



Digital Transformation Report 2017

Creating a Digital-First Business
How the Largest Danish Enterprises
Address Digital Transformation

THIS DIGITAL TRANSFORMATION REPORT IS COMMISSIONED BY MICROSOFT

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Foreword

Understanding the new era.

The world is changing faster than ever before. We are referring to this change as a revolution – the fourth of its kind – but what is remarkable about this revolution is the pace at which change is happening. Our customers are engaging in new ways and demonstrating completely new behaviors. New business models are arising in ways that, at first glance, may seem random. Product innovation is happening with an ease that is enviable. And the traditional definition of an organization, the notion of mobilizing a network of human resources and capabilities to pull in the same direction, is disappearing as companies are forced to adapt to the digital world and employees to new ways of working.

To navigate in the era of digital transformation, we need to understand both the motions and the key drivers that enable us to respond to the digitization of our society and our businesses. We have already spent some time understanding the scope of digital transformation, the 'what'. But for us to adapt to new business models and new ways of strategizing, we also need to understand the 'how'.

We have initiated this report to create a benchmark. By looking at the pioneers in digitization among Danish companies and studying their best practices, we can learn from their experience – and we can create a framework to better understand the initiatives and the progress we are making towards the new world.

I hope you will find the insights of this report useful and inspirational in the continued work of digitizing your business.

– Marianne Dahl Steensen, CEO, Microsoft Denmark



Key Highlights

Across the board, executives are focusing relentlessly on the use of digital technology to radically improve the performance and reach of their enterprises. Driven equally by new opportunities, emerging threats, and disruptive forces, they strategize and organize to make their businesses relevant and competitive in a digital era where transformation is no longer a goal, but a continuous journey that is seemingly picking up speed every day.

The focus in this report has been to investigate *how* executives work with digital transformation. To do so, we have interviewed corporate executives from 20 of the largest Danish companies to understand what they do to build digital-first companies and get digital transformation right from a business perspective. This is what they have to say.

Key Highlights

Let's be clear. No executive is unaware of the massive power that digitalization will have on their business. The innovator's dilemma, first uncovered by Clayton Christensen, demonstrates how successful, outstanding companies can do everything "right", yet still lose their leadership – and ultimately fail – as new and unexpected competitors rise and take over markets.

Executives are as acutely aware of this as they are of the need to adhere to customer needs and adopt new technologies, and that the results achieved from mastering digital capabilities can be staggering. They fully recognize the opportunity to harness the disruptive force of technology, fuel efficiency, become increasingly agile, and ultimately shape their destiny.

Digital Transformation Among Most Important Strategic Agendas in 18 of 20 Companies

This study, based on deep-dive interviews with executives from 20 of the largest Danish companies across most sectors, points to the same tendency. Of the researched companies, seven point to "digital transformation" as being *one of the three* most important priorities on the executive agenda, while another 11 perceive it as being *among a wider range of top strategic priorities*. Only two of the inter-

viewed executives identify digital transformation as being important, but with one or more other priorities being more important.

Digital Winners have Higher Revenue, are More Profitable, and are More Valuable

This is hardly surprising. A US study from 2016 among 340+ enterprises, which compares data platform maturity with business performance, indicates that the organizations that are most mature in their digital transformation journey generated an average of USD 100 million more in operating income each year than those who lag behind. Similarly, an MIT study with over 400 companies worldwide identified that companies with stronger digital intensity derive 9% more revenue from their physical assets, are 26% more profitable, and achieve a 12% higher market valuation than the average of their peers.

The big question is HOW to approach digital transformation in order to tap into the massive opportunity space. We already know that this is not easy. Another study from MIT reveals that 63% of executives believe that the pace of technology change in their organization is too slow. It is clear that we need a better understanding of the challenges faced by the corporate leaders charged with the

'Currently, I would say that 50% of our development projects apply the lean startup approach. Two years from now, I expect it to be around 70-80%. It needs to be'

— DANSKE BANK



task of navigating their companies into the digital world on a daily basis. And we need to learn HOW they address these challenges in order to gain digital speed and improve customer experiences, develop new products and services at the fringe of their existing business, and ultimately break into new markets with new business models.

When looking closer, we found heated activity in almost all of the companies.

Emerging Frontrunner Activity

Most companies can showcase one or more frontrunner initiatives within certain digital domains. There are numerous examples of advanced thinking innovation hubs, incubator setups, new investments into unknown territories, exploration of new technologies, collaborations with Silicon Valley startups, and a general significant faith in the potential value from machine learning, Internet of Things (IoT), big data, etc.

Further, more and more people recognize that the pace of development is exponential, and that it will fundamentally change the way companies need to work. This implies new governance models, new decision-making bodies, a need for new competencies, test of new technology development models, and a need to join into partnership constellations in areas far beyond what the companies have been used to.

Companies Still Relatively Immature in Relation to Digital Transformation

However, in general, many of the companies are still at the relatively immature steps on their digital transformation development journey. Three of the companies can be categorized as being in the 'accelerated' phase due to an emerging *collective* digital experience, a proven translation of digital into

tangible *results*, a digital enabling of activities both within the core and in adjacent business areas, and with a very clear articulation of an ambitious future digital *vision*. Another 10 of the companies are in the 'incubated' phase, with islands of digital activity and a certain tolerance for new ways of working, but still only with limited impact derived from a large-scale digital transformation. And finally, seven of the companies are still in quite an early stage of their digital transformation, being somewhat 'mobilized' with an emerging explorative mindset and sporadic digital initiatives launched, but with a digital development process which is still approached and treated in a very conventional way.

Focus on the Core Business Rather Than Adjacent or New

Looking across the companies, there is a clear tendency towards focusing the digital transformation efforts and resources on the core business rather than adjacent and new business areas, and towards engaging customers and end-users rather than transforming products and services, optimizing operations, and empowering employees.

Focus on 'How'

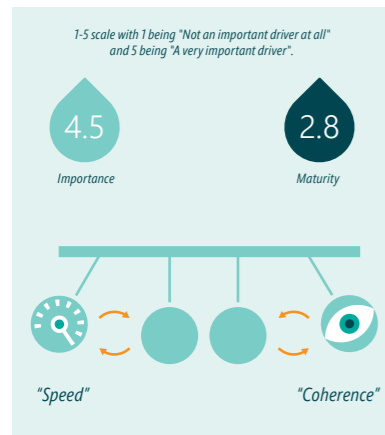
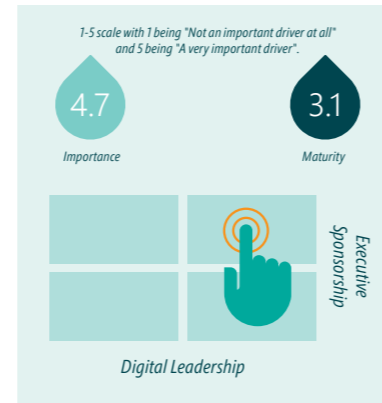
This report looks at *what* companies are doing to move forward on the digital maturity curve and *how* they are approaching the many challenges involved in operating and winning in a market space where exponential speed of change is inevitable.

By doing so, they will be able to grow their business in the future – not only in their current core, but increasingly also in adjacent and ultimately in new business areas. Thereby, they will have a fully transformational impact across customers, products and services, operations, and employees.

Digital Leadership

'Executive sponsorship and digital leadership' is the most important transformation capability – but apparently no easy task

It comes as no surprise that the most important driver for digital transformation according to the business leaders is uncompromised sponsorship from executive management. This entails getting the CEO in a lead role, taking ownership of the digital transformation agenda and taking active part in driving and securing the progress of digital transformation initiatives – both personally and through dedicated, next-level leaders with deep digital competencies. Most, if not all, companies have the right intentions, but many are facing a challenge from conflicting profit goals and from finding and developing leaders that can combine deep industry insights *and* hands-on digital experience.



Functional Clarity

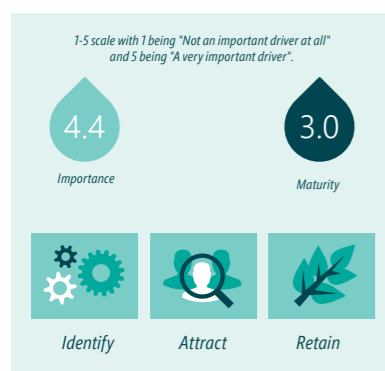
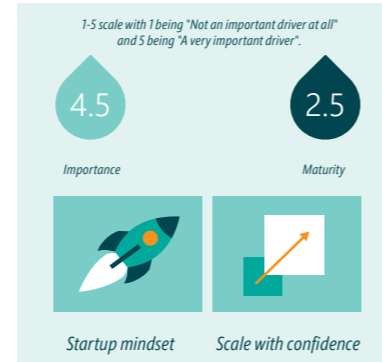
Difficult to strike the right balance between a centrally organized coherent digital direction and local execution responsibility to secure speed and agility

There seems to be an almost pendulum-like evolution over time regarding how to structure the digital transformation responsibilities and mandates, and *where* to place the responsibility for *what* in the corporation. The pendulum has a tendency to swing back and forth between a primarily decentralized approach, leaving it to the local business areas to pursue the digital focus priorities of most relevance to them, and a more centrally mandated digital setup. Only a few of the 20 companies seem to have found a winning formula for this, particularly in relation to clarifying the digital role and mandate on Group level.

Future Way of Working

Many companies experiment with startup practices but despite an increasing trend, the corporate norm is still 'business as usual'

The third most important driver is having an entrepreneurial mindset and adopting startup methodologies such as an all-embracing focus on customer needs, working with the concepts of minimal viable products (MVP), sprints, fail smart, build-measure-learn loops, etc. in the corporate working practices. There is increasing, yet sporadic activity such as creating innovation hubs and incubation units, and exploring highly advanced technologies, and there are many successful and highly profiled initiatives. However, the widespread adoption of a lean startup approach is still the exception rather than the rule.



New Competencies

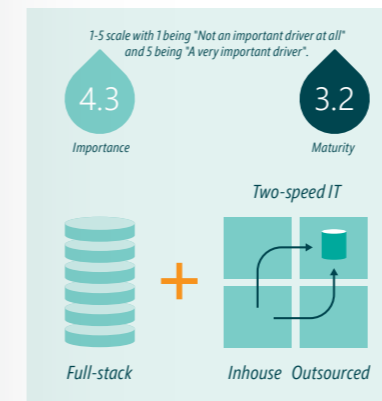
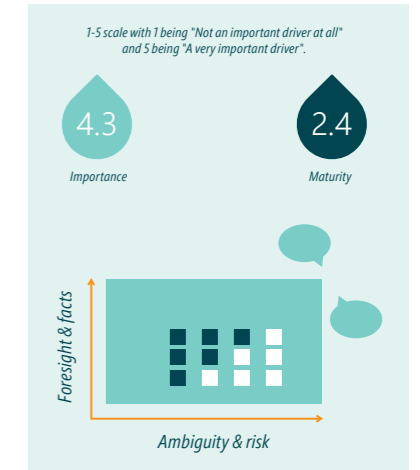
New competencies are scarce and difficult to attract – but even more difficult to nurture and retain

The ability to identify, attract, and retain new competency profiles with a background in design, anthropology, tech development, data science, and commercial entrepreneurship is perceived as being the fourth most relevant capability for digital impact. The challenge primarily lies with retaining competencies, and with assimilating them into the core of operations. Noticeably, only 4 out of the 20 companies assess themselves as having a high or very high degree of success with both attracting and *retaining* new and essential competencies.

Adaptive Governance

Clear need for a different, more agile governance model, but a tendency to 'fall back' into old practices when digital investments become significant

A governance model that supports the digital agenda and ensures that the company 'stands its ground' when facing tough prioritization dilemmas also scored high when evaluated for importance as a digital transformation capability. Leading companies apply an adaptive governance model that tolerates uncertainty and is supportive of an exploratory approach. This includes decision-gate models structured around the desired way of working, light decision bodies with executive involvement, and business metrics focusing not only on financial objectives but also on e.g. customer engagement and digital initiative progress. However, over half of the studied companies note that they struggle with getting agile governance right.



