

BI Norwegian Business School

Examination code and name:

GRA 19502

Master Thesis Preliminary

Supervisor:

Jon B. Sande

Date of submission:

15.01.2018

Campus:

BI Oslo

Programme:

Master of Science in Strategic Marketing Management

Table of Contents

1. Introduction	2
1.1. Background.....	2
1.2 Research Question	2
2. Definitions of Key Terms and Concepts	2
2.1 Digital	2
2.2 Digitalization	3
2.3 Digital Transformation	3
2.4 Internet of Things (IoT)	4
3. Digital Evolution	5
3.1 History	5
3.2 Examples of How Industry 4.0 is Affecting the Business Levels in the Society.....	6
3.3 Why do Companies Want to Invest in Digital Transformation?	7
3.4 Who are the Suppliers of Digital Transformation in the Norwegian Market?.....	9
4. Research Method	10
4.1 Qualitative Method	11
4.2 Case-studies	11
4.3 Interviews	12
5. Literature Review	12
5.1 Agency Theory	12
5.2 Formal and Relational Contracts	13
5.2 Network Governance	15
5.3 Product Forms.....	15
References	17

1. Introduction

1.1. Background

Through the last years the word “digitalization” has been spread through the society and by key speakers at large events named with phrasings such as “Digital Transformation: will you sink or surf?” (Oslo Innovation Week, 2017). In addition, there are also rising conferences that is created mainly to bring out the message of digitalization, such as the “Digitalisation Conference” which is an annual meeting targeting leaders held by the European Commission (European Commission, 2017). The latter shows how important digitalization has become for the society and placed on the agenda by its highest governance institutions. In Norway the government created a Digitalization Board (Digitaliseringsutvalg) in 2017. The background for this is stated by the Prime Minister, Erna Solberg, in the government’s press release: *“We are in the beginning of an upheaval that will be noticed at all levels in the society, where we need politicians that looks ahead and grabs the digital opportunities. That is why we have created the government’s digitalization board”* (The Office of the Prime Minister, 2017).

In 2017, Qvarts conducted a report where they asked executives of 29 leading Norwegian companies about their company’s digital transformation journey. The report showed that digitalization is high on their agenda as the management and boards must reconsider their business model to meet demands and potential threats of today’s peers and future competitors that can disrupt the industry (Marschall & Korstvedt, 2017).

1.2 Research Question

How are contracts written between suppliers cooperating to deliver services and products to a commercial or public customer who is implementing a digital solution into their business operations?

2. Definitions of Key Terms and Concepts

2.1 Digital

As every business wants to go digital, the consultant company McKinsey means there should be an aligned meaning to the word “digital”. Therefore, the company has given three attributes to the term digital, and thereby defines it as: *“creating value at the new frontiers of the business world, creating value in the processes*

that execute a vision of customer experiences, and building foundational capabilities that support the entire structure” (Dörner, 2015).

2.2 Digitalization

Gartner has provided a simple definition of the linked term digitalization:

“Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business” (Gartner., 2017). Further, to understand more about digitalization one can consider the buzz word; digital transformation.

2.3 Digital Transformation

With digitalization often follows a digital transformation. IDC defines digital transformation as “the changes associated with the application of 3rd Platform technology in all aspects of business and society. It is a process by which enterprises apply technical innovations to business strategies, revenue models, products, customer engagement, operations, and services. Digital transformation is accomplished through business or IT lead project-oriented initiatives” (Little & Zaidi, 2017, s. 5). IDC MarketSpace has in addition provided a model of “The Five Dimensions of Digital Transformation” which includes information transformation, Omni-experience transformation, operational transformation, leadership transformation and worksource transformation (see Figure 1). The analytical firm further argues that a digital transformation includes at least either cloud, business analytics, enterprise mobility or social as 3rd Platform technologies.

