are quite focussed potentially makes for simpler deployments where business process analysis and change are less impactful than on larger generalist ERP implementations.

Another element that potentially eases user adoption, a key task in any implementation, is the ability to tie multiple solutions together into a single user experience with MyWorkplace.

DEPLOYMENT

• CLOUD
Cloud Financials, Cloud HR, Business Cloud Essentials, Contract and Tender Management, Cloud School, ProSuite, Cloud Engage, Care Director, eMarketplace, Docman

• HYBRID CLOUD
Workforce Management, OpenPeople, DRS, Workhub, InfoSuite, Staffplan, TALENT, Carpe Diem

EPICOR

Epicor is a US headquartered mid-market provider of ERP and business applications with a focus on manufacturing, distribution and building supply merchants. While less well known as a brand than some of the other vendors featured in this review, Epicor is long established and has over 20,000 customers in 150 countries around the world.

It markets five main products in the UK. Epicor ERP 10 is its broadest ERP solution and it is widely used in manufacturing, distribution and engineering field service businesses. Epicor Bistrack targets building supply merchants. Epicor Prophet 21 is an ERP for distribution businesses. Epicor Tropos is a process manufacturing solution and Epicor Advanced MES provides manufacturing execution capability which can complement ERP solutions in manufacturing environments.

Epicor products are available in a variety of deployment models in the cloud and on-premise.

Later this year Epicor plans to release ERP 11 with a new 100 percent browser based, device independent user experience and added industry-specific manufacturing functionality.

Key products

- Epicor ERP
- Epicor BisTrack
- Epicor Prophet 21
- Epicor Tropos
- Epicor Advanced MES

LINES OF BUSINESS

- Manufacturing and operations
- Finance
- Sales
- Inventory management
- Production planning
- Manufacturing execution
- Service management
- Collaboration
- Delivery scheduling

Business type suitability

Across its product range Epicor products serve customers ranging from the very small to the large. The Epicor ERP 10 product is squarely positioned as a mid-market to upper mid-market solution. Epicor states that it typically works with organisations generating revenues in excess of £25m per year. Epicor ERP 10, in particular, has many implementations in organisations with revenues at multiples of that figure into the hundreds of millions of pounds. Indeed Epicor ERP 10 is sometimes implemented in plants or divisions of much larger organisations in a hub-spoke model.

SIZE OF BUSINESS

- Typically, Epicor works with organisations generating revenues in excess of £25m per year.

Vertical suitability

In the UK Epicor provides innovative and highly focussed industry productivity solutions to manufacturers, distributors and building supply merchants. Within these sectors, Epicor has customers within many sub-verticals such as: metal fabrication; industrial machinery; plastic and rubber products; plumbing supplies; food and beverage; hi-tech electronics; tooling; instruments and controls; fasteners, valves and springs; electrical assembly; steel stock-holding; furniture and fixtures; and medical devices. Epicor ERP 10 is also used by organisations in other verticals keen to implement core ERP functions alongside capabilities like CRM and HCM all within a single solution.

VERTICAL MARKETS

- Manufacturing
- Distribution
- Building Supply Merchants
- Metal Fabrication
- Industrial Machinery
- Plastic & Rubber Products
- Plumbing supplies
- Food & Beverage
- Hi-Tech Electronics
- Tooling
- Instruments & Controls
- Fasteners Valves & Springs
- Electrical Assembly
- Steel Stock-holding
- Furniture & Fixtures
- Medical Devices

Go-to-Market strategy

Epicor sells and implements directly in the UK and also through a focussed partner channel. Epicor lists eight active channel partners in the UK market and claims to have almost 150 resources dedicated to the delivery of Epicor ERP in the UK. While this channel is well developed, it is not as broad as some of Epicor's larger competitors. Epicor does have a well-established UK presence itself and supports its prospects in identifying the most suitable partner as well as providing backup expertise when needed.
Epicor's channel includes partners that can enhance the depth of vertical experience in some cases, and can augment core Epicor solutions with add-ons and supplementary products to meet specific customer requirements.

Licensing and pricing

All Epicor products are typically available on a concurrent user basis for most functional areas. While not completely unique this is less and less prevalent across the industry. It can be particularly attractive to manufacturers with multiple shifts where concurrency reduces the required user count compared to a named user model. There are some exceptions to this model - for example the HCM elements of the ERP solution are licenced on an FTE basis (as is typical for HR solutions). The products are available on a variety of payment models and Epicor ERP 10 is available on subscription for cloud deployments or on a more traditional perpetual licence model.

Customers

BRADFORDS BUILDING SUPPLIES is one of the largest independent builders merchants in the UK. An Epicor BisTrack user, they relied on Epicor BisTrack Delivery to help safely serve customers with collection pickup times during the COVID-19 pandemic using functionality they adapted to meet the need for a touchless click and collect app.

PJH GROUP, a leading national distributor of bathrooms and appliances is supported by Epicor Prophet 21.

IRACROFT is a premier supplier of a comprehensive range of metal pipe and tube fabricated products for diverse industry sectors and an Epicor ERP user. Iracroft has used technology, with a strong Epicor ERP backbone, as both an enabler and supporter of growth.

KEY STRENGTHS OF THE PRODUCT

Epicor's ERP 10 is a mid-market ERP solution with a broad range of functionality that will suit many organisations in the verticals listed above. Its range of functionality includes financial management, customer relationship management, sales, product management, project management, human capital management, service and asset management, production management, supply chain management, and planning and scheduling.
However, its key strengths really lie in Epicor's deep manufacturing industry capabilities. Epicor tends to win deals based on industry specialisation and knowledge of specific processes related to discrete manufacturing sub-sectors such as fabricated metals, industrial machinery, high tech and many more. It has key capabilities to address "xTO" manufacturing (Engineer-, Configure-, or Assemble-to order) in mixed modes, which is a key differentiator.
It has maintained flexibility in deployment models which is sensible for an organisation targeting manufacturers, which have been more hesitant in embracing purely cloud ERP solutions than organisations in other sectors.
While it targets the mid-market, Epicor ERP 10 can be an ideal solution for larger organisations wishing to implement a hub-spoke model with a Tier 1 solution at the core and a Tier 2 solution like Epicor providing deep functionality with simpler implementation in manufacturing sites or divisions.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

Epicor claims that its products are primarily deployed as multi-tenant cloud solutions, but customers have the option to deploy hybrid, single tenant, or on-premise. The Epicor 10 ERP product is available in multi-tenant, single-tenant and on-premise varieties with the cloud solutions being deployed on Microsoft's Azure platform. As already pointed out, this deployment flexibility serves its target sectors well.
Epicor issues major release upgrades every six months with minor updates and maintenance releases for incremental enhancements and security best practices issued more frequently.

DEPLOYMENT

- Epicor products are primarily deployed as multi-tenant cloud solutions, but customers have the option to deploy Epicor products as hybrid, single-tenant or on-premise.

IFS has established itself as a major player in ERP, Enterprise Asset Management and Field Service Management solutions across a range of industries. Known for its particularly strong offerings for asset-intensive and project-based organisations, IFS has invested in innovative new technologies, such as digital twins, augmented collaboration, internet of things, and intelligent process automation. 2020 saw the acquisition of Clevest Solutions, a leading provider of mobile workforce management solutions in the utilities vertical. The launch of IFS Cloud sees an architecture update and increased choice for customers. IFS continues to offer customers a range of deployment options, and IFS Cloud heralds a transition to an evergreen model, with a twice-yearly feature update cadence rather than major version updates every two to three years. IFS has partnered with Boomi to provide an integration platform, recognising that in modern digital enterprises ERP solutions must co-exist with many other systems and act as a good citizen.

Key products

- **IFS Applications**
- **IFS Field Service Management**
- **IFS Maintenix**
- **IFS Cloud**

LINES OF BUSINESS

- Service management
- Manufacturing
- Supply chain
- Project management
- Finance
- Human resources
- Quality management
- Document management
- Customer relationship management
- Business intelligence
- Sustainability management

Business type suitability

IFS broad range of enterprise applications is targeted at upper mid-market enterprises and lower large-enterprise customers with global presence, who manufacture and distribute goods, maintain assets, and manage service-focussed operations. IFS tends to do well with manufacturers (particularly project-based and engineer-to-order), organisations that build and maintain assets, and organisations that manage service-focussed operations. Organisations with complex needs spanning more than one of these areas are a particular sweet spot for IFS as they can offer a comprehensive integrated solution. A good example would be an engineer-to-order manufacturer who also installs and provides after-market services for their products.

SIZE OF BUSINESS

- IFS products are suitable for all enterprise sizes from medium-sized businesses through to large enterprises.

Vertical suitability

IFS specifically focusses on five vertical markets: manufacturing; engineering, construction and infrastructure; energy, utilities and resources; service industries; and aerospace and defence. IFS also has specific expertise in a number of associated sub-industries such as food & beverage manufacturing, shipbuilding and maritime, and oil and gas. IFS has a long track record in each of these target verticals, with tailored solutions to meet the specific and unique needs of sectors such as defence and aviation maintenance. The functional breadth of the solution is an advantage in most verticals, with IFS offering both CRM and HCM functionality as part of the core suite.

VERTICAL MARKETS

- Manufacturing
- Engineering, Construction and Infrastructure
- Energy, Utilities and Resources
- Service Industries
- Aerospace and Defence

Go-to-Market strategy

IFS has traditionally sold directly and delivered the vast majority of implementations, but this approach has changed and a partner channel is actively being developed. IFS currently has nine channel partners in the UK and Ireland (up from four in the last year) and a much larger network of partners and systems integrators globally. Partners generally have specific areas of industry expertise or geographical focus, and it is expected that additional channel partners will continue to be added over time. Channel partners focus on organisations with turnover below £100m, with IFS continuing to sell direct to organisations above that threshold.

Licensing and pricing

IFS' policy is to provide customer choice and they offer a range of licensing and deployment options. Customers can choose traditional on-premise deployments; deploy in their own data centres; use their own cloud providers such as AWS or Microsoft Azure; or use IFS Managed Cloud, a single-tenant solution deployed on Microsoft Azure and managed by IFS. Despite the new release being called IFS Cloud, the same version of the software is used regardless of the deployment model. IFS continues to offer customers a choice of perpetual licensing or SaaS subscription. Users of core modules are licensed on a named user basis.

Customers

PANASONIC HEATING & COOLING SOLUTIONS
Panasonic H&CS uses IFS Remote Assistance, a merged reality immersive experience solution helping experts assist colleagues or customers as if they were on-site. This enables installers, field technicians and customers to share real-life situational context with remote product experts so that hands-on service and repair instructions can be visually demonstrated and acted upon.

PUKKA PIES British food manufacturer Pukka Pies implemented IFS to improve efficiency and meet increasing challenges posed by customers and regulators. Using IFS across finance, sales, purchasing and production, they have achieved a 10 percent increase in business growth, a 30 percent increase in workforce capacity, improved product traceability and quality assurance, better data visibility and reduced manual data entry.

MULTIPLEX An international construction contractor headquartered in Sydney, Australia, Multiplex uses IFS Applications across all regions to support streamlined processes, obtaining global consistency across all regions in which it operates while still respecting regional nuances. IFS has also provided faster and more accurate reporting and increased operational agility.

KEY STRENGTHS OF THE PRODUCT

IFS provides a very broad suite of applications covering service management, manufacturing, supply chain and project management, finance, human resources, quality management, document management, customer relationship management, business intelligence, sustainability management and other core functionality to facilitate full lifecycle management of products, assets, customers, and projects. Allied with deep industry experience and solutions that meet the specific needs of target verticals, IFS provides a very strong offering from a functional perspective.
IFS certainly isn't being left behind from a technology perspective, with the launch of IFS Cloud seeing a raft of new and improved capabilities, including: the introduction of a containerised architecture; completion of the transition to the IFS Aurena user experience (replacing legacy desktop clients); a new workflow designer tool; new industry-specific lobbies (role-based, configurable, at-a-glance start pages for users); a chatbot; and an integration platform, powered by Boomi, with a range of standard connectors. IFS recognises that the vast majority of deployments will need some level of tailoring, and provides this capability in a number of ways: through personalisation and configuration, 'extend on the inside', with IFS application customisation in a layered application architecture, and 'extend on the outside', using APIs to interact with external applications.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

The IFS strategy is to provide a suite of innovative user-friendly products that are easy to tailor, extend and connect with, offer a choice of deployment options, and which deliver genuine breadth and depth for their specific target industries and solution areas. The target market is firmly mid-sized to large enterprise organisations with revenues of £50m and up, as well as smaller organisations with complex requirements. The IFS partner channel is an evolving space, and caters mainly for the lower end of the market; it will be interesting to see how this strategy pans out over time in what is a very competitive marketplace.

DEPLOYMENT

- With the launch of IFS Cloud all IFS products are available on-premise, in a private cloud, or as multi-tenant in the public cloud.

Infor is a US-headquartered ERP and business systems vendor with global operations and a strong and long-standing representation in the UK. It offers a broad range of products available in the cloud and (some) on-premise. Apart from ERP solutions it has market-leading business applications for financial management, enterprise asset management, warehouse management, workforce management, HCM, networked supply chains, analytics and AI. Many of its ERP products are branded as Industry CloudSuites signifying their focus. These include CloudSuites for Automotive, Aerospace & Defence, Chemicals, Construction & Engineering, Corporate, Distribution, Distribution Enterprise, Equipment, Fashion, Food & Beverage, High Tech & Electronics, Industrial and Industrial Enterprise. In addition, there are three ERP solutions available in the cloud or on-premise - M3, LN and SyteLine. Infor also offers its own cloud platform and technology stack, Infor OS, which includes core technology components such as single sign on, security management, document management, collaboration (Mingle), integration (ION) and a data lake.

Key products

- **Infor Business Technology Platform**
- **Infor Industry CloudSuites**
- **Infor CloudSuite Automotive**
- **Infor CloudSuite Aerospace & Defense**
- **Infor CloudSuite Chemicals**
- **Infor CloudSuite Construction & Engineering**
- **Infor CloudSuite Corporate**
- **Infor CloudSuite Distribution**
- **Infor CloudSuite Distribution Enterprise**
- **Infor CloudSuite Equipment**
- **Infor CloudSuite Fashion**
- **Infor CloudSuite Food & Beverage**
- **Infor CloudSuite High Tech & Electronics**
- **Infor CloudSuite Industrial**
- **Infor CloudSuite Industrial Enterprise**
- **Infor Nexus (networked supply chains)**
- **Infor Enterprise Asset Management**
- **Infor Coleman (AI)**
- **Infor Birst (analytics)**
- **Infor Human Capital Management**
- **Infor Workforce Management**
- **Infor WMS**

LINES OF BUSINESS

- Finance
- HR
- Distribution
- Manufacturing operations
- Supply chain
- Customer services

Business type suitability

Historically, Infor has been strongest in medium-sized organisations. This has evolved to now having a clear focus on substantial enterprise businesses as well, with many examples of active or complete implementations in larger enterprises. Many of the ERP solutions in the Infor product range have a wide functional footprint while others have a narrower focus (e.g. SunSystems for financial management). Consequently, there are solutions that fit traditional ERP customers and others that fit organisations with a narrower set of requirements, perhaps with a need to integrate to other internal line-of-business solutions – something Infor can also support using its ION integration platform.

SIZE OF BUSINESS

- Traditionally, Infor has been known for having a sweet spot of medium to 'early' enterprise customers. However, this has evolved throughout recent years and we now have a clear focus on substantial enterprise businesses.

Vertical suitability

By virtue of its broad product range in both ERP and line-of-business solutions like financial management and enterprise asset management, Infor could offer a compelling solution to most verticals or business sectors. Having said that their pedigree is stronger in some areas than others. That pedigree extends across manufacturing in general and in particular in automotive and food & beverage sectors. Infor has particular strength in 'micro-verticals' within food & beverage manufacturing, including brewing, meat processing and baking. Infor ERP products are also well represented in industrial manufacturing and equipment, hi-tech, construction, distribution, equipment rental, retail, fashion, aerospace & defence and chemicals.

VERTICAL MARKETS

- Automotive
- Industrial manufacturing and equipment
- Hi-tech
- Food & Beverage
- Construction
- Distribution
- Equipment rental
- Retail
- Fashion
- Aerospace & Defence
- Chemicals
- Hospitality
- Facilities management
- Charities

Go-to-Market strategy

Infor addresses the UK market through a variety of channels including direct sales and implementation, partnerships with large systems integrators and consulting firms and channel partners. Infor lists eight active channel partners in the UK and, in general, these focus on the small to medium business market, which Infor defines as organisations having revenue below £250m. Infor sees its channel as a key component of its growth plans. Its stated channel partner mission is to be a high-growth cloud leader focussing on core CloudSuite solutions (CloudSuite Industrial, CloudSuite Distribution and Infor SunSystems.)

Licensing and pricing

Infor offers a range of pricing models across its product set. Subscription-based models dominate but perpetual licences are available for some products and deployment models. Typically, Infor ERP pricing is based on named users with HCM and compliance solutions based on employee numbers. Depending on the solution, subscription costs can include ancillary functions such as finite capacity scheduling which for some vendors tend to be sold as additional items. For the SaaS offerings, upgrades and technical support are typically included in the subscription as would be expected in a true cloud environment. As with many subscription models, discounts may be available for agreements that commit to multiple years.

Customers

KINGSPAN WATER AND ENERGY UK Kingspan has successfully deployed Infor LN enterprise resource planning (ERP) to help improve customer service, reduce inventory and accelerate the integration of new acquisitions. The solution is now live for 500 users across 11 sites across Ireland, Northern Ireland and England, and was achieved with no disruption to operations.

RUSSELL ROOF TILES completed its upgrade to a multi-tenant instance of Infor CloudSuite Industrial. This is the third phase of an ongoing project designed to boost customer service and reduce lead times, manual processes and administration.