Two-Speed Technology

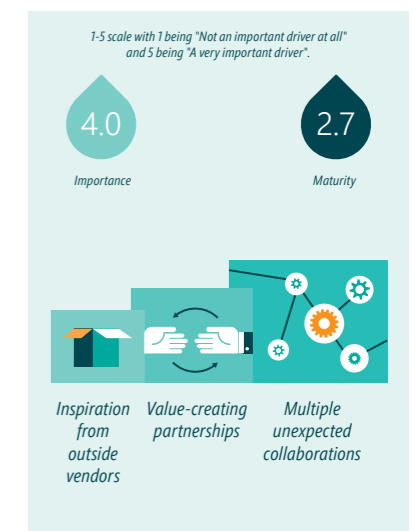
Companies are relatively comfortable in balancing two technology modes to ensure both predictability and exploration, but struggle with 'when and how' to integrate them

A two-speed enterprise technology capacity covers the ability to *combine* a predictable evolution of products and technologies (often related to legacy systems and core applications) with a new, more exploratory and innovative mode related to development within less predictable technology domains. Surprisingly, the management of this technology complexity, in multiple modes with the need to balance often-conflicting priorities, is the digital transformation capability where the companies we studied overall feel most mature in their progress and assess themselves the highest.

Open Collaboration

Emerging tendency to tap into open and collaborative ecosystems to increase inspiration, strengthen delivery, and access new and exploratory business domains

There are many examples among the leading companies in this area of running open innovation initiatives such as hackathons, accelerator programs, etc., and with working closely with startup companies, venture development firms and academia on development activities. The most advanced companies have embarked on operating in open ecosystems with partners from very different domains to take advantage of knowledge and assets outside the enterprise to explore, create, and ensure execution speed – despite the possible risks involved. However, for the majority of the studied companies, external collaboration *still* very much relates to operating in closed environments, sourcing expertise from external 'vendors' that provide input and contribute to projects – rather than seeking value via unlike partners in totally new domains.



'The good news is that our brand is really strong. Engineers with a machine learning background want to work for us, because we have some of the most complex issues to solve. We hire amazingly skilled people, but it takes time to build an organization with the required accumulated capabilities'

– MAERSK

Participating Companies

Most of the writing about digital transformation either relates to the importance of digitalization or assesses executives' expectations towards the level of future investments in digital technology and the effect this will have on future growth – either on a market level or for their specific businesses.

When it comes to investigating how to manage digital transformation on a practical level, focus has traditionally been more on technology and solutions rather than on truly understanding how business executives approach and address the challenges involved across a variety of areas.

For the purpose of this study, we have spoken with corporate executives from leading Danish companies to understand what they do to build digital-first companies and get digital transformation right from a business perspective to gear their companies for the future.

Participating Companies

Executives from 20 Leading Danish Companies
20 deep-dive interviews with executives from leading Danish companies form the basis for the study. Seven of the largest industries in the Danish business environment are covered, ranging from 'traditional' industries such as manufacturing to more heavily digitalized industries such as telco & media.

Broad Industry Coverage

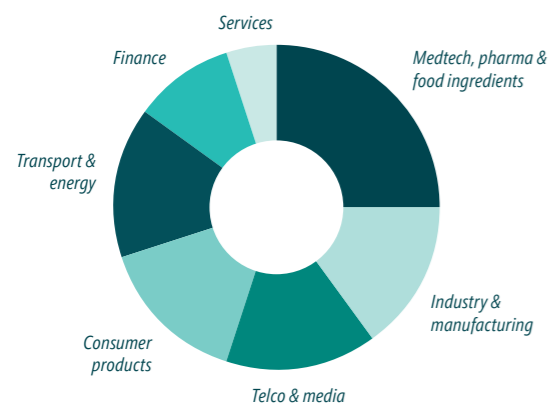
In some industries, such as the financial sector, disruption is starting to play a major role, with technology helping to reshape the industry from both the inside and the outside, while other industries have not come as far due to different competitive industry dynamics, regulation, and/or simply less apparent benefits from digitalization.

However, all industries and companies see technology as a critical strategic enabler, as well as a force to be acutely aware of with respect to preserving existing business domains and competitive advantages.

Approximately 80% of OMX C20 Revenue

The companies surveyed are among the very elite in Denmark. 6 out of the 10 largest Danish companies are included, and the interviewed companies collectively account for approximately 80% of the combined revenue in the OMX C20 index. These are the companies with the most resources to drive major digital transformations, and where the potential impact is largest. Furthermore, these are large and complex organizations, where a digital transformation is a major undertaking that is not

Seven Major Industries Covered in the Study



Large Share of OMX C20 Companies and Revenue Included



6 out of 10 largest companies in DK included



~80% of C20 revenue covered

completed overnight, but something that will require significant dedication and C-level buy-in to succeed.

Digital Responsibility Most Often Resides with Corporate Strategy Function

This study takes a closer look at digital transformation from a business perspective. We have pursued to identify the person with the highest organizational 'rank' and a dedicated responsibility for managing the digital transformation process across the company. In 11 out of the 20 companies, this led us to the Group Strategy or Group Business Development officer, and in four companies, the responsibility was placed with Group Commercial. In another four companies, we spoke to an executive who is responsible for a dedicated digital transformation

unit or dedicated Innovation unit. Only in one case did we find that the CIO was the executive with the highest company-wide business responsibility for digital transformation.

The interviewees are senior executives in their respective companies. Almost all respondents report to the executive office, 12 report directly to the CEO and the rest to a C-suite member other than the CEO.

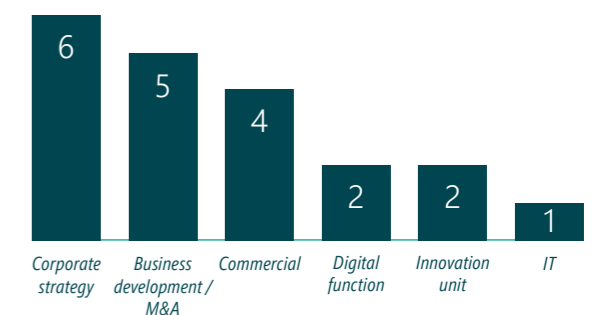
Most Comprehensive Study to Date

As such, we are certain that this is the most comprehensive study of digital transformation ever conducted on an executive level among the largest companies in Denmark.

Majority of Interview Respondents Report to the CEO



Representation Primarily Comes from Strategy and Business Development



Participating Companies

Danske Bank	Widex	Maersk	TV 2
Coloplast	William Demant	TDC	Chr. Hansen
Grundfos	Vestas	Novo Nordisk	Pandora
ISS	The LEGO Group	Novozymes	Stofa/SE
Egmont	Arla Foods	LEO Pharma	PFA

LEO Pharma

Case Study

The creation of LEO Innovation Lab as a separate unit was founded on the idea that the full digital transformation was too difficult to achieve in a regular corporate setting. LEO Pharma has taken the strategic decision to become more patient-focused, which entails going 'beyond the pill' and providing value-added services that improve the patients' quality of life. It is the belief of LEO Pharma that the development of such services requires an entirely independent unit in order to avoid interference by the regular structures, processes, and culture of the company.

Being an independent unit enables LEO Innovation Lab to keep its focus fixed on innovation and the patients, because the success criteria are not directly related to profit. The special development process is

characterized by early patient involvement, as well as postponement of the evaluation of the business model of a new innovation. Furthermore, the unit engages in both strategic partnerships and venture capital to accelerate the development of the right solutions for the patients.

'If this was to succeed, we had to take the freedom to extremes'

The success of the initiative is partly based on learnings from the startup environment. Employees are granted a high degree of freedom, which for example means that vacation is not monitored. This enables the unit to attract and retain the right people. Further,

the lab aims to attract millennials by creating an altruistic feel and focusing on the higher goals of the work. This is achieved by being very open about the work of the unit on both the website and when presenting.

'LEO Innovation Lab is based on the idea that it is difficult to complete the total digital transformation in a corporate setting'

'We go 'beyond the pill' because mental health, fitness, and nutrition also play a role in treating the disease'

About LEO Pharma

LEO Pharma is an independent, research-based pharmaceutical company that develops and manufactures pharmaceutical drugs for dermatological and thrombotic disorders. Founded in 1908, the company markets its products in more than 100 countries and employs approximately 5,000 people.



Established in 2015, LEO Innovation Lab is the independent innovation unit of LEO Pharma, created to meet the long-term strategic goal of focusing on patient needs. While LEO Pharma develops pharmaceuticals, LEO Innovation Lab focuses exclusively on non-medical solutions for the everyday life of people living with a skin condition. In collaboration with partners, the unit develops apps and digital platforms within areas such as mental health, fitness, and nutrition.

TV 2

Case Study

For approximately the first 25 years of its existence, TV 2 relied upon distributors to broadcast their programming to consumers. The company was used to supplying linear TV channels to distributors, who sold it to consumers through subscription packages. Additionally, TV 2 has always sold linear TV advertising. However, the rise of digitalization drastically changed the needs and wants of consumers, who now prioritize watching TV when and where they want. Further, consumers now require smaller packages and freedom of choice and some are willing to pay for premium features, such as content without commercials.

These consumer trends coupled with new technology enabled TV 2 to reassess their business model to focus more on B2C. Traditionally a B2B company, they now had the opportunity to go directly to the consumer, with TV 2 PLAY, thereby driving new subscrip-

tion revenues with high ARPUs. However, TV 2 has diligently chosen to price TV 2 PLAY's channels and on-demand packages in a manner that is consistent with distributor wholesale prices. This consistency has been key to operating both B2B and B2C.

'The biggest impact of digitalization is that we are changing from a B2B to a B2C company'

In addition to going directly to the consumer, TV 2 has changed their organization to stay agile and adaptable going forward. First, the digital agenda is strongly anchored in the strategic work and has buy-in among both the C-suite and in the board. Second, in acknowledgement that the core business is shrinking, TV 2 is gradually moving resources to business development and digitalization departments. Third, they are establishing a modus of leveraging customer data and reacting to market insights – for example by targeting ads to users on TV 2 Play.

'We cannot survive only by selling web TV and banner ads in the long term, so we know we have to come up with new business models'



In response to changing consumer needs and new technology, TV 2 is gradually changing from a purely B2B company to a B2C company. Management is fully aware that agility and adaptability will be key success factors going forward. The company has already experienced success when reacting quickly to market insights – for example by establishing separate sports channels on TV 2 Play during the Olympics to drive subscriptions.

About TV 2

TV 2 is one of Denmark's largest media organizations and the company behind the country's most watched TV channel of the same name. Since the establishment in 1988, the company has grown to include six TV channels and a number of digital media services.

Why?

We take a look at how important the digital transformation agenda is on the highest executive level vis-à-vis other strategic priorities.

We dig deeper to understand whether digitalization is primarily a key lever to improving and sustaining the current core business, or rather a lever for building tomorrow's business focusing on adjacent or even entirely new business areas.

And we summarize how progressed the companies are on their overall digital transformation maturity journey.

Why?

The Importance of the Digital Transformation Agenda at the Highest Executive Level



Importance of Digital Transformation

As outlined initially, it is no surprise that business executives are acutely aware of the massive power digitalization will have on their business. This study confirms that digital transformation is among the most business-critical priorities on the executive agenda.

Of the researched companies, 7 point to digital transformation as being *the* single most important priority on the executive agenda, while another 11 companies perceive it as being *one* of the most

important priorities, with no other priority being more important. Only two interviewed executives identify digital transformation as being important, yet with one or more other priorities being more important.

Given these findings, the study fuels the notion of digital transformation no longer being a concept for the IT and technology departments, but among *the* most important priorities to master for today's top management teams.



