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Accenture Management Consulting

A large, blue, stylized chevron graphic pointing to the right, positioned behind the text.

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A series of white and purple circles of varying sizes, connected by dotted lines, scattered across the background.

Every business is
a digital business
—is mine?

Accenture research on Finnish
businesses and organizations,
January 2014





Being digital is no longer an option, but critical to any business

In the fall of 2013, Accenture interviewed more than 130 executives from the 40 largest Finnish companies and public organizations to create a better understanding of the impact of digital in different industries. We were surprised both by how important traditional industries already consider digital as well as the anticipated acceleration of change in industries where digital already plays a critical role.

It is not surprising that digital is probably the most important management theme in 2014. Industries and value chains change so rapidly due to digital technologies that no company or organization is unaffected by the revolution. The question is no longer whether organizations should do something regarding digital. The issue is much more complex—WHAT should they do?

This question prompted us to research what digital means to Finnish companies and industries. The research was conducted in the fall of 2013 by interviewing more than 130 executives from large companies and public organizations in Finland. Results confirm that digital is, across all industries, no longer an optional activity, but rather a critical success factor in competing for and meeting customers' expectations. This is not so surprising in industries where digital

has been around for some time, such as in banking and telecommunications. However, we were surprised by:

- the breadth of the expected change affecting industries which are already digital, and
- the importance of digital as a success factor in traditional industries.

Views on the impact of digital on one's own company and industry

"A prerequisite of success —without intelligent decision-making and insight, real business is not possible."

Service executive, heavy equipment

"Although the industry has already digitalized, the big surge is only just coming."

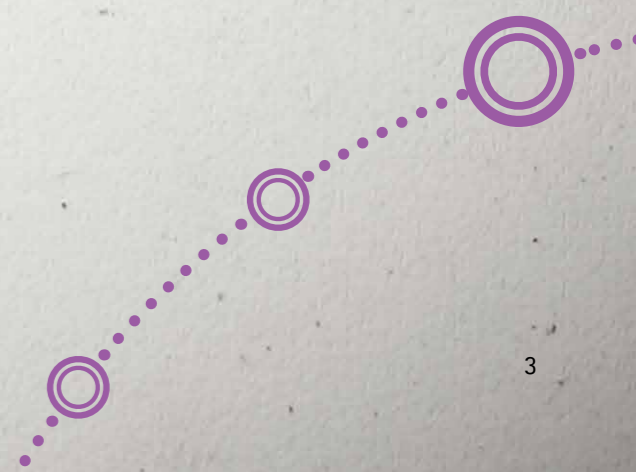
Executive, banking

"If you don't invest, you lose the business... there is no other choice."

Chief Information Officer, insurance

"The consumer interface has changed and we must keep up... The challenge is the profitability of the operations, does anyone make money with this?"

Leadership team member, retail



Finnish companies and organizations have had to face the fact that investing in digital is necessary for their existence. Digital cannot be confined to the IT department, to product development, or left as a side note in the company strategy. The influence of digital penetrates the company, from the customer interface to the supply chain and internal operations.

The change is already visible in the majority of Finnish companies. Among all respondents, 76 percentage said that

digital has already changed their products and services. The change is most visible in consumer-facing companies and in the public sector. The current impact of digitalization is slightly lighter in B2B companies, but they plan to catch up with the consumer-facing companies in digitalization within next three years.

The rapid progress of digitalization is driven by changing customer expectations. According to the interviewees, these expectations are not based only on Finnish

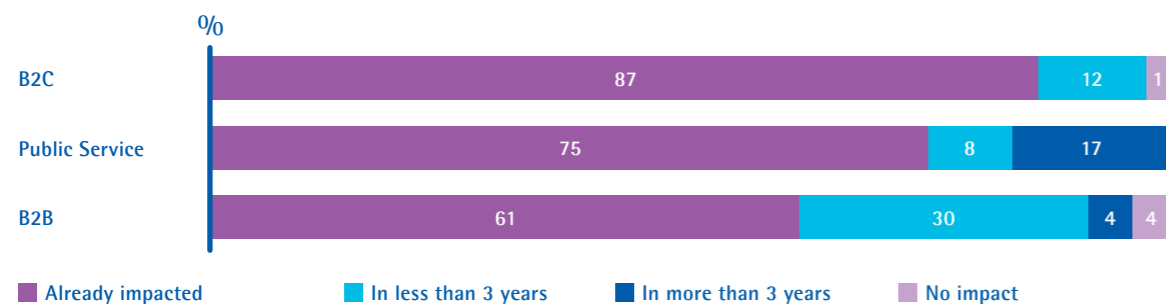
businesses or single industries, but they originate from customers' experiences with global digital pioneers. In other words, customers already expect Finnish companies to operate on the same level as world-class players.