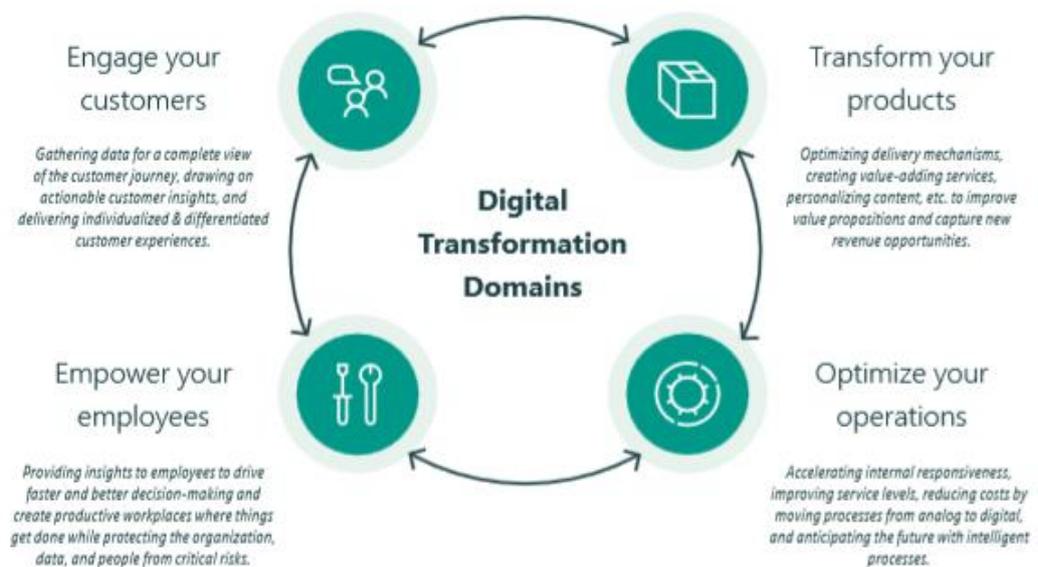
Figure 1: “The Five Dimensions of Digital Transformation” by IDC MarketSpace



Source: IDC, 2017

When Microsoft is considering the “what” of digital transformation the focus is on four domains approaching customer engagement, product development, operational processes and people empowerment (Marschall & Korstvedt, 2017). Through this framework the concern is the level of maturity on a company’s transformation journey and their priorities on each domain by highlighting the leverage of digital initiatives to create value and impact within each focus area.

Figure 2: *Digital Transformation Domains by Marschall & Korstvedt*



We find that Tieto sums up digital transformation in a concrete way by claiming that “digital transformation is influenced by technology innovation, customer behavior, demand and external factors” (Tieto, 2018).

2.4 Internet of Things (IoT)

One of the main drivers of digital transformation is by many recognized to be Internet of Things (Lewis, 2017). There are several definitions of Internet of Things, Gartner describes it by: “*Internet of Things (IoT) is the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment.*” (2018). Forbes defines it with a simpler explanation, that IoT is the concept of connecting almost any device with an on/off switch to the Internet, and/or to each other (2014).

The prediction by the IoT Commercial Lead at Microsoft, Steve Dunbar, is that by

2020, over 212 billion devices will be connected by the Internet, and generate revenues of US\$19 trillion US dollars. Furthermore, IoT will surpass the impact of the Internet on society (2014).

To sum up we find that digitalization is about technology, potential new ways of meeting customers and reconsidering established business models.

3. Digital Evolution

3.1 History

Anuarg Harsh, contributor at Huffington Post has written about the digital revolution and its impact on the market, consumers and government (2016) which the authors of this paper have used to summarize the digital evolution.

The first evolution came in the 1960s, and were mainly for the business sector, where larger corporations would house large computational systems that performed and gave basic analytics to the firm.

Second evolution started in the 1980s, where desktop and personal computers (PC) was developed and enabled faster processing. The second evolution also made its way to consumers, not only the large corporations. Alongside PC penetration was also the development and spread of enterprise software, which had a massive impact on productivity.

Leading from the two first evolutions, the third wave began late to-mid 1990s, and is characterized by automation technology. Connectivity and commerce developed fast, and the Internet drastically changed communication, consumption and information sharing done by people.

Shortly after, in the 2000s, Internet had gone wireless. This opened doors for 24/7 access to connectivity, Social media amongst other, but this also brought a shift in the meaning of privacy.

We are currently in the fourth step of the digital evolution, which has three distinguishing aspects; big data, advanced analytics, and IoT. These three have fundamentally changed both consumers way of living and businesses way of operations, which can be said to be both cultural and social revolution.

From the first to the fourth wave, the evolutions and changes are developing at a much greater speed, whereas the gap from the first two were almost 15 years, we now find the gaps to be as small as 5-10 years.

3.2 Examples of How Industry 4.0 is Affecting the Business Levels in the Society

As stated by the Norwegian Prime Minister, the society as a whole will be affected by the changes digital implementations will bring (The Office of the Prime Minister, 2017). However, it is the commercial and public sectors that are the main drivers of digital transformation for the society as these are the ones doing the large investments for the future that will both affect their own operations but also in the largest degree consumers' way of consuming goods and services.