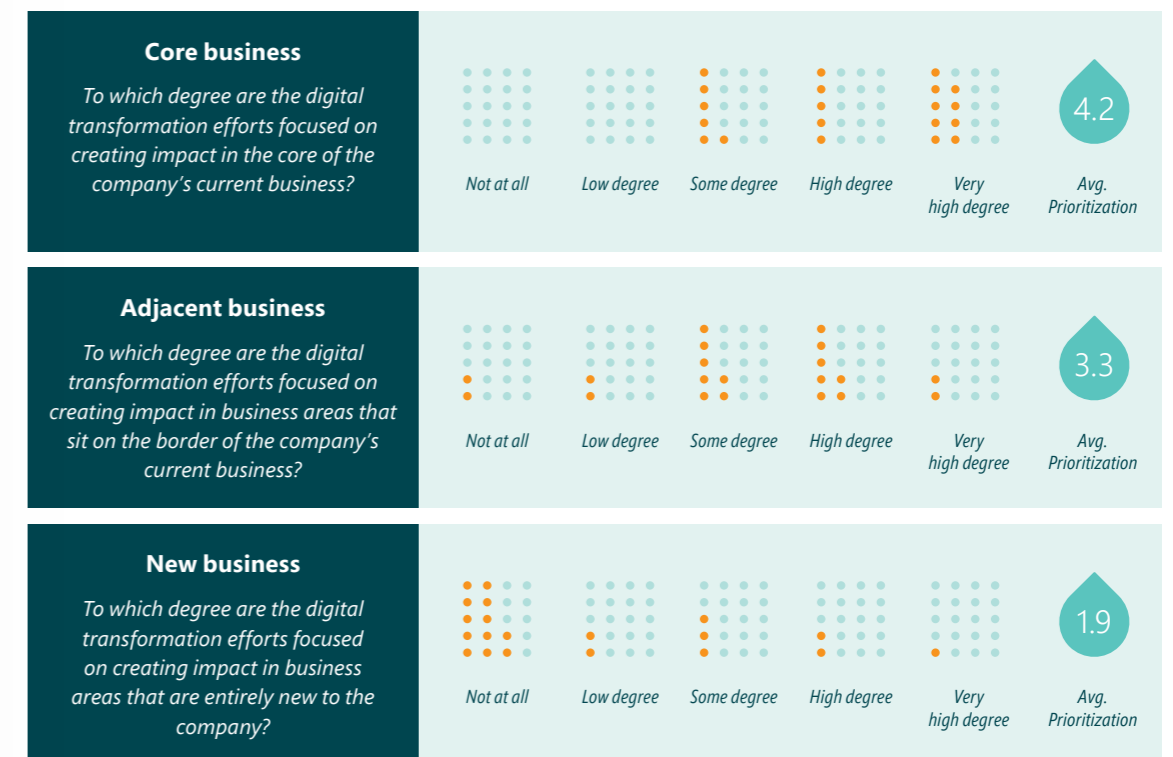
Business Focus in Regards to Digital Transformation

We deep dived into understanding which areas business executives focus to create the most digital transformation impact. Is it in the *core business*, e.g. by augmentation of physical products and services with digital offerings, in *adjacent business* areas that sit on the border of the company's current business and open up new revenue streams, or in the *creation of new, future business(es)* by deployment of the company's assets and resources in new areas – often with totally reinvented business models?

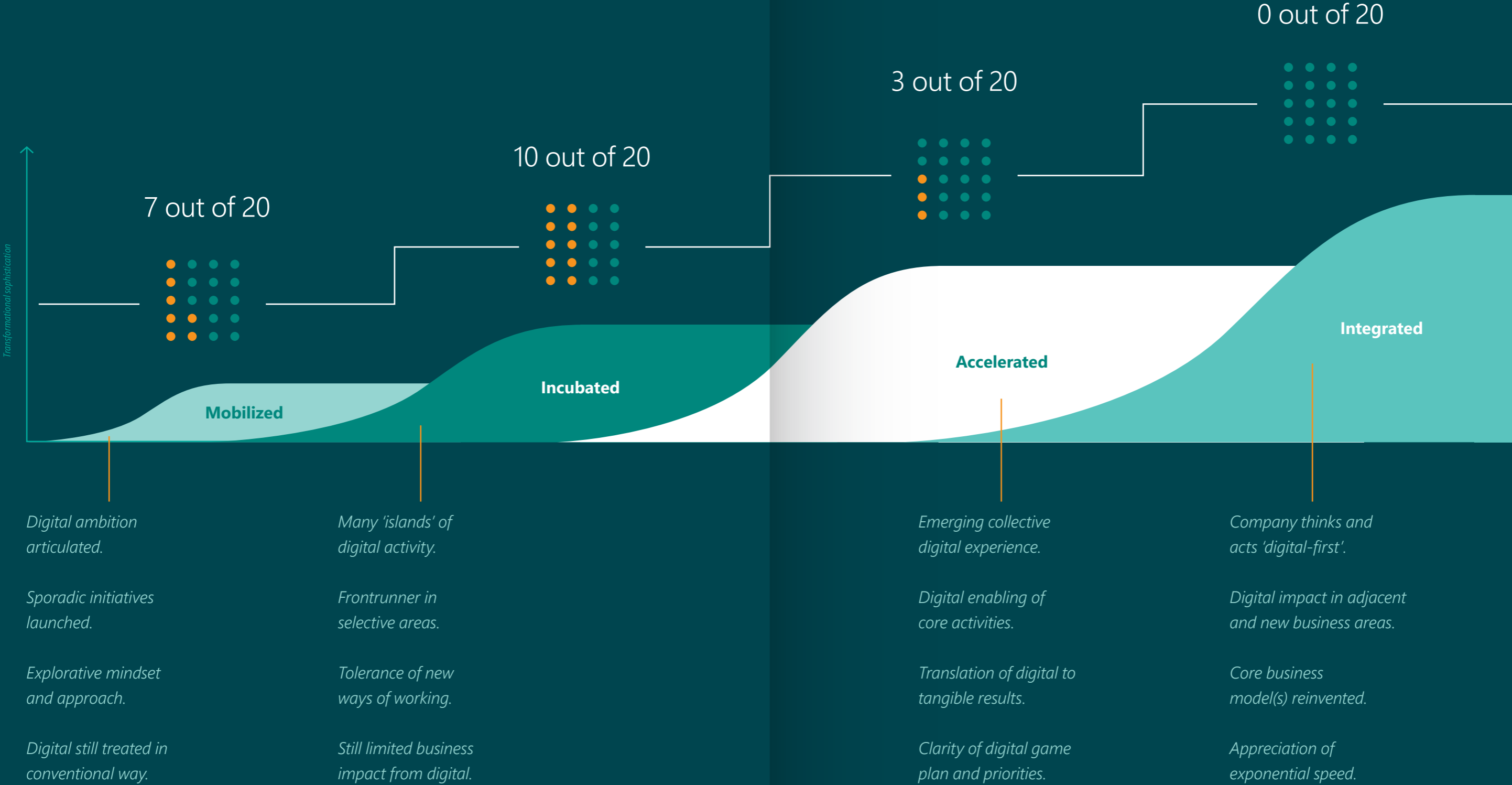
Given the general hype related to disruption and the threat incumbents assume from external new-

comers with none or limited existing business to jeopardize, the hypothesis was that adjacent and new business areas would assume as much expected digital focus as the core business. This is clearly not the case. Not surprisingly, there is a strong gravity towards having a positive outlook on focusing on digitalization to create impact in the core business. What is perhaps more surprising is that 12 out of the 20 companies respond with 'Not at all' when asked whether "digitalization is a key lever to create impact in business areas that are *entirely new* to the company" and only three companies respond 'High degree' or 'Very high degree' to the question.

How much do you currently focus your digital transformation efforts and resources for each of the following areas?



Digital Transformation Maturity Curve



Why?

Digital Transformation Maturity

Overall, many companies are relatively immature and not too far progressed on their digital transformation development journey. No companies assessed are digitally *'Integrated'*, which is characterized by an organization that thinks and acts digitally across all relevant parameters. This includes embarking on large-scale digital transformation with a core business that is fully digitally enabled, and with ventures into new adjacent business areas, with full appreciation for reimagining – and if necessary reinventing – the business model.

Three of the assessed companies are characterized as *'Accelerated'* due to an emerging collective digital experience, a proven translation of digital into *tangible* results, a digital enabling of activities both within the core and in adjacent business areas, and with a very clear articulation of an ambitious future digital *vision*.

Another 10 of the companies are in a more *'Incubated'* phase, displaying islands of digital activity, but still with a limited real business impact from digital solutions. These companies often display a certain tolerance for new ways of working, and can be frontrunners in selected digital areas, but they lack scale and often revert to the old way of doing business when facing tough decisions.

The final seven companies studied are still in quite an early stage of their digital transformation. Due to digitalization being one of their key strategic priorities, they have typically articulated a clear ambition, set up the organizational mandates, and are somewhat *'Mobilized'* in terms of an emerging explorative mindset, having launched sporadic digital initiatives. However, when looking for real digital bets and investments, their track records still suffer from a digital development process that is approached and treated in a very conventional way.

'Digitalization must amplify what we already do. If we were a digital Silicon Valley corporation, we would be doing pretty terribly. So let's not compete with them. If we can make something digital on top of the product that we are better at making than anyone else, then we are able to make something no one else can. The question is, "how can your core capabilities be amplified by digital?" Rather than tossing out everything you know, understand which elements in your core business that can be digitally amplified, and then take your mental starting point from there.'

— THE LEGO GROUP

What?

Having concluded that digital transformation is a top priority among top executives in the studied companies, we turn our focus to what digital areas the companies focus the most on in terms of *engaging customers, transforming products and services, optimizing operations, and empowering employees*. All with the objective of becoming digital-first.

What?

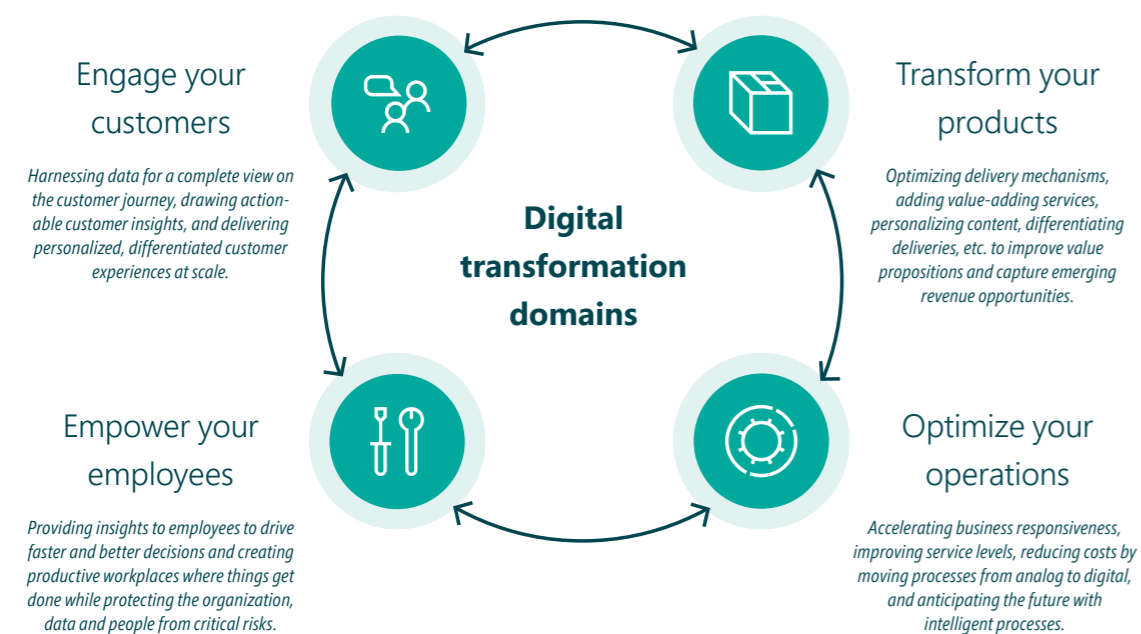
Our point of departure for deep diving into the 'what' of digital transformation builds on a systems-based approach encompassing four domains. This approach represents the combination of strategy, people, process, and technology – all of which enable feedback loops and define an organization's ability to change internally, ultimately impacting the entire landscape of the industries in which it participates.

The digital feedback loops are what helps companies draw insights from data and convert it intel-

ligently to action across the four benefit domains. Our study examines how intensely the companies focus on each domain. This gives us an indication not only of how they prioritize when it comes to extracting value from digitalization, but also of how far along the maturity journey they are when it comes to a holistic and systematic digital approach across all domains.

'When it comes down to prioritization, it's all about the customer experience. If we don't get the customer experience right, everything else is irrelevant'

— DANSKE BANK



'A key priority for our digital transformation efforts is to create an end-user pull for our products, sold by third parties, by engaging them digitally in our consumer program'

— COLOPLAST

Engaging Customers and End-Users

As visualized in the graph, this is the digital domain that most clearly stands out in terms of what the companies focus on. 16 of the respondents answer 'High degree' or 'Very high degree' on this parameter.

It is not surprising that most organizations prioritize digital-enabled initiatives aiming to improve customer and/or end-user engagement the highest, given that uncovering the needs of customers and end-users, and developing superior and engaging experiences are critical for the future relevance and competitive position of both B2C and B2B businesses.

Transforming Products and Services

Transforming products and services is the second highest priority. It is perceived as adding new features and functionalities to existing products and services, entirely new products and services, new business models and new platforms.

While the area is very highly prioritized, most respondents are in the early phases. Few have ongoing transformation initiatives.