In newer industries, companies like Supercell have already made a breakthrough by digital means. Accenture also sees great potential for Finnish companies in the more traditional industries to become winners in the digital revolution.

The research results show that the only way to survive the revolution is to create a clear vision of the impact of digital on your company or organization and to effectively deploy this vision.

What does your vision look like?

When is digital impacting your products and services?



Which organization in your industry do you consider to be a pioneer in leveraging digital?

"The aviation and automobile industries are pioneers that have managed to generate business around information."

Chief Information Officer,
equipment manufacturing

"Google created the entire market. Apple charmed consumers with its end-user experience. Finnish banks and insurance companies have advanced fairly well in making digitalization possible with well-managed customer information."

Executive, telecommunications

"The tax administration has done a good job in directing citizens to digital services."

Executive, pension insurance

Digital reworks industries, ecosystems and value chains

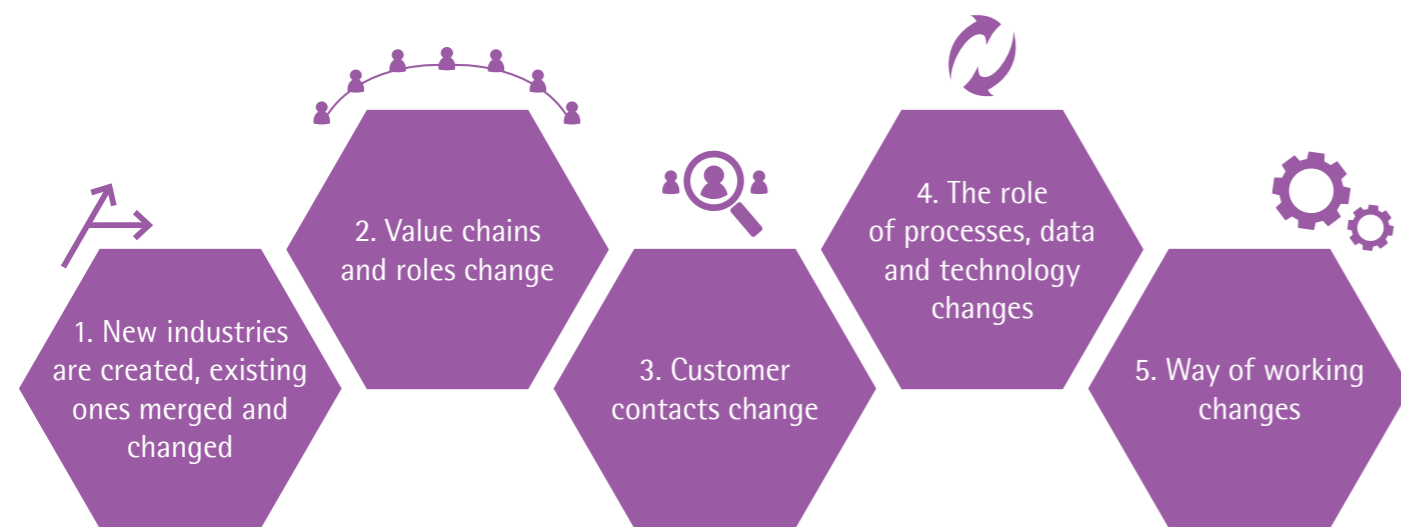
Digital destroys, merges and creates industries. It also changes value chains and forces players to adopt new roles. Successful planning for digitalization requires understanding customer processes and behaviors as well as customer experience and potential ecosystems.

According to the respondents, digital will affect all industries and blur boundaries. For example, the roles of telecommunications operators and traditional media companies are changing as operators expand their offerings into content distribution. The traditional media is not facing pressure only from the operators, but also from international social media and electronic media giants who are expanding their services. As one media industry executive says, "Google, Facebook and LinkedIn are already in the media game, but they play by different rules. Traditional media is regulated by the Council for Mass Media in Finland, among others."

Banks and insurance companies are also crossing industry boundaries. "New sources of income can be found in the extended value chain, health, safety, and so on," says an executive in banking.

Digital ecosystems are emerging as a key trend in many industries. In this context, an ecosystem refers to the value chains of several industries which together provide products or services for end customers. For example, the entertainment services of a telecommunications operator require both the Internet service provider and content production value chains.

When optimizing digital ecosystems, value chains typically shorten and the traditional roles of distributors shrink as digital channels enable a direct connection with end customers. For example in energy production, even remote-controlled power stations could become possible. Then the role of the electricity distributor would be reduced to simply selling and distributing electricity, while suppliers would operate the facilities as a service. By contrast, a central value chain theme in retail is a way to combine suppliers and buyers in different ways, and not only sell from your own warehouse.



"Most significant is where the value for customers is created. This no longer takes place within one industry."

Executive in charge of digitalization, banking and insurance

"The ecosystem is important. Several partners want access to our customer base. Maybe something new can be found there."