This can be seen by the large investments from commercial sectors, whereas Oil and Gas is one industry moving in front. An example is Statoil with the aim to become a global digital leader within their operations, and by that the company is expecting to invest 1-2 billion Norwegian Kroner towards 2020 in new technology (Statoil ASA, 2017). The shift of digitalization in the sector can also be noticed through the changes within the industry's suppliers. One example is the large player DNV GL who has created a digital division with thousand employees where the aim is to create a platform the customers can use to read data (Løvås, 2017). Another example is the supplier Kongsberg Group, who has created a subsidiary called Kongsberg Digital with the focus to deliver software and other high technological solutions to its business customers (Kongsberg Gruppen, 2018).

The investments done in the public sector does often have a more direct impact on how consumers are met by the public service. Digitalization of the health industry has been given high priority lead by The Norwegian Directorate of eHealth (NDE). One example is Bergen municipality who has a program called Smart Care (Smart omsorg) where the aim is to give the citizens better service and help employees work more efficient through transform health and care services (Lerpold, 2016).

Also, when new hospitals are under planning the technology part of the operations and services has become crucial. In the planning of the hospital in Østfold, the health authority worked on how to create a digital hospital. The planned to

implement Kinect sensors, which are movement sensors to the bed, and they used gamification to smooth the moving process for the employees to get used to work at the new place (Brombach, 2014).

There is also a huge focus on digitalizing of the Norwegian municipalities. Further, the municipalities Gratangen, Lavangen and Salanger are the first ones in Norway to outsource their IT operations to the cloud, and reasons behind are security, avoid server down-time and be preparing to follow the digitalization needed in the future (Formulere and Microsoft, 2017).

Several of the largest municipalities are also working on “Smart city”-projects. Stavanger municipality has been awarded as a lighthouse, and they have created a road map in their focus concerning open data, smart shopping street, smart handling of garbage and wealth technology (www.stavanger.kommune.no, 2017).

Lastly, one can also witness that the Education sector is investing in digital transformation in the classrooms with the aim to engage students in deeper learning and keep better track of performance and enable more communication between parents, students and teachers (Microsoft Reporter, 2017).

3.3 Why do Companies Want to Invest in Digital Transformation?

By 2020 it is said that a whole generation called Generation C, referring to “connected”, will have grown up in a digital world effecting the expectations to society, services and employers (Strategy&, 2018). Strategy&, a strategic consultant company, states that the effect of the digitized world is reinforced by three forces of consumer pull, technology push and economic benefits (Strategy&, 2018). The first refers to Generation C and how adapted consumers are to the digital society, and by that is expected to be connected and willing to share personal data. The second is linked to the rapid development of technology, such as cloud computing, its influence and the fact that it is affordable, such as through low-cost devices. The third force is how digitization is capturing economic benefits where invested firms are rewarded by the public markets.

Qvarts’ Digital Transformation report from 2017 shows that the need to digitalize internal operations has a high priority for many businesses in Norway (Marschall & Korstvedt, 2017). This can be concerned with both IT infrastructures, value chain optimization, and automation of areas such as customer service, where the

businesses invest in digital transformation as they recognize cost efficiency of resources and higher quality of services towards customers. The report shows that digital leaders who rethink how to optimize operations, focus on automate processes, connect technology for efficiencies, such as using IoT and predictive modelling through real-time monitoring of operations.

Further, the report shows that a shift towards a more customer-centric organization has become a lead driver for digital transformation. The aim is to create customer engagement through digital solutions in the touch-points a firm has with its end-customers. Those businesses recognized as digital leaders' rethink customer engagement by extracting value from data to gain customer insights and understand the customer journey, implement new technologies to deliver personalized customer experiences and shifting from the focus on touchpoints to entangling customers that enable customers to be in control of own experience.

Through the possibilities of Industry 4.0, businesses have the potential to transform products and services to optimize and individualize its offerings. However, the transformation report shows that in this area there is a great gap of maturity stage between industries, where some has focused on the area and others are still exploring opportunities. The digital leaders rethink product and service transformation by collecting and applying data to explore opportunities, focus on foresight to innovate and develop new features meaningful for the market, and creates new business models by exploiting trends and building digital services connected to traditional products.

Lastly, the members of the society have higher expectations of work tools from employers' (Strategy&, 2018), and therefore empowering employees is a driver for digital transformation. Qvarts report shows that this is concerned with ensuring up-to-date systems and platforms that will create effective communication and processes. Digital leaders in the report rethink employee empowerment by continuously develop the digital skill level and productivity in the organization through technology, use data to gain insight about the workforce and to optimize efficiency, and establishes digital platforms aiming for open collaboration and communication leading to employee motivation.

