Delivering on the promise of digital innovation

How traditional firms are successfully going digital.

Your Tomorrow, **Today**

Digitally innovative companies

26%

more profitable than their industry competitors.

12%

higher market valuation.

Introduction

Uber. Facebook. Google. AirBnB. All familiar poster companies for the digital generation – masters of data, advanced analytics, cutting-edge technologies, and relentlessly customer-centric. These firms are rightly lauded for identifying new opportunities and seemingly reinventing the art of the possible.

But what about those firms born before the advent of the digital age, for whom digital doesn't always come so naturally? For them, moving to a digital business mindset – one that not only embraces digital technologies and business models, but that has digital thinking and ways of working built into its very DNA – involves a significant amount of disruption. It can sometimes be a painful process, long and winding, with false starts and false horizons.

But get this right and the improvements in operational performance and customer experience can bring meaningful rewards. According to research from MIT, companies that are digitally innovative are 26% more profitable than their industry competitors and enjoy a 12% higher market valuation.

Learning from those who've already taken those first steps is an important starting point. Which is where this brief comes in. Oracle recently hosted a series of roundtables with senior executives from some of the world's leading brands to ask them how they are approaching digital transformation and innovation.

1. Creating a digital culture

Where do you start on the transformation journey?
And what are the main challenges?

The challenge of change.

For many, it's about getting that initial buy-in for digital innovation. "The challenge is that initially nobody wants to try. Everybody knows it's a good thing to do, but they're apprehensive about putting money and time into it," explains Piyush Gupta, Senior Executive Vice President in charge of Business Transformation at India's Reliance Industries.

Kaz Kempers, Head of IT at ABN Amro in Hong Kong, agrees. "I think as IT heads we all want to be innovators and we all have great ideas. However, often when you try to push an idea, it's met with scepticism: it's going to cost too much or it's too risky."

Overcoming that initial resistance is key to success, which means getting the support of your senior team is critical. Research from the Project Management institute shows that up to 43% of project failures can be linked back to insufficient executive sponsorship – and this is particularly true in a digital innovation program that will likely touch multiple (if not all) aspects of the organisation.

43% of project failures can be linked back to insufficient executive sponsorship

"It absolutely has to be a top-down initiative," argues Damion Howlett, Customer Engagement & Digital Transformation Director at insurance giant AXA. "This is a big bet for the company; we're going to invest significantly, and we're not going to worry too much about whether we can see a business case because it's more about business survival. We can't just be talking about incremental revenue or cost savings; it's about survivability."

Management mindset.

ABN Amro's Kempers holds a similar view – but feels that merely getting executive approval is not enough. "The driver has to be the board," he says. "But you need to go further than just getting management buy-in. You need a management mandate to change. It's why a lot of companies have problems embracing the digital future."

Indeed, while tools, talent and skills are all critical pieces of the digital puzzle, they mean nothing if you do not have the desire to change in the first place. "There's a cultural aspect to digital that goes way beyond the technology," says Neil Sholay, Head of Digital at Oracle. "It's a mindset change."

Improving customer experience.

"You need to make it seamless and easy for people," insists Citi's SVP and Head of Digital Marketing for EMEA and APAC, Aman Chawla. "Everybody is trying to push out new ways to get their clients to easily engage with them," agrees Kempers. And for Italian-headquartered global banking giant Unicredit, customer-centricity is central to its digital transformation roadmap.

"You have to take a customer-centric approach," says Arnaldo Transirico, the group's Head of Business Strategy. "This means we try to understand what customers might need in the future, and we try to find solutions that are technology and data-driven."

The customer experience needs to change because expectations are changing. "We need to start thinking digitally, because the expectations that our customers have from us as a bank are changing," suggests Bala Nagaraj, Digital & Technology Officer at Commerzbank. "We need a change in strategic perspective from the way we currently do things."

Digital as business-as-usual.

When people stop talking in terms of digital transformation as its own separate entity and instead start talking about business outcomes, that's when you know you're making real progress.

