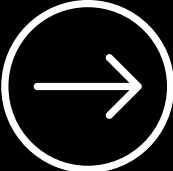


Deliver the digital promise

Operating in a digital world

August 2018

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to begin



Why you should care about digital transformation

Digital helps unlock the scale needed to create new or enhance existing business & operating models.

Everything Digital¹

The transformative effects of digitalisation have upended entire industries and disruptive technologies will change every business. Leaders must move faster or face oblivion.

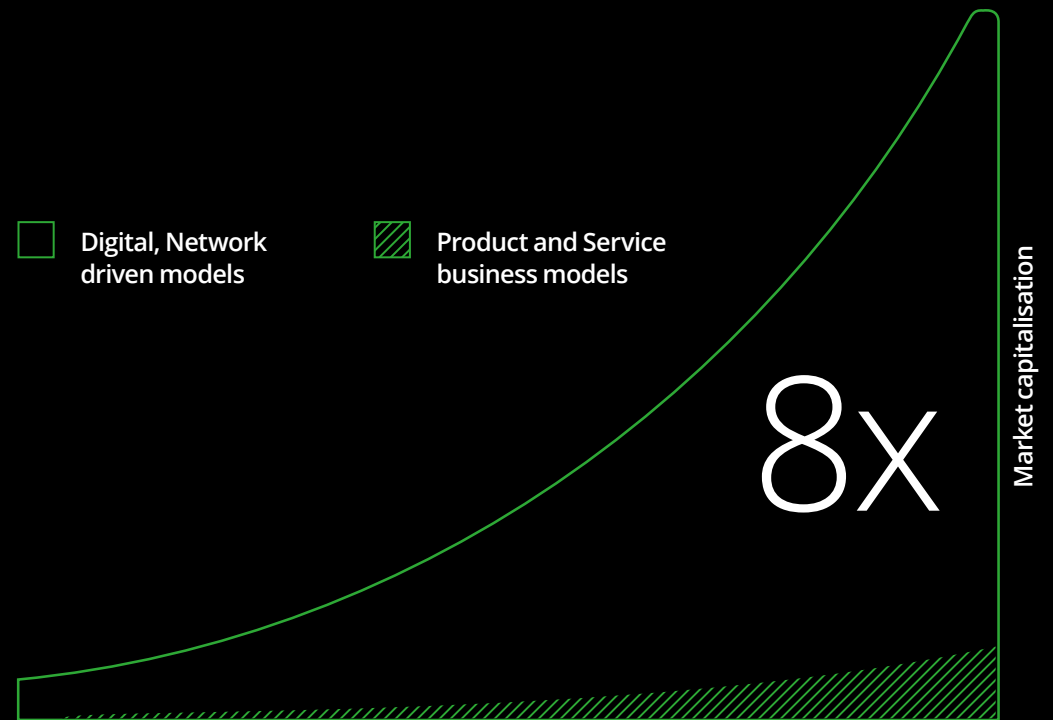
Power needs to be drawn from the following truths:

1. "Information accelerates everything"
2. "Drive to demonetisation"
3. "Disruption is the new norm"
4. "Beware the expert"
5. "Death to the five-year plan"
6. "Smaller beats bigger"
7. "Rent, don't own"
8. "Trust beats control, and open beats closed"
9. "Everything is measurable, and anything is knowable"

1. Source Exponential Organisations – Salim Ismail, Michael S. Malone, Yuri van Geest .2014

Digital value is rewarded²

Network models are valued at 8x product-based business models, 4x versus service models, and 2x software and IP based models.



2. Deloitte ERS research, 2015

Our perspective

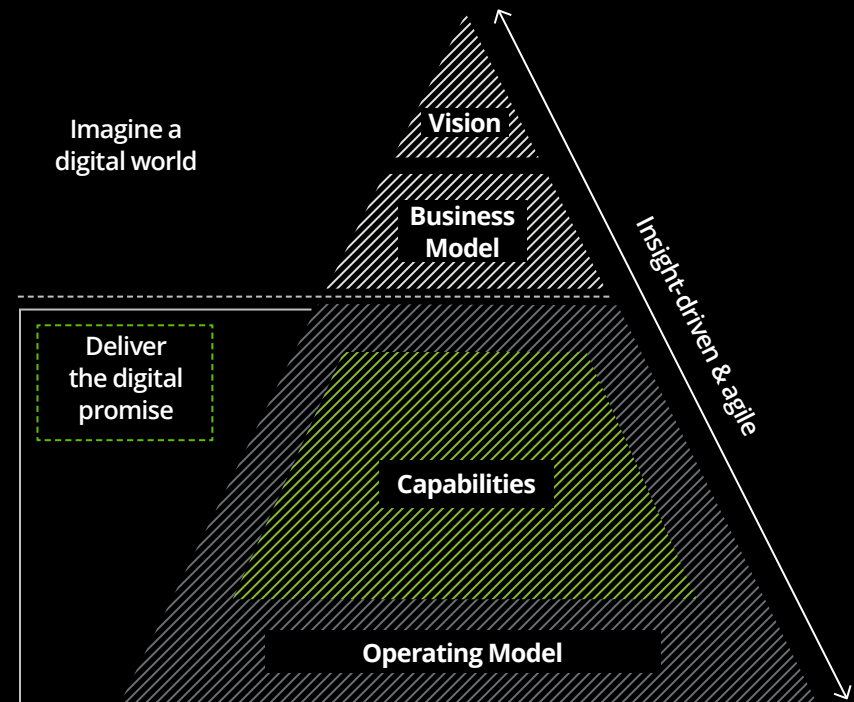
It is clear that the winners in the digital world are those that are able to use technology to harness potential of data and have a mind set and culture to improve continuously in order to respond to the increasing rate of change.

Digital connects people and things in ways that produce an explosion of data, bringing enormous opportunities for companies to make smarter decisions and create value by tapping into their ecosystem. Companies need to **rethink how they create value** and **transform the way they work** to capture it.


The key **missing attribute** of large organisations today is **agility**. They are too optimised for a single purpose business model and aligned to the past. So how can we introduce an evolutionary dynamic that lets them flex, respond and change? We asked ourselves, what would an **ideal organisation** have to do to thrive in the face of ever increasing pace of change? Our answer is simple yet complex – it would have to be able to **continuously improve**.

At the core of Deloitte's Digital Operating Model is an understanding of two fundamental attributes – **Insight-driven and Agile** – that define the essence of continuous improvement.