TRIUMPH MOTORCYCLES is live on Infor LN but we don't have any additional information regarding this customer.

KEY STRENGTHS OF THE PRODUCT

Infor's key strengths might be described as breadth of capability coupled with depth in those verticals that it focusses on. Its CloudSuite solutions should perform very strongly in any comparison in their focus verticals while M3, LN and Syteline are strong in various manufacturing, industrial and service operations environments.
Infor's technology stack is maturing into a fully rounded offering. It has managed to develop its overall product set into a coherent suite of offerings with real depth over the last decade.
In terms of implementation, Infor has developed a methodology called Infor 60:30:10 which aims to deliver 60 percent of requirements using good practice implementation accelerators with more time being spent on solutioning customer specific differentiator requirements (30 percent) and highly differentiating requirements (10 percent). Perhaps this is more realistic than the clichéd 80/20 rule! Many vendors tout accelerators or implementation templates in some shape or form. Their depth and success vary widely.
If Infor can simplify complex ERP implementation with this approach it will certainly gain increased market traction.
Infor has been slow to develop its channel but there are signs that it is now succeeding with the first partner led implementation of M3 in the UK last year. M3 is perhaps the largest ERP in the portfolio so this represents a milestone of sorts.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

Infor claims its dominant deployment model across its product range is now multi-tenant cloud. However, it does offer both single-tenant and multi-tenant options, as well as on-premise, for three of its main ERP solutions (M3, LN and Syteline). Overall, Infor cloud technologies serve more than 62 million users and approaching 15,000 customers worldwide.
However, Infor remains committed to offering customers a choice. They see flexibility as a huge part of the attraction to cloud deployment and claim to be committed to not forcing upgrades, unlike some enterprise cloud applications. Infor's cloud solutions are deployed on Amazon Web Services.

DEPLOYMENT

- Infor products are available on-premise, multi-tenant or single tenant.

Microsoft Dynamics 365

Microsoft offers two key ERP products as part of its Dynamics 365 suite of applications. The first is the snappily titled Dynamics 365 Finance and Supply Chain Management (F&SCM hereafter) which was formerly called D365 Finance and Operations and evolved from Dynamics AX. The other is Dynamics 365 Business Central which evolved from the Dynamics NAV product. The latest evolutions of both products are cloud first applications, but each can also be implemented on-premise. Microsoft is supported by a very strong partner channel and benefits from interoperability (some mature, some emergent) with its stack of business applications, cloud offerings, productivity tools and foundational platforms like Active Directory. Within the Dynamics suite alone the ERP products are augmented by other applications such as Customer Engagement (CRM) and the new Customer Data Platform. Both ERP products have major updates released twice per year with minor ones released monthly.

Key products

Dynamics 365 Finance and Supply Chain Management

Dynamics 365 Business Central

LINES OF BUSINESS

Dynamics 365 Finance and Supply Chain Management

• Finance

•Supply Chain Management (inc. but not limited to inventory management, warehouse management, manufacturing, supply chain planning)

• Commerce / Retail

• Project Management

• HR

• The wider Dynamics 365 Portfolio including customer engagement services, sales, marketing, customer service, CDP

Business Central

• Finance

• Sales and marketing

• Supply chain management

• Manufacturing

• Customer Service

Business type suitability

Dynamics F&SCM is most suited to medium to enterprise scale organisations while Business Central suits small to medium organisations. There is some overlap in the middle in terms of organisation size but typically F&SCM is most suited where multiple countries and companies are involved. Beyond organisation scale, breadth and depth of functional capability compared to project scope will be a determining factor. F&SCM covers finance, SCM (inventory, warehouse management, manufacturing, supply chain planning and more), retail and commerce, project management and HR. Business Central covers finance, sales and marketing, SCM, manufacturing and customer service. While the breadth of coverage is similar the depth of functionality in F&SCM is stronger.

SIZE OF BUSINESS

• Dynamics 365 Finance and Supply Chain Management

> Medium sized to large enterprise

• Dynamics 365 Business Central

> Small to medium sized businesses

Vertical suitability

Microsoft claims that both products are applicable to any vertical. While that may overstate things slightly it is true that both are widely used in product-based, service-based and not-for-profit organisations of a variety of stripes. Microsoft's ISV (independent software vendor) partners develop a range of vertical specific and niche add-ons which broaden this applicability further. In fact, it would be difficult to identify a vertical for which an ISV solution is not available for one or both Dynamics 365 ERP products. Like other vendors, Microsoft has a certified by Microsoft programme to ensure ISV products follow Microsoft standards and remain current with new release cycles.

VERTICAL MARKETS

Microsoft sells its products and services into virtually every vertical market

Go-to-Market strategy

Like all of the large ERP vendors, Microsoft has a multi-faceted go to market strategy including direct sales and a diverse channel of partners, from large consulting organisations and systems integrators to dedicated channel partners, some with a niche focus and their own ISV add-on solutions. Arguably, Microsoft's ERP channel is larger than any other vendors (only SAP might challenge this) and it certainly is their primary sales and deployment model. Microsoft claims to have over 200 active partners in the UK. Direct sales are limited to medium and enterprise customers with channel partners covering everything from SME to enterprise scale.

Licensing and pricing

Most Dynamics 365 deals are now subscription-based though Business Central is also available on a perpetual basis. Dynamics applications are licensed based on 'assigned licences' that are dedicated to a named user or device and 'unassigned licences' that provide access to a feature or service at tenant level. There are a variety of assigned licence types covering full users, which provide access to a broad range of capabilities, and lighter additional users, for more limited access. Partners work with prospective clients to find the most suitable mix of users and to identify any additional unassigned licences that may be required for items such as additional environments or extra storage capacity.

Customers

SILENT POOL DISTILLERS
Silent Pool deployed Dynamics 365 Business Central and Power Platform to replace their largely paper-based processes to manage finance, purchasing, logistics, warehousing, sales, CRM and reporting. Having a single, complete solution has provided Silent Pool with the data and insights to quickly respond to changes in the market.

KFM, a provider of healthcare support services, uses Dynamics 365 Finance and Supply Chain Management to order, track & trace and pay for medical supplies and equipment. The implementation has consolidated processes that spanned multiple systems onto the single Microsoft platform. Since deployment, time taken to receipt goods has fallen by 70 percent and ordering times by 25 percent.

KEY STRENGTHS OF THE PRODUCT

Microsoft claims that F&SCM enables organisations to monitor the performance of financial operations in real-time, predict outcomes, and make data-driven decisions to drive agility and growth as well as breaking down data silos across an organisation's different lines of business. While some of this may be claimed of any modern ERP solution Microsoft adds that F&SCM customers increase finance productivity by 20 percent and cite Forrester Research findings of 60 percent ROI and 20 month payback. The key strengths of F&SCM lie in its functional breath, its evolution into an integrated application set firmly ensconced in Microsoft's ever evolving technology platforms on Azure and augmented by an ecosystem of other applications and tools, not to mention a dynamic partner network. Worth highlighting too is the low-code extensibility available with Microsoft's Power BI, Power Apps and Power Automate solutions.
Business Central offers much of the same in terms of broad brush strokes but at a lower price point with less breadth and depth and in a package more suited to smaller organisations. Arguably, it is less central to the overall Dynamics suite and so lacks some of the opportunities for integrated workflows with other Dynamics applications. It compensates with strong internal capabilities to provide an all-in-one business management solution for small to medium sized organisations.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

Naturally, Microsoft limits its certified cloud deployment options to its own Azure platform. That is not a limiting factor for most organisations and a variety of deployment models are available. Dynamics 365 F&SCM is available as a single-tenant solution on Azure or on-premise. In practice on-premise deployments are rare now and some partners will not offer them at all. As F&SCM has evolved from the early versions of AX into a top-tier ERP solution, customers have really benefitted from the simplicity that cloud deployments offer compared to the infrastructural overhead of running such a sophisticated (and therefore complex) solution on-premise. Dynamics 365 Business Central is also available on Azure and on-premise. It is one of the few ERP solutions that offers the flexibility to deploy either as a multi-tenant or as a single-tenant cloud solution.

DEPLOYMENT

- **D365 Finance and Supply chain management**
  > Single-tenant, on-premise

- **D365 Business Central**
  > Multi-tenant, single-tenant, on-premise

ORACLE

Business applications behemoth Oracle is strongly represented at the top tier of ERP solutions with its Oracle Fusion Cloud ERP. It claims to be the industry's broadest and most integrated public cloud, creating business value for customers in every industry, functional domain, and geography. While these claims are brave they are not without warrant as Oracle has managed to successfully migrate and evolve the deep experience and capabilities of its legacy ERP functionality to a truly cloud-centric environment unlike some competitors that have continued to straddle cloud and legacy architectures. Oracle Cloud ERP can also integrate with the broader Oracle Fusion SaaS portfolio including human capital management, supply chain management, and customer experience to provide broader reach within a single cloud and technology stack.

Key products

Oracle Fusion ERP is comprised of eight modules:

- **Accounting Hub**
- **Enterprise Performance Management (EPM)**
- **Financials**
- **Oracle Analytics for Cloud ERP**
- **Procurement**
- **Project Management**
- **Risk Management**
- **Supply Chain & Manufacturing (SCM)**

LINES OF BUSINESS

Oracle supports virtually all lines of business within an enterprise

Business type suitability

As a tier 1 ERP solution, Oracle Cloud ERP is generally targeted at companies with $200m in revenue and above or with 1,000 employees or more. Though there are significant volumes of customers below that scale it can be considered the sweet spot threshold. It provides most value in large multi-entity environments where the savings of its comprehensive cloud model can best be realised. Oracle Cloud ERP is sold across all geographies and while Oracle does not disclose regional breakdown of customers it is well represented in the UK. By some external estimates the UK is its second largest customer base after the US.

SIZE OF BUSINESS

• Oracle Fusion Cloud ERP is generally targeted at companies with $200m in revenue and above, 1,000 employees and above, and across all industries and geographies.

Vertical suitability

Oracle sells its cloud ERP into all markets and verticals. These include: manufacturing; professional services; healthcare; life sciences; higher education; public sector; financial services; retail; oil and gas; utilities and leisure and hospitality. It is particularly well represented in professional services, financial services, and government as well as various manufacturing sectors. It has deep functionality to support all of these sectors and supports industry focussed business processes. The variety of channel and direct implementation options mean that customers can find implementation partners with deep vertical experience to help them get the most out of the technology.

VERTICAL MARKETS

Oracle sells Oracle Fusion Cloud ERP into all markets and verticals including manufacturing, professional services, healthcare, higher education, public sector, financial services, retail, oil & gas and utilities.

Go-to-Market strategy

Oracle sells and implements directly and through a variety of partners, including large systems integrators, large multi-practice consulting firms and specialist channel partners. While Oracle does not break out its partner numbers by location it is fair to say that the UK is well served through local Oracle presence, local partners and many large global partners having significant bases in the UK. Oracle keeps its partners supported and skilled through its Oracle Partner Network (OPN) partner programme. This provides partners with resources to train and support specialised knowledge of Oracle's products and solutions and opportunities to differentiate and develop to bring more value to their customers.

Licensing and pricing

Oracle Cloud ERP is priced on a subscription pricing model. Pricing is defined within modules, so that different functional components may have different pricing elements, allowing customers to only pay for the components they require. Pricing units are quantified by different metrics including named users, record or transaction volumes (for certain functions), per environment and by employee numbers for some HCM cloud elements.

Customers

OCADO GROUP is using Oracle Cloud ERP to adapt quickly and efficiently to changing customer needs by taking advantage of a scalable and flexible business platform that can support its immediate and long-term growth.

WEST MIDLANDS POLICE, using Oracle Enterprise Resource Planning (ERP), Human Capital Management (HCM) and Customer Experience (CX) solutions, have enabled the force to modernise processes across its HR, finance, procurement and shared services departments, and provided an internal self-service portal allowing officers and employees to access critical information and back-office services quickly. The introduction of a cloud-hosted supplier portal also enhanced agile interaction between the force and its suppliers.

UNIVERSITY OF GREENWICH is using Oracle Cloud ERP to integrate seamlessly with the existing Oracle Cloud HCM system, allowing the university to break down organisational silos, standardise processes and manage financial, planning and workforce data on a single integrated cloud platform to deliver a world class education.

KEY STRENGTHS OF THE PRODUCT

Oracle Fusion ERP's strengths lie in the depth of functionality that can be delivered in a fully subscription-based truly cloud environment. Rather than providing legacy ERP products in a hosted environment and calling it cloud, Oracle took its time and migrated functionality to a cloud architected environment, only releasing elements as they were ready. That has now reached the point where Oracle Cloud ERP is a true tier 1 cloud solution. Apart from leveraging the core business functionality of the legacy solutions Oracle has incorporated and continues to develop emerging technologies including AI, machine learning, and IoT, to broaden domain and industry-specific functionality.

The depth of Oracle Cloud ERP functionality means it is one of the few solutions that is suitable for the largest enterprise scale organisations.

A particular strength for public sector organisations is the fact that Oracle provides a dual-region government cloud. This means that public sector transactional data and back up data can be stored on UK soil with two UK data centres and a dedicated internet backbone connecting them. It was designed in conjunction with UK Government and Defence Ministries according to security principles outlined by the National Cyber Security Centre.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

As a true cloud delivered solution the technical complexity of implementing a tier 1 solution like Fusion Cloud ERP is significantly reduced during implementation. While it is typically delivered on Oracle's public cloud it is one of few clouds that are also available in total in a customer's own data centre. Oracle Cloud@ Customer brings Oracle's complete portfolio of public cloud infrastructure, fully managed cloud services, and Oracle Fusion SaaS applications into the customer's data centre. This can address some of the concerns that customers in certain sectors still have with public cloud deployed solutions without incurring the inefficiencies inherent in private hosting. Oracle still enforces the customisation restrictions and update policies of its public cloud deployments so it can manage the solution with the same economies of scale and provide the associated savings to the customer.

DEPLOYMENT

- Oracle Cloud ERP runs on Oracle Gen 2 cloud infrastructure. However, it can also deliver its Fusion SaaS applications at the customer's data centre through its Oracle Cloud@ Customer offering. For the UK public sector, Oracle also provides a dual-region government cloud, which is the only dual-region sovereign cloud for use by UK public sector customers.

QAD Adaptive ERP is the core solution in a suite of applications covering the broad range of business processes that a manufacturing organisation will require, including financials, customer & service management, supply chain, and manufacturing. It also provides capabilities in analytics, business process management and integration. While QAD does not have a HR module, it ticks the boxes for the vast majority of capabilities needed by manufacturers. In addition to the core ERP product, QAD's portfolio of related solutions includes products addressing quality management (EQMS), supply chain management (DSCP), and global trade and transportation management (GTTM).

Key products

QAD Adaptive ERP

QAD Enterprise Quality Management System (EQMS)

QAD DynaSys Digital Supply Chain Planning (DSCP)

QAD Precision Global Trade and Transportation Management (GTTM)

LINES OF BUSINESS

- **Manufacturing**
- **Supply chain**
- **Financials**
- **Customer management**
- **Transportation management**
- **Strategic purchasing**
- **Supplier management**
- **Service and support**
- **Analytics**
- **Business process management**

Business type suitability

The QAD Adaptive ERP solution is designed for and targeted exclusively at manufacturers of all sizes, from start-ups through SMEs and mid-market manufacturers operating on a single or small number of sites, to market-leading global companies. While suitable for smaller manufacturing organisations, it is a scalable solution that also provides a good fit for multi-national manufacturing organisations with multiple sites across different geographies. Typical QAD customers tend to be mid-market manufacturers, or divisions of larger organisations. The solution provides a broad range of functionality to support different manufacturing environments (discrete, process, batch, and mixed mode), across a range of verticals.

SIZE OF BUSINESS

- QAD has built a solid customer base of global Fortune 1000 and mid-market manufacturers. With a proven track record of more than 40 years of industry leadership, QAD is ideally qualified to meet the business and technology requirements of global manufacturing companies worldwide.

Vertical suitability

QAD's explicit growth strategy is to focus on 22 sectors across six manufacturing verticals: automotive, consumer products, food & beverage, high-technology, industrial and life sciences. As an example, with the life sciences vertical QAD focusses on life sciences contract manufacturing, diagnostics manufacturers, medical devices manufacturers, and pharmaceutical/biotechnology manufacturers. QAD engages with industry groups and standards bodies in these verticals to develop products and services to address evolving industry-specific needs. QAD have a long history in the automotive sector and it continues to be a major focus, accounting for 35 percent of revenue according to QAD's latest breakdown of revenue by vertical.

VERTICAL MARKETS

Automotive suppliers

Consumer products

Food and beverage

Life sciences

High technology

Industrial

Go-to-Market strategy

QAD sells and implements directly as well as indirectly through dedicated channel partners, and continues to expand and strengthen their partner network. In the UK market QAD sells directly and also has a single dedicated channel partner, Strategic Information Group (SIG). QAD partners now provide about four times as much consulting capacity as QAD's internal resources. This capacity is provided through dedicated channel partners such as SIG and, more recently, partnerships with large multinational service and consulting companies like Tata Consultancy Services, YASH, Infosys and Thirdware. This extended ecosystem enables QAD to offer support for large-scale global projects.

Licensing and pricing

QAD's Cloud offering is subscription based, and licensed principally on the basis of named users, limited named users (with access to a limited range of functionality) and purchase requisition users. Non-core cloud modules (e.g., quality management and manufacturing automation solutions) are licensed separately on a named user of device basis. Cloud subscriptions include support as part of the offering. QAD does, on a very limited basis, support enterprise subscription licensing for QAD Adaptive ERP, but typically only for large-enterprise scale implementations.

Customers

RENOLIT GROUP An international leader in the manufacture of high-quality plastic films and related products for various technical applications, RENOLIT uses QAD Adaptive ERP across multiple sites within several divisions around the globe. One notable feature is that RENOLIT has deployed the fully-integrated QAD's Enterprise Quality Management System (EQMS) solution.