Optimizing Operations

Optimizing operations is the third highest priority out of the total four. For some respondents, this reflects their overall prioritization, while others have prioritized optimizing operations for a considerable time, and come far already, e.g. in regards to becoming better at generating and using data with respect to manufacturing, service of products, etc.

Empowering Employees

Empowering employees is rated as the lowest priority among respondents, who in general seem less aware of the overall topic and what empowerment of employees through digital-enabled initiatives actually means.

However, some businesses – either mature or very labor-heavy ones – have voiced very ambitious visions and initiatives in regards to the topic.

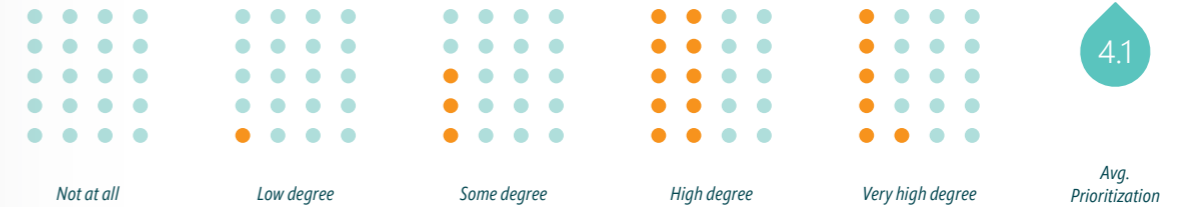
Focus on the Digital Transformation Domains

Domains

Prioritization

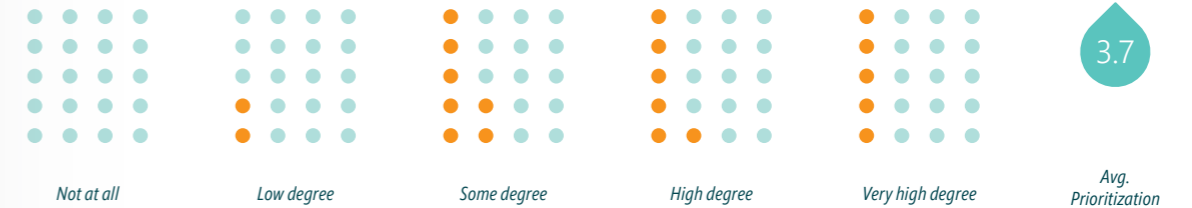
Engaging customers and end-users

The degree to which the company prioritizes digital-enabled initiatives to engage customers and end-users, e.g. by using concepts such as big data, self-service, VR/AR and AI to create customer insights, personalize interactions, and improve the customer experience.



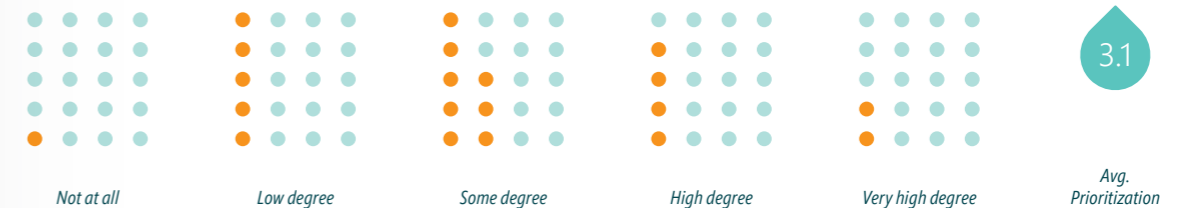
Transforming products and services

The degree to which the company prioritizes leveraging digitalization in order to transform their products and services, e.g. by augmenting existing products and services with digital features and functionalities, and developing entirely new products, services, platforms, and business models.



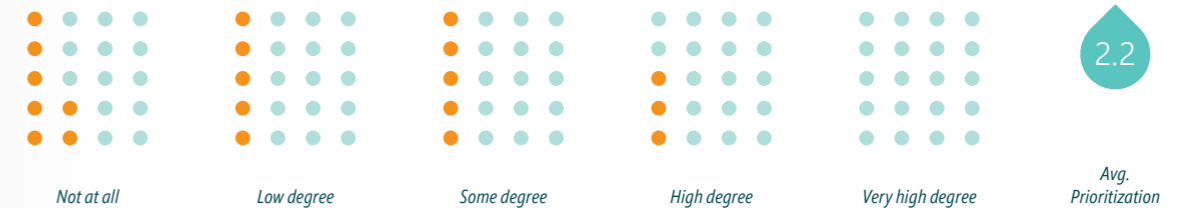
Optimizing operations

The degree to which the company prioritizes the use of digital-enabled initiatives to optimize internal operations, e.g. by enabling process automation, real-time monitoring of operations and predictive modelling to anticipate customer support requests, etc.



Empowering employees

The degree to which the company prioritizes digital initiatives targeted towards empowering employees, e.g. by using digital tools and platforms to enable better communication, closer collaboration, and improved employee productivity and flexibility.

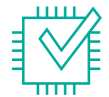


What?

What digital leaders do to rethink **customer engagement**



Extract value from both big and rich data to draw unique customer insights, gain a complete view on the customer journey, and ultimately create segments of one.



Master new technologies such as machine learning, artificial intelligence, and virtual reality to deliver personalized service experiences and stand out from competition.



Transition from focusing on touchpoints to entangling customers in meaningful, recurring relationships that create mutual value and put customers in control of their own experience.

What digital leaders do to rethink **product and service transformation**



Collect and apply data as a strategic asset for exploring new business opportunities and entering new markets.



Shift focus from hindsight to foresight to innovate and develop new intriguing features and functionalities to products and services that are meaningful to customers.



Create new business models by embracing emerging trends, building digital service wrappers around traditional products, and augmenting physical with digital offerings.

What digital leaders do to rethink **operations optimization**



Harness technology for next level of efficiencies by using IoT and sensors to gain new levels of efficiencies that impact sales and customer satisfaction.



Anticipate and solve customer issues before they become critical through real-time monitoring of operations across a wide, dispersed set of end-points and use of predictive modelling to anticipate operational risks.



Automate processes to significantly increase quality and delivery speed, improve service levels, and efficiently manage people and assets to reduce operational costs.

What digital leaders do to rethink **employee empowerment**



Continuously develop the organization's digital skill level and productivity by focusing on optimizing the proficiency with new technologies and platforms.



Use data available from multiple digital sources to gain insights about your workforce and make informed strategic decisions related to optimizing the efficiency.



Establish digital platforms for open collaboration and communication to drive employee motivation, creativity, flexibility and ultimately productivity.

Grundfos

Case Study

To fully leverage digital transformation, Grundfos has taken a highly customer-centric approach in order to make all digital customer touchpoints simpler, more integrated and more effective. Realizing that their strong engineering capabilities are no longer enough to win in the market, the aim is now to transform the pumps from simple hardware to intelligent connected devices and thereby avoid the risk of commoditization and the threat of low-cost suppliers. Collecting vast amounts of data through sensors and connecting their solutions, Grundfos will be able to gain benefits in three main areas.

'We are world champions in hydraulics, but the truly challenging aspect of product development is thinking beyond the pump'

First, the vast amount of data collected enables constant monitoring of the use and performance of each solution, making preventive and predictive

maintenance as well as other services a possibility. In the future, pumps might even be able to order their own spare parts, lightening the workload for the user, while ensuring that the entire system keeps running.

Second, the digital transformation of the products enables entirely new business model opportunities that customers can choose from. One example is performance-based contracts, where customers would pay for the benefits and business impact of the products and service that Grundfos provides.

Finally, the vast amount of feedback from products can be used in the design and manufacturing processes going forward, to the benefit of the customer.

'If we do not build an intelligent setup around our pumps, others will. We have to integrate this in our solutions to remain a premium brand'

GRUNDFOS 

Digital transformation has different meanings for different companies. Grundfos has chosen to focus most of their attention towards augmenting their traditional pump solutions with digital value-added services. By improving the offering with services like predictive maintenance, and simultaneously offering entirely new business models, Grundfos aims to remain a leading brand globally and avoid commoditization and the threat of low-cost competitors.

About Grundfos

Grundfos is a full-range supplier of pumps and pump solutions for the global market. With more than 18,000 employees and an annual production of approximately 16 million pump units, Grundfos is in many respects the global leader in pump solutions.

How?

We get down and close with the business leaders on an operational level.

How they approach the uncertain when stepping into uncharted territory. How they optimize their current business while at the same time preparing their business model for disruptive forces. How they mobilize and motivate their current workforce while investing in technology platforms that potentially make it obsolete.

We take a closer look at how they crack the digital nuts and solve the dilemmas related to balancing the old and new economies. Welcome into the machine room of digital transformation.

Identification and Scoring of Seven Key 'How' Capabilities



Danske Bank

Case Study

There is no doubt that the digital age is already affecting banking and will continue to do so in the future. Products and services such as Bitcoin and peer-to-peer lending will continue to put traditional banking under pressure. Danske Bank realized early that they had two options – either to sit around and wait for the disruption, or to embrace it. Building on the great success of the payment application, MobilePay, Danske Bank created MobileLife as an independent innovation unit.

The idea behind MobileLife is to go narrower but deeper than MobilePay by focusing on major life events rather than simple transactions. However, the unit does not aim only to develop an app or a digital platform. Instead, the aim is to come up with truly disruptive solutions, while remaining customer centric. Being a largely independent unit, MobileLife is not only meant to challenge the industry, but also Danske Bank itself.

A key success factor for MobileLife is to strike the right balance between banking and innovation. To move the bank in the right direction, the management saw it as vital to maintain a strong link towards the bank's current business model. However, to foster innovation, it was also necessary to separate MobileLife from the traditional and somewhat conservative culture of the bank.

This balance is e.g. reflected in the employees' backgrounds. Approximately half of the 60 people working in MobileLife are from Danske Bank, while the remainder bring new and different perspectives from other industries than banking. Combining the best of both

worlds, MobileLife is able to leverage the agility and risk tolerance of a startup, with the muscle, brand equity, and competencies of a major company.

'To innovate, it is necessary to separate the work from the traditional environment and combine it with new ideas and energy'

'As a bank, we have two options: We can either stay where we are and worry about what will happen in the future. Alternatively, we can try to embrace the development. We have chosen the latter'

Danske Bank

Inspired by both Google's special innovation department 'X' and lean startup companies such as Spotify and Netflix, Danske Bank established MobileLife to meet the disruption in banking head on.

The mission of MobileLife is to create a virtual banking space than can handle not just everyday transactions, but also the major life events that require bank interactions.

Its first innovation, 'Sunday', is a digital platform helping customers both search for homes and obtain a purchasing permission online.

About Danske Bank

Danske Bank is the largest financial group in Denmark, servicing private retail customers, companies, and institutional clients across Northern Europe. In addition to traditional banking, the Group offers services such as mortgage credit, pensions, and leasing through subsidiaries like Danica Pension, Realkredit Danmark, Nordania Leasing, and Home.