We developed a set of core capabilities that serve as strategic enablers to support the transition toward Insight-driven and Agile organisation.


















Digital winners rely on two fundamental attributes – **Insight-driven and Agile** – to create **alignment between the business and operating model and deliver the digital promise**.

 = scope of this document

8 Disruptive forces you need to embrace

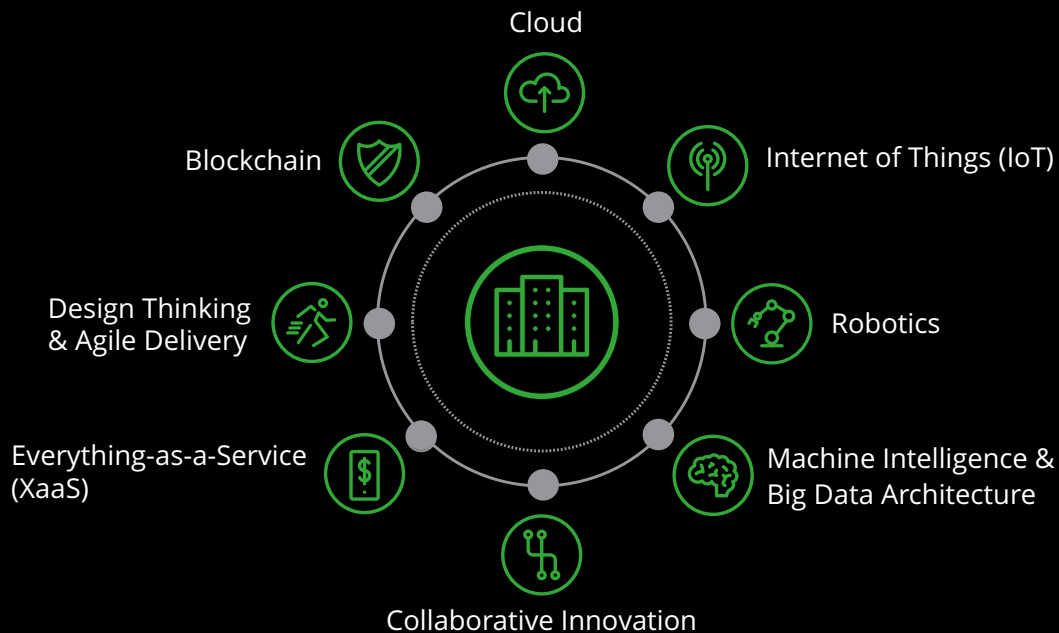
Following digital technologies are reshaping the way companies create value, but maturity differs between industries.

	Cloud	Access to storage and processing power at speed and scale. Companies are moving toward cloud-first landscape to reduce costs and improve performance at the same time.		Allergan has migrated more than 400 websites and applications from a traditional hosting provider to the cloud, resulting in reduced operating costs and faster response to demands of the marketing department.
	Internet of Things (IoT)	IoT means all things connected to the internet. What's the impact for you where everything can be measured? Bold IoT initiatives can create new business models.		Hospital analyses body signals of prematurely born babies to produce a description for a nurse (e.g. "this baby is hungry"). Fruit conglomerate uses sensors in transport containers to prevent spoilage.
	Robotics	Be it physical robots augmenting human physical activities or software robots automating rule-based processes, robotics is rapidly turning into a table-stakes for many industries.		UBS is strategically deploying software robots across operations function to automate processes –achieving both quality improvement and cost reduction.
	Machine Intelligence & Big Data Architecture	A collection of advances in machine learning and data analytics help organisations move from retrospective data analysis to making inferences and predictions.		Mastercard uses open source Hadoop architecture to mine 10 PB worth of credit card transactions data to reduce false positives. No more blocked cards when you travel abroad.
	Collaborative Innovation	New ways of collaboration such as crowdsourcing and open source offer superior ways to access outside knowledge and use it to innovate faster and smarter.		InnoCentive crowdsources solutions to some of the toughest problems companies face. Open source Apache Hadoop is the leading big-data platform for distributed computing.
	Everything-as-a-Service (XaaS)	Transforming existing business products, processes, and legacy systems into a collection of services that can be used both inside and outside the organisation is the goal of XaaS.		Amazon monetised its own internal services by extending them to customers in the form of AWS. GE evolved from a manufacturer of goods to a purveyor of business outcomes through its Predix platform.
	Design Thinking & Agile Delivery	Use Design Thinking to reduce unnecessary complexity by putting employee and customer experience first. Master Agile to respond faster to changes and accelerate product iteration.		Apple has brought design thinking to the mainstream. Intuit has gone from creating a culture of design thinking to building a practice of design doing by relentlessly focusing on end-to-end customer experience.
	Blockchain	Shared ledger technology that removes intermediary in a contractual agreement, Blockchain is assuming the role of trusted gatekeeper and purveyor of transparency.		State of Delaware , home to more than 60 percent of Fortune 500 firms, launched a Blockchain based smart contracts system to streamline registration process.

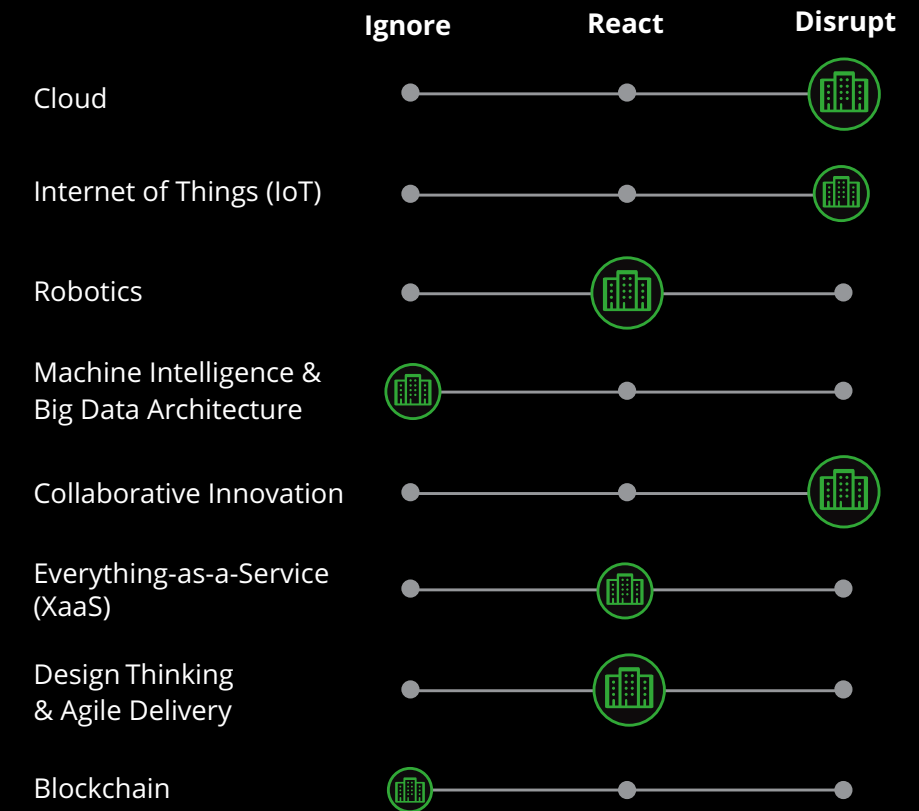
Convergence of disruptive forces is creating impetus for change