GKN AUTOMOTIVE The largest global supplier of driveline technologies for the automotive industry, GKN Automotive has deployed QAD Adaptive ERP in the cloud globally across its manufacturing facilities, encompasses all core ERP functions as well as Cloud EDI for the entirety of the GKN business plus the QAD Precision Global Trade and Transport Management solution.

SAINT-GOBAIN The Saint-Gobain High Performance Solutions, a €7.5bn division of the Saint-Gobain corporation, designs, manufactures and distributes a range of materials and solutions for industrial applications. The division has standardised globally on QAD Adaptive ERP in the cloud including QAD Automation Solutions and Production Execution.

KEY STRENGTHS OF THE PRODUCT

QAD's depth of experience in providing solutions for manufacturers is undoubted, making QAD Adaptive ERP a very strong offering for any manufacturer falling within its target sectors. With a proven track record and a growing customer base, QAD also has a strong focus on helping manufacturers deal with the various day-to-day practicalities and compliance headaches of conducting business across multiple countries. Examples include support for the Making Tax Digital (MTD) requirements in the UK and reporting requirements mandated by the Chinese government. The breadth of the solution is another strong point, with modules such as CRM for manufacturers, field service management, quality management, enterprise asset management and production execution augmenting the traditional core manufacturing capabilities.
From a technology perspective, the QAD Enterprise Platform provides a modern technology architecture, making it easier for manufacturers to develop and maintain additional 'last-mile' functionality where required. Extensions and new apps can be created in a low code/no code environment, reducing the need for intrusive customisations, and the modular design means upgrades can be applied selectively. QAD has invested in improving the user experience across both web and mobile, with intuitive personalisation options by role, activity and user, and embedded analytics.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

QAD is deployed as a single tenant cloud solution with the option to deploy on dedicated virtual hosts. QAD, like most other ERP vendors, is actively pushing customers towards subscription-based licensing and cloud deployments. While on-premise deployments may still be available, new functionality will be released in the cloud version first.
QAD's keen focus on six manufacturing verticals means that, in theory, QAD Adaptive ERP should be easier to configure and require fewer customisations. QAD Enterprise Platform, which enables the development of extensions and apps, plus integration with other enterprise applications, also enables less complex and faster implementations.

DEPLOYMENT

• QAD Adaptive ERP is a single tenant solution, meaning that the customer receives their own dedicated environments, with dedicated application code and databases. These can be deployed on dedicated virtual hosts for the customer if requested. Firewall rules and network/host-based segmentation separates the other customer environments.

SAP

SAP is the longstanding market leader in ERP but is much more than an ERP vendor now. SAP describes its range of offerings as an 'integrated framework for intelligent enterprises'. Effectively this means a set of applications, infrastructure and services that it divides into six categories: its foundational Business Technology Platform, covering services and applications from identity management to database technology, development platforms and intelligent technologies such as AI; business applications, covering a range of business applications including ERP as well as the newly acquired SAP Spotlight providing analysis of business process configurations; industry cloud providing a cloud platform through which the various solutions can be delivered; sustainability solutions to help customers meet the rapidly emerging demands of environmental, social and corporate governance; experience management solutions to build stakeholder engagement into business processes; and business networks including procurement networks such as the well-known Ariba. This review focusses on business applications and ERP in particular.

Key products

- **SAP Business Technology Platform**
- **SAP Customer Experience portfolio**
- **SAP Digital Supply Chain portfolio**
- **SAP Digital Manufacturing**
- **SAP Human Experience Management Portfolio**
- **SAP Intelligent Spend portfolio**
- **SAP ERP Solutions:**
    - **SAP S/4HANA (multiple deployment options, single code line)**
    - **SAP Business ByDesign**
    - **SAP Business One**
    - **SAP ECC 6.0 (SAP ERP) legacy**

LINES OF BUSINESS

• **SAP S/4HANA**: Asset Management; Finance; Human Resources; Manufacturing; R&D/Engineering; Sales; Service; Sourcing & Procurement; Supply Chain; GRC & Cybersecurity

• **SAP Business ByDesign**: Executive Management Support; Financial Management; Customer Relationship Management; Human Resource Management; Supply Chain Management; Project Management; Supplier Relationship Management; Compliance Management

• **SAP Business One**: Administration; Sales, Purchasing, Service; Financial Management; Project Management; Inventory & Distribution; Light Manufacturing

Business type suitability

SAP offers multiple ERP solutions ranging in suitability from the largest global organisations to SMEs. The flagship solution suite, S/4HANA, targets midsized to large organisations. It is available in multiple distinct flavours - a multi-tenant edition, a single-tenant edition on SAP's HANA Enterprise Cloud (HEC), a private cloud edition which is single tenant, subscription-based and available from multiple hyperscalers (Microsoft Azure, Google and AWS) and finally, on-premise. Business ByDesign is another multi-tenant cloud (HEC) ERP solution from SAP but targeted at the mid-market. The final solution, targeted at SMEs, is Business One, available on-premise, hosted or as a subscription-based single-tenant cloud solution.

SIZE OF BUSINESS

• **SAP S/4HANA:**
> Mid-sized to large business

• **SAP Business ByDesign:**
> Mid-size business

• **SAP Business One:**
> Small Business

• **(SAP ERP) legacy:**
> Mid-sized to large business

Vertical suitability

There is scarcely a vertical market not served by SAP ERP products, reflecting its long-standing pedigree, breadth of functional capabilities and strength of its delivery channels. SAP ERP solutions target many verticals in the following broad sectors: financial services; manufacturing, mining and mobility; public services; healthcare; consumer industries; energy and natural resources; service industries; sport and entertainment. While S/4HANA includes a functional breadth and depth that makes it applicable for large organisations in most sectors, Business ByDesign is best suited to services and project-based businesses while Business One is broad enough for SMEs in services and product businesses even including light manufacturing capabilities.

VERTICAL MARKETS

- Financial Services
- Manufacturing, Mining & Mobility
- Public Services
- Healthcare
- Consumer Industries
- Energy and Natural Resources
- Service Industries
- Sports and Entertainment

Go-to-Market strategy

SAP's industry focus extends beyond its product configurations to its go-to- market strategy. It has a rich channel partner network globally, with sixty-three active partners operating in the UK. SAP partners build, sell, service and run SAP solutions – adding expertise that extends reach, market penetration and functionality of SAP solutions to meet diverse customer needs. SAP's route to market includes direct sales and partner led engagements with partners ranging from large systems integrators and consulting firms to niche operators with a more boutique or tailored approach, sometimes with their own SAP certified add-on solutions with a specific focus on vertical or niche functional capabilities.

Licensing and pricing

A variety of pricing models exists across the SAP ERP product range reflecting the variety of deployment models available. S/4HANA is available as a pure SaaS model, as a licence subscription or as a perpetual licence. While going to print SAP announced a new bundled service model called 'RISE with SAP' which is billed as 'Business Transformation as a Service'. This appears to bundle S/4HANA solutions with other SAP technologies and hyperscaler cloud services into a single subscription and contract. Watch this space.
Business ByDesign is only available as a pure SaaS subscription, reflecting its multi-tenant architecture, and Business One is available on a licensed subscription or as a perpetual licence.

Customers

VODAFONE Working with SAP and Accenture, Vodafone has established a single digital core based on S/4HANA with additional SAP products SuccessFactors, Concur and Ariba. The implementation's aim was to improve operational efficiency in business functions such as finance, supply chain and IT, rolled out across 26 countries for over 130 legal entities.

BRAKES Brakes, a B2B food delivery service and a leading supplier to the food service sector in the UK, launched a new direct-to-consumer platform on the SAP Commerce Cloud in just seven days. With the COVID-19 pandemic this enabled Brakes to distribute food packages to UK households. The new consumer site is based on Brakes' existing B2B solution, which runs from the same code base.

DIXONS CARPHONE Dixons Carphone has implemented a range of SAP core applications in a hybrid cloud environment to transform efficiency in areas such as finance, procurement, HR and travel and expenses. Dixons Carphone also implemented a range of SAP cloud applications along with SAP S/4HANA to improve customer experience.

KEY STRENGTHS OF THE PRODUCT

The key strengths of SAP ERP solutions might be considered breadth and depth. Few solutions can compete with S/4HANA in terms of functional capabilities. That versatility extends to deployment options, though not all functional capabilities and extensibility options are available in all deployment models. In addition to the capabilities of S/4HANA, SAP offers a leading range of complementary solutions such as SuccessFactors for HCM, Concur for travel and expenses and the Ariba procurement network. All are strong contenders in their own markets and complement the S/4HANA solution very well. Recently SAP has positioned S/4HANA as the 'Digital Core' around which other solutions can be implemented to enable the digital transformation many organisations seek. The recent RISE announcement suggests that this focus on transformation will deepen with support for business process optimisation in the digital core. SAP Business Process Intelligence potentially strengthens the foundations this core can provide to further digital initiatives. It will be interesting to see if SAP, and critically their partners, can make good on this potential and further strengthen their offering.
Business ByDesign and Business One, in contrast to S/4HANA, have strength in their narrower focus. While not quite niche they both offer robust ERP solutions for smaller organisations – the former for service sector businesses primarily with the latter flexible enough for many SMEs that may not be comfortable with a multi-tenant solution.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

SAP is often considered a complex solution to deploy. This relates primarily to S/4HANA and its predecessor ECC6. While there are undoubtedly examples of complex, lengthy and costly deployments they tend to be higher profile for SAP than for other vendors because of their market position and having many very large clients with more complex project environments.
However, S/4HANA projects should be considerably simpler to deploy than ECC6 historically was, particularly for the multi-tenant and private cloud editions. A key factor to realising these simplifications, though, is finding an implementation partner that will maximise the capabilities of these newer deployment models.

DEPLOYMENT

- **SAP S/4HANA:**
  > Multi-tenant, single-tenant, hosted, on-premise
- **SAP Business ByDesign:**
  > Multi-tenant
- **SAP Business One:**
  > Single-tenant, hosted, on-premise
- **(SAP ERP) legacy:**
  > Hosted, on-premise

UNIT4

Unit4 is a major player in ERP for people-centric organisations, with offerings firmly focussed on the needs of organisations who don't make, maintain or move physical products. Unit4 offers three main products: Unit4 Enterprise Resource Planning (ERP), formerly Unit4 Business World, and prior to that Agresso; Unit4 Financial Planning & Analysis (FP&A), formerly Prevero; and Unit4 Human Capital Management (HCM). The HCM and FP&A products can be sold as best-of-breed solutions, or as part of an integrated Unit4 solution.

Unit4 People Experience Suite is used to describe solutions encompassing some or all of ERP, HCM, FP&A, and other niche Unit4 products, all delivered on Unit4 People Platform, a micro-services-based integration suite. 2021 sees a further major evolution in this direction with the release of Unit4 ERPx - available from this month - a fully integrated ERP, HCM and FP&A solution built on Microsoft Azure cloud infrastructure.

Key products

Unit4 ERP

Unit4 FP&A

Unit4 HCM

The People Experience Suite

LINES OF BUSINESS

• **Unit4 ERP** delivers a full ERP suite of financial management; human resources and payroll; planning, budgeting and forecasting; procurement management; project management; and enterprise asset management services-centric offerings

• **Unit4 FP&A** delivers a software solution for financial planning, budgeting and forecasting, financial consolidation, reporting, and analysis

• **Unit4 HCM** offers the spectrum from onboarding to modern performance management and learning management.

Business type suitability

Typical Unit4 customers are people-centric and/or service-centric organisations with between 200 and 10,000 employees, and with turnover of £150m and upwards for commercial organisations. Unit4's products are suitable for large organisations operating in multiple countries, and are sold, deployed and supported globally. Service-based and people-based organisations with a large workforce who are struggling to manage environments where multiple systems are used to manage financials, people, projects, planning and business intelligence should consider Unit4's solutions.

Unit4 offers a choice of deployment options for ERP (on-premise, single-tenant and multi-tenant cloud), with on-premise and single-tenant cloud options for FP&A and multi-tenant cloud for HCM.

SIZE OF BUSINESS

• Suitable for all markets, but its focus is mid-market -200-20,000 employees, $200m to $1bn plus.

Vertical suitability

Unit4's target markets for its ERP and FP&A products are principally higher education, public services, not-for-profit, professional services organisations, and people-centred services organisations, while the HCM product has a narrower focus on professional services organisations and the public sector. Within those verticals there are a number of significant sweet spots for Unit4. This includes local government, where Unit4 has historically been very strong, government agencies, and universities. Large project management-based, engineering and architecture consultancy practices are a key focus within professional services.

VERTICAL MARKETS

• **Unit4 ERP:** People centred services industries, higher education, public services, not-for-profit, professional services organisations

• **Unit4 FP&A:** People centred services industries, higher education, public services, not-for-profit, professional services organisations

• **Unit4 HCM:** Professional services organisations, public sector

Go-to-Market strategy

Unit4 sells and deliver its solutions both directly and through a partner network comprising dedicated channel partners, systems integrators and consulting firms. Building a partner ecosystem is a key element of Unit4's strategy, with a range of different partner models and levels (select, premier and elite). Go-to-market partners sell, implement and support Unit4 solutions, service partners are extensively trained on Unit4 solutions to enable fast implementation, integration solutions, and support services, while technology & innovation partners enhance the functionality and performance of Unit4 solutions through software extensions and integrations. Unit4 currently has 26 active partners in the UK.

Licensing and pricing

Both perpetual and subscription licensing are available for the ERP and FP&A products, with subscription pricing only for the HCM product. Unit4 ERP licence costs are calculated using a Full-Time Equivalents (FTE) users metric, with a view to simplifying the licensing model and concerns over the number and types of user licences required. This licensing model, which is common for people-centric and HCM solutions, covers full-time, part-time, and temporary employees, plus potentially volunteers in the not-for-profit sector.
FP&A is licensed on the basis of solution elements required, and named users of different types (modelling, planning, analytics) depending on their role in using the software.

Customers

EAST OF ENGLAND AMBULANCE SERVICE NHS TRUST EEAST provides 24 hours, 365 days a year accident and emergency services to those in need of emergency medical treatment and transport in Bedfordshire, Hertfordshire, Essex, Norfolk, Suffolk and Cambridgeshire. The service receives more than one million emergency calls each year. They have deployed Unit4 ERP and FP&A.

FOREST RESEARCH Forest Research is Great Britain's principal organisation for forestry and tree related research and is internationally renowned for the provision of evidence and scientific services in support of sustainable forestry. They have over 250 staff across England, Scotland and Wales, and have deployed Unit4 ERP.

SOUTHAMPTON CITY COUNCIL
Southampton City Council is the unitary authority for Southampton on the south coast of England, comprising approximately 254,000 residents. They have deployed Unit4 ERP, spanning finance, procurement, HR, payroll, and more, supporting the council in the delivery of more than 400 services to citizens.

KEY STRENGTHS OF THE PRODUCT

Unit4 ERP provides financials; human resources and payroll; procurement management; project management; and enterprise/estate asset management services. FP&A delivers financial planning; budgeting and forecasting; financial consolidation; reporting and analysis. HCM offers advanced HR functionality, from recruitment through onboarding to performance and learning management.
A key strength for Unit4 lies in their long heritage of providing people-centric solutions for organisations in their target verticals. The not-for-profit sector is a good example, with Unit4 providing functionality to support requirements in areas such as grant management, projects, and auditing/compliance reporting.
The big news for Unit4 in 2021 is clearly ERPx, described as 'next-generation cloud ERP', utilising Microsoft Azure's public cloud platform. Initially launched in October 2020, ERPx is being rolled out to customers from March 2021. The key for any software vendor is to have existing customers adopt a new platform such as ERPx, and Unit4 announced global not-for-profit Americares as the first of ten early adopters already on board.
The ERPx cloud platform supports a range of features such as: enabling process automation and improved efficiencies through artificial intelligence and machine learning; a microservice architecture; low-code toolkits providing an easier path to system extensions and integrations; and an improved user experience.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

While many organisations considering Unit4 solutions may be satisfied with the standard financial reporting and analysis provided by Unit4 ERP, the FP&A solution provides a range of functionality that is likely to be attractive to larger or more complex organisations, such as financial consolidation and corporate performance management. FP&A's capabilities will likely be a fundamental element in delivering business benefits in such organisations.
Availability of Unit4 resources has been noted as a concern in the past by some analysts, but Unit4 has addressed this through a major acceleration in its partner programme in preparation for ERPx, with 22 new partners onboarded during 2020 according to one report.

DEPLOYMENT

- **Unit4 ERP**
  > On-premise
  > Single-tenant (shared and dedicated deployment)
  > Multi-tenant
- **Unit4 FP&A**
  > On-premise
  > Single-tenant (shared and dedicated deployment)
- **Unit4 HCM**
  > Multi-tenant

Workday has emerged as one of the big success stories in the world of ERP over the last 15 years. In an industry not generally noted for the emergence of new players - all of the other vendors featured in this review have been around for considerably longer in some shape or form - Workday has risen from a start-up in 2006 to a position towards the top of the charts. And it shows every sign of staying there, with continuing strong growth over recent years and over 1,300 customers in the UK. While originally best known for its HCM offering, Workday now boasts a much broader solution suite, making it suitable for a wide range of business types and industries. Workday's multi-tenant solution means every customer is on the same version. New functionality is added regularly, and the company has also been active in acquiring complementary solutions.

