Critical review of strategic theories

Applicable to new technologies
Abstract

There are few theories that focus on future digital business. This article evaluates how a traditional theory like Porter’s five forces and a more modern like Red ocean vs. Blue ocean can be used.

Key words

Porter’s five forces, Red Ocean vs. Blue Ocean, New technology

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1. Introduction

This work is aimed to critical review theories and models that were used to formulate a business model. The article will look at the strength and weakness that can contribute to make a better understanding in the decision if a business model is worth to continue with. The article is initialized with a short explanation, their usage, reflections and recommendation.

2. Selection of theories and recommendations

Several theories were introduced during the semesters of the program “Digital Affärsutveckling”. Some of the theories were found to be a bit legacy and was more suited towards traditional manufacturing.

To fit the other tasks in this semester the theories were selected to fit an innovative technology idea that can become reality 5-10 years from now. The idea is within the Internet of Things (IOT) area for industrial factories, and focus on making machines autonomous by connecting devices in a secure way. The product and services will mainly be based on software.

2.1. Red ocean vs. Blue ocean strategy

This theory was chosen because it fit to innovative ideas that not so many have thought about. Not just to take something that exist and make it better, it suits disruptive ideas.

It is also a good exercise to do when one is thinking about entering a new market. It has several good tools to map the potential competitors and to see where there are loop holes in existing business models. I.e. to find new innovations and new opportunities.

It is recommended to use this theory. Especially when one wants to enter a market with little competitors.

2.2. Porters five forces

This theory was chosen to map a potential competitive landscape as well as identify where potential barriers that can make the offer stronger.

As this theory was launched already in 1979 it is today somewhat common sense for everyone working with business development. However, even though that is the fact, most companies seem only to scratch the surface of what the theory is capable of.

It is recommended to use this theory, primarily for existing business. One can take corrective actions when there are insights. It is a good idea to sit down and create a true holistic perspective of the competitors.
3. Summary of chosen theories

3.1. Red ocean vs. Blue ocean strategy
2005 Renée Mauborgne and W. Chan Kim publish the book “The blue Ocean Strategy”. The key takes away is how to create an unchallenged spot within a market, mainly by making your competitors irrelevant.

This strategy is often illustrating with an ocean (like the name indicates). The red ocean contains several aggressive competitors (sharks) and one must outperform the others in a cutthroat competition (which turns the water red). This is where the market is today. The blue ocean is an area where one is alone selling the product. This where one like to be and proposed.

The key goals of the red ocean strategy are to beat the competition and exploit existing demand. The opposite is the blue ocean strategy were the goals are to find the right marketing opportunity and making the competition irrelevant.

The purpose with this strategy is to find an innovative idea that differs so much from competitors that it actually creates new demands, to create your own blue ocean.

The theory has evolved over the years and there are today several tools that can used to explore a business model further. 2017 the follow up was released – “Blue Ocean Shift”

The next section will explain the main tool, first statement (to the left) belongs to Red ocean and the second to Blue ocean.

3.1.1. Compete in existing market space vs. Create uncontested market space
Existing markets are where all the customers are doing business in the industry right now. Either it is with you or your competitors. In this theory it is assumed that if one wins a customer the other loose it.

In the uncontested market there is no else that fight for the same business. This because they don’t know that there exists a market, they do not know how or they cannot produce as similar product. I.e. you are the alone winner. The better you have prepared your blue strategy, the harder it will be for the competitors to move in.

3.1.2. Beat the competition vs. Make the competition irrelevant
To make the competition irrelevant is when the competitors cannot duplicate the ideas to make equal or better commercial success. If one does not succeed with this part then one must be better on multiple terms to beat the competition, i.e. in the red ocean.
3.1.3. **Exploit existing demand vs. Create and capture new demand**
If you can create a value so high that you attract customers the never before would have considered your offer, then it is an innovative product fitting into the blue ocean. The opposite in the red ocean is to try milking as much as possible out of you existing share.

3.1.4. **Make the value-cost trade-off vs. Break the value-cost trade off**
In traditional strategy one must make a trade-off between value and cost. Meaning that one cannot both have high value and low cost. This is when one end up in the red ocean. However, if one can break this trade off and have both high value and low cost, then it is difficult for competitors to copy the concept and one are in the blue ocean.

3.1.5. **Align the whole system of a firm’s activities with the strategic choice of differentiation OR low cost vs. Align the whole system of a firm’s activities in pursuit of differentiation AND low cost.**
To be successful in the blue ocean one must strip away every unnecessary cost. Anything that doesn’t create value should be reduced to a minimum, and this should be holistic view of the whole organization. If one cannot create this environment one end up in the red ocean and must make a strategic choice.