Executive, retail

Digital offers substantial opportunities, but it is difficult to find the right role and make the required investments

Retail and financial services report a focus on growth generated by digital channels, whereas process industries, heavy equipment and the public sector are concentrating on cost efficiency by digitalizing operations. Several industries in Finland are only now taking their first steps in the digital business, even though it may have the biggest impact on their business.

The change brought by digital is visible in different ways in different industries. This can be illustrated by placing the industry-specific views of the importance of digitalization (growth and cost efficiency) in Accenture's digital business framework.

Digital can create benefits for companies and organizations in three ways: through growth generated by digital channels, efficiency generated by digitalized operations, and through completely new digital business.

A company can seek growth from new customer groups and markets by deploying digital channels for the sales of existing products. Perhaps the most significant change is in the role of traditional sales, as consumers are increasingly moving their purchases online, especially in selecting and comparing products. This creates challenges for developing the current sales organization and further blurs the boundary between marketing and sales.

Nevertheless, scaling only revenue will keep the existing cost and margin structure of current products unchanged, limiting the opportunities for increasing the operating profit. The operating profit can be scaled more efficiently by using the other two

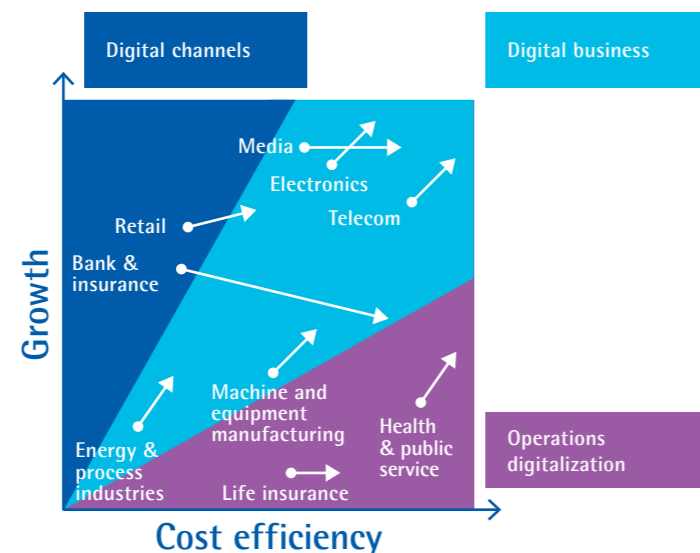
means mentioned above: by growing cost efficiency through digitalization of operations, or by introducing new products and services with a higher margin by means of a digital business.

Based on the research, there are no industries in Finland that would pursue

improving profits generated by digital growth only. The one closest to this was the electronics industry where digital was an extremely important generator of growth for 91 percentage and an extremely important factor for increasing cost efficiency for 64 percentage of respondents.

Accenture's digital business framework

Our view of the current situation and development direction of different industries



"Digitalization kills the salesman."

Leadership team member, finance industry

"The revolution will be enormous, a lot bigger than is expected. It will mean changing operations at all levels—not just digital channels but all processes and products."

Chief Information Officer, insurance

The traditional industries in particular report a focus on the digitalization of operations, including for example the pension insurance, industrial equipment manufacturing and energy and process industries. For example, in the pension insurance field, 89 percentage of respondents considered digital to be an important driver of cost efficiency, but only 44 percentage saw it as an important generator of growth. Correspondingly, in the energy and process industry, 60 percentage of respondents considered digital to be an important driver of cost efficiency, and only 40 percentage saw it as an important generator of growth.

The digitalization of operations has developed quickly in recent years. *Wärtsilä*, for example, already has the capability to remotely gather a vast amount of sensor-based data from ship engines and, based on the data and insights, help customers optimize the use of engines, fuel consumption, and emissions. The next challenge is making use of the data more widely and finding the right commercial service concepts and business models.

Michelin Solutions is changing the business model of tire sales towards digital solutions, offering services supported by digital technologies for tire management, vehicle productivity improvement, and increasing fuel efficiency. *GE Aviation* and *Accenture* have established *Taleris*, a joint venture which focuses on real-time analytics of aircraft jet engines, making it possible to optimize both flights and maintenance.

However, the greatest benefit from digital is gained in the upper right-hand corner of the framework, when developing *digital business*. This means bringing digital products and services to the market and changing the business models of companies. Based on the research, the telecommunications and media industries are most advanced in developing digital business.

Examples of potential retail business models in a digital environment include "affiliates" like *Amazon* or "brokers" like *DealDash* or *eBay*. A key opportunity for retail and media companies alike will be business operations around customer data, i.e. acting as an "infomediary."

The core business in insurance companies consists of risk assessment and building products around risk assessment models. For example, fully integrated sensors in buildings and GPS navigators in vehicles offer completely new opportunities on this front. Consumers carry with them an ever-increasing amount of sensors which gather data related to location, acceleration and temperature, as well as data related to distances driven and driving habits. Completely new insurance products can also be built around this information.