Key products

- Adaptive Insights Business Planning Cloud
- VIBE Central
- VIBE Index
- Workday Skills Cloud
- Workday Talent Marketplace
- Workday Adaptive Planning
- Workday Financial Management
- Workday Spend Management
- Workday Human Capital Management
- Workday Payroll
- Workday Analytics
- Workday Professional Services Automation
- Workday Student
- Workday Cloud Platform
- Workday Talent Management
- Workday Benchmarking
- Workday Data Hub
- Workday Augmented Analytics
- Workday Prism Analytics
- Workday Accounting Center
- Workday Vaccine Management

LINES OF BUSINESS

- HR
- IT
- Sales
- Finance
- Accounting

Business type suitability

Workday's suite of products covers finance, procurement, human capital management, planning and analytics, which effectively means it could be deployed by organisations in any sector. Workday customers are often mid-size and large global multi-nationals. The full suite tends to be used as a corporate-level solution, and by organisations in service-centric and people-centric sectors. Workday HCM has a much broader target market, and is a market-leading solution in its own right, as is the highly-regarded Workday Adaptive Planning which provides financial, workforce, sales and operational planning.

SIZE OF BUSINESS

- Workday is suitable for mid-sized to large enterprises.

Vertical suitability

Workday is used across a broad and diverse range of sectors as communications, energy and resources, financial services, government, healthcare, education, hospitality, insurance, life sciences, manufacturing, media and entertainment, non-profit, professional and business services, retail, and technology. Workday's history and reputation as a HCM solution makes it a strong candidate for organisations with large numbers of employees. Workday competes at the higher end of the market, facing competition from the likes of SAP, Oracle and Microsoft in larger enterprises, more focussed vendors such as Unit4 for people-centric organisations, and specialist HCM vendors.

VERTICAL MARKETS

- Retail
- Financial Services
- Professional and business services
- Communications
- Energy and Resources
- Government
- Healthcare
- Higher Education
- Hospitality
- Insurance
- K-12
- Life Sciences
- Manufacturing
- Media and Entertainment
- Non-profit
- Technology

Go-to-Market strategy

Workday has developed an ecosystem of services partners across the globe, and has a stated aim of expanding this further to support local deployments. Services partners are an important element in Workday's overall go-to-market strategy, with the majority of customers using partner services for deployments rather than contracting directly. Workday's own professional services team focus on more complex projects, strategic clients and implementations involving new features. There are various partner types, covering advisory services, deployment services and application managed services. Partners range in scale from 'boutique' to major regional or global organisations. Partners may specialise in specific products, industries, or functional areas.

Licensing and pricing

Workday subscription costs for core financial and HCM modules are based on the number of Full-Service Equivalent (FSE) workers in your organisation. This is Workday's pricing metric which converts the total number of workers in an organisation into a weighted equivalent based on the number of workers in various categories. For example, each salaried worker may be equal to one FSE, whereas four part-time workers may equate to one FSE. When engaging with Workday it is advisable to know how your workforce breaks down by categories to inform discussions on subscription costs, particularly for organisations with significant part-time or seasonal workforces.

Customers

ALDI International supermarket chain Aldi has gone live with Workday over the past quarter to enhance employee experience, facilitate its drive to become paperless, support robust GDPR processes, augment compliance and provide real time insights via live, accurate and dynamic reporting. Aldi will roll out Workday across the 40,000 employee business in Q2 2021.

EQUINITI As a global financial services company providing back-office services for listed companies, Equiniti uses Workday Financial Management and Human Capital Management. The company employs about 5,000 people, with 500 in the US, and just under 1,000 in Chennai, India, where all the back-office services for IT, finance, HR, and operations are supported.

JOHN LEWIS A household name in the UK through John Lewis department stores and Waitrose supermarkets, John Lewis Partnership deployed Workday Human Capital Management and Payroll in the midst of the COVID-19 crisis, helping its 84,000 employees access payslips, check time sheets and change bank details wherever they were.

KEY STRENGTHS OF THE PRODUCT

A significant selling point for Workday is what they describe as "the Power of One": a single application with a single user experience, database, security model and code base, in comparison with some other solutions which are comprised of many moving parts. That said, the core of financials and HCM has been augmented through acquisitions to provide a more rounded and compelling suite of solutions. Notable additions in recent years include Scout RFP, a strategic sourcing and supplier engagement solution, Adaptive Insight's Planning solution (which will continue to be sold as a best-of-breed planning solution) and more recently Peakon, an employee engagement app. As with any acquired products, integration with the core solution takes time. Workday also continues to invest in its core applications, and 2020 saw a number of new offerings: VIBE Central and VIBE Index, to help advance belonging and diversity (B&D) initiatives, Talent Marketplace, a talent mobility solution, Workday Accounting Centre and machine learning (ML) driven predictive forecasts for Workday Adaptive Planning.
The Power of One concept extends to the Workday Community, a network of almost 100,000 Workday users. Customers can share, learn, and collaborate with other users, as well as influence the direction of Workday applications.

EASE OF DEPLOYMENT AND KEY CONSIDERATIONS

Workday solutions have fared very well in recent coverage from industry analysts, and is now firmly established as a credible option for mid to large organisations in its target sectors. Workday touts its consistently high customer satisfaction ratings, and uses this as a key selling point. There is good availability of resources globally through the partner networks, an important consideration for global organisations. Unlike many cloud ERP suites, Workday was developed for the cloud as a multi-tenant solution, and has no legacy pre-cloud technological heritage. That model tends to favour using standard out of the box functionality rather than customisation.

DEPLOYMENT

- All workday products and services are available as multi-tenant SaaS

ERP TODAY

annual vendor review 2021

WHAT MAKES A PERFECT MATCH FOR TRANSFORMATION?

BY CHRISTINE HORTON

COVID-19 has accelerated the digital transformation plans of many organisations, in some cases bringing about years of change in just a few months. Whether those companies turn to one of the global systems integrators (GSIs) or enlist an independent system integrator (SI) to help them, they rely on the expertise and support of those firms to help them navigate those changes. Here we take a closer look at the current SI market and examine some of the key characteristics that separate a smaller independent specialist from a global giant. What can they offer an enterprise when faced with the scale and breadth of resources from an **Accenture** or a **Deloitte**?

For the budget-conscious CIO, the first thing that springs to mind is cost. But it is more than the potentially prohibitive cost of employing a global SI to help deliver their transformation – the real issue is value for money. Ask an independent and they will tell you that GSIs are typically unable to provide the same ratio of higher experienced senior consultants on a project.

"Because they carry large, expensive overheads, the typical model deployed by bigger consultancies is based on utilisation rates with on-premise solutions requiring hundreds and often thousands, of man hours to carry out testing, development and migration as part of a systems upgrade," explains Phil Burgess, MD of **Inoapps** UK & EMEA.

"In the new world of evergreen SaaS environments, where system updates happen every 90 days, this methodology is no longer effective. Many of the independent SIs provide far greater value to clients by using a more relevant business model."

Independent or

global SI

CONSULTING

In the new world of evergreen SaaS environments, where system updates happen every 90 days, this methodology is no longer effective

PHIL BURGESS
INOAPPS

Burgess says that Inoapps uses intelligent automation tools to reduce the update time from 1000 days to 100 days, meaning that it requires a fraction of the consultants and significantly fewer hours to complete the project.

"While bigger consultancies may have an upper hand in covering a broader offering, they can rarely provide the same depth of knowledge and business experience compared to an independent that focusses on a number of core sectors," he says.

Burgess is not alone in this view. Chris Mason, CEO of **Namos Solutions** also believes the main selling point of an independent SI is its level of expertise.

"I think the specialised **Oracle** service can be better from the SIs – the consultants tend to be experts in their field rather than sometimes with the GSIs you can get a mix of experts and general management consultants masquerading as Oracle experts. I'm not saying management consultants are bad and will do a bad job, but they aren't Oracle experts (or **SAP** or **Microsoft**)," he explains.

Another weapon in the independent SI's arsenal is its flexibility – something not often seen in a global giant.

"Customers don't always want the huge transformations – but it feels like that is all they are offered by the GSIs," says Mason. "It feels like a cliché, but agility is key. The smaller SIs can pivot and change quickly to customer demands and challenges."

M&A activity

We can't talk about the SI market without looking at the mergers and acquisition (M&A) activity that has marked the landscape in recent years. Most notably, we've seen a lot of independent specialists being snapped up by the big players. But to what effect on the market and customer choice?

"There are far fewer boutique or independent SIs around in the Oracle marketplace, and even less so that are now accredited by Oracle on their new partner programme," says Mason. "I would say at least half of the SIs that were around 10 years ago have either closed up or been bought and merged into the big four or five to instantly boost their numbers of consultants. This in turn means customers aren't seeing the choice they did."

He continues: "We're seeing larger consultancies now competing in our space and bidding on projects I doubt they'd have even sniffed at several years ago – this can be confusing for customers and we are hearing from customers that have fixed price bids from a couple of SIs and one of the 'big four' that have ranged by over £1.5m in price!"

Ian Caswell, CEO of **Sapphire Systems** thinks that when it comes to M&A activity in the SI space, it is very much a game of two halves.

"While the big consultancies like Accenture and **Capgemini** will of course benefit from acquiring more specialist, dedicated expertise in this field, there is a risk that this trend might reduce choice for the customer and potentially impede progress when it comes to the 'last mile' nuances of implementing a modern core operating platform," he says.

"We see a huge opportunity for midsize consultancies like Sapphire, where this kind of boutique approach built around education, understanding the very specific profile of a particular business challenge, and maximising value at each stage, is very much engrained in our DNA."

Sapphire itself has been on a shopping spree. In January it announced the acquisition of UK-based **ServiceNow** partner, **ITOM Solution**. It then extended its US footprint through the acquisition of Arizona headquartered SAP Business One partner, **Pioneer B1**.

Indeed, **Canalys** chief analyst, Alastair Edwards thinks it is the midmarket players such as Sapphire that are now thriving in this current market.

"I have definitely seen examples of these specialist ERP SIs emerging and thriving. Sapphire Systems is a hungry, well-financed and nimble, digitally-enabled business which is pursuing a pretty aggressive growth path, including acquisitions," says Edwards.

"These midmarket focussed SIs are playing just below where an Accenture would play, so they aren't having to compete with the global SIs – typically. Their customers in midmarket or low-end of enterprise are often keen to invest in cloud-based ERP systems such as SAP Business One, because it supports their own essential digital transformation."

CHRIS MASON
NAMOS SOLUTIONS

We're seeing larger consultancies now competing in our space and bidding on projects I doubt they'd have even sniffed at several years ago – this can be confusing for customers

Agility and responsiveness are so much more than buzzwords in 2021 and beyond, and are in fact the currency of strong performance

IAN CASWELL
SAPPHIRE SYSTEMS

While there has been M&A activity across the board, it has been particularly noticeable in the SAP space. Laura Atkinson, chief partner officer for SAP UK & Ireland, thinks the acquisitions are broadly a positive thing – "as long as those incredibly cool, agile companies which are being acquired are still allowed to operate in that way by their new parent."

She explains: "We love agility, we love innovation, and sometimes our smaller partners have just got a lot more ability to say, 'that's a really good idea, I'm going to do that for you tomorrow'. We don't want to lose that. As long as that kind of heritage is allowed to flourish in a bigger company and doesn't get gobbled up by bucket loads of red tape and processes, I think it's a good thing for the customer, because they get that safe pair of hands."

ALASTAIR EDWARDS
CANALYS

Sapphire Systems is a hungry, well-financed and nimble, digitally enabled business which is pursuing a pretty aggressive growth path

The next big thing?

Mark Sweeny, CEO and co-founder of **de Novo Solutions**, was the founder and CEO of **Certus Solutions**, which was sold to Accenture in 2018. He believes a key trend we're now seeing is the merging of digital design experience agencies and traditional SIs.

"Both Deloitte and Accenture have been the most active in this space over the past five years with numerous acquisitions around the world. This is really the start of the experience economy, which sees the need to digitalise organisations' business operations from front to back and across an enterprise," he says.

The experience economy, he says, offers personalised experiences over standardised processes. But this time there is a twist for those acquisition-hungry companies. "We are operating in a hybrid multi-cloud environment, so it will be interesting to see how this develops. We are going to see **Salesforce**, ServiceNow, Microsoft et al penetrate from the front office and across the enterprise integrating with the established back office ERP vendors."

Agility the biggest weapon in the SI's arsenal?

Those enterprises pushing the button on their digital transformation plans clearly have choices as to who they choose to partner with.

With an independent SI they are paying for access to product - and vertical - specialists and an organisation that is agile and can adapt immediately to changing requirements as and when they arise.

"Boutiques want happy customers at all costs, they need customer advocacy to promote their businesses, hence they have an intrinsic understanding and desire for personal ownership of an implementation. Reputation is everything," says Sweeny.

However, he argues that GSIs still have a role in the ecosystem: "If you are undertaking a major global implementation for a large multi-national, then you are going to need the services of a large SI. However, I would still push to ensure they have skilled boutique partners in their supply chain, from which you can leverage over the course of the implementation."

And much like a need for agility is driving many transformation projects, so too is that reflected in the need for an SI partner.

"Agility and responsiveness are so much more than buzzwords in 2021 and beyond, and are in fact the currency of strong performance," says Caswell. "Smaller independent SIs are arguably in a stronger position to deliver this speed and agility when it comes to deployment, as they are less entrenched in the red tape and processes which can constrain their larger counterparts.

"The challenge now, is for those SIs to step up and convince the market of the true value of adopting the new breed of core operating systems which will undoubtedly become the foundation of successful business over the next decade." ■

This is really the start of the experience economy, which sees the need to digitalise organisation's business operations from front to back and across an enterprise

MARK SWEENY
DE NOVO SOLUTIONS

Inflection 2021

THE MISSING PIECE OF THE ENTERPRISE JIGSAW

BY MARK SWEENY

This year will see the continued evolution of SaaS cloud applications and once again we find ourselves at another inflection point. The next step brings into focus the final piece of the jigsaw and delivers on what ERP has been promising for decades - simply to make our lives easier at work.

Digital transformation is already here. There is no need to carry on debating whether people will continue to work from home or return to the office. Everyone is already working everywhere but the emphasis is changing. We have to break out from the functional silos that ERP systems create and look across the wider enterprise. Work is now coming to you rather than you going to work.

Organisations that continue to ignore the evolving needs of their workforce and do not have their people and the employee experience at the centre of their strategy will continue to lose pace with those who are prepared to invest. For some, this has already proven to be fatal. Be warned, no industry is immune to digital disruption.

Stay relevant - take the experience economy seriously

Any company that does not deliver a seamless customer experience will be forever chasing the next sale while their competitors build meaningful and lasting relationships with theirs. Deep customer relationships create customer advocacy and this creates repeat business.

JP Morgan estimate that the experience economy Total Addressable Market (TAM) size is $110bn globally and **Gartner** research analysts are predicting that by 2024 organisations with an established multi-experience strategy will outperform their competitors in both customer and employee experience satisfaction metrics with:

- 40 percent of professional workers orchestrating their own business application experiences like they do their music streaming experience
- 50 percent of all major business applications will include at least one or more types of no-touch experience
- 70 percent of self-service customer interactions will be initiated by speech

To be successful organisations must always stay relevant to their market. The Gartner research makes a compelling argument that understanding both your customers' and employees' needs, wants, and behaviours on an individual level is more important than ever.

> **Any company that does not deliver a seamless customer experience will be forever chasing the next sale**

Delivering great products and services still needs human interaction. The consumer grade digital B2C world we all experience in our personal lives has now arrived in the workplace. We demand one click.

By creating real-time subconscious digital experiences that make employees efficient, effective, and most importantly successful, increases employee satisfaction as they feel valued. Employees now get to spend their most precious asset - their time - dealing with customers and/or citizens and not wading through endless back-office organisational bureaucracy.

The time to invest is now

The infamous Richard Branson quote, "Clients do not come first. Employees come first. If you take care of your employees, they will take care of the clients", is true. So why then do we continuously deny the type of capability we subconsciously use in our social lives to our employees at work?

Even with modern SaaS cloud applications the way we interact with technology still does not reflect the way an organisation actually works and does not reflect the human element that contributes to an organisation's culture. Very few employees inside an organisation work within a functional silo as the business processes that support service delivery connect front-office to back and span multiple functions and supporting systems outside a core ERP platform.

Inefficiencies in the workplace exist as individuals spend considerable amounts of time undertaking non-productive work in driving processes in functional silos rather than focussing upon those value-add strategic tasks that require human thinking and business relationships. This often creates pure frustration on an employee's part. Consequently, there is a strong phycological human behavioural and cognitive element to finding the employee experience nirvana.

As we crawl out of economic recession the war on talent still remains. Employees' expectations are that they will not only get technology that works but tech that makes them successful in their role. If you want to attract and retain the best talent you need to create an environment that clearly demonstrates you value them.

The direction of travel has been set

The experience economy is no passing fad with industry titans like Bill McDermott, CEO at **ServiceNow**, Marc Benioff, founder and CEO at **Salesforce**, and Mike Ettling, CEO at **Unit4** all setting the direction of travel since late 2019. Just recently Larry Ellison, founder and chief technology officer at **Oracle** has also entered the fray.

The front office platform vendors are now looking to provide enhanced customer and employee experiences across the enterprise, breaking down the silo functionality of back office systems and bringing the work to the user by using technologies such as artificial intelligence, machine learning, adaptive analytics and interoperability.

Josh Bersin, a renowned HR industry evangelist and analyst was quick to identify this as early as 2019, with his insights on the 'employee experience platform' being introduced into the workplace architecture.

Naturally being in an industry that loves its labels and acronyms we refer to it as Enterprise Service Management (ESM). However this is only the beginning as the workplace cloud-based technology agenda is now set for the next decade.

The rise of the employee experience platform

The evolution of the experience economy is so much more than an intelligent employee portal enabling access to a wider range of inter-departmental services. The leading ESM technology vendors like Salesforce and ServiceNow are providing platforms that will in time have the capability to deliver individual personalised experiences automatically in the workplace. This is the nirvana of the experience economy.

However to achieve this you have to combine the experience layer ESM applications with the back office business process ERP. Consequently, a new experience architecture materialises that can provide personalised experiences over standardised processes.

An experience architecture is data driven and takes advantage of a myriad of new technologies. It is this that drives a personalised employee experience bringing the relevant application services to the user at the appropriate time, unifying the underlying ERP platforms, various lines of business, front office systems, and external trusted industry relevant systems but without the user ever having to touch these systems directly.