Capability 1:

Digital Leadership

'Executive sponsorship and digital leadership' is most important - but apparently no easy task

Leading Practice

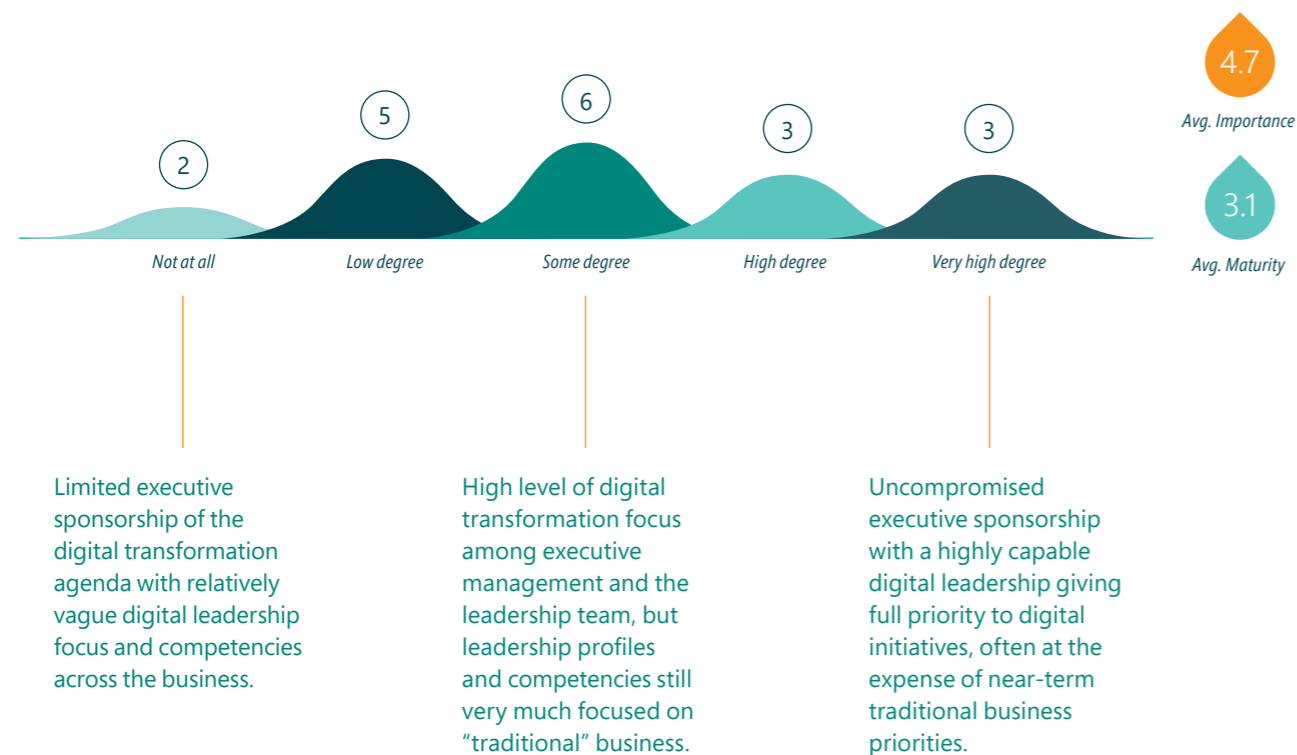
Uncompromised sponsorship from executive management that owns the digital transformation agenda. Leadership takes responsibility and is held accountable for the transformation speed and impact, and takes part in driving and securing the progress of digital transformation initiatives both personally and through dedicated, next-level leaders with digital leadership competencies.

How?



Digital Leadership

To what degree do you have executive sponsorship and broad, capable digital leadership of your digital transformation agenda?



'Having a clear and strong sponsorship from the top executive management and a dedicated owner who takes responsibility of the agenda is the first step, and a key part of succeeding with the digital transformation'

— GRUNDFOS

Perhaps it comes as no surprise that for the many business leaders we have spoken with, the most important driver for digital transformation is uncompromised sponsorship from the executive

and taking part in driving and securing the progress of digital transformation initiatives – both in person and through dedicated, next-level leaders with deep digital competencies.



Most, if not all of the interviewed companies, signal that their executives have the right intentions. However, many report that those in charge are not quite as firm when it comes down to 'putting their money where their mouth is'. Many executives tend to have difficulties in staying the course when met by conflicting, short-term profit goals and long development goals.

management. This ideally entails getting the CEO in a lead role, setting an ambitious digital transformation agenda, taking ownership of the key priorities,

Even if CEOs and their executive peers have the stamina and display the necessary hardship when it requires risk taking and stepping into uncharted territory, a large challenge seems to lie in finding and developing next level leaders that combine deep industry insights and hands-on digital expe-

'Managing and running the existing and day-to-day business is not the same as defining the future of that business, and then execute on it. In our experience, the two tasks typically speak to two different profiles and people'

— EGMONT

How?

rience. Although most companies recognize the need for leaders that are both conversant across the current business and digitally diligent, having such leaders is in practice more often the exception rather than the rule.

The highlighted characteristics of the leadership type that is sought after covers both the ability to understand the intrinsics of the business they

operate *and* a visionary, daring mindset and experience with digitalization. The latter includes understanding the new ways of working, identifying the competencies necessary to build digitally minded teams – and establishing the culture to attract these – and having a doer attitude necessary to succeed in an environment where speed of change is inevitable and increasing.

Recipe for Success:

- Executive sponsorship is king – ensure full and strong executive sponsorship as a starting point for your digital transformation journey
- Digital leaders are a new breed – put effort into employing the right profile(s) to spearhead and run the digital transformation execution in your organization

Capability 2:

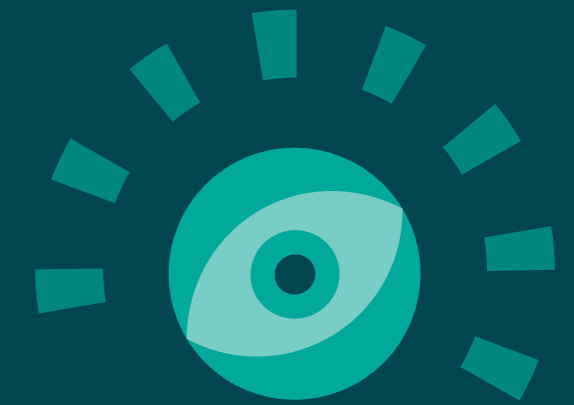
Functional Clarity

Digital resources deployed close to customers for speed and agility and a coherent agenda articulated centrally

Leading Practice

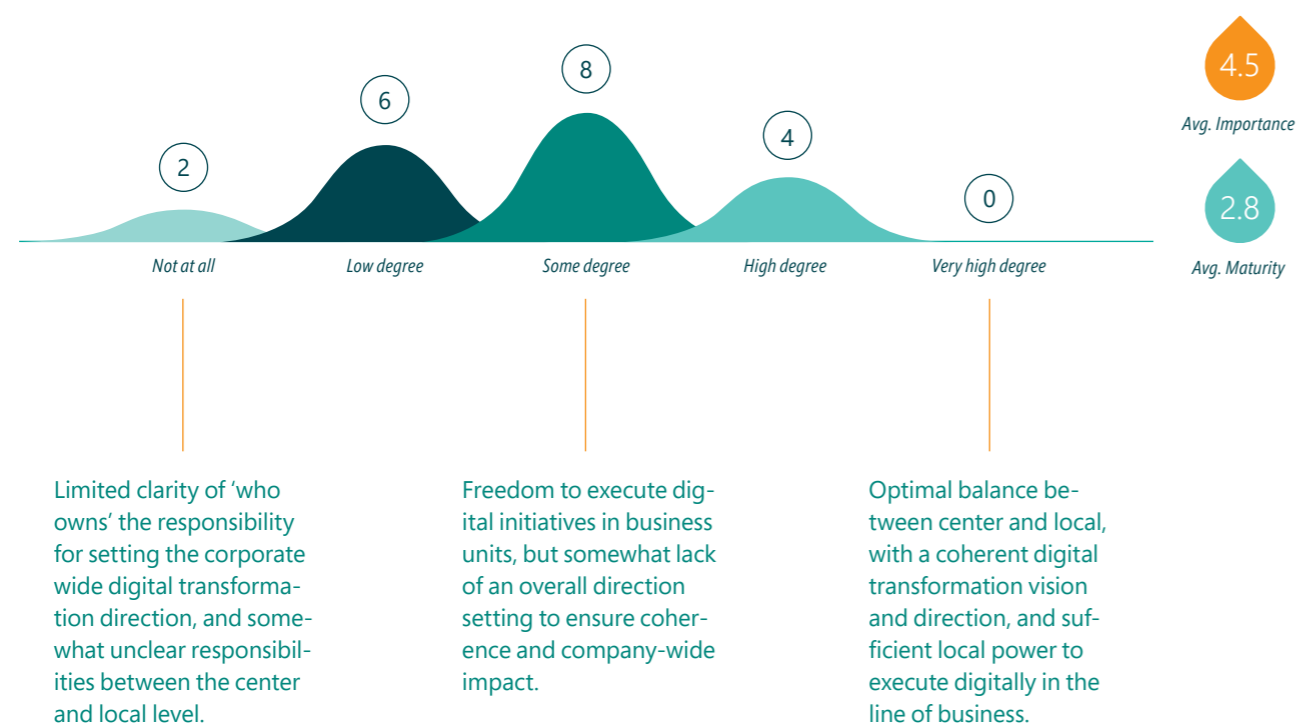
Both a very clear functional responsibility for articulating a company-wide, coherent digital transformation vision, with clear direction and strategic priorities, and strongly mandated responsibilities for leading and executing the operational digital initiatives in the line of business to ensure agility, speed and execution power.

How?



Functional Clarity

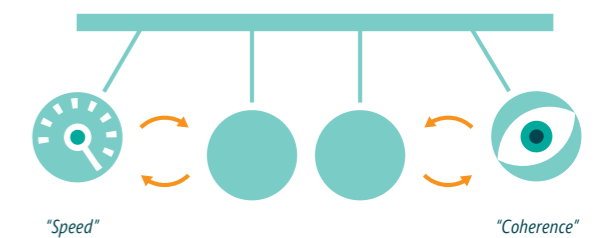
To what degree do you have clarity of the functional responsibility for articulating a company-wide direction and for executing operational digital initiatives to secure agility and speed?



'The digital transformation must happen both centrally and decentrally. Centrally, we set direction, launch initiatives, and build capabilities, while the units need to think more about new needs, offerings, and business models'

— GRUNDFOS

There seems to be an almost pendulum-like evolution over time regarding how to structure the digital transformation responsibilities and mandates, and where to place which responsibility in the company. Typically, the pendulum starts with a primarily decentralized approach, with the majority of resources deployed close to the customers, in the business units, with clear decision and execution mandates.



As digital platforms increasingly become a vital part of the core business, and the company has experienced some challenges in relation to securing a coherent and efficient company-wide digital approach, some choose to establish separate digital innovation units, as is the case with Danske Bank Mobile Life and LEO Innovation Lab. Others, such as TV 2, have created a Chief Digital Officer position as part of the executive team, while Grundfos has a Head of Digital Transformation with CEO reference.

The function most likely to have the Group-wide charge for digital development in this study is the Corporate Strategy function. In 11 of the interviewed companies, the business responsibility for digital transformation resides with Group Strategy or Group Business development, while the Group Commercial function is responsible in another four cases.

'So far, we placed a lot of responsibility for digital close to both our product development and our channels, including our ecommerce. We believe this helps us stay agile'

— PANDORA

How?

In terms of setting up a dedicated digital transformation unit, either as its own function or as an autonomous unit, the aim is typically either to secure speed of execution through focus and dedication or to ensure that initiatives with high uncertainty

that require a certain mindset, mandate, capabilities, and/or ways of working do not get blocked by corporate norms.

Recipe for Success:

- Digital Transformation Maturity Outset – Assess your digital transformation maturity, including people competencies
- Digital Transformation Direction (What to Do) – Define who should be responsible for the direction (what to do) – decentral vs. central direction: Assess need for central direction (i.e. need for push if people do not do it themselves and/or if need for corporate coherence on the direction vs. need for exploration of opportunities from people close to the market)
- Digital Transformation Execution Setup – Define your execution setup. Distance from initiatives to regular business/operations dictates need for decentral (BU) execution vs. execution in dedicated DT initiative unit (need for coordination vs. execution)

Vestas

Case Study

Vestas' digital transformation agenda focuses on three main areas. The first is to address the automation of key business processes, such as payments, in order to increase efficiency. The second focus area deals with leveraging customer and competitor insights, e.g. by using big data and game theory to sharpen the pricing and project portfolio of Vestas in a tender driven market. The third and final focus area relates to the massive amount of data obtained through sensors on the turbines.

This is seen as both the most challenging and potentially also rewarding area. Initially, the data was only employed internally (e.g. to determine when to deploy a service technician), but going forward it can potentially change the business model of Vestas. The turbine data along with Vestas' expertise enables Vestas to provide improved service for end-users, for example by advising on how to optimize performance and output. However, this

also leaves Vestas with a series of key challenges, such as how to commercialize these new assets and communicate the benefits to customers.

'It is all about leveraging our existing digital assets to make them relevant in the market, which requires completely different competencies'

The Vestas management are well aware that these new challenges require a new approach. The first step was to recognize that entirely new competencies are needed to succeed. In other words, there is an awareness that Vestas need to bring in people with a clear understanding of the difference between selling hardware and software. Additionally, a new process for development initiatives within this area is needed. Since this

in many respects is uncharted territory, a more explorative approach is allowed for projects within new offerings. Further, the assessment of the business case is less rigid, reflecting the need to improve significantly in this area in order to prepare for the market dynamics of the future.

'We now have sensors on every turbine that can send information about its performance and whether or not a breakdown is imminent. This helps prevent the loss of production from a failing turbine and the costs associated with monitoring, because fewer people now can cover close to 70 GW'

About Vestas

Vestas is a Danish wind turbine company involved in the development, manufacturing, selling, installation and servicing of turbines across the world. With approximately 22,000 employees and manufacturing sites on four continents, Vestas is one of the leading green tech companies on a global level.