The impact of digital is faster and stronger for consumer-facing companies. Another factor in the importance of digitalization is the ability to digitize the current products and services in an industry. Common characteristics of "digital business" industries are a high

level of technology, the possibility to replace current services with services delivered over the network, and transactions that can be converted to digital. These opportunities are the clearest in banking and retail. For example in the heavy equipment and process industries, products are tangible and cannot be replaced digitally. In these industries, digitalization is rather realized by means of new services, improvement of current services, or in improving the cost efficiency of operations.

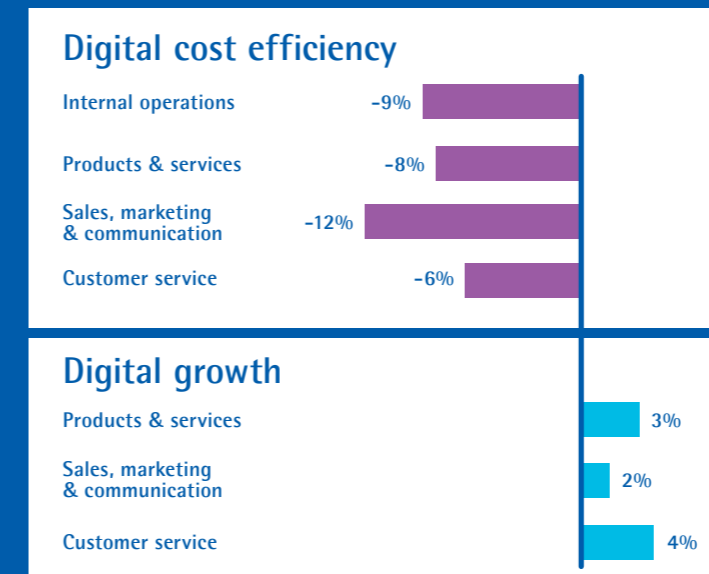
Examples of digital business models:

- **Digital affiliate** is a retail operator without its own inventories, such as *Amazon* ("buy new and used") or *Barnes & Noble*.
- **Digital broker** creates a marketplace for buyers and sellers, such as *eBay* or *DealDash*.
- **Infomediary** productizes customer data and makes it possible for parties other than the information collector to use it as well. For example, *Barclays Bank* is in the process of launching the sales of refined customer data to other companies.
- **Subscription-based digital business** brings continuous income from recurring product orders, such as in the case of *Nespresso* coffee capsules that can be ordered online.

"First we sought efficiency, then sales growth and increased efficiency in customer service. Additional sales by service technicians will be important in the future."

Executive, heavy equipment

In which of these areas will your company leverage digital more in the next years? (Percentage of respondents)



The focus of digitalization is shifting from cost efficiency to growth

In Finnish companies, the focus of digitalization is currently more on cost efficiency than on growth. However, in three years' time, the importance of growth will slowly start to increase.

Interestingly Finnish companies believe that the importance of digitalization in cost efficiency will decrease. This is surprising, since it is unlikely that the competitive situation would allow Finnish

companies to slow down their pace of progress. By contrast, growth is expected to rise ever higher on the agenda within three years.

Big data and analytics are next to change the world

SMAC (Social media, mobility, analytics and cloud) is changing the digital world map the most. Mobility is the most mature of these trends, and the majority of companies say its influence is already visible. The breakthrough of big data and analytics is expected to take place within the next three years. The results for both cloud and social media are divided between the industries. Some industries already see the full influence of these technologies, whereas some respondents do not believe that cloud and social media would have any impact on their businesses.

Mobility is the most mature technology trend

Based on the research results, mobility is the most advanced of the four digital technology trends. Among all respondents, 75 percentage said mobility has already influenced their business,

while the rest are expecting it to break through within the next three years. In the future, even more considerable cost savings can be achieved by digitalizing operations, not only through company-

wide mobile communication but also through remote services in field force management as well as mobile retail technologies.

Big data and analytics are on the verge of breaking through

Big data as a term and trend has existed for more than 15 years, but the opportunities are still extensive. This also illustrates the situation of digital more widely in Finnish companies—it is seen as important by everyone, but few know how to leverage it. The volume of information is not as important as how the analytics