Imagine being contacted by phone or text message to initiate an action, or to make you aware of a relevant event, and then being able to communicate through voice when required to access the company portal on your remote device; what you are presented with is an individual personalised front end. All automatically generated and configured with no customisation and applicable to you for that moment in time, with the same standardised processes in the background being executed. This is what the future looks like.

Adopting the entrepreneurial mindset

2021 will only see the experience economy gaining momentum. To take advantage, organisations need to adopt an entrepreneurial mindset, have a positive attitude and a willingness to step up and do something to embrace the direction of travel.

So think big, think different; be prepared to take calculated risks; ignore your critics and remember it's not just about making money! It's about contributing by making a positive difference.

My advice for 2021, be different, be you and go be brave, because this train is leaving the station. ■

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Mark Sweeny, founder, de Novo Solutions

MICHIEL VERHOEVEN

Can a new MD move the needle for UK customers?

Back in July 2020, SAP appointed Michiel Verhoeven as managing director in the UK&I – until now we haven't heard much from the new top man. In his first media interview since taking over the hot seat, Verhoeven spoke to Paul Esherwood on ERP Today Live! to set out his agenda for the UK business and to explain what the broader SAP strategy means for UK customers.

The Q&A below is an abridged version of that live interview which took place in December 2020.

You've worked for SAP for a little over seven years, you've been posted to some fantastic locations all around the world. When you got the call about the UK job, did your heart sink a little?

MV "Quite the opposite. In fact, a couple of years ago, I tried to make a deliberate attempt to move back to Europe after spending many years in Asia Pacific. I visited a number of companies in the UK at the time, and I started to network a little bit to try to make a move to London given that this is such an international city. Having lived in multiple countries, this is a great place to be and from a business perspective, even better."

When you get offered a job like this, is turning it down an option? I guess, turning it down is the same as handing in your resignation?

MV "It didn't even cross my mind to turn it down. It's been an aspiration of mine to be responsible end to end for an SAP business from the moment that we sell something to the moment that we deliver and support it and be there with the customer throughout the entire experience. So for me, it was a great opportunity to step into something I've aspired to do, and hopefully been trained for through different previous roles to be a bit qualified for."

When I interviewed your predecessor he set out his vision for turning SAP in the UK into a truly customer focussed organisation and I'm not sure he completely delivered on that. How is your tenure going to be different and what specifically are you going to do in terms of culture to bring SAP more in line with your customers' expectations?

"Yes, I think it's really good that you mentioned that because you made a comment in the beginning that I'm the third MD in a few years. In fact, I'm the twelth MD in 15 years. So that shows you that we've not been particularly consistent and reliable for our customers and partners in the way that we should be, and yet we're a 47 year old company with frankly a fantastic brand, especially in the ERP market. So how can that be? That's the first thing we need to address.

"Jens was in fact here two and a half years, one of the more longer serving MDs, and I'm hoping to do better than that in terms of tenure. So the first thing I would say is what Jens set out as his vision is what we all strive for as a company. It's not Jens' personal vision. It's SAP's mission to drive and deliver customer success. So in the very early period here, I have met personally in a couple of months' time probably 50 customers, CEOs, CFOs, CIOs, and they absolutely said to me, 'Michiel, SAP needs to do more than sell and promise. You need to deliver on your promises, and we expect to be treated fairly, equitably, and as a partner and not as just one of your customers who you're selling to.'

"So, there is a recognition inside the organisation, inside SAP UK and in Ireland, that it's not just about empathy. It's about fundamentally changing the way we go to markets and service our customers."

Does that recognition spread back to Waldorf as well because a lot of companies that work with SAP in the UK and also work with SAP in Asia or in the US or in Germany, say they get

an intelligent enterprise is further in the horizon.

"Then you have customers who have taken the greenfield approach, and they say, 'Look, we are going to take advantage of this disruption in the market and the technology allows us to do it. We know we have to standardise our processes. We know that data and harmonisation of it is critical to our success, and we need to learn to do analytics and monetisation of our own assets a whole lot better. So we're going to take the plunge.' And those customers tend to have made longer running cycles of delivery, but get higher benefits out of it. We've seen a 20 percent increase year on year of the number of S/4HANA customers. We see from the user survey here in the UK alone that about two thirds of the people are saying, 'Within the next three years I'm going to go on the S/4HANA journey.' So there's significant movement in the right direction."

Is that two thirds of your existing ECC customers saying that they're ready to move to S/4HANA?

MV "Yes, and that's within the next three years. So, then you have a whole group that's of course going to come later given that the maintenance window expires in 2027."

If those numbers are correct and two thirds are going to move in three years there's going to be some issues around resourcing and skills. But where does that leave the other third? They may not need to move. Migrating to S/4 is normally wrapped up in some sort of business transformational programme, and not all businesses need to transform in the same way. There are businesses that are quite capable of surviving without having huge sweeping transformation programmes. What happens to those businesses?

a very different experience with SAP in the UK than they do elsewhere.

MV "Yeah, number one, I think, with Christian Klein and Adaire Fox-Martin, standing behind our customer success strategy, which is the unification of sales and service and support, and our customer experience organisation in one board area, that makes it a lot easier to make decisions as an MD of a country, to empower people to do the right thing for the customer.

"So we have a big mantra that says, 'customer first, SAP second, line of business third.' That's very important for people to have a true north and a compass for decision making when situations are difficult."

So that talks to the high level strategy and customer focus, but the elephant in the room is S/4 - it was launched more than five years ago now, and it's not quite taken off in the way that SAP would have liked. What are you going to do to help UK businesses that are struggling to find a compelling business case to move from ECC6 to S/4, and within the timeframe that SAP has set?

MV "First let me just give you a perspective of whether S/4HANA has taken off, yes or no? The answer is more than 15,000 companies globally have said 'Yes, we believe in S/4HANA. We believe in the intelligent enterprise vision of automating business processes end to end, and we do recognise that it's time in our journey as a company in whatever industry I'm in, to make those business processes more visible, extract the value from the data flow and the objects that come across.

"People have said, 'Yes, I need to make that move.' The question is, do you do it as a greenfield implementation? Do you do it as a brownfield implementation? Or do you mix and match, if you want? And what we are seeing is that the vast majority of companies are going for brownfield technical migrations and then decide to innovate on top. They get some organisational buy in, but they don't make the big leap. And if you take the brownfield approach your technical risk is lower, your adoption will be more secure, but the incremental benefits of becoming

MICHIEL VERHOEVEN

MV "Some of them are risk averse, and say, 'In my industry, I need to see others go first and then I will follow.' Others are saying, 'I have a problem with the business case today because I have competing priorities.' Maybe they have other areas of innovation in their go-to-market, for example, in their revenue domain, and that is currently a higher priority.

"Then there's people who say, 'Well, what's my business case really?' There are sceptics out there that said, 'There is not enough of a business case to go for S/4HANA,' and that tends to be the people that look at the hardware, the software, the IT costs, TCO, rather than the full business case."

How well equipped do you think the partner network is to deliver these S4 projects? Is there enough resource in the ecosystem to get these companies live in the timeframe SAP has set?

MV "That's a huge focus for us as a company globally. If you look at the number of SAP users on a daily basis, I think there's more than two and a half million or something active out there. But if you look at the UK alone, we have about 2,000 certified SAP consultants. And our stated goal from SAP here in the UK and Ireland, is to have four times more certified consultants within the next three years. Now, if you do the math, you say 2000 times four, that's only 8000. That doesn't mean that's the ecosystem of capable partners. There are companies who have their own trading programmes, their own certifications. And you look at the Accentures, Deloittes, and the IBMs, they have very sizeable practices."

They have, but the issue is that a lot of the people that have got deep SAP experience have been around for 20 or 25 years now. Is there enough younger talent emerging that's going to have that inherent SAP knowledge? You know, the cool kids want to work with cool tech - and I'm wondering how cool is SAP at the moment?

MV "Paul, that's an area that I'm quite passionate about because we have about 5,000 or 6,000 students right now in the UK enrolled in classes where SAP is being taught, so it's not like there's nothing. There's certainly a lot of activity, I think there's more than 50 or so universities participating. But I believe the scale needs to be bigger.

"You asked is it a cool company? Well, you know, I worked in one of those cool companies and it's called SAP. If you want to be part of a transformation, you want to make things different for people in the future and the here and now, then you should be part of SAP because this is where it's all happening. I believe that and I'm trying to make it happen.

"This company wants to really be an aspirational brand for people to be joining. So we have a huge focus on learning hard, learning resources. We have self-guided learning if you want, Open University classes. We have structured programmes with universities, we have partner certification trainings. There's a plethora of offerings available, and we want to make that broader."

You've obviously joined at a difficult time when you've not been able to get out and see customers in the same way you normally would do. If you think about 2021, what are you hoping to achieve this year? If we talk again in a year's time what are you hoping to be able to tell me then?

MV "Great question. Of course I think about that because every customer that I see will ask me that question saying, 'So what, Michiel. You've just told me that you're MD No 12 in the last 15 years. What's going to be different? And the number one thing that is top of mind is a perpetuation of what Jens said. It's the same as what we say globally – is customer success. Customer outcomes is what we have to drive.

"What does that mean? Instead of selling software and saying, 'Mr or Mrs Customer, it's great that the ROI of your business case shows something positive.' That's not an outcome, that's a projection. The actual outcome occurs when the savings happen in the P&L of the customer later, or the extra revenue growth is materialised, or when they have x1000s of customers themselves benefitting from the commerce solution that we sold them.

"Number two, partner success. I want to see way more certifications in the market from our partner ecosystem by SAP, not just by the partner organisations themselves. I also want to see a doubling of the indirect revenues, not in one year's time, don't get me wrong, but that will take three years.

"The third element I think is very important is what we want to do is create a more people centric culture in one SAP. If you ask any customer, 'Who do you know from SAP?' They will give you five names. If you ask them, 'What are their titles or job functions?' They have no clue, other than to say it seems like everybody's a salesperson or everybody's a support person. It should be much simpler to engage, and we need to be one team.

"And then final thing that I want to see is cloud growth. If I look at the market size, we are today in a market of about €10bn roughly in cloud in the UK and Ireland combined. And that's growing towards €16bn in three years from now. If I look at the on-premise business, that is a €3.8bn market potential and shrinking to €2.5bn. So, the market is moving to cloud - it's not just a statement, it's in the facts. So, in one year from now, we should already see that our cloud revenues have grown significantly, versus our on-prem business."

In a year's time SAP will be a cloud-first company?

MV "I think that is what we have been saying for quite a few years already. And if you're MD number 12 it means you have to prove through actions, not through words. So, we need to gradually gain that trust from each of our customers." ■

THE ECONOMIC BENEFITS OF Certainty

BY WAYNE LLOYD

Certainty can be defined as the confidence that we have in our beliefs. It is a determining characteristic of how we perform as individuals, as a team and as a company. The more certain we are in our beliefs - irrespective of how accurate or disruptive those beliefs might be - the more passionately we defend and act upon them. Consequently, certainty can be considered one of the most influential forces and 'the catalyst that turns attitudes into action, bringing beliefs to life and imbuing them with meaning and consequence.' (Tormala & Rucker, 2015).

There is a case to be made that the certainty of a company is directly reflected in their approach towards innovation. For this article, innovation is defined as a non-constant, non-linear mode of change, and a break with all things available and known, whilst simultaneously it is 'reliant on conditions that cannot be fulfilled at the time of the innovation.' (Paech, 2000). To innovate therefore, can be considered a representation of how certain a company is about how the world is changing around them and how much that company is prepared to learn, adapt and change in order to maintain market share and relevance.

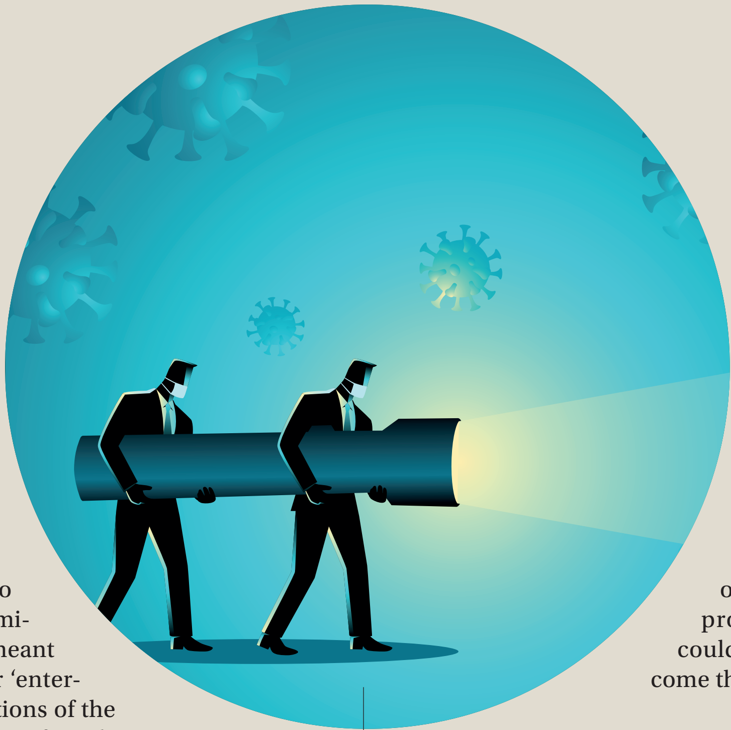
Given the uncertain world we find ourselves living in today, the link between innovation and certainty has never been more prominent. A recent study from **McKinsey** (2020) found that during this pandemic businesses (excluding pharmaceutical and medical) 'are deprioritising innovation to concentrate on four things: shoring up their core business, pursuing known opportunity spaces, conserving cash and minimising risk, and waiting until there is more clarity.'

> **"There is a case to be made, that the certainty of a company is directly reflected in their approach towards innovation**

Last summer, I wrote for ERP Today and implored businesses to continue leaning into the future and to look for the opportunities that this pandemic might offer. I believed then, as I do now, that companies must 'embrace the certainty of the uncertainty' mindful that some of the most valuable companies of today, including **Airbnb**, **Slack**, and **Uber** were all born from the ashes of the 2008 financial crisis. Indeed, studies from **Gulati** et al (2010) found that businesses that reduce operational costs but 'invest relatively comprehensively in the future by spending on marketing, R&D, and new assets' are the businesses that win post-recessions, whilst McKinsey state their belief that 'prioritising innovation today is the key to unlocking post-crisis growth.' In spite of the evidence that supports this view; uncertainty still prevails and businesses continue to hold back.

The link between certainty and innovation is akin to the story of blockchain. Throughout its short but recent history it has always been overshadowed and to some extent undermined by the uncertainty and volatility that surrounds its greatest use case - bitcoin. Many businesses have perhaps believed that the value of blockchain technology is reflected in the volatile price of a single bitcoin, whilst others have been reticent to investigate its potential further due to associated stories of illicit behaviour that have stigmatised the maturity curve of the technology's evolution.

During 2017/18 in particular, the link between the boom and bust of digital asset prices



and the perceived value of blockchain were obvious. Some prominent business leaders seemed to dismiss the technology's potential out of hand and attacked it across various mediums. Of course, others put forward more considered and rational reasons why they believed blockchain was doomed to fail, pointing out that the limitations of the technology meant it could never be ready for 'enterprise adoption'. The limitations of the technology that were being referred to at that time were predominantly centred around the lack of speed and scalability in processing transactions, the difficulty integrating into legacy systems, lack of interoperability, poor user experience, its incompatibility with legal and regulatory frameworks and concerns around the finality of smart contracts.

Innovation however, is an iterative process that can be broken up into two parts - innovation implementation and innovation adoption. The difference between them 'is fundamental' (Klein & Knight 2005) with innovation implementation being defined as the critical gateway between the decision to adopt the innovation, versus the routine use of the innovation (Klein & Sorra 1996). During 2017/18 however, it seemed that many businesses and their leaders were willing to conclude there could be no innovation adoption of blockchain before an innovation implementation phase had even started.

For the companies that remained steadfast in their belief that blockchain offered much potential, their commitment to innovation now presents an opportunity for growth, particularly given how much the world has now changed. Early adopters are now using blockchain to enjoy new levels of operational efficiency, lower costs, whilst providing their customers with new digital experiences that build trust. Other companies looked beyond how blockchain might transform their businesses and instead recognised that the limitations of blockchain itself were less of a barrier and more an opportunity to build new products and services that could help companies to overcome those limitations.

> **"For the companies that remained steadfast in their belief that blockchain offered much potential, their commitment to innovation now presents an opportunity for growth**

Chainlink was one such company and with no metrics to measure how successful their innovation might be they were certain enough that the static nature of smart contracts on a blockchain needed to be solved. At their inception smart contracts did not satisfy the requirements of contracts in English Law (they do now) but they pushed on regardless and set about expanding on the capability of smart contracts, across any blockchain, by connecting them to 'real-world' data providers such as web-APIs, ERPs and IoT devices. Chainlink's decentralised tooling, known as oracles, provides certainty that data being pulled into ERP systems (for example) via outside sources can be trusted. Their tooling helps to overcome concerns raised in relation to the finality of smart contracts. At the time of writing Chainlink has a market-capitalisation of over £6bn, demonstrating the economic benefits of certainty.

Harvard Business Review found early adopters grow twice faster than technology followers (the early mainstream market) and three times faster than cautious technology adopters (the late adopting mainstream market). Blockchain is here to stay ensuring the time for businesses to act is now. ■

Wayne Lloyd, CEO, Smarter Contracts

Acumatica takes on Sage in the UK

What does this mean for SME ERP customers?

Acumatica is the US-based cloud-native ERP vendor that has set its sights on a big slice of the UK market that is currently occupied by **Sage**. Acumatica is from the same stable as **IFS**, being controlled by **EQT** - the Swedish private equity player - although the two vendors operate as independent organisations and service different ends of the market.