"A lot of what started as digital transformation from a programme perspective is now absorbed into the organisation as business-as-usual," explains AXA's Howlett. "We've stopped talking about transformation and it's now just how we incorporate digital as part of those everyday business processes: customer engagement, product development, etc. It's evidence of progress, but there's still a long way to go."

Some are taking it a stage further. "We're largely dropping the word 'digital' in Oracle now," says Oracle's Neil Sholay. "But not because it's not important. We're not using it because it's starting to become integral to everything we do. The concept of digital as a separate thing has become a bit – dare I say it – passé."

2. Using these digital tools

Once you have that mandate for digital change in place, what tools, technologies and ways of working can help you on your digital innovation journey?

Digital and/or legacy?

Legacy is an issue for all but the shiniest of start-ups – and for most large organisations with significant legacy environments, transitioning to digital is easier said than done. Many see those existing systems and architectures, some of which are now decades-old, as incompatible with the more open, agile, flexible ways of working required by the digital age. Nevertheless, overcoming these challenges is key to unlocking the potential of digital – as Zurich's Head of IT Transformation, Daniel Teague, explains.

"We have systems that have been around for 25-30 years, supporting policies that were sold that long ago. Bringing those systems up-to-date so that they are digitally capable is a massive challenge for us," he says. "You see that in the types of products that we are able to sell: they're shaped by the administrative systems they sit upon."

It's a common complaint and, in response, many firms are moving to new, cloud-based architectures that offer greater scalability and flexibility. Others are embracing APIs and micro-services to open up their internal business applications and stimulate innovation.

"The reason we're talking about APIs, microservices, clouds and analytics is because those are the technologies, the lightweight architectures, that support becoming built for change," says Oracle's Neil Sholay. "How do you build a business that embraces change and plans for it rather than avoids it? It's not about technology. It's about having a culture that is very fast, very agile, and built for change."

Agile innovation.

One way to introduce speed to your organisation is by introducing agile development methodologies. An increasing number of firms are using agile processes to improve the speed at which IT projects are rolled out – and the executives we spoke with were no exception.

"About 98 percent of our developments are agile," says Kaz Kempers from ABN Amro. "About a year-and-a-half ago we decided that everything new should be developed using agile."

Alejandra Leon Moreno, Director of Digital Architectures at healthcare giant Philips, tells a similar story. "Agile is pretty much our only framework for development; we don't use waterfall anymore," she says.

And while not everyone is at the same levels of maturity when it comes to agile – most firms are taking a more hybrid approach, with an average of between 30-50% of applications currently being built using agile methodologies – it is a critical piece of moving towards a faster, more digitally-savvy organisation.

Nevertheless, there are challenges with applying agile thinking. "I think one of the biggest things is training stakeholders to work in an agile way," says Kempers. "It requires a shift in mindset – and that goes for senior management too – otherwise you end up with the same problems you have in normal waterfall developments: scope creep, deadlines not being met, budget over-runs, things like that."

30% to 50% of applications are typically built using agile methodologies, according to Oracle research

Enrico Conte, Head of Digital Transformation at BNP Paribas, is taking things a step further. For him, agile extends far beyond the scope of the IT teams: it's an organisational imperative. "We are using agile methodologies – not just for developing software, but in a wider sense," he explains. "We are changing buildings, we are completely changing the workplace. It is much different to the ways we have worked before, more flexible. Everything is changing. Going digital is not just about having cool mobile apps or faster IT. That's a necessity, but it's not the whole picture."

The devil's in the data.

For many, digital is primarily about making smarter operational and business decisions. For that, data becomes key. "Those companies that manage to harness the data that's out there – not in their own books of business, because actually a lot of that can be old and not very useful, but the wider sphere of social data and other data sources – I think that's the real opportunity," says Teague.

According to Sholay, how you leverage data to develop information-based business models, products and experiences will define success in the digital age. "I think we need to start looking at going beyond just how we manage information to how we apply it," he says. "When I come across organisations and boards who are obsessive about data and information, they don't just manage it and store it. They actually assign an economic value to their information."