When the rules of the game are changing, you can't afford to sit idly on the bench.

What are the interdependencies between disruptive forces?



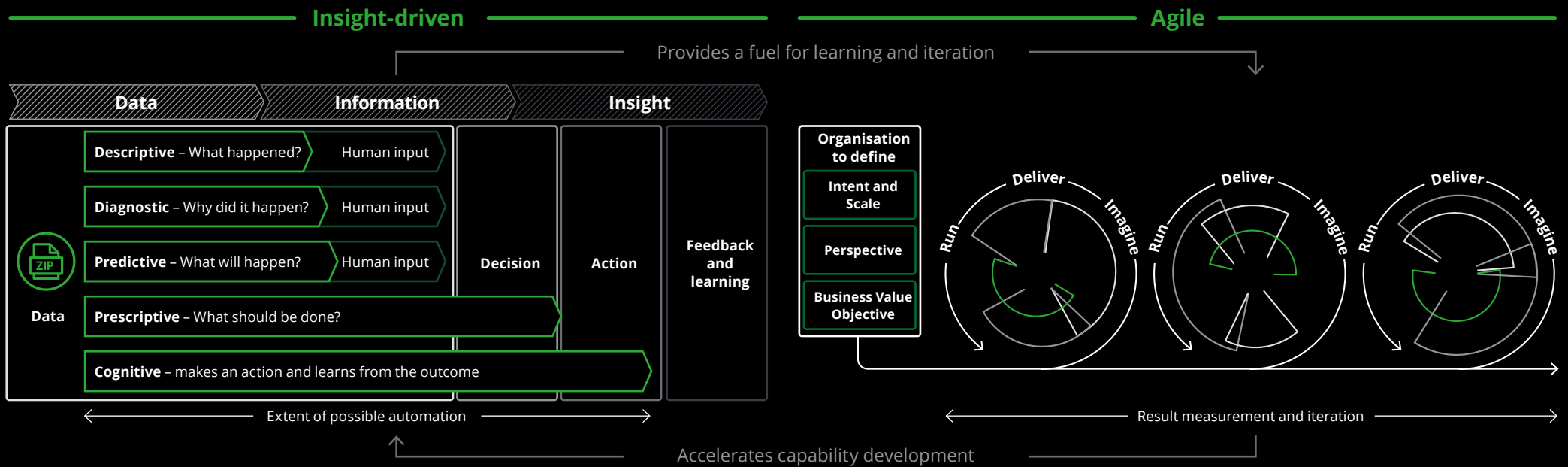
How should you respond? (illustrative)



Small impact: Medium impact: Large impact:

Foundation to deliver the digital promise

The two foundational attributes of digital winners – Insight-driven and Agile – reinforce each other to achieve continuous improvement.



Insight-driven approach has data-based insights at the heart of value creation and streamline decision making across all business functions.

Using data strategically allows companies to scale their operation and deliver personalised customer experience faster and cheaper.

Coherent investments in dedicated talent, platforms, and processes enable companies to turn information into insights.

Agile is key to respond to the increased speed of business change, social shifts and technology advances.

Agile enables rapid organisational learning by providing feedback loop based on accurate and prompt analysis of customer data.

This approach empowers teams to self-organise and collaborate to continuously improve and make fast and transparent decisions.



Doing digital vs. being digital

To mature digitally, you must blend digital capabilities with digital behaviors. Only 'doing' digital things will not be enough to capture the full value of 'becoming or 'being' digital.

Exploring Digital

Leverage traditional technologies to **automate existing** capabilities

Doing Digital

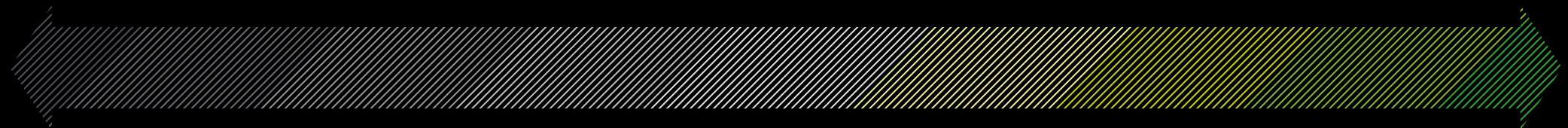
Leverage digital technologies to **extend** capabilities, but still largely focused around current business, operating and customer models

Becoming Digital

Leverage digital technologies – becoming more synchronised and less siloed – with more **advanced changes** to current business, operating, and customer models

Being Digital

Business, operating and customer models are leveraged for digital and **profoundly different** from prior business, operating or customer models



Little to no Digital DNA characteristics are evident

Some Digital DNA characteristics are evident

Many Digital DNA characteristics are evident

Digital is not something separate. It is completely woven into the fabric (DNA) of the organisation