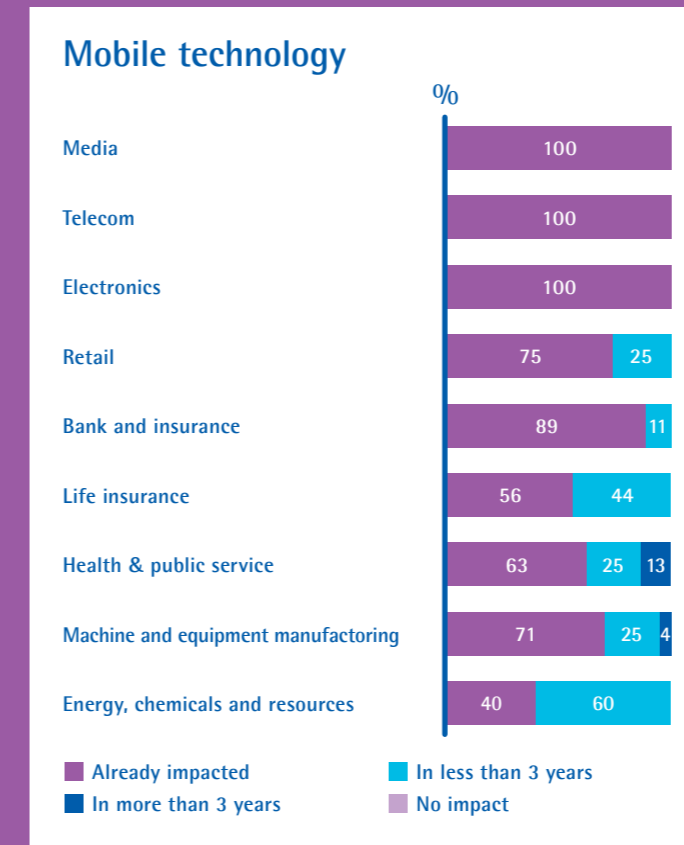
can help us to move from "what" and "why" to "what then."

Of the digital technology trends, big data and analytics currently have the least impact on industries, on average. Nevertheless, results indicate that the share of companies for which analytics is

important, will increase from the current 44 percentage to as much as 84 percentage within the next three years.

Industries close to consumers are the most advanced in making use of analytics. In these industries, 60 percentage of respondents said that the impact of big data and analytics is

When do you expect the following technology trends will impact your business?



already visible. According to an executive of a technology company we interviewed, "Big data and analytics are coming up fast, but leveraging them is yet not as advanced as the use of other technologies." An executive in the finance industry states, "We feel the pain with analytics, but there is no clear vision or pragmatic approach to it."

In the energy and process industries as well as in the public sector, the utilization of big data and analytics is in its infancy. In both sectors, only approximately 10 percentage of respondents think the impact is already visible. "Currently, our progress in analytics is slow, compared to the opportunities that exist," commented

one public sector executive. An energy industry representative even considers Finland to hold a leading position in the development of some analytics-related applications, such as making use of hourly metering of electricity consumption.

Large differences in the impact of cloud

Cloud utilization is progressing fast throughout the industries, especially in marketing, sales, and customer service functionalities.

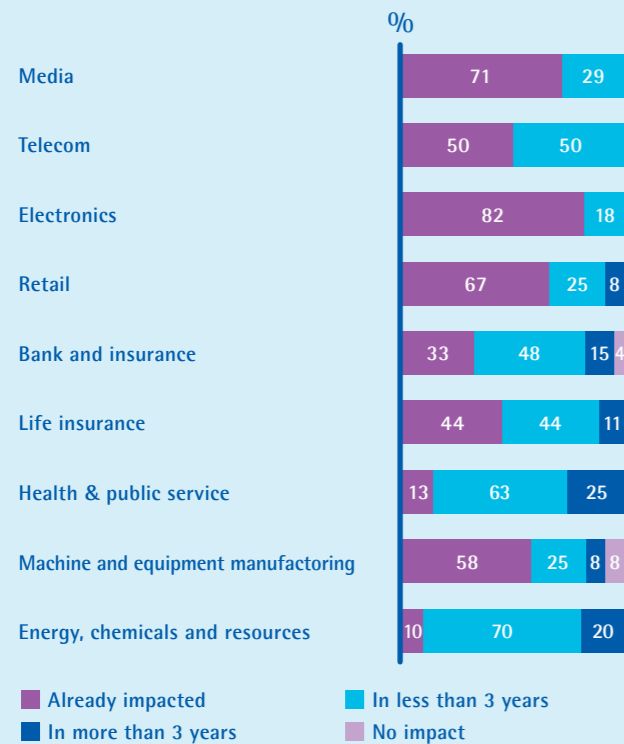
On the other hand, cloud is the only one among the four major trends in which

respondents of five industries think that this technology will not have an impact on their industry. The greatest uncertainty around cloud is in financial services, where some respondents did not believe cloud services would have any impact on their industry.