Acumatica was founded in 2008 as a cloud-only ERP solution. It has about 6,000 customers although the majority are based in North America. The move into the UK market is a big step for this modest-sized company but they have teamed-up with **Pinnacle** - an established IT and systems consultancy - and this will give them a great springboard, not least as Pinnacle is also a long-time Sage partner and that's a segment Acumatica will be aggressively targeting.

When we interviewed Jon Roskill, CEO at Acumatica, on ERP Today Live! the session was entitled; 'Does the world need another mid-market ERP vendor?' There is already a dozen or more solutions that SMEs can choose from so it was hard to see at first why there was a need for another similar solution. Roskill was keen to point out that he doesn't think there are other 'similar solutions' and the Acumatica product is in a different league to the offering from Sage.

"There are some huge gaps in the Sage offering that we intend to fill. A significant number of customers in the UK have a big manufacturing, distribution or eCommerce requirement and Sage can't service that in the cloud", said Roskill. "Intacct was meant to come with a distribution component but it doesn't and we've seen a big switch in the US where Sage partners have turned to us for a modern cloud solution for their customers. We are partnering with Pinnacle in the UK and we expect the same experience here as we had in the US."

ERP Today spoke to James Spencer, MD at Pinnacle, to find out why the long-standing Sage partner had chosen to team-up with Acumatica and asked, 'What's wrong with Sage and why Acumatica?'

Spencer said: "We have over 1,200 customers and we have built up a business over 30 years partnering with Sage. Most of those customers are on-premise - some are in the cloud or hybrid cloud, but most are traditional client-server customers. We wanted to break into the true-cloud ERP space and we felt that we needed to go out and find a broad ERP product that could give our customers the agility and innovation they need. Looking at the existing ERP providers, they didn't really excite us. We felt that our customers needed a solution that's fast to implement and comes with innovation out of the box. Acumatica really excited us and we are looking forward to bringing the product to UK customers."

How is Acumatica different?

Firstly, Acumatica is a genuine cloud ERP solution. It's not a retooled legacy suite that provides some cloud capability. It was written as SaaS from the start and it is architected on a modern cloud-native platform that allows easy integrations with other tools and services. Its UI is clean and user friendly and provides a browser or mobile experience for users on the move or working from home.

It also separates itself from the competition in a number of unique ways. Vendor differentiation is a thorny topic; speak to most ERP providers and they will reel-off a list of facts and characteristics that they believe makes them special. They sound compelling until you realise that virtually every vendor tells you the same thing meaning their differentiations are nothing more than the minimum that customers should be able to expect from any ERP provider. Acumatica takes a different approach to separating themselves from the competition by focussing less on features and functions and more on things like their customer bill of rights, their licensing and pricing agreements, data ownership policies and their commitment to customer success.

Roskill said: "Around 80 percent of UK businesses are running some sort of legacy accounting or ERP solution and almost 100 percent are running with companies that have a long history of bad customer care and a general disregard for whether the customer is seeing benefits out of the products. Acumatica treats its customers differently and provides customers with a different standard of service." ■

WHAT DO ACUMATICA CUSTOMERS SAY?

There's really only one way to determine how much credibility to put behind vendor narrative – speak to their customers. Analyst reviews, NPS scores and even editorials in trade press can contribute to building a picture - but, having direct access to a customer and being able to ask them whatever you want is still the only true test. So that's what we did.

ERP Today spoke to Chris Drake, COO at Smartnumbers - a UK organisation that provides voice-network security solutions to the likes of UK Ministry of Defence, the NHS and a host of government and public sector organisations. As far as customer testimonials go it couldn't have been more emphatic.

Chris, Acumatica isn't very well known in the UK yet, how did you end up selecting it as the right ERP for your organisation?

CD "We did thorough assessments on six well-known vendors and Acumatica was somewhat of a wild card on that list."

What were your primary requirements for a new ERP solution?

CD "The leading requirement for us was user experience. Classical ERP systems don't have a great reputation for having good user experience, but with Acumatica we found it to be very intuitive, very configurable, we could mould it around how we wanted the users to work, how our business processes work and that's across the board.

What else appealed to you about Acumatica's model?

CD "We've got this culture of collaboration and wanting things to be accessible and teams to work together. The licensing model was unique and something that was going to support us in in those goals. Also, the open design that Acumatica has allowed us to move the data in and out really easily. The second big factor was that Acumatica offered a true cloud SaaS model - for me as a technology person, I appreciate that it's been built in a web-native technology. Whereas

with other providers that we looked at, there's a sort of pseudo cloud model that relies on remote sessions, or it was clear that they'd lifted something and transplanted it into the cloud."

How easy was Acumatica to implement?

CD "The initial implementation took about 12 weeks and a lot of that was trying to wrangle data out of pre-existing legacy systems. We had a really great experience even though we implemented it in lockdown and that was a real testament to their model."

Can you see where it's actually delivering value?

CD "It's exceeded our expectations. In fact, some of the numbers we've got are slightly embarrassing really, because in terms of measurable time savings, up to 90 percent for some processes that we were doing. And the direct cost savings have been excellent - we're probably going to reach 80 percent or more direct cost saving. That's great, but there's some immeasurable benefits that we're really feeling as well. That removal of the historic distraction the overhead of what we had before, enabling our people to work on more valuable strategic activities has been really important."

Acumatica is trying to get a foothold in the UK, would you recommend them to other potential customers?

CD "Absolutely. Acumatica is kind of this golden thread that runs through our business and supports us culturally as well. When we talk to them, we have this feeling like we're their number one customer, and hopefully that continues as they grow - but even to the point where Jon, the CEO, speaks to us directly from time to time to check in and see how we're doing. It's a great business and I certainly wish them all the best."

Intelligent Automation

THE KEY TO LASTING BUSINESS RESILIENCE

BY PRINCE KOHLI

The COVID-19 pandemic has been one of the most disruptive business events in history - requiring immediate technology shifts for recovery, resilience and competitiveness.

Organisations had to accelerate digital transformation plans from years to weeks – or even days to support remote work. Adoption of intelligent automation and robotic process automation (RPA) to weather these times of disruption has been swift and it's not stopping anytime soon.

Gartner predicts that 90 percent of large organisations globally will have deployed RPA in some form by 2022 as they look to digitally empower critical business processes while recalibrating human labour and manual efforts. Businesses that fail to do so risk becoming obsolete as their RPA enhanced competitors will operate orders of magnitude more efficiently - making it nearly impossible to compete.

The Now & Next: State of RPA report, which combines real customer data with survey results from **Enterprise Technology Research**, uncovered that intelligent automation is growing in popularity with the majority of organisations surveyed (63 percent) already deploying RPA or actively scaling, as businesses need to bolster resiliency in an uncertain climate.

RPA can play a vital role in maintaining critical back-end business processes, especially in the face of sudden interruptions, demand spikes, or an unavailability of labour due to the pandemic or other reasons. With RPA, intelligent bots can eliminate bottlenecks by quickly and efficiently executing repetitive processes and tasks. These bots, which interpret both structured and unstructured data, work across various applications and systems such as email and ERP - for the automation of entire processes.

Below are three examples of the importance of intelligent automation when building a resilient enterprise and what to keep in mind when adapting this strategy to your business.

Achieving business recovery, resilience through intelligent automation

In his book, Digital Transformation, **C3.ai** CEO Tom Siebel predicts, "the corporate world is in the middle of mass extinction, with 52 percent of Fortune 500 companies from the year 2000 no longer in business today." His point is simple: companies need to adapt to the digital world or die.

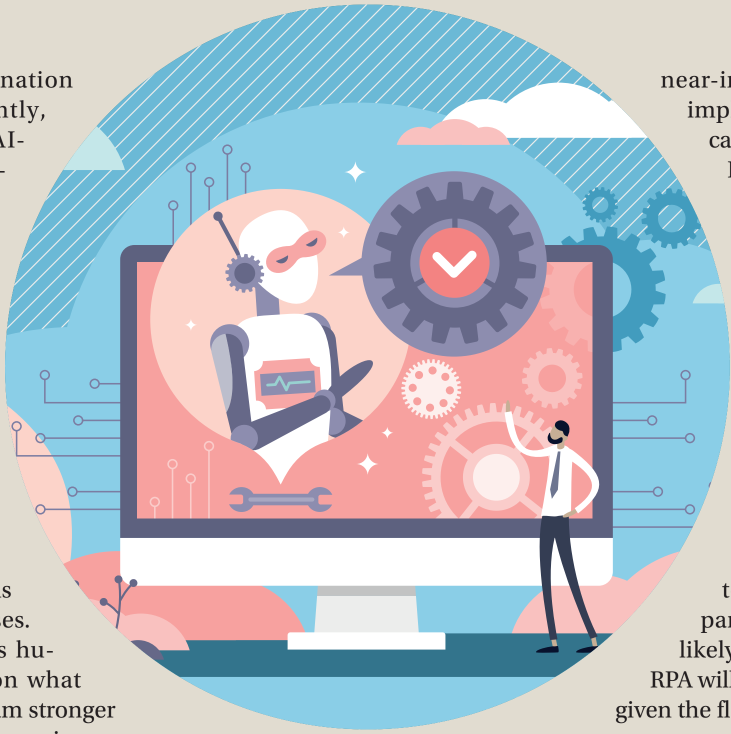
RPA is a leading pillar to achieving digital transformation and enables rapid returns. For organisations suddenly burdened with staff shortages and other constraints caused by the COVID-19 crisis, the benefits of automation are no longer about making cost efficiencies, but about building resilience.

RPA is a cognitive technology in that it moves a portion of human acumen, experience, and intelligence into software. Software bots, which can operate 24/7 with great speed and accuracy, can liberate human workers from repetitive, manual tasks, allowing them to focus on value-added activities and pursue new skills that exercise their creativity while improving customer service, increasing efficiency, and streamlining administrative tasks.

We've already seen various sectors, such as airline companies develop AI-bots to accelerate the processing of customer cancellations, automatically creating an e-voucher option giving customers faster credit. These bots helped enhance overwhelmed customer service representatives and provided a scalable digital workforce to deal with the deluge of requests during the pandemic.

The banking sector also leaned on Paycheck Protection Program (PPP) bots to streamline loan processing by automatically extracting application data and entering the information into the Small Business Administration's (SBA) loan origination portal – quickly, efficiently, and accurately. These AI-powered solutions expedited processing from three weeks to three days – helping customers receive needed aid while giving banks a digital foundation to meet the demands of today and the needs of tomorrow.

Enterprises looking to bolster their business resilience should strongly consider intelligent automation to weather the pandemic and future disruptions to traditional work processes. A digital workforce allows humans and bots to focus on what they do best - creating a team stronger than the sum of its parts, improving operational efficiency, and enabling employees to focus on more abstract thinking.



The new normal is in the cloud

The COVID-19 pandemic has shown the world the importance of the cloud due to the flexibility it can provide with the shift to remote work as well as the importance of intelligent automation. This combination creates efficiency by eliminating burdensome administrative tasks.

The pandemic exacerbated the challenges of legacy systems, and the associated silos of applications that companies - and their employees - rely on to get work done. Moving to the cloud and adding RPA and intelligent automation delivered as Software-as-a-Service can help to bridge the silos.

According to Now & Next: State of RPA, after cybersecurity, cloud migration is the top technology priority for CIOs over the next 12 months, driven in part by the need for remote work solutions amidst COVID-19, becoming the platform of choice for RPA deployment.

Of those we surveyed, 67 percent of customers opted for cloud-based automation due to the flexibility it provides, and more than half (57 percent) of respondents expect to increase investments over the next year, with the number of bots doubling during that timeframe.

The cloud-based SaaS model gives users the inherent benefits of RPA, but with reduced costs of ownership, near-infinite scalability, ease of implementation and dramatically decreased time-to-value. By allowing users to create and deploy AI-powered software bots from any web browser, and on any device, cloud-based RPA programmes unleash the full potential of intelligent automation.

Many IT leaders looking to implement RPA programmes have already embraced and relied on the cloud - especially given the instant shift to remote work during the pandemic. With remote work likely to continue, cloud-based RPA will be preferred over on-prem given the flexibility it provides.

> **"We are in the era of realising technology's ultimate promise – a democratising force that levels the playing field**

Automating the process of automation

We are in the era of realising technology's ultimate promise – a democratising force that levels the playing field and provides greater work-life balance. Advancements in AI and RPA allow businesses to 'automate automation,' resulting in enterprises being able to rewrite their workflows to match new workplace realities.

AI will soon monitor existing processes and model them against ideal solutions specific to an enterprise and suggest an appropriate bot. Using data comparisons, security parameters, compliance clouds, and more, AI will automatically be able to create optimised workflows for any business process - unlocking unparalleled efficiency.

From bots that can process unstructured data pulled from documents to bots that can automate the creation of other bots, there are countless possibilities for automation to benefit the workforce. Our research has shown that CIOs actively scaling RPA are expanding from an average of 67 to 131 bots, automating thousands of processes and achieving massive efficiencies while improving workforce satisfaction.

Now is the time for business leaders to advance their automation solutions - making sure that they are empowering employees, creating a vested workforce, improving operational efficiency, and setting up the business for long-term success. ■

Prince Kohli, CTO, Automation Anywhere

COMMON DIGITAL TRANSFORMATION

DEBUNKED

BY BONNIE DUNCAN TINDER

CONSULTING

GUEST CONTRIBUTOR

BONNIE DUNCAN TINDER

Using more than 1,000 enterprise cloud implementation reviews of SAP, UNIT4, Oracle HCM, Workday, UKG, ServiceNow and Cornerstone, Raven Intel debunks six common myths about consulting partners and digital transformation efforts.

Raven Intel is a peer review site for enterprise software consulting. Its mission is to help software customers choose the best systems integrator (SI) for their project.

It has spoken with software customers from every region, industry and size and has amassed project reviews on 1,030 enterprise software implementations, particularly HCM (publicly available at RavenIntel.com).

Raven has analysed the results and provided the following insights into what is happening in the complex world of enterprise software consulting that flip conventional wisdom on its head.

Before we bust through the 'myths,' let's review 2020 as it is important to realise some of the trends that have appeared over the past 12 months.

2020 Year in Review

2020 was a challenging year for the world of enterprise software projects. While it accelerated many digital transformation efforts, particularly in industries like healthcare, retail, government and manufacturing, the challenge of delivering projects in a fully remote environment was something that customers, vendors and SIs needed to adapt to.

In 2020, these trends included:

Types of project work. Higher volume of Phase 2/optimisation projects (^25%), somewhat fewer Phase 0/1 full-suite implementations from previous years (2018-19) down 10%.

> Industry hotspots. Increase in projects in healthcare, manufacturing (both ^15% from previous years) and government ^4%.

> Scope changes. 48% changed the scope of their project while in-flight.

> Delivery. On-time/on-budget delivery increased -10% ^ in on-time delivery/8% ^ on-budget increase, likely the result of projects being smaller in nature. Delivery range was approximately 60% on-time/on-budget and 40% late and/or over-budget.

> Satisfaction. Overall project satisfaction was higher than in years past (by close to 1 point out of 10 - hovering in the 8s).

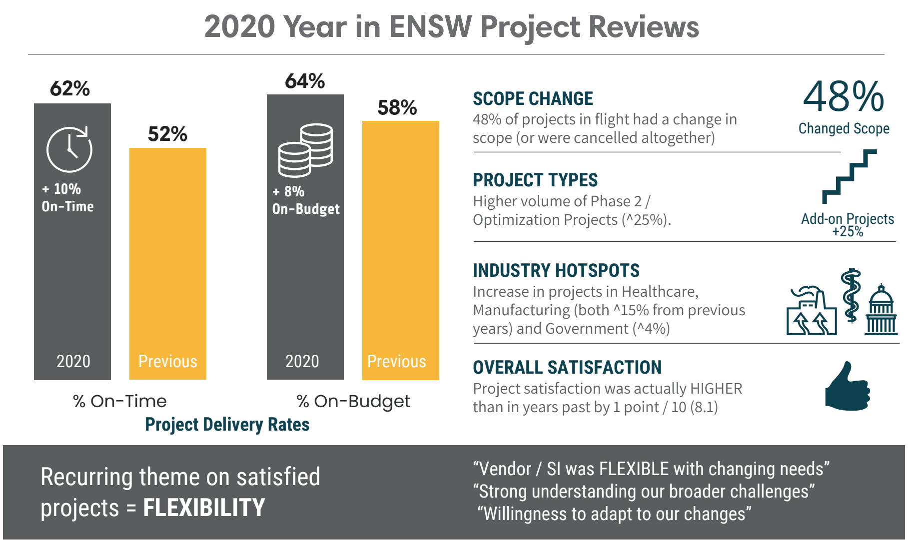
> Recurring theme on satisfied projects: FLEXIBILITY.

Customer quotes:

"Vendor/SI was flexible with changing needs."

"Strong understanding of our broader challenges."

"Willingness to adapt to our changes."



N=1030 customer reviews, available to be read at RavenIntel.com.
Software implemented: SAP, ORCL, WDAY, UKG, UNIT4, SNOW and CSOD.

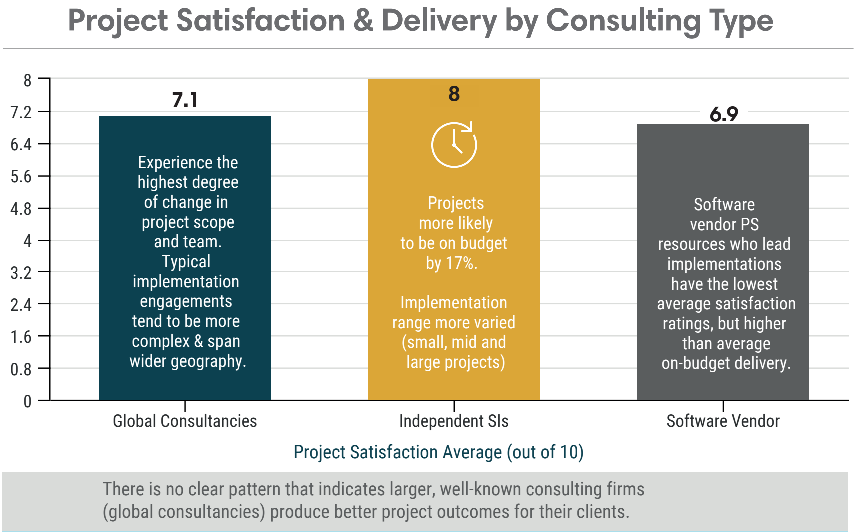
Myth 1

The bigger the SI the better.