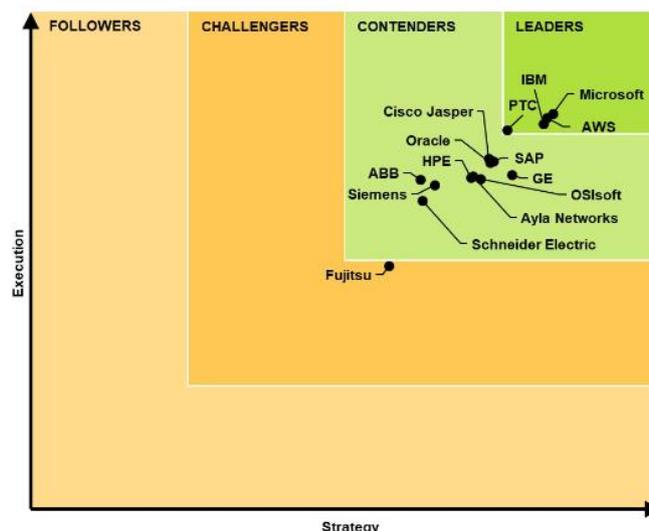
3.4 Who are the Suppliers of Digital Transformation in the Norwegian Market?

A parallel transformation is ongoing on the supply side delivering digital services and products to buyers (Strategy&, 2018). As an effect of the changing demand of digitalization, the traditional information and communication technology (ICT) suppliers are experiencing a booming competition from non-traditional actors who offers new services, often through new business models.

The world's leading technology companies in 2017 were Apple, Samsung and Microsoft (Stoller, 2017). However, the variety of tech giants are leading on in different fields and differ in which areas they are competing. In the market for cloud computing it is said to be Amazon Web Services, Microsoft and Google competing for the leading edge, whereas the other suppliers are lacking behind (Darrow, 2017).

Navigant Research states that the top three IoT Platform Vendors are Microsoft, Amazon Web Services and IBM (Navigant Research, 2017). The leading companies in the report are recognized as having developed IoT platforms where customers can handle large data sets from connected things, such as devices and sensors. Such platforms thereby enabling the customers to gain meaningful insights from the data that has impact on business outcomes.

Figure 3: *Vendors of IoT*



IDC MarketScape published a study that assesses the vendors providing digital transformation consulting and system integration service (IDC MarketScape, 2017) (KPMG, 2017). The report includes both qualitative and quantitative measures, and a balanced service portfolio that includes tech implementation as well as customization to the customers' transformation needs are highlighted. The results of the study states that Accenture, Wipro, Cognizant, KPMG and IBM are the market leaders within the field.

Figure 4: *Digital Transformation and System Integration Consulting*



4. Research Method

In the following section, we will present the chosen research method for our master thesis, in addition to explaining how we will collect, process and analyze the data.

The research and question to be answered will determine which kind of research methodology is appropriate, where we divide by qualitative or quantitative research (Palgrave , 2018). The method to be used to answer the proposed research question is qualitative research method, with interviews and case-studies as primary sources of information.

4.1 Qualitative Method

A qualitative research method can be explained in a variety of ways. The authors of this thesis find Askheim and Grenness description most applicable, that a qualitative research can be explained as a way of approaching reality, where the outcome is the production of descriptive data as humans impaired words, statements or observations of the human behavior (2008). During our process of reviewing literature for the thesis, we found several articles regarding B2B sales models and contracting, but limited information concerning these subjects with the addition of digitalization and newer technologies. We therefore consider it useful to develop more knowledge and theory regarding the research question. This coincides with Graebner, Martin and Roundy's article, which refers to qualitative methods as a well-suited approach if the research desires to develop theory (2012). Qualitative method involves the subject of interview individual viewpoints and personal and professional experiences. What the individuals explains and describes regarding specific subjects' functions as informative data to be used in the later analysis.

What separates quantitative and qualitative data the most is that the latter does not measure significance and correlations, but rather measures softer facts which are derived from the authors analysis and is presented in text form rather than in numbers. As Knut Halvorsen describes in his book, qualitative research explains the non-numerical regarding the survey units, which is presented in either text or verbally (2011, s. 208). The authors goal with qualitative research method is thereby to understand how contracts are written to deliver to a customer implementing digital solutions to their business.

4.2 Case-studies

To gain the necessary knowledge to be able to answer the research question, the authors will look into business cases where there has been more than one supplier involved in delivering software and technological solutions to a business customer. When the research question includes "why" and "how" or aims to explain something about a present phenomenon, Yin (2009) argues that case-studies are suitable. Additionally, Yin presents case-studies as a method that goes in-depth through studying much information about few units. The authors are therefore confident that such studies will be well-suited with our research question as we aim to understand a relatively new phenomenon.