Vestas®

For Vestas, there are several relevant aspects of digital transformation. Perhaps the most important aspect is the impact of new available data on the business model. By combining data from turbine sensors and their vast knowledge, Vestas will be able to greatly improve their service model and thereby improve customer and end-user relations. This is vital for a business that is increasingly reliant on services and maintenance. In order to succeed, Vestas focuses on bringing in the right competencies and adjusting their approach to development initiatives to match the added complexity and uncertainty of these new ventures.

'We should measure ourselves on how many people we have from eBay and Amazon, to see if we can attract people from companies that are 100% digital, and whether we can retain them because they think it's cool to be with us. If we hire them and they leave us again within 6-12 months, then we haven't learnt enough'

– ARLA FOODS

Capability 3:

Future Way of Working

Significant experimentation with startup practices but the corporate norm is still 'business as usual'

Leading Practice

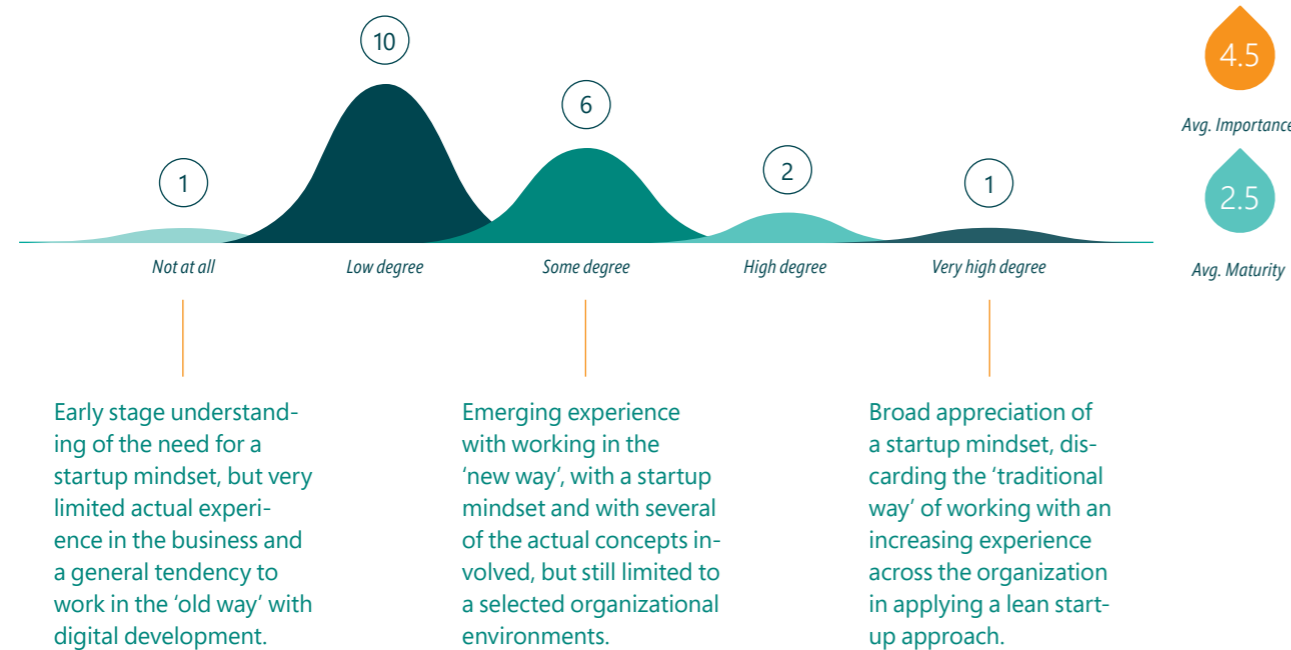
A startup mindset and methodologies are adopted into the corporate working practices, involving an uncompromised focus on customer (user) needs as the point of departure for development activities, and the application of the lean start-up approach, working with the concepts of minimal viable products, sprints, fail smart and build-measure-learn loops.

How?



Future Way of Working

To what degree is a startup mindset and methodologies (processes, tools, etc.) adopted into the relevant parts of the business (and corporate working practices)?



'I would not say we have mastered 'failing fast', but we are experiencing a tendency towards a more agile and iterative project management mindset where failing fast is accepted as part of learning'

— WILLIAM DEMANT

Inspired by emerging and successful startup challenges in many industries, new ways of working are generally gaining recognition among established companies. Since the beginning of the 21st century, the lean startup approach, rooted in the lean manufacturing methodology and particularly relevant in relation to digital transformation, has



become highly regarded both academically and by corporate front-runners such as GE, Coca-Cola, Cisco, etc. In contrast to traditional ways of defining and running projects, with 'big design' upfront, the lean startup approach is more explorative and iterative, and moreover often pragmatic. It is highly customer- and user-centric, and can be a very fast, smart, and agile approach for digital development

initiatives using concepts such as MVP, sprints, fail fast, build-measure-learn loops, etc.

The same recognition is evident among the respondents. All companies studied acknowledge the relevance and value of adopting one more of these new approaches and philosophies. However, the majority of respondents indicate a relatively low degree of experience with adopting new working practices in the operation.

Many are still in the early phase of articulating and trying out new practices in selected areas, most often via dedicated units or separated programs. Few organizations have solid experience and proven traction of adopting the methods into the broader organization and general working practices. However, some organizations have actually leaped to develop front-runner approaches and built separate innovation and incubation units in the name of hubs, hacks, garages, etc. Danske Bank and LEO Pharma stand out as two of the most exposed and well-known initiatives, but several other of the studied companies are starting to embark on creating similar setups.

'Everything is moving so fast that the implementation cannot last two years - by then a faster and cheaper solution will have been developed'

— ISS

How?

These setups work in sprints of maybe 1-2 months at a time rather than long development processes. Focus is on slicing the elephant, proving output, and moving on to do the next thing, rather than sitting around talking about what is not allowed by the external market dynamics. The way these functions work with the development process is characterized partly by being extremely customer shaped in the way they approach the pain or gain they set out to solve.

Further, the setups increasingly perceive their digital development as a portfolio approach, with a joint and established reference frame for the de-

velopment process, clear logic for which themes to invest in and which to let go, and firm processes for starting, driving, and closing projects.

Although the trend positively points towards building incubation setups and generously experimenting with new working practices inside and outside the companies, there are also cases with a more differentiated perspective on how and when to use this approach. One example of this is The LEGO Group, which on a general note is quite experienced in digitalization, but in this case urges to slow down sprints, etc., and apply them only in situations where it makes sense.

'We are trying to become better at making a lean startup approach. On the other hand, too much lean startup results in proliferation everywhere. You need to identify which pond to go fishing in, and make sure that it is in that particular pond that you are very lean and very MVP'

— THE LEGO GROUP

Recipe for Success:

- Identify business pains and gains that benefit from sprints and similar new working practices
- Ensure a talented cross-functional and multi-capable team with an exploratory mindset that can get things done
- Be pragmatic and seek short-term results by turning issues into outputs within weeks or maximum a few months

Capability 4:

New Competencies

New competencies are scarce and difficult to attract – but even more difficult to nurture and retain

Leading Practice

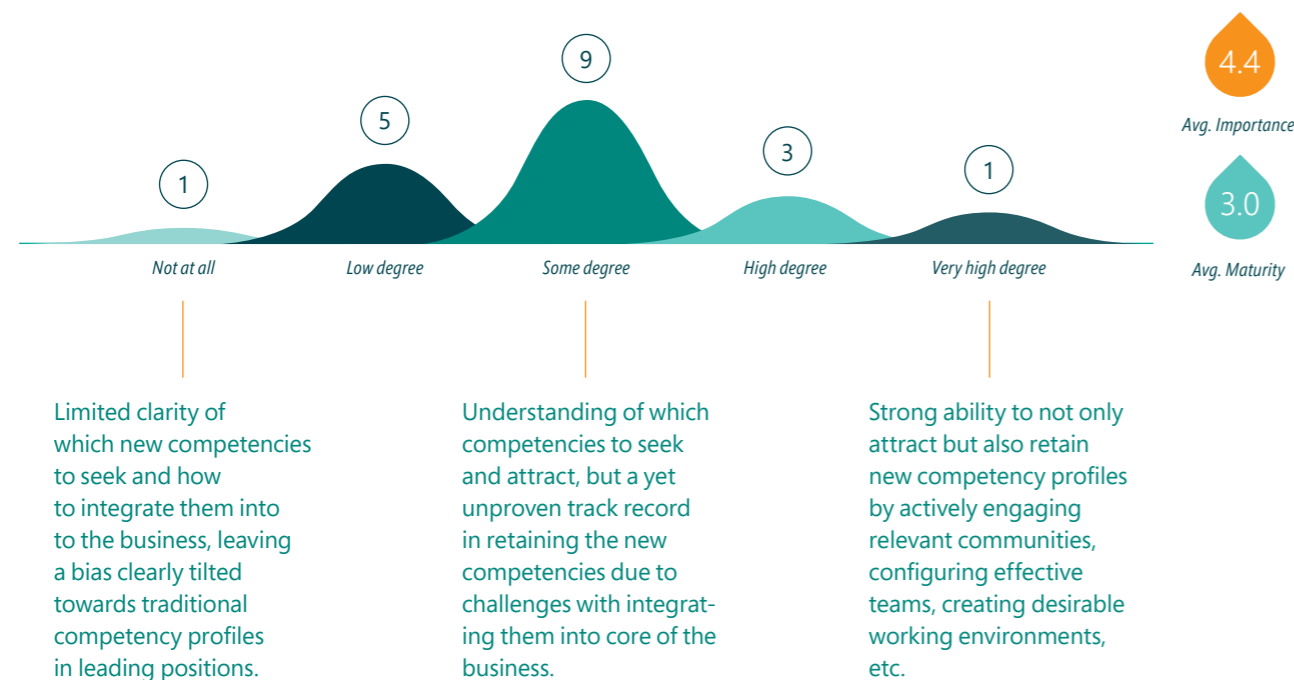
Strong ability to identify, attract, and retain new competency profiles, e.g. designers, anthropologists, tech developers, data scientists, entrepreneurs, etc., required to succeed with digital transformation – and to assimilate new competencies into the core of the business to create digitally enabled teams that combine and integrate new functional competencies and deep industry experience.

How?



New Competencies

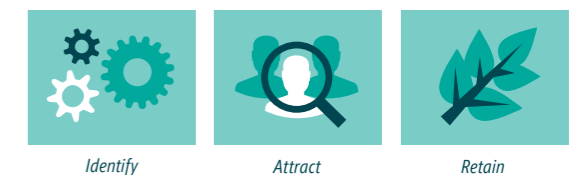
To what degree are you able to identify, attract, assimilate, and retain the necessary competencies to succeed with your digital transformation agenda?



The ability to identify, attract, and retain new competency profiles is perceived as being the fourth most relevant driver for achieving impact from digital. The competencies looked upon as most critical relevant from the various companies' point of view are quite diverse, reaching into domains such as design, anthropology, tech development, data science, commercial entrepreneurs, etc.

For the majority, the initial challenge is ambiguity, both in relation to what the new competencies are and what competencies are needed. The growing landscape of competencies and the distinct nature of the new ones increase the complexity of the task. Furthermore, as several participants are still not

The companies appear to be skilled in identifying and attracting new competencies, but less so in retaining and assimilating them into the core of operations, and integrating them seamlessly with the more 'traditional' functional and industry-related expertise. With only four companies assessing themselves as having a high or very high degree of success in both attracting and retaining new essential competencies, this a digital transformation driver with a large spread between perceived importance and current performance and maturity.



fully clear on the specifics of their digital transformation journey in terms of objectives, initiatives, processes, etc. it is difficult to know which new competency profiles to pursue.

The more mature respondents, who have managed to map the landscape and highlight the new com-

'It is very difficult to both attract and retain the new breed of required capabilities. Most think it is more appealing to work in smaller-scale companies or startups, with more room for new thinking and new ways of doing things'

— **NOVOZYMES**

How?

petency profiles most needed, point to a broad spectrum of data analysts and data scientists, human science profiles such as designers (UX, UI, etc.) and anthropologists, front-and back-end developers, and entrepreneurs as the most important new competency profiles.

Particularly data analysts and data scientists stand out as an emerging competency in extremely high demand. An increasing number of companies are starting to see data as a strategic capacity in itself, and are investing into capturing data from multiple sources - often without knowing how to put it into productive use and even less how to monetize it.