FACT: There is no correlation between consulting partner size and customer satisfaction.

There is no clear pattern that indicates larger, well-known consulting firms produce better project outcomes for their clients. Overall project satisfaction is highest for work done with independent firms (7.9) by close to a full point out of 10, and lowest for projects done by the software vendor themselves (not as common, but some customers use the actual software vendor themselves instead of an SI firm). Work done by global consultancies are rated average 7.1 out of 10. In addition, projects completed by independent firms are 17 percent more likely to be delivered on budget.

TAKEAWAY: There are other more important criteria to consider when choosing an SI than size and brand-name. While they will boast a larger, global footprint and may have worked on broader management consulting projects for your organisation, going with a well-known/large partner for the software implementation provides no guarantee of success.



Myth 2

Price is everything.

FACT: Customer satisfaction is highest for projects where price is a factor - but not the only one.

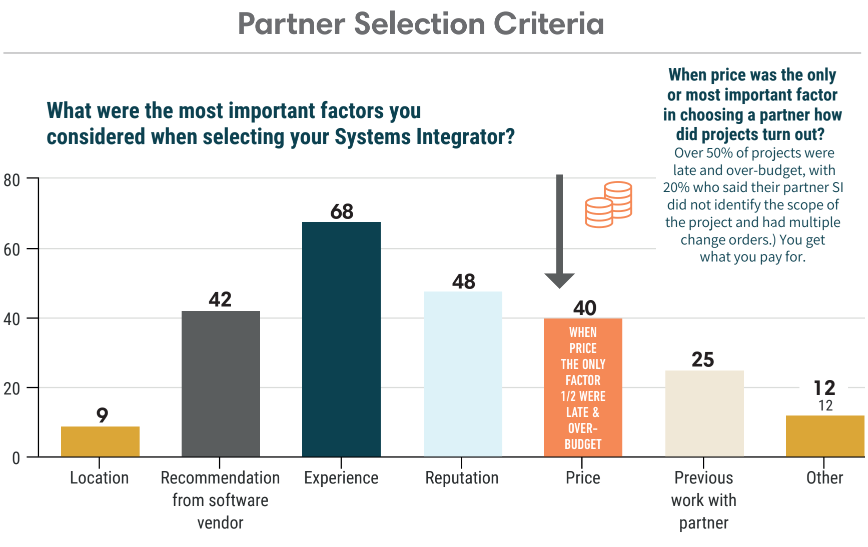
Projects where price is the only important criterion rate lower on basically every measure: 1) Project satisfaction 2) On-budget delivery 3) On-time delivery and 4) Project scoping quality.

Raven Intel asks reviewers what factors were important in choosing their implementation partner. The most common answers were:

> Experience – 68%
> Reputation – 48%
> Price – 40%
> Previous experience with consultant – 25%
> Vendor recommendation – 42%
> Location – 9%

When price was the only or most important factor in choosing a partner how did their projects turn out? Over half of projects were late and over-budget, with 20 percent who said their partner SI did not identify the scope of the project and had multiple change orders.

TAKEAWAY: If you are choosing a partner based upon price alone, chances are you will end up paying more in the end (project scoping has a higher probability of being under-scoped, thus change orders will always cost more money). Customers with a more holistic view of partner selection criteria end up with better projects in the long run.



CONSULTING

Myth 3

Project teams change - it's not that big a deal.

FACT: Team change is one of the biggest downfalls of a project - particularly if the project manager changes.

Team Consistency

Did your team change during the project? If so did you have some changes or many?

TEAM CONSISTENCY

- Team Stayed the Same
- No Change of Team

In over half of projects, there were some changes reported in the team, which can be correlated in lower on-time/on-budget delivery as well as lower overall satisfaction.

MANY CHANGES ON TEAM? PROJECT SUFFERS.

In projects where there were "many" changes of the team ("team changed a lot"), the average drops.

These same projects report have change orders 66% of the time (with 16% having multiple change orders.)

6/10 Satisfaction

34% On-Time Delivery

66% Change Orders

Raven Intel asks if the team that was initially assigned to the project stayed intact, or if there were 'some' or 'many' changes throughout the course of the project. In over half of projects, there were some changes reported in the team, which can be correlated in lower on-time/on-budget delivery as well as lower overall satisfaction (by 1 full point out of 10) as compared to projects with no team change. In projects where there were 'many' changes of the team ('team changed a lot'), the average satisfaction drops to an average of 6/10 in project satisfaction, 34 percent on-time and 30 percent on-budget. These same projects report having change orders 66 percent of the time (with 16 percent having multiple change orders).

TAKEAWAY: Keeping the team consistent throughout a project is important. Knowledge transfer to new players is difficult, and maintaining cohesion throughout the project can be directly correlated to success. Make sure the SI you hire doesn't 'bait-and-switch' the team they introduced you to and assign different players to your project (or change players mid-project.)

Myth 4

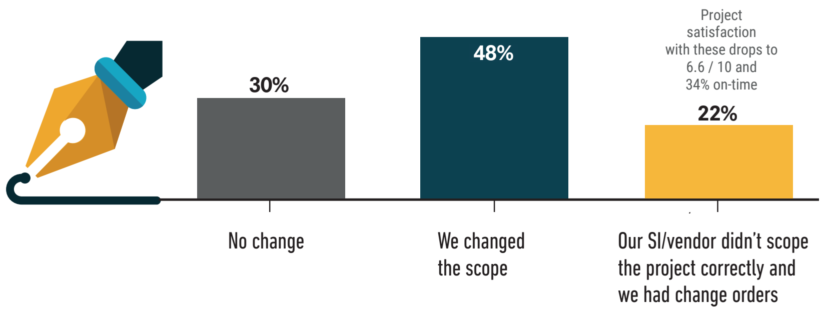
Change orders are no big deal.

FACT: Change orders are a big contributor to dissatisfaction and project failure

Project Scoping

How was your project scoped? If you had change orders, were there some or many?

For projects that were under-scoped (22%)--change orders were problematic. 16% of projects reported their SI did not appropriately identify needs up front and there were change orders, and 6% reported having multiple change orders due to a severely under-scoped project.
For these 20%, average project satisfaction rating drops to 6.2 / 10, on-time delivery drops to 34%. These projects also tend to rate their software vendor lower as well (6.6/10)



30 percent of projects reported no change in scope, while 48 percent reported changes due to their organisation changing the scope of the project. For the remainder - 22 percent - of change orders were problematic. 16 percent of projects reported their SI did not appropriately identify needs up front and there were change orders, and six percent reported having multiple change orders due to a severely under-scoped project.

For these 22 percent, average project satisfaction rating drops to 6.2/10, on-time delivery drops to 34 percent. These projects also tend to rate their software vendor lower as well (6.6/10)

TAKEAWAY: Read the 'statement of work' provided by your SI and have your whole team read it as well. Ask a lot of questions. This sounds like a pretty basic concept but in some cases we've heard that the software salesperson has 'sold' the consulting engagement along with software agreement as a rapid deployment and set the wrong expectations about project scope and delivery. This never ends well.

Myth 5

You can judge a project as a success or failure clearly.

FACT: It depends on where you sit in the organisation

Reviewers who classify their role as the 'decision maker' typically rate their satisfaction with projects higher (8.3/10) than those who classify their role as a 'project manager' or 'project team member' (7.5/10). On the other end of the spectrum are those who say their role was 'other,' such as subject matter expert/business lead who on average rate projects the lowest (7.0/10).

Satisfaction by Role — What was your role on the project?

DECISION MAKER / EXECUTIVE SPONSOR	PROJECT LEADER	PROJECT TEAM MEMBER	BUSINESS PARTNER
Avg satisfaction **8.3/10**	Avg satisfaction **7.5/10**	Avg satisfaction **7.6/10**	Avg satisfaction **7.0/10**

Decision makers may rate the partner more highly because the project team is looking to present their progress in the best possible light. An executive sponsor or decision maker who isn't involved in the project on a daily basis may not appreciate the difficulty that the project team members faced to get the project up and running. The perspectives of all these reviewers are important to get a full 360-degree view of the implementation partner.

TAKEAWAY: When choosing your consulting firm, be sure to take into account multiple points of view within the organisation - not just the executive sponsor who typically isn't as aware of the day-to-day mechanics of a project.

Myth 6

Integrations are hard.

FACT: Integrations are harder than you think.

Integrations are one of the most commonly referenced problems in the 'lessons learned' area of Raven's reviews. Often the 'ease' of an integration to another system is oversold during the sales process, and customers end up frustrated with the additional resources, time and cost involved with getting systems to talk to one another. One recent reviewer commented: "Lining up a technical resource on the vendor side and keeping momentum with the integration development was challenging. It also generated unexpected vendor costs." We've heard this time and time again.

Integrations: Harder than you think

> Many times the "ease" of an integration to another system is oversold during the sales process, and customers end up frustrated with the additional resources, time and cost involved with getting systems to talk to one another.

TAKEAWAY: Make sure you understand how exactly an integration will work - even the ones that are labelled as standard or pre-built. Your technical team should check the fields that will be mapped and understand the mechanics of how the data transfers actually work before you start the project. Rule of thumb is that you should double the cost and effort from the initial quote to avoid surprises down the road.

Final Thoughts

4 TAKEAWAYS FOR SUCCESSFUL PROJECTS

There are four main themes that Raven Intel has heard from customers based upon the lessons learned area of our reviews for consideration when embarking on any project - from a full digital transformation effort, to a phase 2 add-on module rollout. They are:

Know your why. Don't do projects with unclear outcomes or that do not solve a defined business issue/goal. Digital transformation only works if there's actually a business transformation.

Your team will make or break your success. Pick the best partner, project leader and internal team for your project, and if you don't have a solid executive sponsor, you're fighting an uphill battle. Don't change your team mid-project if at all possible.

Control what you can control. Before your project gets approved, start getting your house in order. Clean up bad data before you start your project. Make sure you have a way to manage your project systematically throughout.

Integrations. They're more important that you think, take longer and can be problematic. The less spaghetti, the less mess.

USING DIGITAL TECH FOR A FAIR

Future of work

BY DR ZARA NANU

Throughout 2020 we have all had numerous conversations about how the pandemic has exposed rifts and inequalities in public health and the economy all over the world. Workplaces have not been exempt and unemployment rates have been soaring. In December 2020 the US economy lost 140,000 jobs – with 156,000 women finding themselves out of work at a time while men gained 16,000 jobs in the same period.

We can no longer afford to spend time discussing these inequalities, we need to take action especially as digital technology offers us the opportunity to not only step into a fair inclusive future of work. Digital tech allows us to leap into it and grow a successful enterprise.

For over a decade now, research has been confirming that proactive steps to advance gender equality could add $13tn to the global GDP by 2030. Moreover, organisations in the top quartile for gender diversity are 21 percent more likely to have above-average profitability than companies in the lowest quartile. Organisations with greater leadership diversity out-innovate and out-perform those that do not, and are 70 percent more likely to capture new markets. In addition to the needs and demands of a productive economy, 86 percent of job seekers say workplace diversity is an important factor when considering a potential employer.

While enterprises wanting to be successful have been slowly taking steps to address inequalities within their workforce, the current pace just isn't fast enough. Before the COVID-19 crisis the **World Economic Forum** predicted that at current rates of progress it will take 257 years to close the economic gender gap. Not an acceptable number.

This is where digital technology can come to the rescue. I've been working in the space of using data science to address pay equity for over five years, and it works. True to the well known phrase 'what gets managed gets done', we see organisations make significant progress when they measure workforce distribution and pay equity continuously.

> "By inputting some basic data on gender, wages, location and yearly revenue, companies get instant insights into the impact on GDP

In addition to a company view, the global picture is equally important. At the end of January 2021, our partners the **Female Quotient** and **Citi** launched a new free tool to find out how closing pay gaps will impact global economies. The Advancing Equality Calculator fosters transparency around the gender wage gap, helping organisations calculate their raw pay gap and, ultimately, better serve society. By inputting some basic data on gender, wages, location and yearly revenue, companies get instant insights into the impact on GDP if they were to accelerate equality. Better yet, they get direct insight into how accelerated equality will improve their bottom line.

With this starting point in mind, digital tech can take us further and has the potential to change the entire employment landscape, reshaping recruitment, occupational segregation, flexible working and other areas which currently create disparities between gender, ethnicity, disability and other personal characteristics. Here is how we can leap forward:

1. Measure diversity and inclusion

We are all getting used to measuring diversity. It's becoming common practice to set targets for representation at interviews, or even targets for representations in certain departments going forward. But as diversity advocate Verna Myers puts it: "Diversity is being invited to the party. Inclusion is being asked to dance." And technology can help measure inclusion so that organisations can thrive. There are various tech tools that will help understand which departments are more inclusive, which managers mentor and coach more diverse employees, and where glass ceilings are. Using tech can help measure both diversity and inclusion. And this metric should be discussed at each board meeting.

2. Data can ensure the right support is provided

Data can ensure the right support is provided to employees. In the summer 2020, we ran a survey as part of an event we were organising in partnership with the **Equal Pay International Coalition**, and only one third of the respondents were collecting data on the caring responsibilities of their employees. There are some incredible examples of how companies can support carers (or in the case of a lockdown, homeschooling parents), and doing so could have a long term positive impact on the workplace. And it all has to start with knowing who needs our help within a company. Identifying risk will involve asking employees if they are experiencing extra pressure at present and how we can help.

3. Digital tech can help us rethink how we value work

Despite the progress we see around improvements fostered by digital tech, we still work and recruit people into a system that was developed and valued in a post WWII environment. While we have used tech to develop a vaccine in record time, and are launching cars into space, some areas of our lives are still catching up with this process.

As an example, most of the jobs that we have in our workplaces have been valued and defined by male perspectives from the 1940s, which largely viewed their wives' and partners' work as of lesser value than their own. That is one of the reasons we currently have occupational segregation - which means that female dominated roles pay less per hour than male dominated roles (as an example a legal clerk versus a data scientist). With the help of AI we can review and overhaul this entire system to ensure fair pay and representation. Value of work does not have to be guided by how we understood productivity in the aftermath of the Second World War, nor does it have to be guided by working hours. Value of work can be linked to specific objectives, projects, industries and impact.

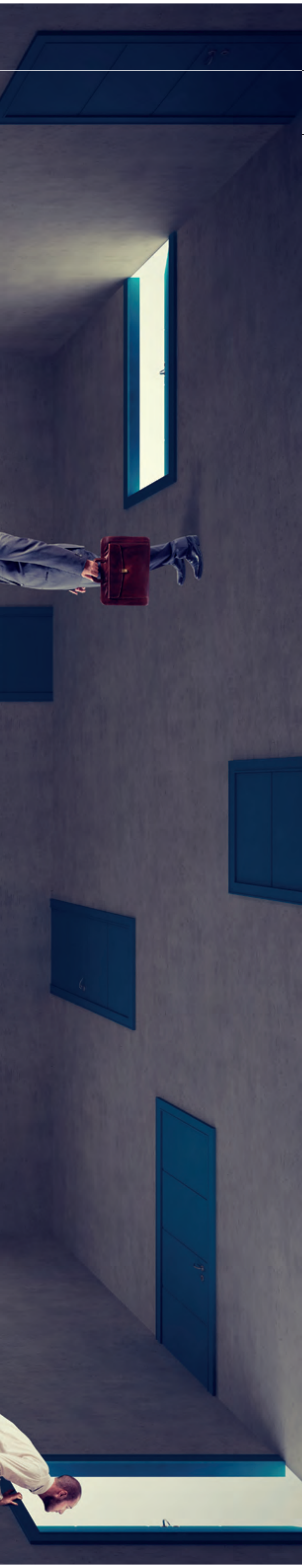
> **"With the help of AI we can review and overhaul this entire system to ensure fair pay and representation**

These are just a few examples that scratch the surface of how digital tech can help us accelerate progress on advancing equality in the workplace. From smaller steps of data collection and analysis in order to improve decision making, to bigger visions of using AI to review how we value work, productivity and jobs. Wherever in this journey you are, it will take effort from every single one of us to make significant progress and close the gender pay gap in the next decade. ■

Dr Zara Nanu is CEO of Gapsquare

PUBLIC CLOUD PLATFORMS

SURVIVAL STRATEGIES in a hybrid and multi-cloud world



BY HOLGER MUELLER

There is no question anymore that technology progress has overtaken the technology demands of business best practices, creating the current need for experimentation and exploration of how to operate a business in the 21st century. The main drivers of the technology progress have been the increase of complexity and the leverage of economies of cloud vendors and their platforms. But is this all good for the future of the enterprise? Let's see how we got here, what the cloud is and how to survive best in these tumultuous times.

How did we get here?