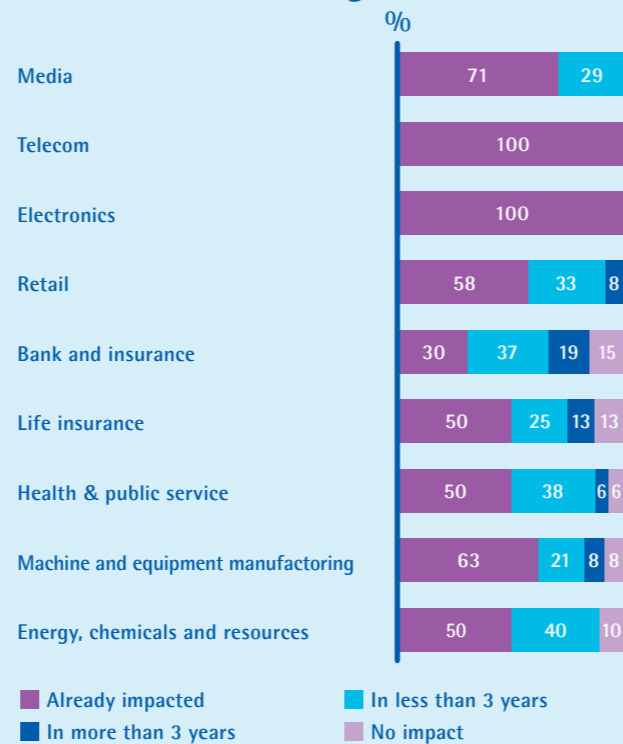
"Regulation sets the framework. Even if there was a clear business case [for implementing cloud], we must take into consideration the relevant authorities and compromises between efficiency, growth, and regulation," says a management team member of one bank.

When do you expect the following technology trends will impact your business?

Big data and analytics



"Cloud" platforms in sales and marketing



"Real time monitoring and preventive analytics help to identify failure-prone components and equipment."
Executive, heavy equipment

"We are in the initial stages of leveraging social media, but we are monitoring the situation."

Executive, equipment manufacturing

"Currently, social media is not leveraged."

Executive, insurance

Opportunities in social media are unknown

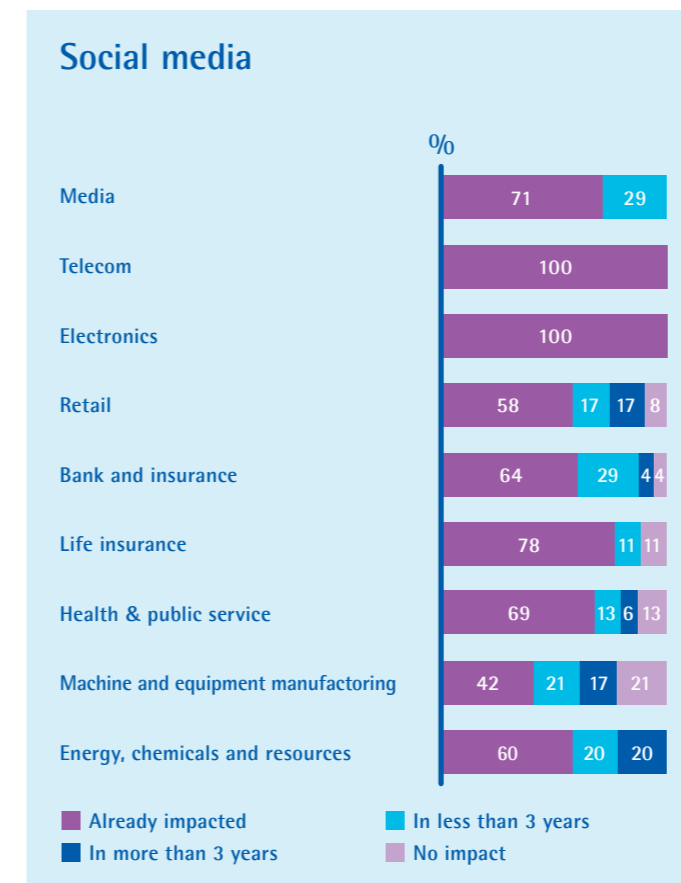
The industries we studied have considerable differences of opinion concerning not only cloud but also the impact of social media. In one extreme, the full impact of social media is already experienced in the electronics industry. On the other hand, as many as 21 percentage of respondents in equipment manufacturing think that social media will not have any impact on their industry. Based on the interviews, in

surprisingly many organizations, social media still means only Facebook.

As a summary, leveraging social media is progressing but the level of its applications is still modest. Accenture believes that utilizing social media will generate significant benefits already in the next few years—for example, through social CRM and recruiting. In addition to consumer industries, B2B

industries will also have potential to utilize social media. For example, shared problem-solving already makes it possible to share error logs or pictures of a broken device between technicians in factories in order to receive instant peer support.

When do you expect the following technology trends will impact your business operations?



Digital is a good servant but a poor master

Surviving the digital revolution requires clear vision on how digital affects an organization. The biggest barriers for development are budget constraints, decentralized and unclear ownership of digital as well as lack of digital skills. The majority of companies are planning to invest in the development of digital skills through in technology, external specialists, and training.