Generally, the supply side is currently falling short of the growing demand for emerging competency profiles. Additionally, the sought after profiles tend to value more liberal and non-established work settings and cultures, meaning the established

corporations not only fight over these against each other, but also against smaller-scaled companies and startups.

The challenge in relation to building new competencies lies with attracting them to the corporate environments, but maybe even more so in retaining them. Many companies are actively responding to the need for establishing more entrepreneurial work environments. Some, such as Danske Bank and LEO Pharma, have established separate innovation hubs, others again have created an incubation unit as part of the corporate strategy setup. Large exposure to executive management has generally proven to be an essential prerequisite for these separate units to ensure traction, given the uneven balance between maybe 10 people working with future ideas and many thousand people focusing on existing business.

'It is revolving more and more around addressing all the intelligence we have about customers and competitors to constantly become sharper in shaping and pricing our products, e.g. by using big data and working with a form of game theory when the market moves into auctions. Data will become the future in our business'

— VESTAS

Recipe for Success:

- Invest in understanding the possibilities of bringing new skills on board and map how valuable they are to the company (hire digital leaders who understand this)
- Decide which skills to have in-house and which to outsource
- Establish environments to attract and nurture new profiles, if necessary via independent units

Capability 5:

Adaptive Governance

Clear need for an agile governance model, but tendency to fall back when investments are significant

Leading Practice

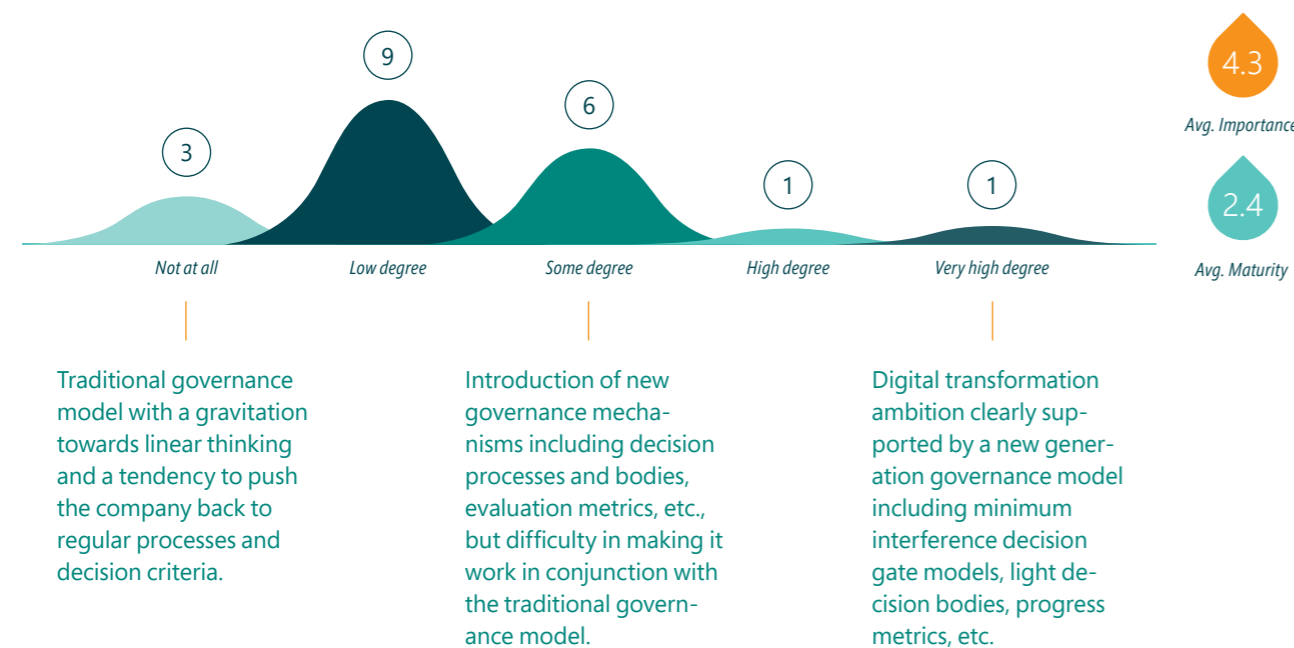
A governance model that supports the digital agenda and ensures that the company 'stands its ground' when facing tough prioritization dilemmas. This involves a governance that tolerates uncertainty and supports a more exploratory mindset and way of working. It includes a strong mandate to the people responsible for the digital transformation, decision gate models structured around the desired way of working with minimum interference, a light and powerful decision body, and the use of relevant evaluation and prioritization metrics for development activities focusing also on customer/end-user engagement and initiative progress.

How?



Adaptive Governance

To what degree does your governance model support the desired future mindset, new way of working, and agile decision-making process necessary to succeed with your digital transformation agenda?



'We are always reaching out externally to gather insight and best practice from others, e.g. venture capital funds and startup-related businesses, to see how they are evaluating more uncertain areas'

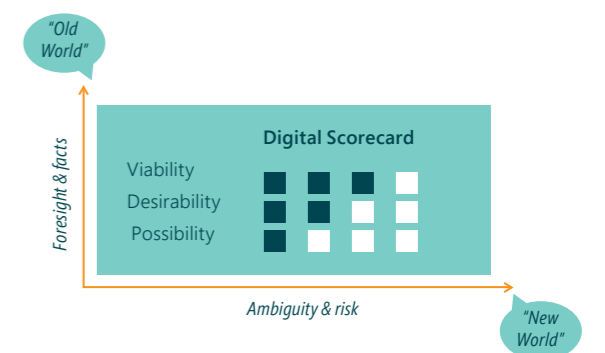
— EGMONT

Establishing a governance model and structure 'fit' for a digital world is the capability where the studied companies on average struggle most to get it right. Only two of the respondents score 'high degree' or 'very high degree' on how well their current governance model supports the desired future way of working to become a digital first business. Although most companies have a clear digital vision and have already embarked on multiple ambitious digital initiatives, there still appears to be a tendency to fall back to the more traditional governance model when assessing large-scale digital initiatives.

Where the traditional governance model tends to gravitate towards linear thinking alongside a tendency to push towards regular processes and decision criteria, the adaptive governance model is intended to respect the somewhat exploratory and iterative development process. This model generally includes less interference beyond the transparent decision gates, and applies a broad set of evaluation and prioritization measures that focus also on customer/end-user engagement and initiative progress such as number of solution releases, number of attempts (and even fails), rather than often tough-to-quantify top- and bottom line metrics.

The adaptive governance model aims at securing that the organization 'stands its ground' when faced with conflicting targets and uncertain business cases, as long as it is seeking value within themes that have been deemed strategically important to the organization.

Many experience that applying traditional business cases rooted in top- and bottom-line metrics such as ROI, payback time, etc. result in de-prioritization of potentially attractive digital opportunities. Traditional governance models often come with a risk-averse mindset that works against an exploratory process and the willingness to fail and learn from it. Consequently, the majority of the respondents acknowledge the need for adjusting or supplementing their governance setup as well as



How?

their evaluation- and prioritization metrics to better prepare for digital initiatives, particularly ones characterized by high uncertainty.

In terms of maturity, many of the participants are in the early phase of defining and testing relevant governance adjustments and metrics. Some are even reaching out to outsiders such as digital natives, venture capital funds and venture development firms, etc. for inspiration in this area.

Key focus in regards to adjusting other parts of the governance is to ensure that the people responsible for the digital initiatives have a sufficiently strong mandate that provides the necessary independence and management power to make things

happen in the right way and with the right speed. This includes the ability to leverage resources internally from various parts of the organization as well as external resources.

Despite the above new suitable metrics and governance adjustments, several of the even more mature companies in this respect highlight that there is often a tendency to fall back to the old mindset and traditional evaluations when one is facing dilemmas and needs to prioritize between initiatives. Consequently, it is very important that the governance principles and mindset are well anchored and bought into all the way to the top as well as horizontally across business functions and units.

'The ability to get started with initiatives step-by-step is a real strength of the lean startup approach. The analogy with two tankers and some speed boats fits us well, because we explore many areas without sacrificing too much. We initiate quick projects and dedicate additional resources if the results are intriguing'

— CHR. HANSEN

Recipe for Success:

- Establish the proper governance setup that ensures that the people responsible have the power to get things done in the right way and with the right speed
- Build metrics that determine progress and value to the customer, i.e. number of new customers that have been on-boarded, customer response and activation rate, etc. into the model
- Make sure people buy into the new solution, and hold on to it even when times are tough

PFA

Case Study

'The goal for our digital solutions is basically that they should help prepare the customers to make decisions about their pensions and long term savings – both through self-service and advisers'

In the eyes of many customers, retirement plans can be boring and complex. Customers often find it hard to make a decision regarding their pension, and their involvement is typically quite low. An obvious digital transformation opportunity for PFA is to leverage digital tools to change how customers are engaged.

As a response to the challenge, PFA has developed digital solutions that in a simple and intuitive way help customers get to the very core of the issue: Will I have enough money for my retirement?

One successful solution is 'Pensionstallet', a simple digital tool for dialogue allowing customers to estimate the share of their current after tax salary they will have available for retirement. Essentially, 'Pensionstallet' boils down the complex dynamics of actuarial finance to one

simple number, simplifying the decision process for the customer. To ensure the success of digital tools, PFA has prioritized making them available on mobile devices to meet customers where they are. As an example, PFA has created an app for Apple Watch, allowing customers to track retirement savings in real time.

Similarly, the personalized self-service solution 'Mit PFA' has resulted in a dramatically improved engagement and increased business volume through a larger financial involvement of the customers.

The success of PFA's digital initiatives is unquestionable. In addition to an impressive growth, PFA has won awards such as 'Digital Pension Company of the Year' and 'Best Digital Customer Solutions in the Pension Market'.

'It is extremely important for us to be relevant for our customers and meet them where they are – both regarding choice of platforms and their expectations'

PFA
PENSION

A key digital task for PFA Pension is to improve the way customers are engaged by turning a rather complex issue into something simple and relevant. So far, PFA has been highly successful with developing digital tools such as 'Mit PFA' (My PFA) and 'Pensionstallet' (Pensionscore), and making these available through all customer touchpoints, be it adviser meetings, digital platforms, or applications on mobile devices.

About PFA Pension

PFA Pension is Denmark's largest commercial pension fund. It was founded in 1917 as an independent company by a number of labor organizations, with the sole purpose of ensuring a financially secure future for the employees and their families. Today, PFA has approximately 1.1 million individual customers from a wide range of large companies and organizations in Denmark, and the ambition remains to create maximum value for customers by channeling profits back to them.

'We have hired a Chief Digital Officer as part of the executive management team. He is tasked with handling all our digital priorities, whether they relate to content, commercial objectives, or technology. We have to accept that content and commercial priorities often overlap'

'Our current task is to move enough resources and acquire new competencies so that we can redirect our focus and 'think digital' in all aspects of our business. This is no small task, because we are a large organization born with TV, but we are progressing well'

'It is the responsibility of the CDO to 'think digital' in regards to both technological investments and content. He has to be the one pushing the digital agenda throughout the entire organization, and thinking 'digital, digital, digital' in every single executive committee meeting'

– TV 2

Capability 6:

Two-Speed Technology

Companies balance predictability and exploration in multiple IT modes, but struggle with integration

Leading Practice

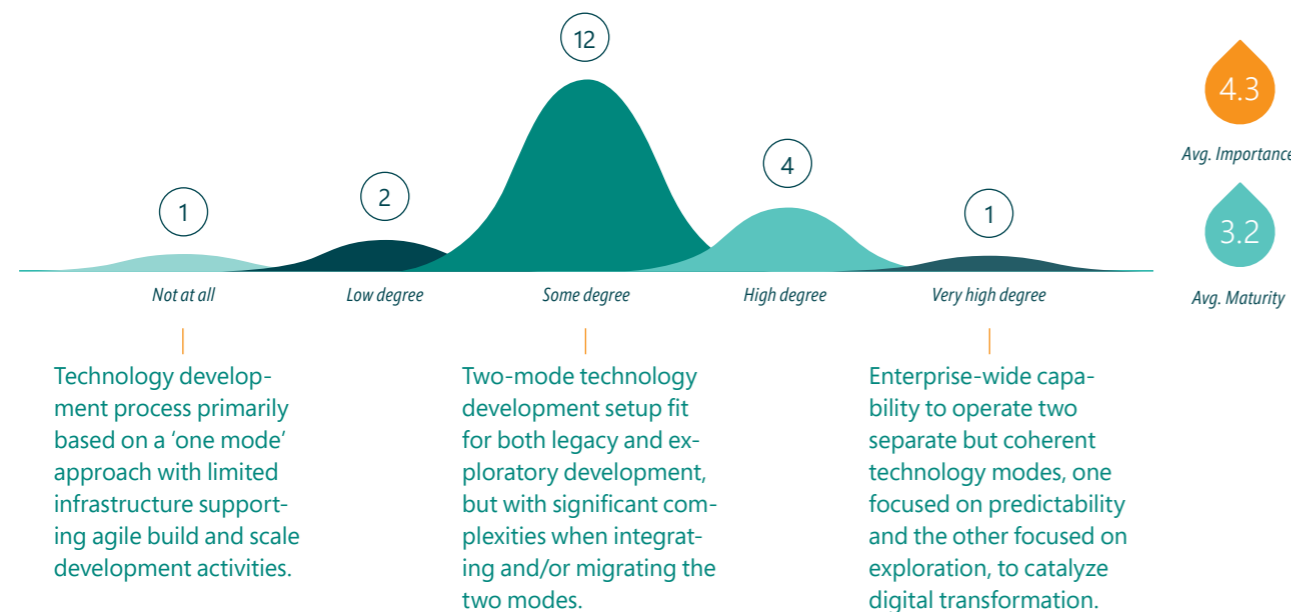
Two-mode enterprise technology capacity, with the ability to combine a predictable evolution of products and technologies with a new more exploratory innovative mode, to jointly catalyze digital transformation. Requires the ability to make the legacy environment 'fit for digital' and running a more exploratory mode fit for experimenting to solve new problems and optimized for areas of uncertainty. Will usually imply that exploratory development resources with front and back-end capabilities are separated from operational IT, despite additional direct costs and potential indirect integration costs.