Conceptual view of organisational types

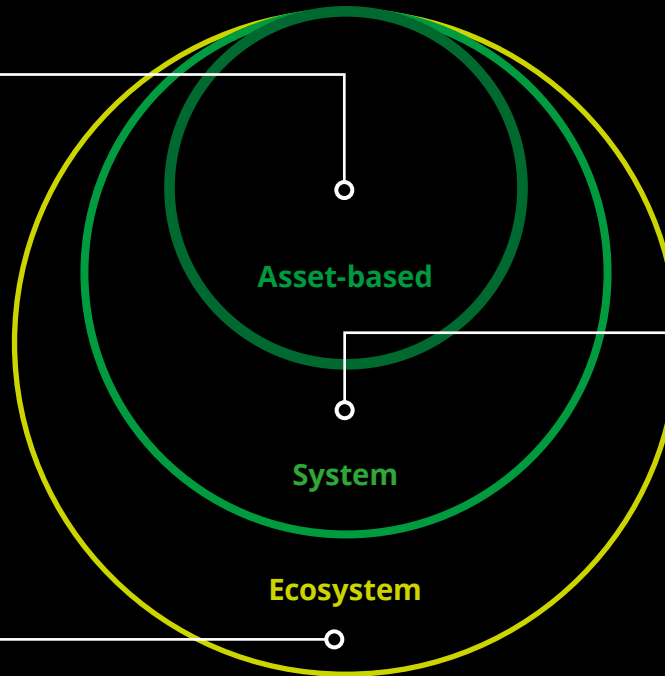
Assets that enterprise controls (e.g. intellectual property, data, brand) to create value.

Excellence here is required but not sufficient to sustain a viable business.

Pharmaceuticals. The drug development process is known to be complex, high risk, expensive and time consuming. In order to continuously innovate, organisations explore “beyond the pill” solutions to understand the co-creation potential with other partners in the ecosystem.

The broadest view that uses partners (e.g. customers, competitors, etc.) to collectively reach performance that lies beyond the effective scope & capabilities of an enterprise. Enterprises that master this dimension become digital leaders.

Technology providers. Due to exponential growth in computing power, technology enterprises launch open source product development initiatives to the entire world. These initiatives enable companies to accelerate their innovation cycles and to capture and enter new or adjacent markets faster by creating lasting network effects.



A view that expands the enterprise to include services from trading partners (e.g. logistics, distribution, resale, etc.).

Excellence here is required to create a viable business but not sufficient to become a digital leader.

Car manufacturers. Supply chain has been at the core of many car manufacturers success for a long time, achieving both cost and quality competitive advantage. In the digital era, new players have emerged, creating a need for traditional car manufacturers to expand beyond their normal way of working to gain competitive advantage.

New digital business models

<p>Subscription model</p> <p>Disrupts through “lock-in” by taking a product or service that is traditionally purchased on an ad hoc basis, and locking-in repeat custom by charging a subscription fee for access</p> <p><i>Netflix, Dollar Shave Club</i></p>	<p>Freemium model</p> <p>Disrupts through digital sampling, where users pay for a basic service with their data or ‘eyeballs’, rather than money, and then charging to upgrade to the full offer. Works where marginal cost for extra units and distribution are lower than advertising revenue or the sale of personal data</p> <p><i>Spotify, LinkedIn</i></p>	<p>Free model</p> <p>Disrupts with an ‘if-you’re-not-paying-for-the-product-you-are-the-product’ model that involves selling personal data or ‘advertising eyeballs’ harvested by offering consumers a ‘free’ product or service that captures their data/attention</p> <p><i>Google, Facebook</i></p>	<p>On-Demand model</p> <p>Disrupts by monetising time and selling instant-access at a premium. Includes taking a commission from people with money but no time who pay for goods and services delivered or fulfilled by people with time but no money</p> <p><i>TaskRabbit, Deliveroo</i></p>	<p>Access over ownership model</p> <p>Disrupts by providing temporary access to goods and services traditionally only available through purchase. Includes ‘Sharing Economy’ disruptors, which takes a commission from people monetising their assets (home, car, capital) by lending them to ‘borrowers’</p> <p><i>Zipcar, Airbnb</i></p>
<p>Hypermarket/ low cost model</p> <p>Disrupts by changing the structure of the operating model to drive significant cost out of the system using digital. Often ‘brand bombing’ using sheer market power and scale to crush competition, often by selling below cost price</p> <p><i>Amazon</i></p>	<p>P2P marketplace model</p> <p>Disrupts with the provision of a digital marketplace that brings together buyers and sellers directly, in return for a transaction or placement fee or commission. Includes the ‘gig economy’</p> <p><i>Uber, eBay, App Store</i></p>	<p>Pyramid model</p> <p>Disrupts by recruiting an army of resellers advocates and affiliates who are often paid on a commission-only model. Includes businesses that use viral marketing</p> <p><i>Dropbox, Yo</i></p>	<p>Experience model</p> <p>Disrupts by providing a superior experience, for which people are prepared to pay</p> <p><i>Tesla, Apple</i></p>	<p>Ecosystem model</p> <p>Disrupts by selling an interlocking and interdependent suite of products and services that increase in value as more are purchased. Creates consumer dependency</p> <p><i>Microsoft, Apple</i></p>



Capabilities to operate in the digital world (1/3)

Digital winners reinforce their culture and change efforts with agile operations (“lean thinking”) and ...



Capability to establish a culture that supports employees to pursue new ideas, to think outside of the box, to communicate and brainstorm with each other.

This will enable the organisation to continuously transform ideas into new, beneficial and profitable products, services and processes facilitated or driven by digital technologies and management practices.

Capability to manage extensive, complex changes on which the organisation's future success relies upon. Being able to change implies agility, which requires establishing processes that are easy to adapt to new circumstances.

It provides the enterprise the power to implement changes and bring everyone in.

Capability to enable a culture that is open to change and that can manage the impact of change on different stakeholders.

Communication is key; the need for change and its impact on the company as well as on the individual employee.

Capability to learn and adopt by embedding “Lean Start-up thinking” approach.

It is fuelled by hypothesis-driven experimentation, iterative “product” releases and continuous feedback loop in order to respond rapidly with minimum investment and failure acceptance.

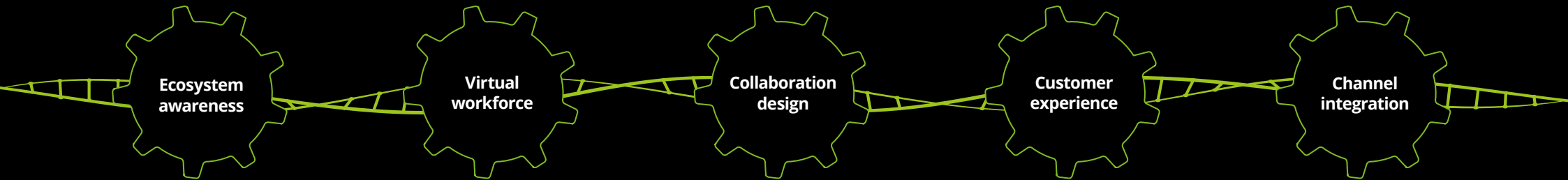
Capability to manage business processes in an organisation, so that their performance is outstanding. It is a central capability for any organisation that wants to compete.