The organization must have a vision of how the digital revolution will affect its operations

At the turn of the millennium, Finnish companies were pioneers in utilizing technology, but since then we have clearly fallen behind. Local and Nordic competition is not creating a pressure for renewal, but contenders come from outside the national and industry borders. In the words of one telecommunications executive, "*Finland cannot afford to be in 'special education' class, and companies cannot afford to benchmark within their own industries only.*"

There are three alternative responses to the digital revolution in your industry:

1. Shape the future and be among the first to drive the change.
2. Adapt to the change as a fast follower.
3. Observe the change and reserve the right to play.

All three alternatives have their strengths and weaknesses, and they must be adjusted to the company's strategy and tolerance of risk. Nevertheless, one must be able to act fast when needed. Being a pioneer requires an ability to take risks and have the readiness to act even in the face of setbacks. For example, *Danske Bank* has been a pioneer in digitalizing banking and has proceeded systematically on its chosen path, even though initially digitalization has caused customers to leave and negative public attention.

Digitalization lowers national and industry boundaries and in many fields Finnish companies are exposed to international

competition in the domestic market. According to our research, many companies do look for role models abroad, but often are not fully familiar with the threat posed by global competition. For example, Finnish metal industry companies have yet to fully face global competition especially from China through digital channels. There is a danger that companies fall behind the emerging markets players who expand their operations quickly via digital channels.

Being a pioneer requires strong vision

Danske Bank is a forerunner in moving operations to digital channels. In recent years, the bank has invested considerably in the development of online, mobile and tablet services, with a specific goal of improving profitability by growing automation and digital services as well as closing down branch offices.

Digitalization has helped produce a considerable change in the bank's operations. Out of the original network of 100 branch offices, only 62 remain, and the bank is not planning to open new offices anymore. In 2013, the volume of cash services in branch offices decreased by more than 40 percentage and the volume of online bank logins increased by 100 percentage. In some areas, as many as 50 percentage of customer transaction now take place online.

However, many customers have switched banks due to the changes. In April to November 2013 alone, approximately 3,000 customers left Danske Bank. The chosen strategy may be taking the bank in the right direction, but it remains to be seen if the pace has been too fast.

Look beyond the industry boundaries and borders of Finland

Finnish metal industry companies consider digital to be a way of protecting themselves against competition from China and Asia. They typically list other Finnish and Nordic enterprises as the leading companies, and the expertise of Chinese companies in online trade is not well known. For instance, most of Boasteel's sales and customer service is already digital. Boasteel is the world's largest steel manufacturer. Ten years ago, everyone believed that China would never export metal to Europe. Finnish companies currently believe that digital channels will not be significant sources of income in the near future. There is a risk that Western companies will fall behind the fast movers from the emerging markets when it comes to digital.

Digitalization is held back by a skills gap and unclear ownership

Implementing digital operating models into practice is difficult. Only 1 percentage of respondents believe that there are no obstacles to their company's investments in digital. The greatest challenges listed were financial constraints, decentralized and unclear ownership of digital as well as the lack of skills required. Purely technical limitations were highlighted primarily in the comments of the pioneers, such as media companies.

Top management, middle management and experts have different views on

how digital should be addressed. Top management sees fewer obstacles to development than the lower organizational levels. Only in technical constraints does top management see more problems than other respondents. Middle management and experts consider problems to be more related to leadership and the organization itself.

Only 4 percentage of top management thinks a lack of commitment is holding back the development of digital skills, whereas 25 percentage of experts think top management is not fully

committed. At the same time, experts and middle management see that the decentralized ownership of digital within the organization is the most significant obstacle to development. This indicates that the commitment by top management does not always translate in concrete actions. On the other hand, management does not always see the challenges in execution.

Companies are prepared to invest in developing digital skills

The majority of researched companies and organizations invest in the development of digital skills by focusing on technology, external experts, and personnel training.

Among the respondents, all experts, middle management, and almost all of top management said their company was investing in developing digital skills.

Companies were prepared to invest, in particular, in technology, external experts, and retraining their current employees.