The best firms, he says, go beyond the technology and use data to create entirely new information-based business models and services. And for most organisations, that's an entirely new way of looking at things. As Citi's Aman Chawla puts it: "Data is pretty much what differentiates you as a company that's more predictive as opposed to reactive."
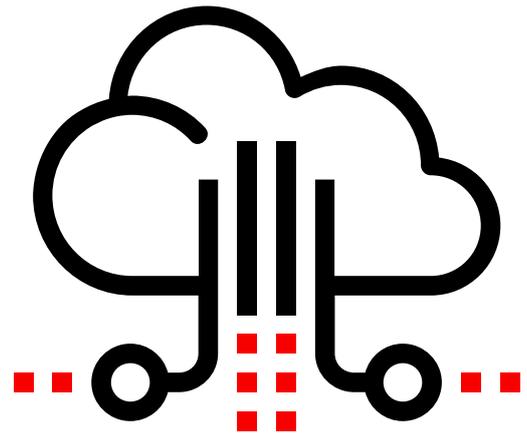
How you leverage data to develop information – based business models will define success in the digital age.

3. Meeting the challenges

How organisations are using innovation to meet business demand in the short- and long-term.

For most organisations, having innovative ideas is not the challenge. It's about mapping them against major strategic and operational issues, to gain momentum and move ahead. Only with this focus can we understand how to execute our innovative ideas effectively and as part of a continual process. So, what kind of challenges are other major enterprises currently facing?

The Challenge of Going Live: not enough ideas are making it to reality.

The challenge for many comes in translating those new and exciting ideas into business projects that truly impact the organisation in terms of growth or revenue (or both). "The truth is, if you look at most of these digital labs, only about five percent of the ideas generated make it to market," says Sholay. "We've got to find a way of going from five percent to 30, 35, 40 percent."

The Challenge of Speed: you have to think and act faster than ever to compete.

And that's a major challenge for organisations everywhere. MTN's Thokozani Shaka likens it to a race. "It feels like we are up against the Usain Bolts of the world," he says. "We've just left the start line, we're looking up, and he's already 15 meters down the track. We have quite a lot to catch up on."

The Challenge of Fear: failure to embrace failure leads to failure to learn and experiment.

Indeed, keeping up with the pace of change can be daunting – which often manifests itself as a fear of failure. For many firms, the pressure to succeed is such that there is often little tolerance for imperfection. "We still have this feeling that if it's not 100 percent perfect, we cannot go live," confides Gabriele Lochis, Head of Digital at vehicle leasing firm Arval, a part of the BNP Paribas Group. "We need to change that mentality if we want to be more innovative. In my view, done is better than perfect."

Armancio Kolompar, Vice President for Digital Confidence at the world's largest cable company, Liberty Global, has encouraged employees to become more comfortable with the concept of imperfection. "One of the key things I implemented was to celebrate the 'failure of the month', to create an environment in which people dared to fail," he explains. "Take a risk and learn from any failures: that is a key ingredient to becoming innovative."

The Challenge of Execution: going beyond going live to implementing at scale.

Once you've removed the fear of failure, the next challenge is around successful execution. British-based banking behemoth Barclays has launched one of the UK's most successful digital initiatives through its Digital Eagles programme. But even so, it's not all been plain sailing. "Barclays is very good at going live. It's not so good at implementing," concedes Simon Wheeler. "And implementing is all about how you get the customer to take what you've got and really go away and use it."

The Challenge of Alignment: building the right roles, responsibilities and connections is critical.

That requires a closer alignment between business, customer and innovation priorities. "One thing we realised quite quickly is that you need to make innovation relevant to the business," adds Deutsche Post's Carranza. "There has to be an immediate recognition that what you are trying to do is moving the business forward and solving real business needs."

The Challenge of Leadership: getting buy-in from decision-makers is tough, but vital.