The objective of operational excellence is to realise efficient and effective business processes through continuous improvement and innovation.



Capabilities to operate in the digital world (2/3)

...leverage ecosystem to deliver outstanding customer experiences...



Capability to review the value chain in the context of the ecosystem and to ensure that the right partners are delivering different capabilities in the value chain.

Be able to understand how to partner with external parties to create competitive advantage, and how you can create products & services that can be enhanced by the ecosystem – thereby actively developing it.

Capability to manage employees by responding to the rise of technology and understanding the impact.

Be able to integrate virtual and collaboration tools in tasks need to be done in order to meet business requirement and improve performance.

Capability to move from organisational hierarchies and functions to platforms and projects.

Be prepared for impact that disruption will have on current and future organisation. New partnerships are required between business, IT, and data science.

Capability to understand the customer's journey and to engage with the most valuable customers by using modern technologies and data insights.

Aim at reaching strategic advantage and increased long-term profits through the alignment of products and services with the wants and needs of the customers.

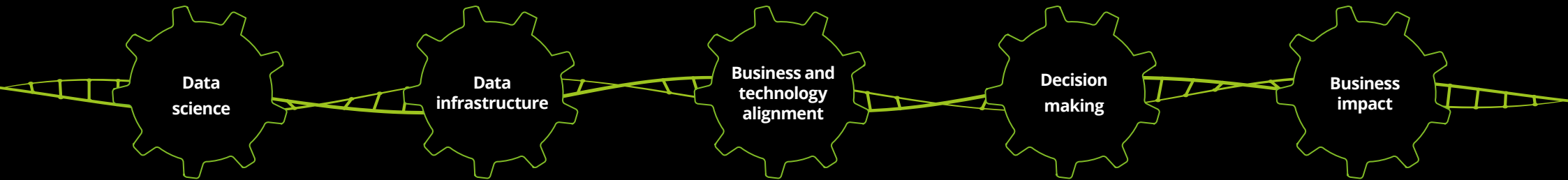
Capability to integrate all touchpoints into a single customer profile and using collective knowledge of all customers to improve targeted KPIs.

Be able to use advanced analytics to achieve a granular picture of what actions are driving KPIs and where value is migrating.



Capabilities to operate in the digital world (3/3)

... powered by complete commitment to insight-driven decision making.



Capability to attract the right talent and build robust pipeline that accelerates practical deployment of data science solutions.

Extract insight from data and enter the domain of real-time automatic business improvements.

Capability to understand the gap between the organisational current data repository and need ("garbage-in, garbage-out").

Be able to create a common digital platform that integrates same category data across the organisation. Understand cyber risks and secure reliable countermeasures.

Capability to use technology across the organisation to deliver customer led opportunities and rapid developments (blurring lines between business and IT).

Ability to embed technology as a core function that support business needs all facets of organisation.

Capability to embed data into the organisation's decision-making processes and turn analytics into a core capability.

Ability to assess potential decision automation and development to speed up the process.

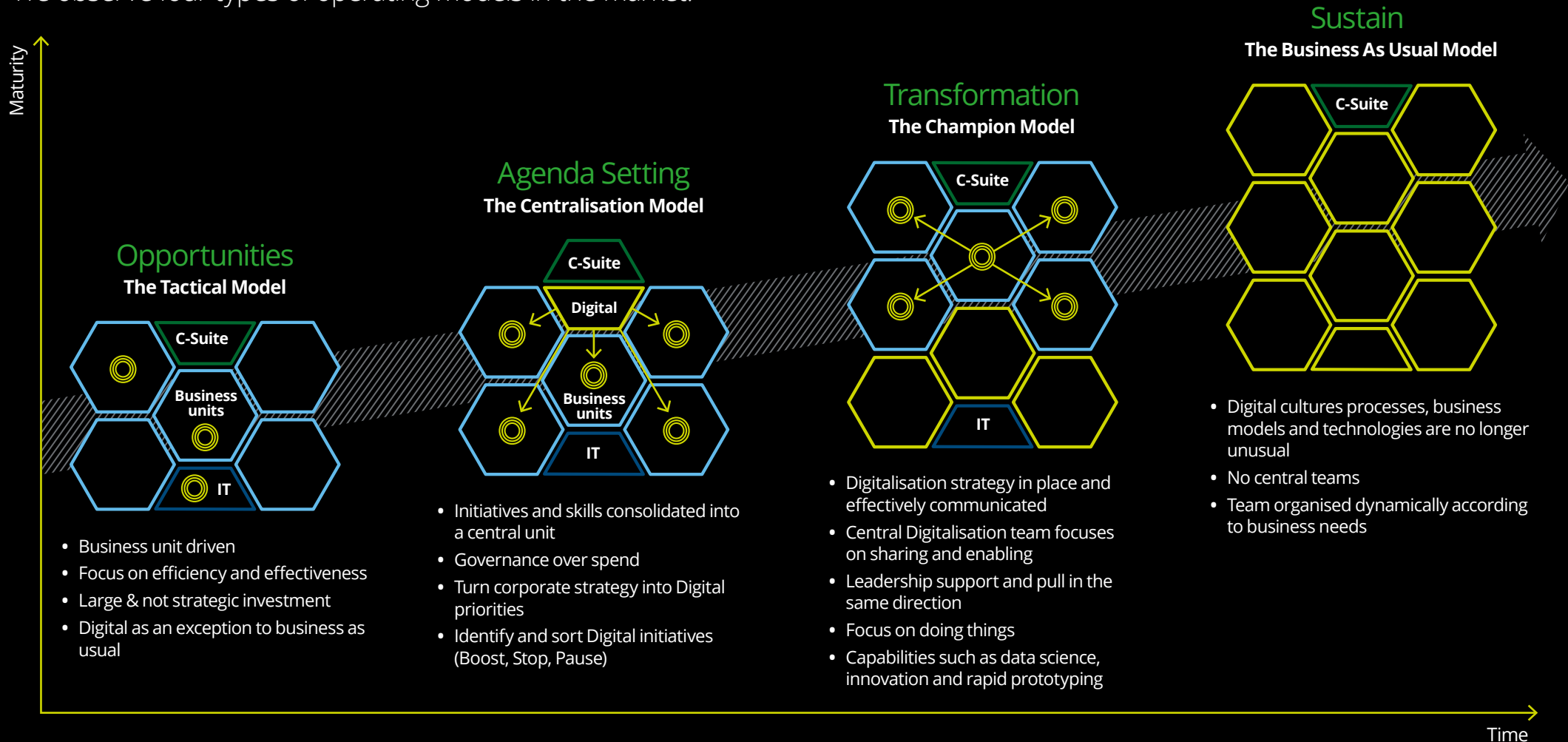
Capability to understand the impact of disruptors and the usage of new technologies (such as mobile connectivity, cloud computing, big data and social media) to enhance the organisation.