How?



Two-Speed Technology

To what degree do you have an agile technology development setup that ensures fast tracking of build and scale development activities without compromising your operational IT?



Technology development process primarily based on a 'one mode' approach with limited infrastructure supporting agile build and scale development activities.

Two-mode technology development setup fit for both legacy and exploratory development, but with significant complexities when integrating and/or migrating the two modes.

Enterprise-wide capability to operate two separate but coherent technology modes, one focused on predictability and the other focused on exploration, to catalyze digital transformation.

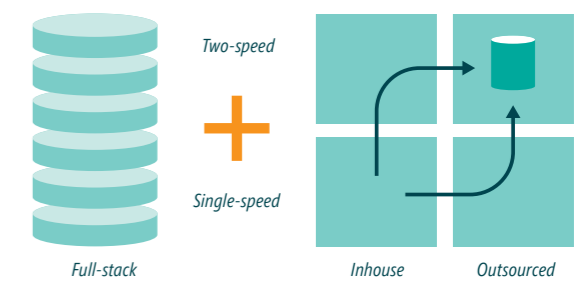
'We try running a two-speed IT development process, and it works as long as we work with front-end and in the higher parts of the architecture. However, if related to core systems and legacy platforms, everything stalls'

— TDC

'Running two-speed IT gives us agility and works great for initiatives of a certain size. However, once they grow and the need for integration to other corporate platforms and reaping synergies increases, two-speed IT becomes challenging and often expensive'

— EGMONT

The idea of securing an agile technology setup that enables fast tracking of building and scaling technology is a vital element of a successful digital transformation. This concept was prevalent among all participants. More specifically, all companies acknowledged the need for a two-speed technology setup, where one runs day-to-day IT operations and the other setup is dedicated to future development activities. The first works with traditional IT projects, e.g. updating and maintaining core IT platforms, whereas the purpose of the latter is to develop or scale technology solutions for business-driven initiatives in a more agile way, typically in sprints.



The majority of the respondents currently work with some version of a two-speed technology setup, and most consider themselves at least somewhat successful at securing an agile digital development process while at the same time effectively operating day-to-day IT. However, many put forward that they struggle getting their development-speed technology platform and environment sufficiently agile and capable.

Some companies responded that they increase agility by making the scope of the agile technology speed narrower and more specialized for digital transformation-related development initiatives. Others are improving the collaboration between the internal IT resources and business resources by organizing them in cross-functional teams, for example with people from marketing, product development, IT, etc. located together physically.

In addition, most also leverage external technology development resources to strengthen agility and to stay focused on their own core, non-technology activities. Working together with the right partners

How?

and knowing what tasks and responsibilities to outsource is often highlighted as a success criteria.

One of the frequently mentioned issues is the complexity related to integrating solutions and systems from the two technology development speeds. This is particularly prevalent when an organization sits on old core legacy systems that limit the agility when it comes to developing solutions that depend on integration to back-end systems and platforms holding transaction data, billing data, etc. In some industries such as healthcare, even regulation is a factor that can significantly put the brake on de-

velopment, in some cases even to the advantage of the incumbent that is used to operating within a given set of policies.

In spite of potentially missing synergies and other later integration issues, a couple of the studied companies try to solve the issue by developing a fully independent and separate technology unit, with proprietary back-end platforms, architecture, etc.

'We have split our IT efforts into two parts. One is very rigid and works primarily with our ERP system. The other works with business solutions and takes a far more agile approach, with small sprints and teams including both business and IT people'

— WIDEX

Recipe for Success:

- Run your IT at two speeds by separating the exploratory mode from the predictable mode, but take subsequent integration (e.g. to transaction data, billing, etc.) into account early on
- Create clear view on the development initiatives to be undertaken and prioritized, and keep a close and strong collaboration between the developers and the business
- Engage with external resources to outsource for agility and speed, and to keep the maximum focus on what is core to the business

Capability 7:

Open Collaboration

Emerging tendency to increase inspiration, strengthen delivery, and access new and exploratory business domains via open and collaborative ecosystems

Leading Practice

Clear acknowledgement that the organization should not, and cannot, do everything itself in the best possible way. Leading practitioners collaborate with digital natives and complementary resources in open ecosystems related to different phases and development activities for external inspiration, support, and to stay challenged. Among other things, this can involve running open innovation initiatives such as hackathons, accelerator programs, etc. and working closely with startup companies, venture development firms, academia on development activities, and/or to ensure a structured approach to continuously challenge the organization through external digital advisory boards, etc.

How?



Open Collaboration

To what degree do you leverage complementary resources in open and collaborative ecosystems to enhance your transformative capacity?



'To us it does not matter if we develop things ourselves or through partners. If there are areas where we do not want to, or are not able to, build things ourselves, we may collaborate with startups or others that have a service or offering that we can tap into'

— LEO PHARMA

Engaging with open and collaborative ecosystems enhances the digital transformative capacity. Leading organizations have an open mindset and collaborate with various types of external partners in many phases of development activities. They have a clear view of relevant ecosystems, communities and external partners, of the value they create, and of how to collaborate with them optimally.

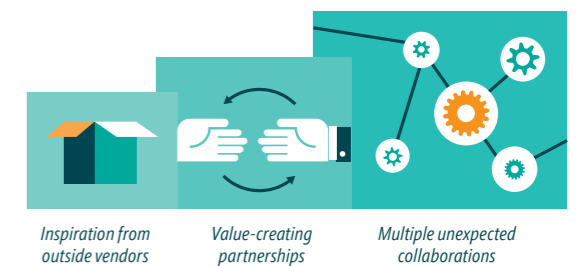
This is also the case among our respondents. Many perceive external collaboration as a key component to secure successful digital progression. The rationale is first and foremost that the respondents know they are unlikely to master everything, nor are they capable of employing all the best, relevant competencies internally. Secondly, they appreciate the flexibility and agility in leveraging externals, especially with digital advancements in terms of easy collaboration tools and much greater supply of qualified and specialized externals.

In spite of the good intentions, the majority of companies remain in the early stages. Most of the current external collaboration remains on the more traditional advisory level. Typically, collaboration takes place through advisory boards or manage-

ment consulting services, and often from people within the industry and/or with relatively similar profiles in terms of background, core competencies, etc.

Many are actively looking into the value and ways to leverage partnerships on a structured basis. Currently, this means spending time and energy on mapping and understanding the landscape of external resources and how one's organization can collaborate and benefit from these in the best possible way. Sporadic collaboration efforts exist, with various types of tests such as setting up hackathons, running small accelerator programs, etc.

Others are starting showing more commitment by working together with venture development firms and/or academia to allow them to help run the



How?

organization's development initiatives. This can for example cover initiatives in the organization's innovation pipeline that are furthest from the existing business.

A handful of the respondents leverage external networks on a more structured basis to challenge or help deliver on initiatives and projects. This involves structured use of ecosystems and communities that help from the early beginning of projects in terms of the problem and ideation phases to

developing concepts and products and testing them, as well as scaling solutions in the market.

The mindset is often very open, and there is usually transparency regarding work/ideas in progress. To some, the only requirement is that they own the data. We experience that the leading organizations collaborate within a number of areas, including anthropology, design, front- and back-end development, data science, growth hacking, etc.

'We talk a lot about it, and have a few things in place. Generally, we would like to have more and work with it on a structured basis. We have run different initiatives, e.g. one where we engaged in dialogue with design institutes, academia, customers, digital natives, and entrepreneurs, to get their perspectives on digital opportunities in our industry'

— GRUNDFOS

Recipe for Success:

- Get engaged – understand what is out there and how to leverage it to seek value in new domains that are currently difficult to reach
- It does not matter whether you develop internally or through partners, the importance is to continuously get things done
- Have an open mindset and challenge yourself

Conclusion

Engaging with C-suite executives that lead the way in digitally transforming the largest Danish companies has given us a thorough understanding of what they do to digitize their businesses, how they approach an uncharted digital territory - and of their maturity in adapting to a digital-first world.

Why?

With 18 of 20 companies having digital as one of the main executive priorities, we can affirm that digital transformation is at the top of the executive agenda. However, despite the hype about new business opportunities derived from digital technology, only a small number of companies significantly focus their digital resources on adjacent or new business areas. The primary focus is still on the core.

When looking at the maturity of the enterprises across four phases, most of them are still in the early stages of their digital transformation when measured against global digital-first benchmarks – the phases referred to as 'Mobilized' and 'Incubated'. Only three of the companies score their maturity as being in the 'Accelerated' phase, and no companies assess themselves as being in the 'Integrated' phase - the most progressed phase on the Digital Transformation Maturity Curve.

What?

'Engaging your Customers' clearly emerges in both quantitative scoring and qualitative statements as the most important of the four digital transformation domains. 'Transform your Products and Services', and 'Optimize your Operations' are perceived by the companies as being less important when assessed for digital impact. Perhaps surprisingly, 'Empowering your Employees' receives the lowest priority by far.

How?

The digital world may be fast paced, but some things seemingly never change. 'Digital Leadership', defined as an executive sponsorship with a highly capable digital leadership team giving full priority to digital initiatives, often at the expense of near-term traditional business priorities, came out as the most important transformation capability.

The second most important capability is 'Functional Clarity', referencing the structure of responsibilities and mandates related to the digital transformation process, followed by 'Future Ways of Working'.

Many companies struggle with 'Adaptive Governance', the degree to which the company's governance model supports the digital transformation agenda. 'New Competencies' and 'Two-Speed Technology' are key digital transformation capabilities where the companies feel slightly more mature.

Least important at this stage among the transformation capabilities is 'Open Collaboration', referring to the collaboration with external partners in open ecosystems. While many companies do make use of initiatives such as hackathons and accelerator programs, we found that there is still a large group that operates in closed environments and tends to apply a sourcing approach to external vendors.

Thank you

Digital leaders benchmark against the best. We thank the digital pioneers among Danish companies for giving us valuable insight into their work with digital transformation, so we can learn from their experiences.

Contributors

The Digital Transformation Report 2017 is developed by Microsoft and QVARTZ.



About the Authors

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Thomas Holm Møller has lately co-founded BOX, a Business Ideation Company that specializes in building and scaling new digital ventures and growth-stage businesses.

About QVARTZ

QVARTZ is a top-tier management consulting company with offices in Copenhagen, Stockholm and Oslo, working with top level management in leading Scandinavian companies.

Jens Friis Hjortegaard heads up the Digital Transformation Practice in QVARTZ and the partnership with Microsoft delivering digital strategy and transformation projects to clients.

About Microsoft

Microsoft has commissioned the report and selected frameworks in the report are based on Microsoft's approach to Digital Transformation.

Microsoft is a global leader in digital solutions, helping the world's largest companies to succeed in complex Digital Transformation journeys. Nana Bule is COO/ CMO in Microsoft Denmark, and leads the unfolding of Microsoft's digitization strategy and approach in the Danish market.



Digital
Transformation
Report 2017