The researchers will through a large IT corporation work to find 3-4 business cases that we can study by the help of parties involved in the cases. As part of the digital revolution we will look for deliveries of a certain scale that is bringing large value to the customer through digital transformation for the buyer. Parties will be IT software suppliers, both manufacturers and OEMs. Depending on the cases, the authors will also aim to extract information through interviews from customers if necessary and relevant to gain the right knowledge and understanding of the case.

The established theory of relationship governance and formal contracts will be used to compare theory with the business cases, and compare “best practice”-theory with what was done in successful and not successful delivered in turn of the evolvement on the relationship between the parties before, during and after the delivery.

4.3 Interviews

As mentioned in the previous section, the interviews are to be decided depending upon the cases used. We aim to interview key persons involved in the cases to get a deeper knowledge of the essence, characteristics and features in the cases. The authors will function as the interviewers, and the interview object will be the informant. Depending on the cases, the authors will create an interview guide where the structure is relatively open with a specific theme, a given order and open-ended answers (Jacobsen, 2005). This is essential for the informant himself/herself can provide the information he/she considers essential. All businesses and interview objects will be anonymous throughout this research paper.

5. Literature Review

In this part of the literature review we will consider academic articles regarding how businesses who cooperate, either as partners or as a general contractor and a subcontractor, should govern the relationship and maximize the value output to both parts.

5.1 Agency Theory

Hendrikse published in 2003 a central theory called agency theory that reflect how companies relate to each other (Hendrikse, Chapter 5 Principal agent models,

2003) (Hendrikse, Chapter 6 Hidden action problem, 2003). The theory is concerned with the frictions ascending when there is an unbalance in the asymmetric information, risk aversion, the binding character of the contracts and measurements problems of the effort done by the agent (other part, subcontractor). All of these can be considered as governance problems, which are divided into the measurement problem, the adaptation problem and the safeguarding problem. Most importantly is that the theory says that the specific character of the agent and circumstances sets the tone of how the contract between the parties should be written. Hendrikse's theory suggests that a contract should be heavier on strong incentives when the agent is willing to take risk, the general contractor's measure of the agent's output evidently expresses its efforts, the effort of the agent translates into high performance and the agent's personal costs does not increase the same if it chooses higher effort. This means that in terms of the agency theory, how a contract is built when it comes to incentives affect the effort of the parties, and thus also the value created towards the customer and the value that can be extracted to the suppliers (contractors).

The possibility for value extraction is also the first problem in the principal-agent problem, and it is called surplus available. Whereas the two further problems are conflict of interest and asymmetric information. To cope with these problems a contract must be written, but there are however discussions regarding how formal the contract should be in terms of having all parties follow the common interest and not behave opportunistic.

5.2 Formal and Relational Contracts

There can often be factors in the exchange between parties that is difficult to write formally in a contract and that can be overhold by a 3rd party, such as the court of law. Based on this it is argued that the parties should have a relational contract that is self-enforcing, and that can help the parties to adapt to circumstances that will gain both firms. Gibbons and Hendersen writes in their article that businesses who have crucial capabilities resting on managerial practices can be supported by relational contracts through its informal agreements (2012). The authors use "*informal agreements sustained by the shadow of the future*" as a definition of relational contracts (2012, s. 1350). Their emphasis is on the twin problem of credibility and clarity that relational contracts must solve. In their

article Gibbons and Hendersen define credibility as “*the problem of persuading others that one is likely to keep one’s promise*” and clarity as “*the problem of communicating the terms of the relational contract*” (2012, s. 1352). In the article they argue that credibility in principle might be instantly acquired because once parties decide to enter a contract they do have trust in the relationship whereas a shared clarity can take time to develop as it is more difficult to truly understand the other firm’s promises and intentions. The latter can in complex ways at the same time interact with credibility which make it more difficult to create relational contracts.

To have sustainable relational contracts it is however important that both parties commit to the informal agreement. Heide and John (1992) came up with three measures that the parties should share in a relationship based on norms; solidarity, flexibility and information exchange. The first is considering the expectations that both firms place a high value on the relationship. Whereas the second is the expected willingness to make adaptations, and the latter is the expectation of proactively provide important information to the other party.