Ability to prioritise and to create a balanced digital initiatives portfolio and how to run such a portfolio.



How do you organise your digital capability?

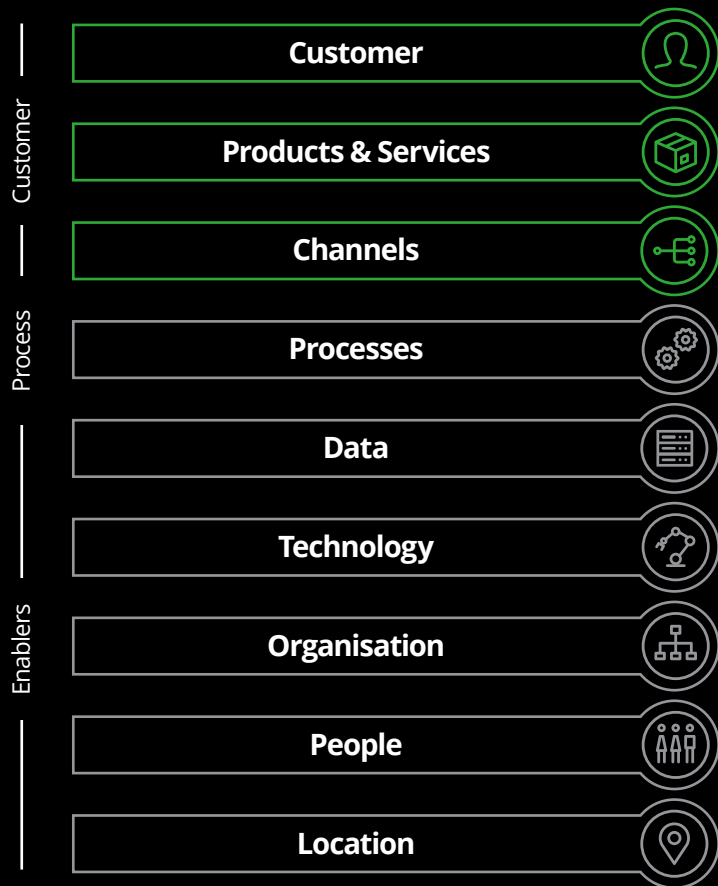
We observe four types of operating models in the market.



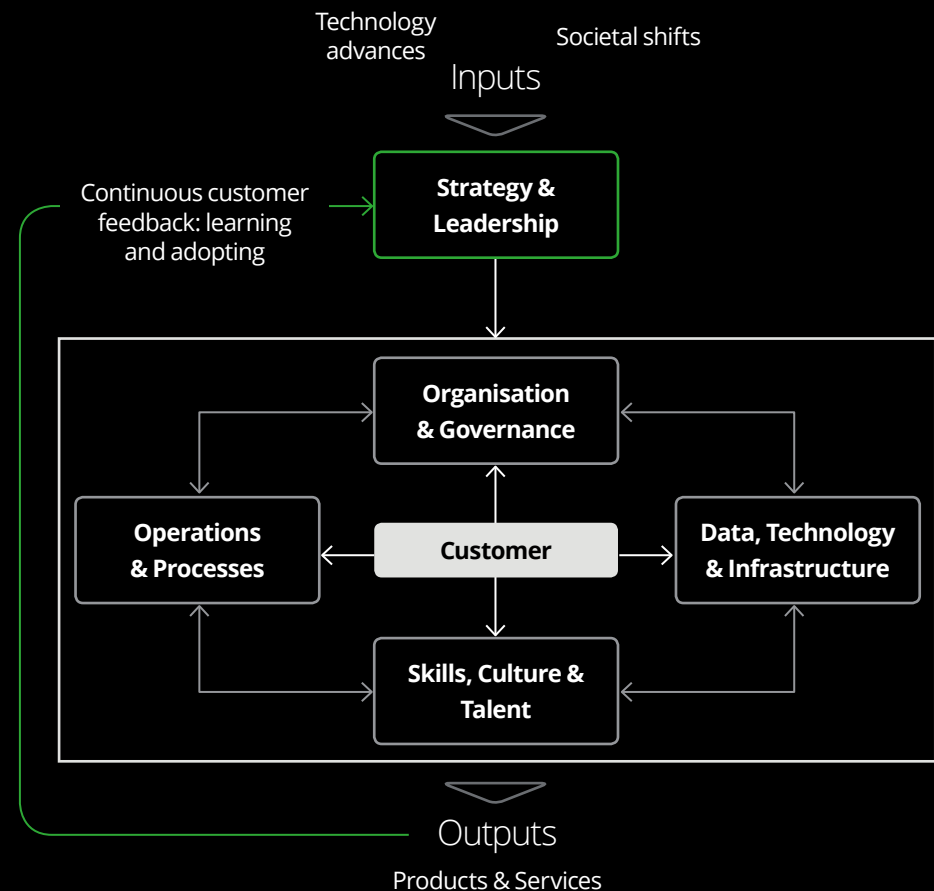
Operating in a digital world

Successful companies achieve operational digital congruence – configuration of the right capabilities in the right way within their operating model. When fully adopted, digital can cause a paradigm shift in operational delivery.

From traditional operating model...



...to working in an Insight-driven and Agile way



Key challenging questions



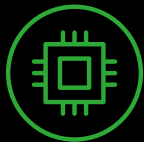
Strategy & Leadership

1. How do we respond to technology advances and social shifts which are disrupting the way we do business?
2. What are key strategic areas digital leaders invest in and what investments are they discontinuing?
3. Have we thought how to mobilise our organisation to support digital transformation and to ensure effective change?
4. What are our customer needs and expectations, how can we use our ecosystem to enhance service offering?