As such, getting the business engaged in your innovation programme is a critical step. "If you're going to invest in innovation you need to reprioritise some things, so you have to get buy-in from the P&L owners," insists HSBC's Alstadter. "And that's a quid pro quo. What are they going to get from reprioritising? What are they going to get from disrupting their people? And how is that going to help them drive their KPIs? Your senior management needs to implement performance KPIs that are based around innovation. Otherwise, quite honestly, it just doesn't happen."

The Challenge of Time: getting everything into a schedule amplifies importance.

Putting it into a timeframe is also important. "What are the expectations?" asks Carranza. "Are we talking about short-term, mid-term innovation or improvements, or are we talking about long-term improvements? Managing those expectations is critical."

"What we've started to do is to get board-level sponsorship of the ideas that come out of our hackathons and competitions," continues Wheeler. "You have to have somebody that will mentor the team through delivery into the organisation." That, he says, serves a very important purpose. "The board have a clear idea on what the strategic direction for the company is, and therefore the hack is usually something they're interested in and want to expedite. As a result, they're more willing to put resources behind making it happen."

The Challenge of Focus: what's strategic and what's tactical? Clear thinking is essential.

Indeed, finding that funding is a major challenge – and clarity of purpose can certainly help. "We did a bunch of POCs and they ended up lying around on the shelf, never getting implemented or adopted into the operating models of the business," admits Tanmay Saxena, Head of Digital Channels at Credit Suisse. His solution? To separate the tactical innovations from the ones that were more strategic in nature.

"For the tactical ones, we started engaging the business area heads and focused only on topics that could be adopted in less than a year and could show tangible results or create positive news in the market," he explains. "Meanwhile the strategic ideas, those that would take longer to implement, we worked on how to best secure central funding."

The Challenge of Scaling: being able to bring ideas to fruition in an agile way.

And while that approach has provided a degree of direction, Saxena does sound a note of caution. "The thing about all those ideas is that when you implement them, the costs can explode. As such, we also need to fix the legacy platform so that we can bring in new ideas faster."

It's a common problem: becoming more agile and responsive. But, as Sholay is quick to point out, this doesn't just refer to improving your technology estate. "We talk about agile as a concept in IT," he says. "But what I hear most is people complaining that they can ideate in six hours, can prototype in six days, and it still takes them six weeks to provision a server, another six weeks to get through legal, and it takes them six months to hire a data scientist. These are the things we have to hack and reduce, because that is what is slowing us down."

4. Making innovation work

How are the most successful organisations overcoming these challenges and capitalising on the digital opportunity?

When it comes to successful digital innovation, there are several steps to take. You've done your hackathon, run your ideas competition and crowdsourced your ideas. You've created a culture where ideas are celebrated and removed the stigma of failure. You've got leadership buy-in. The final step is to pull it all together to ensure those ideas can scale and can be implemented either across the wider business or brought to market. And that's where you need to employ some management discipline.

Finding your approach path – and involving the whole business.

Whether it's digital labs, hackathons, innovation hubs, incubators or pilot schemes, companies everywhere are embarking on new ways to harness digital innovation – both from within the organisation and from outside.

Hothousing innovation can be a way to accelerate new idea development. For firms that are struggling to attract staff with the requisite digital skills to help change the company because they are perceived as boring or old fashioned, such labs can be an attractive base for new talent. And they can also be a form of insulation against the kind of short-term accounting that is often seen as the enemy of innovation.

But therein lies part of the problem. By separating innovation off in a separate unit, firms often find it difficult to integrate their ideas into the parent organisation.

Concepts might get lost in translation; what worked well in the lab might not work in the context of existing technology or process constraints; new innovations might not map to actual business needs.

"I spend a lot of time in digital labs and innovation hubs and accelerators, and after four or five years of doing this, I think they work – up to a point," offers Neil Sholay, Head of Innovation in EMEA. "The challenge with digital business units is that they need to be reverse-engineered back into the organisation. You have to embed digital into every line of business; if not, all you do is you create a centre of excellence that doesn't scale."

In other words, innovation cannot be an add-on to the business. Instead, what is needed is an approach that pulls ideas from the workforce itself.

Vision.