Sande and Haugland further argues in their article from 2015 that relational contracts mediate the effect of misaligned formal contracting on performance (2015). They pointed to studies that showed the importance of fit between formal contracts and transaction attributes, and how a misalignment would reduce relationship performance. The authors define misaligned formal contracting as “*The distance between the realized level of formal contracting and the expected or appropriate level of formal contracting under given set of transaction attributes*” (2015, s. 188). Hence, they emphasize on the importance to find the optimal fit of the contract and the transaction attributes to cope with transaction hazards. The conclusion is however that the impact of a misalignment will be more negative for end-product enhancement which relies more on relational contracts than for cost-reduction outcomes which is more easily written in a formal contract with clear targets to measure.

5.2 Network Governance

Networks are established for various reasons, and the overall goal is that the relationship will establish a better position for the involved parties. Firms in high-tech industries can create alliance networks for several reasons, including the possibility to access new technology and to better market new products. Networks ultimately consists of relationships, but are more complex and harder to understand. An important aspect of transaction cost economics (TCE) and the implication of governance problems is therefore related to the decision of the use of networks to govern these B2B relationships.

Wuyts and Van den Bulte (2012) presents an overview of various network governance mechanisms, which explains the importance of understanding how networks in B2B settings, who are first and foremost driven by self-serving motives, can improve the inter-organizational governance. The authors separate four network governance control mechanisms by: *two-step leverage*, *negative gossip*, *group norms* and *tertius*. The two first mechanisms are directed at an individual actor, whereas the two latter are not, meaning that they affect firms across the entire network. A fundamental step in network governance is the step from dyad to triads, thus three actors are involved.

In addition to protection against negative behavior, networks also enable coordination and synergistic benefits. The mechanisms that facilitates the positive behaviors are: *structural embeddedness*, *generalized reciprocity*, and *tertius iungens*. These coordination efforts can affect both the nature and the extent of competition, as the success in uncertain and complex industries are dependent upon the need for networks in order to be successful.

Common for both governance and coordination mechanisms, is that the effectiveness evolves on both network structure and motivations of actors involved in the network.

5.3 Product Forms

All firms involved in an B2B market setting must ultimately choose what types of products they are selling to the market, thus product form decisions are considered fundamental for any business. Gosh, Frias and Lusch (2016) presents in their article that at a general level, a firm can decide between four product forms that can be sold: *intellectual knowhow*, *intermediate components*, *systems* or *final*

goods, or to sell services (solutions). The decision of also affect activity and roles of the focal firm and its up- and downstream channel partners will vary accordingly, thus traditional value chain systems are challenged and needs to be modified. Whereas new business ventures often face product form decisions as a central concern, more mature companies must often reconsider their product form decisions. The authors present these different choices a firm faces in a hierarchy, where the choice of product form on profitability is related to the matter of which product form will minimize transactions cost

Important drivers that are likely to be discriminating aligned with the product form decisions are: *the need for adaptation, the need to safeguard know-how and the availability of operant resources*. According to Frias (2011), the decision of chosen products form implies tradeoffs, pros and cons. Ultimately, every firm are somehow connected to the market ecosystem, but the question raised by Gosh et al is where and why the firm connects with the market, and how does the decision on point of connection change the interaction in the ecosystem.

Product form strategies can serve as a fundamental question for firms to answer, where the profitability is related to minimized transaction costs.

Worm, Bhradwaj, Ulaga and Reinartz (2017) showcases in their article the effect on profitability by choosing customer solution strategies over other strategies based on TCE, conducted through testing of several hypotheses. The authors make the distinction between customer solutions and other goods-service combinations by the following two critical characteristics: "*first, suppliers design end-to-end offers around customer activities and/or process, not around supplier products*." (2017, s. 491) The second characteristic is the shift in the vendor's value proposition. "*Rather than committing to deploying resources and performing activities, solutions providers take on the responsibility to achieve specific outcomes defined by the customer*" (2017, s. 491). The results of the study find 4/5 hypothesis are supported, and that on average, offering solutions as a strategy grows the financial returns, and affect the firms' performances through cost efficiency and customer retention. The positive profitability is enhanced for firms with higher degree of sales capabilities, hence stronger in the industries with greater buyer power, but weaker in the industries driven with intensive technology.