Organisation & Governance

5. What are best practices of structuring organisation to ensure it fits its digital maturity and ambition?
6. Which new roles and positions are critical for digital success, today and tomorrow?
7. What drives success in integrating transformation efforts with existing business processes and activities?
8. How do we collaborate – both internally and externally – to foster innovation and to lead digital change in our industry?



Data, Technology & Infrastructure

9. Do we know what data we need and how to create value from it?
10. How do companies address gaps between their current infrastructure and what they need to support their digital vision?
11. What are best practices of integrating digital investments to maximise the effect?
12. What are ways to set up organisation for continuous improvement and post-launch iteration, using analytics and available data?



Skills, Culture & Talent

13. Have we identified the required (new) skills needed and the approach to bridge the gaps?
14. What does it really mean to build a digital-first culture and create a lasting change?
15. What approaches work in ensuring that employees learn and develop at required pace and scale?
16. How do we leverage talent outside our organisation?



Operations & Processes

17. Are we optimising our delivery and reducing risk to achieve a required ROI?
18. How do we focus on the part of operations that is central to strategic advantage?
19. What processes can (should) be automated and what business impact will this have on our organisation?
20. What tools do digital leaders use to transition from proof-of-concept to industrial scale quickly and effectively?

Strategy & leadership

Ability to swiftly change strategic direction and leadership to execute changes are essential elements of digital winners.

Key challenging questions

How do we respond to technology advances and social shifts which are disrupting the way we do business?

What are key strategic areas digital leaders invest in and what investments are they discontinuing?

Have we thought how to mobilise our organisation to support digital transformation and to ensure effective change?

What are our customer needs and expectations, how can we use our ecosystem to enhance service offering?

Digital winners respond by ...

... using and leveraging experience from their main business to gain competitive advantage elsewhere and do not limit themselves to the confines of their own industry.

... understanding the value migration and “the big picture” of change in their industry. They are not afraid to invest heavily – be it in-house or through a strategic acquisitions.

... understanding and communicating transparently a clear case for change by focussing pragmatically on key levers and using an inclusive approach.

... engaging with customers or even competitors to delivery the right products & services. These organisations acknowledge that often the in-house know-how is not sufficient and that outside expertise is required.

Case study examples



Amazon used its customer background and relationship with vendors to develop industry leading cloud business.



GE realised their need to dramatically accelerate their digital know-how in industrial space and invested heavily in Silicon Valley software HQ which churned Predix – an industry leading IoT platform.



Michelin embraced the need for change and moved from selling tires to selling outcomes. Key success factor was convincing employees about benefits of the new business model.



Eli Lilly became a pioneer in the crowdsourcing field in the pharmaceutical industry. It started successful crowdsourcing initiatives such as Innocentive® or YourEncore.

Organisation & Governance

Organisational structure and governance should support digital ambition by allowing the right people to make timely decisions.

Key challenging questions

What are best practices of structuring organisation to ensure it fits its digital maturity and ambition?

Which new roles and positions are critical for digital success, today and tomorrow?

What drives success in integrating transformation efforts with existing business processes and activities?

How do we collaborate – both internally and externally – to foster innovation and to lead digital change in our industry?

Digital winners respond by ...

... turning to simplify hierarchical (leadership) structures to improve decision making, to cross-functional teams to become more agile and innovative and prepare for the impact on current and future workspace.

... hiring based on probability of future success and not past accolades. They are able to attract talent with right technical expertise and ability to create high-performing teams.

... defining clear transformation accountabilities and cross-teams empowerment to ensure delivery of the to coherent digital strategy and avoidance of competing priorities.

... differentiating themselves by taking the role of an orchestrator to provide platforms that their ecosystem can use to create value.

Case study examples

Xiaomi 

Xiaomi, an Android smartphone manufacturer, promotes flat structures and engages employees in open discussions on product design.

 **airbnb**

Airbnb needed to scale rapidly and transitioned from a centralised team of five data scientists to more than 70 which sit within product areas where they work as business partners with product teams.

BURBERRY

Burberry has transformed a traditional physical brand into a digital experience. By empowering employees and customers with digital tech, Burberry positioned itself as an engage able and forward-thinking champion of design.

 **IBM Watson**

IBM Watson bets on co-developing AI applications with industry leaders and actively invests in strategic partnerships. It has established itself as a leader in AI enterprise application space.

Data, Technology & Infrastructure

Digital leaders are able to use data and technology to accelerate their digital ambition through continuous improvement.

Key challenging questions

Do we know what data we need and how to create value from it?

How do companies address gaps between their current infrastructure and what they need to support their digital vision?

What are best practices of integrating digital investments to maximise the effect?

What are ways to set up organisation for continuous improvement and post-launch iteration, using analytics and available data?

Digital winners respond by ...

... building their competitive advantage around Big Data – capturing the right data at scale and transforming it into applications that solve real business problems.

... investing in cloud infrastructure that changes the way to store, and process data. This supports the creation of large platforms and to scale to the increasing data demands.

... understanding the linkages between different investments and look for synergies that accelerate the journey toward a desired future state. Siloed individual projects are bound to fail.

... having a robust pipeline to deliver improvements is paramount. Learning and adopting from continuous feedback by deploying lean and agile approach to design, test and build new propositions with speed and at scale.

Case study examples

facebook

Facebook tracks its user data to create a detailed picture of their interest and matches this picture with the most appropriate ad. The system continuously improves as users react to suggested posts.

Etsy

Etsy changed the way customers can purchase goods by providing a trusted transaction platform enabled by Hadoop open-source software framework used for distributed storage and processing of big data sets.

IKEA

IKEA, a staple of brick-and-mortar shopping experience, made targeted investments in augmented reality and social channels to create a best-in-class online experience among homeware retailers.

TESLA

Tesla revolutionised the automotive industry. Rather than going with the industry standard of huge new releases every few years, Tesla accelerated development cycle by providing much more frequent software updates.

Skills, Culture & Talent

Digital winners are able to attract the best people and create a cohesive culture that promotes learning and personal development.

Key challenging questions

Have we identified the required (new) skills needed and the approach to bridge the gaps?

Digital winners respond by ...

... identifying and communicating the key skills gaps in early stage. Winners are taking a step further and look for new ways to address the gap as traditional channels are often no longer sufficient.