"One of the key elements you need to have is a clear strategic vision and mission," suggests Bill Limond, Interim CIO and Senior Advisor to the UK Cabinet Office. "That will set the framework for being able to implement innovation at a later stage. And the other thing – especially in organisations where you've got a lot of stovepipes – is to put a very clear governance structure in place. And that will typically mean linking in to stakeholders at all levels."

Cross-business involvement – leadership and management.

HSBC's Alstadter agrees. "You've got to drive from the top down by setting the right tone and implementing the correct performance KPIs and metrics and reward recognition systems. But then also drive from the bottom up, to capitalise on that groundswell of ideas."

Clearly, getting buy-in from both the top and the bottom of the organisation is important. But equally critical is engaging the middle layer of management who will often be tasked with implementing those new ideas or initiatives. "You have to follow a planned, flexible, but robust process designed to bring things together and make practical things happen," argues Sholay. "Frame, ideate, share, test, scale. You need to have that process, it should be published, and people should use it. Because if you don't, then how do you expect to scale?"

Outcomes are everything.

In his role at Oracle, Sholay has seen countless approaches to innovation across a wide range of industries and client companies – with varying degrees of success. "What we noticed very early on is if you go straight into ideation and build a prototype without framing the problem first, the failure rate goes through the roof," he says. "What's the outcome? If you define that first, then you find that more than 50 percent of your ideas go through to what we call the scale stage."

It's an approach that Barclays is already attempting to employ. Simon Wheeler sees four key ingredients to developing a successful innovation programme – starting with defining the scope of work. "First, sit down right at the outset and talk about your outcomes and what you expect them to be, and what barriers or headwinds you think you're going to hit," he says. "Next, set up your team and really be tight on who you think you'll need and that you're all locked in to drive towards success."

Communication.

With those building blocks in place, it's time to go on a charm offensive. "Communication is critical," he says. "Talk to people about why you're doing what you're doing – not what you're doing and how you do it – and have that at the forefront of your mind all the way along. And finally have measures and milestones in place, so that at the end of the day you can say whether you've achieved success or not."

MTN's Shaka agrees. "For me, it's all about the objectives," he asserts. "What specific objectives is this initiative supporting? Once you can zero in on that and align it with the company's overall strategic objectives, you get manager buy-in right from the get go."

Incentives and follow through.

The other key step, says Sholay, is incentivising management staff to focus on and follow through with innovation. Google famously has its 20 percent rule – whereby employees get to spend a fifth of their time "working on what they think will most benefit" the company – but plenty of other firms are taking a similar stance. "I'm working with an airline right now, and they've made a decision that 30 percent of all projects must be allocated to innovation," he explains. "It can't be a business-as-usual project, it's got to be a new business model, a new product or experience. And if the managers don't achieve that 30 percent target, their bonuses are impacted. They lose money from their pocket. That's an organisation that is really hacking management."

Redesigning for innovation.

Becoming an innovative organisation means being built for change. But evolving to this type of model isn't always easy. "I think one of the things you really have to do to be a built-for-change organisation is look at how you make decisions: how you access resources, how you execute on ideas and innovation projects," asserts Sholay. "You have to line those all up in a very dynamic, agile way. It's agile management as opposed to agile IT."

Great ideas don't necessarily come from innovation departments or labs. They don't come from companies who merely talk about innovation. But they do come from companies who allow their people to try new things and fail without fear of consequences. They come from companies that have developed an environment in which employees can be creative. And they come from companies that have a robust process for not only surfacing new ideas, but developing and implementing them, too.

Innovation is the currency of the 21st century. Does your organisation have the discipline to spend it wisely?

5. Today's modern CIO

The CIO is now better placed than ever to be tasked with boosting agility and enhancing innovation – whilst ensuring security and reducing costs. From being simply a custodian of technology, the CIO is now a strategic driver for innovation, and as entrenched in the business as the CEO. The CIO job is no longer only to support the business, it is to direct the business.