References

- Abelia. (2017, October 12). *www.abelia.no*. Retrieved from Alt du trenger å vite om statsbudsjettet: <https://www.abelia.no/politikk/nyheter/alt-du-trenger-a-vite-om-statsbudsjettet/#millioner>
- Askheim, O., & Grenness, T. (2008). *Kvalitative metoder for markedsføring og organisasjonsfag*. Oslo: Universitetsforlaget.
- Beke, T., & Bakjord, E. (2017). *Dataforeningens kontraktsstandard for skytjenester (Beke & Bakjord, 2017)*. Lov&Data 2017. Lovdata.
- Brombach, H. (2014, October 8). *www.digi.no/*. Retrieved from Artikler: <https://www.digi.no/artikler/skal-sikre-pasientene-med-kinect/287958>
- Corbin, J., & Strauss, A. (2015). *Basics of Qualitative Research*. California: Sage.
- Darrow, B. (2017, June 15). <http://fortune.com>. Retrieved from Gartner Cloud Rankings: <http://fortune.com/2017/06/15/gartner-cloud-rankings/>
- Dörner, K. (2015, July). *www.mckinsey.com*. Retrieved from Industries: <https://www.mckinsey.com/industries/high-tech/our-insights/what-digital-really-means>
- Dunbar, S. (2014, August 21). *Microsoft Enterprise*. Retrieved from A universe of opportunities: <https://enterprise.microsoft.com/en-us/articles/industries/retail-and-consumer-goods/a-universe-of-opportunities/>
- European Commission. (2017, June 8). <https://ec.europa.eu>. Retrieved from Events: https://ec.europa.eu/isa2/events/digitisation-conference-2017_en
- Evans, B. (2017, June 1). *www.forbes.com*. Retrieved from Tech: <https://www.forbes.com/sites/bobevans1/2017/06/01/sorry-amazon-but-microsoft-is-the-worlds-1-cloud-vendor-heres-why-cloud-wars/#142502bf7928>
- Formulere and Microsoft. (2017). <https://e24.no/>. Retrieved from Annonserinnhold: <https://e24.no/betalt-innhold/bak-tallene/tre-fremtidsrettede-kommuner-gaar-foran-loefter-alt-opp-i-skyen/24143754>
- Frias, K. M. (2011). THREE ESSAYS ON PRODUCT FORM CHOICE. *Texas Tech University - Area of Marketing*.
- Gartner. (2017). *www.gartner.com*. Retrieved from Digitalization: <https://www.gartner.com/it-glossary/digitalization/>
- Gartner. (2018). *Gartner*. Retrieved from IT Glossary: <https://www.gartner.com/it-glossary/internet-of-things/>
- Ghosh, M., Frias, K. M., & Lusch, R. F. (2016). Choosing Value-Chain Locations in Marketing Channels: Integrating Service-Dominant Logic and Product-Form Strategy Perspectives.
- Gibbons, R., & Henderson, R. (2012). Relational Contracts and Organizational Capabilities. *Organization Science*, 1350-1364.
- Graebner, M. E., Martin, J. A., & Roundy, P. T. (2012). Qualitative data: Cooking without a recipe. *Strategic Organization*.
- Halvorsen, K. (2011). *Å forske på samfunnet, en innføring i samfunnsvitenskapelig metode*. Oslo: Cappelens Forlag AS.

- Harash, A. (2016, November 8). *Huffington Post*. Retrieved from The Digital Revolution and its Impact on Industry, Consumers, and Government: https://www.huffingtonpost.com/entry/the-digital-revolution-and-its-impact-on-industry-consumers_us_57acdc9de4b0ae60ff020c2d
- Haugland, S. A., & Sande, J. B. (2015). Strategic Performance Effects of Misaligned Formal Contracting: The Mediating Role of Relational Contracting. *International Journal of Research in Marketing*, 187-194.
- Heide, J. B., & John, G. (1992). Do Norms Matter in Marketing Relationships? *Journal of Marketing*, 32-44.
- Hendrikse, G. (2003). Chapter 5 Principal agent models. *Economics and Management of Organizations*, 90-98.
- Hendrikse, G. (2003). Chapter 6 Hidden action problem. *Economics and Management of Organizations*, 106-109, 112-122, 124-125, 129-131, 135-139, 145-147, 149-150, 155-156.
- IDC MarketScape. (2017). *Worldwide Digital Transformation Consulting and Systems Integration Services 2017 Vendor Assessment*. IDC MarketScape.
- Jacobsen, D. I. (2005). *Hvordan gjennomføre undersøkelser, innføring i samfunnsvitenskapelige metode*. Kristiansand: Høyskoleforlaget AS.
- John, G. W., & Shantanu, D. (1999). Marketing in Technology-Intensive Markets: Toward a Conceptual Framework. *The Journal of Marketing*.
- Kongsberg Gruppen. (2018, January). www.kongsberg.com. Retrieved from Kongsberg Digital: <https://www.kongsberg.com/en/kongsberg-digital/>
- KPMG. (2017, August 18). <https://home.kpmg.com>. Retrieved from Nyheter og innsikt: <https://home.kpmg.com/no/nb/home/nyheter-og-innsikt/2017/08/kpmg-ankjent-som-global-leder-innen-digital-transformasjon.html>
- Lerpold, B. (2016, November 14). www.visma.no. Retrieved from Blogg: <https://www.visma.no/blogg/digitalisering-norske-kommuner-skyter-fart-skjer/>
- Lewis, J. (2017, October 5). www.forbes.com. Retrieved from Business: <https://www.forbes.com/sites/comcastbusiness/2017/10/05/digital-transformation-internet-of-things-is-a-primary-driver-of-digitization-strategies/#318070e9478a>
- Little, G., & Zaidi, A. (2017). *IDC MarketScape: Worldwide Digital Transformation Consulting and Systems Integration Services 2017 Vendor Assessment*. Framingham: IDC.
- Løvås, J. (2017, September 26). <https://www.dn.no>. Retrieved from Oljeservice: <https://www.dn.no/nyheter/2017/09/26/2048/Oljeservice/dnv-gl-lager-digitaldivisjon-med-1000-ansatte>
- Marschall, T., & Korstvedt, T. (2017). *Digital Transformation Report 2017*. Oslo: QVARTS, Microsoft .
- Microsoft Reporter. (2017, June 13). <https://news.microsoft.com/>. Retrieved from The technology revolution transforming education: <https://news.microsoft.com/europe/2017/06/13/the-technology-revolution-transforming-education/>