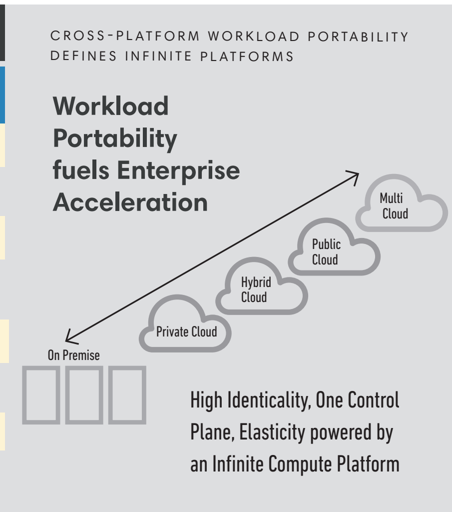
The IT landscape gets more and more complex for enterprises year after year. Gone are the days when an enterprise could say – all our applications run on our mainframe. Let's look at the transformation of IT in the last 70 years:

- **The beginning: the mainframe era.** It all began in the 1950s, life seemed challenging but was easy compared to today – there was literally one of the few systems where IT happened. In an example of how IT does not discard technologies, mainframes are alive and well in 2021.
- **The first erosion: medium data range minicomputers.** Enterprises needed more local IT capacity and more flexibility, most prominently **DEC** and **Wang** responded, and IT fragmentation happened rather quickly, but central control was still ruling.
- **The laptop revolution.** The need for workforce empowerment and productivity led to the desktop and then the laptop, eroding on-premise control by IT and opening the door to tremendous security challenges.
- **The smartphone reality.** Starting out as 'dumb' telephones, smartphones came in overnight, and while once leader **Blackberry** kept IT in charge, the following iPhone rise put the user/consumer in charge, fragmenting IT even further.
- **Hosting has its charm.** Struggling with complexity, enterprises soon found out that service providers were willing to 'run their mess for less', using economies of scale. The approach never became mainstream.
- **SaaS vendors appear – and the cloud journey begins.** The first SaaS vendors wrestled away the control of owning the business automation an enterprise would run. Originally welcome, as innovation of on-premise vendors was lacking, enterprises still struggle today with the SaaS innovation cycles.
- **IaaS and PaaS enters IT making hybrid cloud real.** More recently, the 'as a Service' concept has been applied to infrastructure and platforms, giving enterprises both technological and commercial choice in abundance, but also making IT management a multi-dimensional game to master.
- **Cloud by accident or design makes multi-cloud real.** SaaS gave businesses a ticket to freedom from IT, and with that making decisions about platforms and outsourcing their management. Cloud happened 'by accident' from an IT perspective and the whole trend led us to where we are today where multi-cloud is real for almost all enterprises.

PUBLIC CLOUD PLATFORMS

How IT has changed

PHASE	# of Systems	Dimensions	IT Ownership	LoB Ownership	Complexity	"Game" Analogy
MAINFRAME	1 (or few)	1	100%	0%	Lowest	Dice
MINICOMPUTER	Double Digit	2	100%	20%	Low	n Dices
LAPTOPS	= # EEs	3	80%	90%	Medium	BattleShip
SMARTPHONES	= 2x # EEs	4	60%	100%	Higher	BattleShip w Submarine
HOSTING	Few	5	0%	100%	Lowering	Add Murder Mystery
SAAS	Many	6	0%	100%	LoB – Lower IT – Higher	Space War
IAAS AND PAAS	Few to many	7, 8	20%	50%	Higher	Add more Galaxies
MULTI-CLOUD	Few	8+	10ish %	20ish %	Highest	Play in the Universe as we know it



SOURCE: HMCC & CONSTELLATION RESEARCH, INC.

In summary, first IT, then the business lost control over their business automation, first on the platform side, mostly by IT, often cheered on by the LoB due to frustrations with the IT function, then on the software side for both functions, as they transitioned from ownership to renting of software. No doubt there are tremendous potential upsides of relinquishing control on the software side, like faster innovation cycles, more modern platforms, and user experiences, but enterprises get lumped together in the 'herd' of subscription users. That in itself has a whole set of pros and cons... which we may highlight in another piece here.

But let's understand 'cloud' first

The term cloud has been re-defined and abused ad absurdum, so let's understand what deployment options enterprises have for their workloads:

• **On-premise.** Enterprises still need to be able to operate their workloads on-premise. The most prominent drivers are data residency requirements, performance requirements and a lack of local public cloud data centres, often all coupled with a substantial dose of public cloud skepticism. But on-premise always means ownership of hardware and usually processes.

• **Private cloud.** When operating workloads on-premise, it is wise for enterprises to be able to use some of the cloud's benefits, most notably elasticity. Being able to scale workloads on demand using cloud technologies in an elastic way is the reason for operating private clouds. Recently vendors have innovated with subscription-based hardware and services – so the enterprise does not have to own anymore all aspects of operating a hybrid cloud.

• **Hybrid cloud.** A combination between on-premise/private cloud and public cloud creates the hybrid cloud operational scenario, which is the reality for most enterprises today, as they operate on-premise and in the cloud, maybe through some SaaS decisions that have been taken. Ownership is mixed between on-premise (enterprise) and cloud (respective vendors), but the integration is ultimately owned by the enterprise.

• **Public cloud.** The public cloud with its 'pure' cloud characteristics, most prominently elasticity, is a key operational platform, especially for new workloads coming from next-generation applications. The ownership of enterprises is reduced to mostly decisions about which clouds to use and then how to implement them in the confines of the options provided by the cloud vendor.

• **Multi-cloud.** Automation split across multiple public clouds creates the multi-cloud scenario that most enterprises find themselves in, mostly due to SaaS vendors' public cloud choices. Enterprise ownership is similar to the public cloud scenario, only that complexity is increased.

There are inherent risks operating in this environment, here we name the most prominent ones:

• **Complexity can kill.** Complexity can lead to higher cost and a loss of enterprise agility, leading to lower or even no enterprise acceleration.

• **Lock-in can hurt.** IT history is full of situations where vendors turned the thumbscrews on enterprises, so they want to avoid lock-in.

• **Vendor dependency can be bad.** A great vendor today may not be a great vendor tomorrow, so enterprises want to preserve the ability to shift their workloads to tomorrow's great vendor.

• **Scarcity of talent creates operational risks.** People remain essential to enterprise success, but it will become even more challenging to recruit and retain great talent – and operational complexity needs more talent that is excellent in regards to managing the underlying platforms.

The solution: infinite computing platforms

The only way for enterprises to protect themselves from potential bad outcomes in this complex operating environment, is to look for the portability of their workloads, across the different forms of cloud, including on-premise.

At **Constellation** we call these platforms 'infinite computing platforms', as they allow an enterprise to operate in a non-limited, therefore infinite, way across the platforms on which it wants to operate its enterprise automation workloads.

The definition of an infinite computing platform is as follows, the criteria below being the most dominant ones:

- Supports at least two cloud deployment forms.
- Managed as a SaaS platform by the vendor.
- Operates with a single pane of glass across platforms.

The good news is these infinite computing platforms are emerging fast and all over the enterprise stack. Here are some of the players across the enterprise stack that enable infinite computing:

- **Two-dimensional players** - My cloud and on-premise: **AWS** with Outposts, **Google Cloud** with Anthos (but see also below), **IBM** with Satellite, **Microsoft** with Azure Stack and Azure Arc, **Oracle** with Oracle Cloud at Customer/Dedicated Region.
- **Multi-dimensional players** – My cloud, my competitor cloud and on-premise: Google with Anthos and BigQuery Omni, IBM with OpenShift
- **Virtualisation players** – Your VM – anywhere: **Nutanix** and **VMware.**
- **PaaS players** – This PaaS capability – anywhere. **CloudFoundry** (PaaS), **HashiCorp** with Cloud Platform (Cloud and DevOps), **Mirantis** Container Cloud (containers), MongoDB Atlas (database), **SAP** BTP (PaaS)

As with any nascent software category, innovation is fast and furious, and the vendors are juggling for their respective space in the market. CxOs need to determine which vendor gives their enterprise the best benefits that they can reap from an infinite computing platform.

The takeaways

While software and IT are more important for the success of an enterprise, the operational challenges are also bigger than ever, and so are the risks of operating on legacy, dwindling (or worst dying) platforms. While much of the complexity results from the transition of automation assets from on-premise to the cloud, CxOs know deep inside that the future is multicloud and that is an inherently more complex environment than operating all of the IT landscape on-premise. On the bright side, vendor offerings are emerging, and that presents the workload portability that enterprises need and want to succeed in the 2020s. In closing, CxOs will be aware that they are trading off dependency on many platforms and vendors, to fewer platforms and vendors, thus increasing dependency, but reducing net complexity. Sometimes I used to wish a CxO from 2021 could speak to the VP of electricity from the early 1900s... and see the historic VP's shock when he discovers the nonchalant attitude to not create electricity on site, relying on a single utility company to power the enterprise.

In reality though, practically all enterprises operate – in a multicloud world, using all cloud providers, and there is a high chance an enterprise with 5,000 people or more are present on all three clouds. ■

Holger Mueller, VP and principal analyst, Constellation Research

UNDERSTANDING THE KEY CONCEPTS

By now you have a good understanding of cloud and its inner workings. But what about the other key technology concepts – here is a short rundown:

- **Infinite computing.** If you cannot count something, it may as well be infinite. Even better if you can pay for it as your busines scales up and down. The end of finite computing that relies on sized machines in your data centre is the start of the Infinite Computing era. Its five layers are already familiar (Infinite Communications aka – the internet), used by disruptive enterprises (Infinite Insights – Hadoop style technologies), more widely used (Infinite Compute – from the cloud), the innovation layer (Infinite AI/ML – look at Tensorflow) and the frontier, almost not used yet (Infinite Deep Learning). Adoption of the Infinite Compute technologies is key for enterprise survival.

- **Next generation applications.** As Infinite Computing becomes reality, technology capability overtakes best practice demands. Effectively, new best practices are being enabled and created. CxOs cannot afford to wait for their standard software vendors to provide these, as standard software vendors want to run the same software for hundreds if not thousands of customers. The result is that enterprises need to build software again and build their own next generation applications. The seven generic use cases for next generation applications are: digitising value chains; tame the internet for demand chain usage; revolutionise intra-enterprise functions for the value chain and across the three chains to build IoT applications; enable Data-as-a-Service (DaaS); re-invent communication (**Zoom** anyone); and innovate the human-machine interface.

- **Enterprise acceleration.** Enterprises need to move faster and become more agile. To win they need to advance their people skills, improve their people processes and provide modern platforms for their enterprise to Excel. The speed of an enterprise needs to exceed the speed demands of the markets it wants to successfully compete in… and the speed is determined by the potential and ability of its people as well as the technology platform. The inherent speed of the technology platforms determines the limitation to enterprise velocity, therefore technology and software matter so much for enterprise success in the 21st century.

SUCCESS SHOULD BE MEASURED BY THE 'externalities' of the business

BY STEPHEN JAMIESON

The ways we measure a successful enterprise are changing – it can't happen fast enough.

In the past, to evaluate the health and success of an enterprise, you would look to its balance sheet where the profit, margins, and revenue columns would lay bare the performance and trajectory of the business. But that myopic way of measuring success is rapidly changing. In the near future, a business will be measured as much by its financial performance as by its impact on the environment and society at large.

Companies are already facing pressure from their employees, shareholders and customers, to take responsibility and report on their 'externalities', the third-party effects that result from the production and consumption of their goods and services. These externalities can be positive – like carbon offsetting, or negative – like the impact of air or water pollution. They can also extend beyond the organisation itself and include the externalities of its suppliers and distributors.

As we continue to demand more from the planet and face the consequences of a climate crisis, these externalities can and should be measured and companies should be held responsible for their environmental impact.

It is likely that those businesses that aren't already evaluating their externalities will soon be required to do so.

Last November, the UK Chancellor made a major announcement related to corporate sustainability. Not only did he outline proposals to support sustainable financial flows and extend the UK's global leadership in green finance, he also highlighted plans for shifting the UK towards a net zero carbon future. As such, we can expect that UK businesses will soon be legislated on their sustainability efforts, particularly in the wake of COP26 - the UN Climate Change conference, being hosted this year in Glasgow. Here exists the opportunity for UK businesses to take the global lead and model what a truly successful, sustainable enterprise looks like. It also provides an opportunity for technology companies as these new measurement criteria will require technology that can gather the data and translate it into recognised standards that assign a monetary value for these externalities.

> **"It is likely that those businesses that aren't already evaluating their externalities will soon be required to do so**

The ingredients of a successful enterprise in 2021

We're all aware of the advantages inherent in being a 'digitally native' business. Now we're beginning to see the influence of 'green native' businesses that have been established with sustainability at their core. For legacy businesses that are just beginning to shift to more sustainable practices, the process can be more challenging, but the following five measures are a good place to start:

1. Consider and evaluate externalities in day-to-day decision making: Say you run a confectionery company and are buying 100kg of cocoa beans for your company's signature chocolate bar. You need to think beyond the cost and quality of the cocoa bean. You need to look into the CO2 impact of the farming and transport process, its impact on the ecosystem, the environment, and biodiversity and you need to make sure the beans were all sourced fairly with everyone being paid a reasonable wage along the way.

2. Invest in innovation that accelerates sustainability: There are many ways to make incremental sustainability improvements and the most radical improvements often spring from entirely new ways of doing business. For example, fashion apps like **Depop**, **Vinted** and **Etsy** have normalised circular fashion services. **Britvic** has introduced boiling water taps and flavourings – shaping more sustainable consumer behaviours and eliminating packaging along the way.

3. Commit to achievable targets: The days of companies making grandiose sustainability commitments with no plan to deliver are gone. Businesses should focus on delivering and demonstrating genuine progress through actions taken year-on-year. This means pivoting away from managing through commitment. A successful company should look to produce attainable goals against which they can be measured and show genuine ongoing progress.

4. Operationalise sustainability into the core organisation: As anyone who has ever managed a major digital transformation can attest, major change can only prosper with senior executive sponsorship. Many enterprises are now introducing a chief sustainability officer or head of ESR performance to the company management to oversee these changes. Their role is to ensure that sustainable models are integrated into business strategies and company culture and that sustainability metrics are embedded into KPIs and institutionalised as a core reporting function.

5. Provide integrated stakeholder transparency across the wider ecosystem: Businesses need to move away from simply reporting through financial statements which might include a small sustainability tab. Instead, enterprises should embed sustainability into their wider reporting and offer a much more integrated view with which the ecosystem can collaborate. This shows a true commitment to measuring sustainability.

> **"The simple fact is no business should need to 'build a case' to be more sustainable. It's simply the right thing to do, for business, for society and for the future of our planet**

Building the case for a more sustainable business

The simple fact is no business should need to 'build a case' to be more sustainable. It's simply the right thing to do, for business, for society and for the future of our planet.

But that doesn't mean there aren't very tangible reasons why companies should act fast to become more sustainable.

For one thing, government regulations are inevitably coming, creating financial implications for global multinational businesses that could range from millions to billions in fines, depending on their sustainability model (or lack thereof). Carbon pricing will also have a massive impact on the overall revenue and profit of a company, especially those with unsustainable business models as they will have a lot of work to do in playing catch-up against the rest.

Any sustainability work within businesses and organisations moves only as quickly as the weakest link. With the investor link accelerating, the employee link developing and consumers getting more informed on the subject, the regulatory context has for a while been the weakest link slowing any progress down. That one will, however, leapfrog imminently, and if businesses are not in control of all of these factors and are not pushing themselves already to be more sustainable, they will face the fiscal consequences.

Ultimately, these factors are all drivers for digital transformation, and they will become some of the biggest issues businesses will tackle over the next few years. Businesses who have anticipated these changes will have a head start on a more successful and sustainable future. ■

Stephen Jamieson is head of sustainable business innovation, Northern Europe, SAP.

Under par

AND COUNTING MY BLESSINGS

BY ROBIN MCBURNIE

It is hard to believe that we are approaching a year since the first lockdown due to the pandemic. In many ways it has felt like forever and in other ways it has flown by – a year of working from home, looking out the window of my home office and still scratching my head and wondering if this is just a dream.

Many of my friends and colleagues have shared with me that this feels never ending, but my uncharacteristically non-Scottish and optimistic reckoning, I truly believe that we are more than 90 percent through the worst of it and will soon be able to meet again.

For me, work has been a welcome area of focus. I lead **PwC**'s **Oracle** practice in the UK and EMEA – and even as early as April last year, I realised just how much I loved my team, my colleagues and my clients and craved for the ability to jump on a plane from Glasgow on the spur of the moment to attend a meeting, dinner or event. I have missed the energy we create when we meet in person. For many of us, the joy has been taken away from our daily lives - something that we took for granted, that has been replaced by routine – endless **Zoom** calls – video on, video off. Walking and talking. But never meeting in person.

Recently we hosted the Oracle ERP Summit with clients using virtual reality technology. Now this was really cool – something really different. We hosted 24 guests from our clients and Oracle using VR headsets – and I have to say having been sceptical on the effectiveness of this format, it was a roaring success. Break out rooms, trips to the beach, the bar, the auditorium and watching keynotes on the big screen on the future of finance – it was such a welcome change and perhaps a way of running more events in the future – in a hybrid model. It was fun - but definitely not as fun as meeting in person, whether it be in the office, on a boat in London or in the US at Oracle OpenWorld.

Outside of work, one positive thing from the pandemic has been that I have been able to play golf three times a week for the first time in my life. And last month was my first ever sub-par round. My regular golf buddies of course reminded me that I was playing a shortened course and putting on winter greens, but it was an achievement nonetheless as I have been a hacker for over 20 years.

> **I know I've had it easier than most but a lower handicap has been a highlight**

Throughout lockdown, I've tried to do something I love every day, as well as trying to keep things going on all fronts. I'm not going to deny, it's been tough. I know I've had it easier than most but a lower handicap has been a highlight. I've been inspired by my colleagues to hear what they have done to keep themselves sane and keep up their spirits. This article will be published on 10th March and it's likely that we will still be restricted in our movement. But, the vaccine roll-out has improved and is now running like a better ERP roll-out after some earlier teething problems!

But I think the hard yards are over and before long we will be back on the road, so hang on in there folks – Summer 2021 will be the time that humans bounce back and we will meet again soon! ■

Robin McBurnie, senior partner and UK Oracle leader, PwC