Umeå University

Managing the Digital Enterprise

Individual Assignment 1

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Contents

1 Effects of digitalization

The digitalization of business and organization has a big impact on companies, reshaping the way they operate and compete. These changes can be analyzed through the lens of *Scale*, *Scope* and *Speed*.

Definitions

Scale	describes the rate at which products are created. [6, 15]
Scope	describes the investment in customer relationships or physical distribution. [6, 15]
Speed	describes the pace in which existing capabilities are improved and new capabilities are developed. [6, 15]

Scale, *Scope* and *Speed* are also referred to as the three dimensions of digital business. [6, 15]

1.1 Scale

Scale

Scale refers to the size and reach of an organization, for example the rate at which products are created. [6, 15]

Companies extended their *Scale* in the industrial era by increasing sales of products. This was limited by physical attributes such as cost and availability of materials and reaching enough costumers. [10, 15, 18]

A big aspect of the change of a company's *Scope* in the context of digitalization is the existence of digital goods. Goods can be seperated into the categories of material goods, services and digital goods. Digital goods can easily and cheap be reproduced and distributed. A physical product (material good) has to be produced more often, which generates more costs for material, transport, logistics and production in general. A digital product can often be reproduced and distributed on a bigger scale easily, after the product was created once. Only maintenance aspects like potential server costs can increase – the initial development costs of the product will not change. [10, 18]

Digitalization enables companies to reach a global market without a material good. But digital goods introduce new challenges like a high rate of piracy, because the digital goods can easily be reproduced and distributed by the consumer, too. [10]

1.2 Scope

Scope

Scope describes the investment in customer relationships or physical distribution. [6, 15]

As described in Section 1.1, companies extended their *Scale* in the industrial era by increasing sales of products. This was limited by physical attributes such as reaching enough costumers or physical distrubution (*Scope*). Digitalization enables companies to reach a global market more easily, because the costs of communication and transportation and distribution were decreased drastically. [10, 15, 18]

Digitalization introduced new opportunities to distribute products - for example the distribution of digital goods. Partnerships between businesses became more important and the relationships to the customer are primarily build online. A website for distribution and online customer support often replace the personal experience of direct communication between a seller and a customer. [10, 15, 18]

1.3 Speed

Speed

Speed describes the pace in which existing capabilities are improved and new capabilities are developed. [6, 15]

Digitalization has accelerated the pace of business operations. As already mentioned in Section 1.1 and 1.2, the product development cykles have shortened and become more easy and the existence of digital goods changed the whole market. [10, 15]

But with the increase of *Speed* the customer expectations adapted and the expectations for the *Speed* of a company have increased. [18]

Overall, digitalization has transformed the business landscape by increasing the potential and rate for *Scale*, expanding the *Scope* of activities, and accelerating the *Speed*. Companies are trying to adapt to these changes by continuously monitoring and adjusting their strategies to suceed in the digital era. Failure to do so can leave them at a disadvantage, because the customer expectations are constantly growing. [15, 17, 18]

2 Fast-movers

Fast movers have the ability to recognize opportunities and respond to challenges rapidly. [2, 15]

Fast-mover

Fast-movers refers to companies or organizations that can adapt quickly to changes in their environment, for example market shifts, technological developments or competitive pressures. [2, 15]

The concepts of *Scale*, *Scope* and *Speed* can be used to explain how organizations become fast-movers. Those concepts were explained in Section 1.

- ***Scale*** refers to factors like the market share or production capacity. A company that is a fast-mover has to scale to their advantage in consideration of the current market situation. A significant presence in their field will lead to more capital and more attention, which can for example lead to better educated workers or other opportunities. [2, 15]
- ***Scope*** describes the range of activities and markets in which a company is involved. A broad *Scope* is allowing diversity and reducing risks and can also lead to access to a wider variety of customers, which can be an advantage when the company quickly adapts to changes. [2, 15]

Speed is the most crucial element in becoming a fast mover, because of the importance of quick adaption to changes, dynamic organization structures and previously described adjustments of *Scale* and *Scope*. [2, 15]

- ***Speed*** describes the ability to make quick decisions and execute strategies fast, which leads to a quick respond to changes in the market. To be able to have this agility, a company often requires an open mindset towards innovation, short and direct decision making processes and efficiency in execution. [2, 15, 18]

Becoming a fast-mover requires a balance between *Scale*, *Scope*, and *Speed*. Companies that can control these elements can adapt to changing circumstances and new opportunities. This is neccessary to defy the competition in today's dynamic markets.

3 Requirements to become a fast mover

To become a fast-mover in today's dynamic markets, companies need to be able to respond to changes quickly – they need to prioritize digital and leadership capabilities. The aspects of being a fast-mover were explained in Section 2.