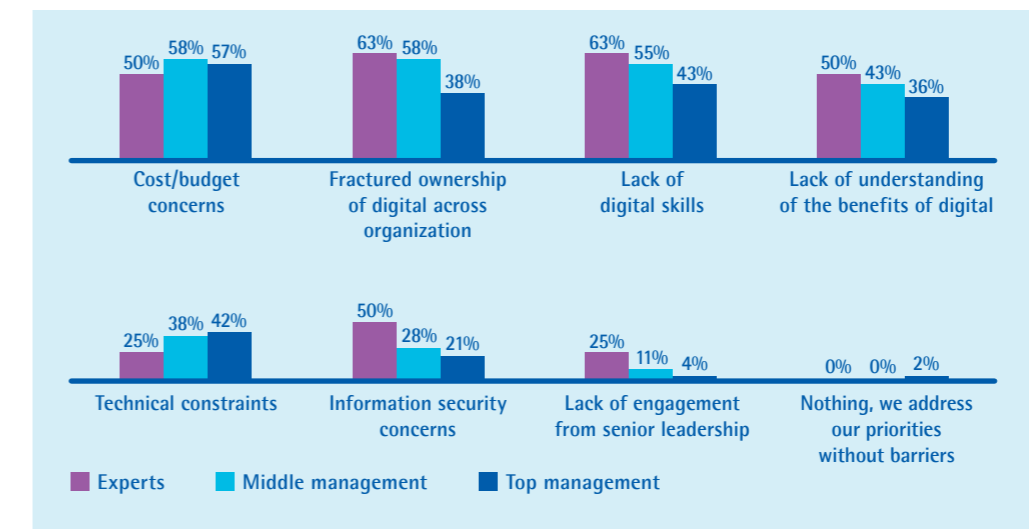
However, the views on development measures differed between the organizational levels. Experts consider retraining of existing personnel to be the most important measure, whereas top

management and middle management would focus investments on technology. Based on the results, management is also planning to hire more digital talent, but their plans are not visible on the lower organizational levels.

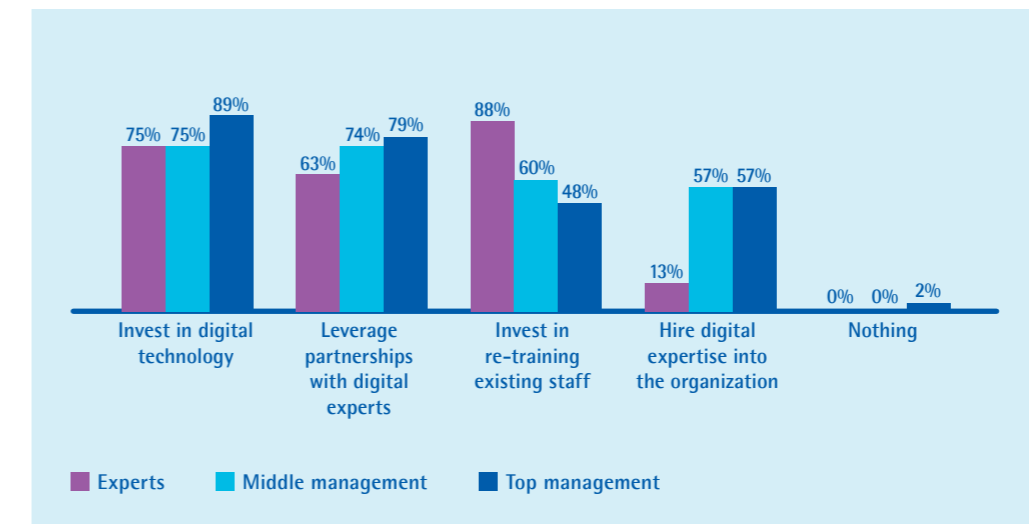
"Top management does not walk the talk. They understand the benefits and are committed to a certain extent, but their intense focus on costs and budget undermines the commitment."

Executive, insurance

The greatest challenges in developing digital



Key investments for developing digital skills



Summary and future outlook

Digital is a key development area for every company and public organization. Digitalization requires strategic vision which covers products, operations, channels and processes. The importance of developing Ecosystems must not be forgotten and traditional earning models should be questioned.

According to the executives interviewed, digital was one of the most important development areas when responding to competition and meeting customer expectations. Therefore, what should be taken into consideration when investing in digital and how should it be put into action?

First of all, the company's digital vision needs to be sufficiently strategic. Every

company and organization must find its own path in the digitalization of channels, digitalization of operations and development of digital business. Secondly, the change requires development across products, services, channels, and processes. The most important strategic issue for an increasing number of companies will be finding their own niche in the digital ecosystem and value chains. In this context, business models must also be re-evaluated.

Turning a clear digital strategy to immediate successes or failures via rapid testing has turned out to be the best implementation method for digital innovations. In order to increase speed, many companies have launched "digital

innovation incubators" which generate prototypes and even made the testing of ideas completely transparent for customers in sales or customer service.

The digital revolution among Finnish companies is already progressing at full speed. In all industries, a considerable volume of customers, market shares, and euros are in play in terms of both revenue and cost savings. The greatest benefits from this revolution will be reaped by the most innovative companies and organizations which will boldly test and commercialize new alternatives.

The key questions in developing a digital business:

1. Who is responsible for developing and utilizing digital?
2. What kind of competition do we face outside of our own industry and how should we respond to it?
3. What could we learn from other industries?
4. What is our digital strategy like: aggressive, defensive or observing?
5. Are we able to create customer-centric digital products and services? What 'silos' should we break?

Is your company or organization one of the winners in the digital revolution?

Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 275 000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$28.6 billion for the fiscal year ended Aug. 31, 2013. www.accenture.com

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