- Morgan, J. (2014, May 13). *Forbes*. Retrieved from Leadership/#NewTech:
<https://www.forbes.com/sites/jacobmorgan/2014/05/13/simple-explanation-internet-things-that-anyone-can-understand/#5514d3991d09>
- Navigant Research. (2017). *www.navigantresearch.com*. Retrieved from Internet of Things: <https://www.navigantresearch.com/research/navigant-research-leaderboard-iot-platform-vendors>
- Oslo Innovation Week. (2017, September 26). <http://oiw.no>. Retrieved from Program: <http://oiw.no/program/digital-transformation-will-you-sink-or-surf>
- Palgrave . (2018). *Palgrave Study Skills*. Retrieved from Choosing appropriate research methodologies:
<https://www.macmillanihe.com/studentstudyskills/page/choosing-appropriate-research-methodologies/>
- Statoil ASA. (2017, May 22). *www.statoil.com*. Retrieved from Digitalisering for økt verdiskaping: <https://www.statoil.com/no/news/digitalisation-driving-value-creation.html>
- Stoller, K. (2017, May 24). *www.forbes.com*. Retrieved from Investing:
<https://www.forbes.com/sites/kristinstoller/2017/05/24/the-worlds-largest-tech-companies-2017-apple-and-samsung-lead-facebook-rises/#653cb0bed140>
- Strategy&. (2018). *www.strategyand.pwc.com*. Retrieved from Digitization :
<https://www.strategyand.pwc.com/global/home/what-we-think/digitization/megatrend>
- Strategy&. (2018). *www.strategyand.pwc.com*. Retrieved from Digitization:
<https://www.strategyand.pwc.com/global/home/what-we-think/digitization/suppliers>
- The Office of the Prime Minister. (2017, April 28). <https://www.regjeringen.no>. Retrieved from Aktuelt: <https://www.regjeringen.no/no/aktuelt/opprettet-digitaliseringsutvalg/id2551401/>
- Tieto. (2018). <https://campaigns.tieto.com>. Retrieved from Digitlazing your business:
<https://campaigns.tieto.com/digitalizing-your-business>
- Worm, S., Bharadwaj, S. G., Ulaga, W., & Reinartz, W. J. (2017). When and why do customer solutions pay off in business markets? *Journal of the Academy of Marketing Science* .
- Wuyts, S., & Van den Bulte, C. (2012). Handbook of Business-to-Business Marketing . In S. Wuyts, & C. Van den Bulte, *Handbook of Business-to-Business Marketing* (pp. 73-89). Edward Elgar Publishing Limited . Retrieved from <https://www.dawsonera-com.ezproxy.library.bi.no/readonline/9781781002445>
- www.stavanger.kommune.no*. (2017, December 15). Retrieved from Samfunnsutvikling:
<https://www.stavanger.kommune.no/samfunnsutvikling/smartbyen-stavanger/smartby-prosjekter/>
- Yin, R. K. (2009). *Case Study Research: Design and Methods* (4. edition ed.). California: SAGE Publications.