The most strategic CIOs realise that they must be ready to constantly pivot their business models to keep the competition off balance while reacting to fast-changing customer requirements and market trends. This approach requires a cloud-first strategy that shifts the enterprise focus from product to service and which enables continuous and infinite innovation cycles as businesses search for the services that will allow them to disrupt and move into new markets. CIOs need to take the lead in creating a 'fast fail' approach to innovation in the organisation.

Of course, CIOs understand that the cloud is not a panacea, just as they are aware that cloud for cloud's sake is not an approach any business should take (even if ordered by the CEO). But there is now a clear appreciation that the cloud is an important tool in supporting next-level, game-changing services and business models which will enable the business to compete more effectively.

Businesses need to design their business around composable, flexible and personalised services, and rethink their past value chain in the new context of a bigger, much more open and extended ecosystem of partners, digital technologies and physical things that interact among them, all of which are fuelled by data. Only the cloud can provide this at scale and at low cost. The cloud needs to be an integrated enterprise architecture that enables agile business processes. Cloud computing can be constituted from a mix of many technologies, including Infrastructure, and Platform and Software as a Service, by delivering them in a number of ways - the important thing is that it is fully integrated across the enterprise and able to help the business join data to applications in order to fuel improved digital services.

Security: a key reason to move to the cloud.

If one thing is constant in the IT world, it's change. Consider the age-old dilemma of security versus innovation. Just a few years ago, concerns about data security and privacy prevented some organisations from adopting cloud-based business models. Today, many of these concerns have been alleviated. IT leaders are migrating their applications and data to the cloud in order to benefit from security features offered by some cloud providers.
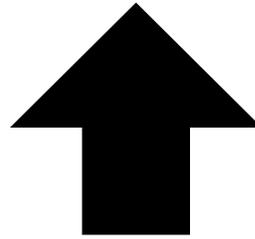
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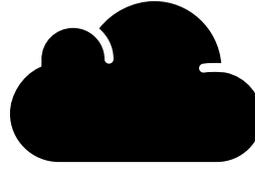
90%

of EMEA C-level executives believe the cloud enables them to innovate faster[3]

16–37%

CIOs expect digital revenues to grow from 16 percent to 37 percent during the next 5 years[4]

3. Oracle, Cloud enables 92% of Organisations to innovate faster, 2016
4. Ibid

The IT security practices of many organisations that manage their own systems may not be strong enough to resist complex threats from malware, phishing schemes, and advanced persistent threats unleashed by malicious users, cybercriminal organizations, and state actors. The perimeter-based security controls typically implemented by organisations who manage their own security—from firewalls, intrusion detection systems, and antivirus software packages—are arguably no longer sufficient to prevent these threats. Smart businesses must find out if their current security controls are enabling them to predict, prevent, detect, and respond to threats - or if they're falling short.

To understand how secure your sensitive data and applications really are, why not take our Security Risk Assessment to see if your organization is exposed.

Cloud empowers democratising data.

Today's drive to be more data-driven means organisations simply can't afford to wait for long IT development cycles or use inflexible tools to gain access to the data they need when they need it. To overcome these barriers, they need solutions that can help them move toward a democratised approach to data, where more than just the few specialists are able to discover data insights.

Cloud services are playing a vital role in this new approach, by enabling organisations to instantly provide access of and respond to immediate business demands for data and analytics. With the right technology platform, it's also possible for any company to deliver a consistent user experience whether hosting on-premises, in the cloud or across both, and supporting multiple sources of data.

Oracle Autonomous Data Warehouse Cloud is the industry's first solution for delivering business insights with unmatched reliability. It's a single platform that empowers the entire organisation to ask any question of any data type. Users can load and analyse data in the cloud in a few clicks, allowing them to quickly extract data insights and make critical decisions in real time. This fully autonomous database cloud service is also self-tuning and preconfigured for automated patch and upgrades and avoids manual error-prone human management processing.

To understand the benefits, use our Autonomous Data Warehouse Cloud calculator. In a few minutes, you can generate a personalised report for your organisation highlighting costs and savings verse on-premises solutions.

For questions or further advise please contact us: oracle.com/contact