Case study examples



As industry moved from cable to cloud, AT&T understood the need to address the required skills challenge. AT&T focused their efforts on its existing workforce, engaging employees to learn new skills and promoting lateral mobility.

What does it really mean to build a digital-first culture and create a lasting change?

... leading by example. Leadership is focusing on collaborative culture, promoting experimentation, embracing analytics and the use of data in decision making processes.



Google has infused the company with a test-and-learn culture. Product and solution development is based on hypotheses, tested via experimentation, and improved continuously by the gathered data.

What approaches work in ensuring that employees learn and develop at required pace and scale?

... caring far more about learning and personal growth than perks. Winners are embedding learning into their long-term vision to drive employee engagement and productivity.



Salesforce has developed personalised learning plans that employees could do at their own pace. Company designs one-on-one learning journeys to meet each employee's unique development needs and linked those to customer success.

How do we leverage talent outside our organisation?

... embracing the reality that they need to look beyond their organisation to deliver innovative products (eg. hackathons, crowdsourcing).



LEGO has been successful in increasing product innovation while also improving customer engagement by crowdsourcing its product design. Customers can submit a design and the idea with the most amount of votes gets moved to production.

Operations & Processes

Deploying Agile to make rapid progress and taking advantage of automation possibilities are essential elements that distinguish digital leaders.

Key challenging questions

Are we optimising our delivery and reducing risk to achieve a required ROI?

How do we focus on the part of operations that is central to strategic advantage?

What processes can (should) be automated and what business impact will this have on our organisation?

What tools do digital leaders use to transition from proof-of-concept to industrial scale quickly and effectively?

Digital winners respond by ...

... applying an "agile approach" to improve time to market, boost employee engagement and increase productivity.

... investing heavily in end-to-end digitalisation of their supply chains. Winners are acknowledging that physical assets are still important, but it is the way how "digital" managed them that creates the most value.

... putting automation high on their strategic agenda and creating Robotics and Artificially intelligence CoE's. Automation frees up time of employees to engage in creative work, reduces costs and improves quality of services offered.

... creating a streamlined pathway that allows them to rapidly bring successful experiments without being encumbered by corporate bureaucracy and slow decision making processes.

Case study examples



ING deployed Agile at their group headquarters. They requested everyone to reapply for a position and assemble nine-person "squads" to drive forward end-to-end improvement in client experiences.



Amazon has built their competitive edge around continuously optimising the way they partner with vendors, operate warehouses and deliver products.

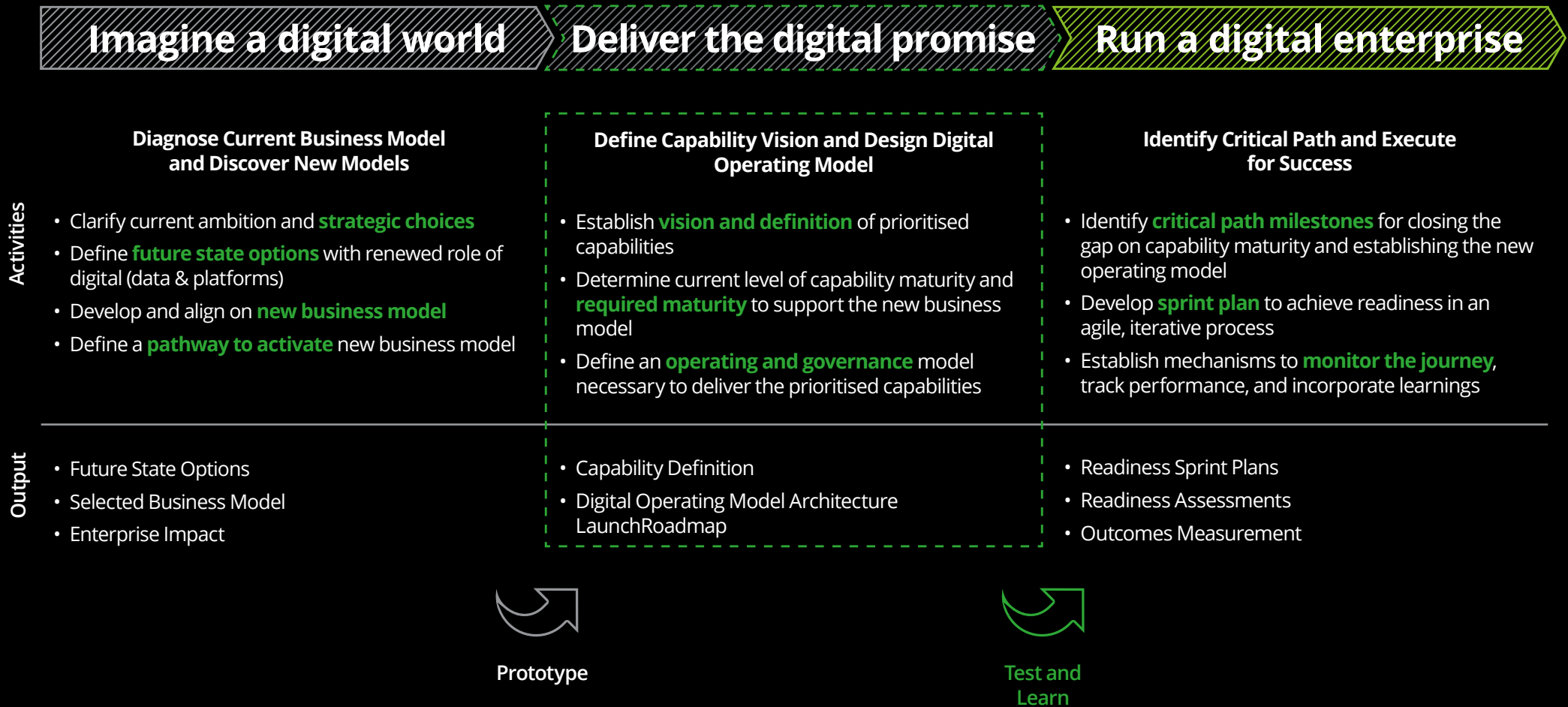


Bank of America introduced an artificially intelligent bot to promptly answer simpler customer requests, while employees can dedicate more time to address more complex matters.



BMW and Sixt experimented with car sharing platform DriveNow, measured results and quickly scaled after initial success to more than 10 cities across Europe.

Start the journey



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