3.1 Digital capabilities

A company which wants to suceed in today's rapidly changing digital environment and become a fast-mover has to make use of their digital capabilities. This includes changing their customer engagements, internal operations and structures or changing the business models. Tools such as social media or enterprise application software (*EAS*) are seen as opportunities for big changes and improvement by fast-movers. [17]

Due to the complexity and the different aspects of today's technology, companies should consider many rules, aspects and opportunities for mastering the digital field. This can range from social media marketing to cyper security. In the following, some of those aspects are discussed.

- **Social media** can be used to build an online presence. This can be done to create attention to the company, establishing and enhancing the brand image, learn from customers, target customers, placing targeted advertising and expand market research. The wide area of social media platforms allow different ways of digital marketing strategies. Some strategies are listed and described in the following table. [11]

Product placements	A technique where products or references are part of another work, such as a movie, tv program or youtube[1] video with promotional intent. [1]
Promotions	Special offers and information are provided only to *fans*, for example a discount for the first $x \in \mathbb{N}$ amount of customers. [11]
Crowd sourcing	Obtaining knowledge or services from a body of people, for example giving feedback or designing a companies logo. [11, 16]
Tracking	Cookies or other mechanisms to check-in can be used to track user behavior, show personalized ads and measure the effectiveness of advertisement campaigns. [7]
Games	Hosting a successful (mini) game to combine entertainment and advertisement. [11]

[1] YouTube is an online video sharing and social media platform (`www.youtube.com`)

Media sharing sites	Uploading photos or videos to a website that can often be accessed for free from anywhere in the world can have effects on the exposure of a company. [11]
Review sites	Websites on which reviews are posted about businesses or products effect the opinion of new customers. [11]
Forums	Online discussion sites where people can ask questions and discuss in the form of posted messages are a way to improve a company's reputation – some forum users are respected experts in their field. [11]

- ***EAS*** is used by companies to organize internal structures, track the use of resources, sharing data within the organization and optimize their efficiency, for example by reducing redundant processes. One challenge of integrating *EAS* into a company is the need to provide training to employees to ensure the software's proper utilization and functionality. [5, 13]
- ***Data Analytics and Insights*** can be used to collect and analyze, information for a company to be able to act faster and make more informed decisions. [9]
- ***Agile Development*** in software development and an adaptable IT infrastructure are essential for organizations to respond quickly to changing customer needs and market conditions. It is a flexible approach and can help with delivering products or services more quickly with reduced risks more flexibility. While it originated in software development, agile principles can be applied to a wide range of industries and situations. [12]
- ***AI*[2] *and automation*** can be used to automate routine tasks to reduce the workload on employees and to predict and analyze processes. This can improve the efficiency and speed in various business operations. [4]

AI	Machines perform tasks that typically require human intelligence, for example chatbots or predictive analytics for optimization. [4, 8]
Machine Learning	A subset of AI that uses algorithms that learn from data and helps to improve performance over time. It can help to predict customer behavior or optimize marketing campaigns or strategies. [8]
Automation	Replacing manual tasks with technology-driven solutions, including workflow automation or robotic process automation. With this, businesses can reduce human error and workload, increase productivity and cut costs. [8]

[2] *AI* is short for Artificial Intelligence

- ***Cypersecurity*** to protect a company's data, systems and customer trust. Failure in cybersecurity can disrupt business operations, cause downtime and lower of productivity. [14]
- ***Digital skills of employees*** are important to ensure the efficiency of the digital improvements. A company's employees should have the skills and expertise needed to use the potential of the digital capabilities.

By considering these digital capabilities, companies can create a culture of innovation and agility that enables them to respond quickly to market changes and make them a fast-mover in their industry. To be able to implement those techniques and being able to profit from the advantages, an open mindset towards fundamental changes and the education of the company's employees is important.

3.2 Leadership capabilities

Committed leadership is neccessary to use the advantages of technology and adapt to changing circumstances quickly and become a fast-mover. According to *Leading digital: Turning technology into business transformation* by Westerman, Bonnet and McAfee [17], transformation does not happen successfully *bottom-up* but a strong *top-down* approach with a set direction is needed.

- ***Bottom-up*** in leadership strategies refers to an approach, where ideas and initiatives come from employees at various levels of the organization. Then those ideas are evaluated and potentially integrated into the company's strategy. [3]
- ***Top-down*** in leadership context includes a strong guidance and coordination. A comany's leaders decide on strategies and goals for the company and these directives are handed down to the lower levels of the organization.

  One challenge is the acceptance of new strategies within the company: Employees might TODO

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