3.2. **Porters five forces**
This theory was created by Michael Porter (Harvard Business School, published 1979). It us used to analyze an industry’s attractiveness and likely profitability. Porter identified five forces that create the competitive landscape which can erode the profitability. He realized that one must look beyond competitors’ actions and analyze what factors that could impact the business environment.

3.2.1. **Rivalry among competitors**
The first look at the number of competitors and their strength. Understanding of the rivals is vital to successfully launch a product. The competitors are analyzed to your own company in size, influence, quality, offering, services etc. The firm must be aware of competitor’s strategy and reactive to any changes.

If the rivalry is intense, then the market is less attractive and it is likely that one need to compete on price or have high spending in marketing. One wants the competitive rivalry to be minimal. No one else should be doing what you do or in the way you are doing it

3.2.2. **Threat of potential entry**
Those industries that have high profit normally attract new competitors. How easily could your market be affected that by other that enters it? How much would it cost them and how well is your customer tied to you?

Rivals can quickly enter your market and weaken your position if it has a low cost to copy your concept or technologies (if there is low protection). I.e. a low entry cost. New entrants will sooner or later decrease profitability for other firms
One should aim for strong barriers to preserve the favorable position. These barriers could be patents, scalability, capital requirements or government policies. However, one should keep in mind that high entry barriers is likely to make exit more difficult.

3.2.3. **Bargaining power of suppliers**
The power of the supplier is determined by how easy it is for them to control the price. How many potential suppliers of equivalent products are there (is it unique or conventional)? How expensive is it to switch from one supplier to another?

This can heavily affect one’s profit. The more to choose from the easier is the switch to a cheaper product. In the opposite with a few suppliers they will have stronger position and charge one more.

3.2.4. **Bargaining power of buyers**
What power does the customer possess, are they in a position to dictate terms to you or decrease price? How many buyers are there, how much would it cost them to switch to another product, how big are their orders.

A firm can reduce the power of the buyer by lock them to the product or create loyalty programs. Several customers with large accounts would naturally be the best.

3.2.5. **Threat of substitutes**
How likely is it that your customers find another way of doing what you are providing? Are there a technology that solve the same economic need? Can an automated service be replaced by manually or outsourced?

One’s position is weaken if a substitution can be done cheap and easy.

4. **Why and how theories have been used to serve purpose**

4.1. **Red ocean vs. Blue ocean strategy**
The most important part with this strategy is to make your competitors irrelevant. I.e. to come up with such innovative idea that it is hard or take time for competitors to catch up (this is partly “First movers advantage”). I.e. to find the uncontested market space.

In other task of this program this theory was used (amongst others) to prove that most competitors in the “Internet of Things” (IOT) branch are still focusing centralized servers to dictate routes and authorities for individual devices. However, the future network that connect all devices in IOT network will act distributed. All participants can rely on each other and have unlimited communication capabilities.

The chosen strategy is blue ocean.
4.1.1. Create uncontested market space
There are today very few companies targeting this specific area of industrial manufacturing, most are focusing on consumer market. The new technology requires quick adapters and there seems to be few large established firms announcing any progress.

4.1.2. Make the competition irrelevant
The potential competition within IOT are building their architecture around a central server. The same way it has been done last 20 years. The new architecture will be distributed instead of centralized.

4.1.3. Create and capture new demand
This market has for long required solutions for secure connection with easy usage. However, existing solutions cannot provide reliability. With the technology that recently have been developed this is now possible.

4.1.4. Break the value-cost trade off
The main cost for software development are human resources. By being efficient in utilizing competences the cost can be cut to minimum.

Many companies that are new on the market often make the mistake to be too low on price. The price tag can always be discussed to go down but it is difficult to go up.

4.1.5. Align the whole system of a firm’s activities in pursuit of differentiation AND low cost.
The shift we have seen last years in firms point towards cooperation instead competition. In addition to this we see R&D departments move away from pure development to also operation of the products. This will naturally feed business innovation from the grassroot.

4.2. Porter’s five forces
Porter state that by facing the external opportunities and threats for an organization then one can create the insights necessary to create a competitive strategy. He also states the five forces he identified is applicable to all industries in all markets. By having the information of how the market is changing it is possible for management to take corrective actions.

This theory was used to map the competitive landscape. Even though there are no competitors today, it is estimated what the market would look like in short (5 years) and long (10 year) perspective.

4.2.1. Rivalry among competitors
As for a disruptive idea there are no rivals established today. This type of product has the potential to shift the competitive landscape and take the power from traditional automation suppliers to the minor new comers with niched innovations.
The software can broaden existing value proposition on existing products as well as be enhanced by time in a much easier way than traditional hardware based products. An openness in the product can enable third parties to utilize valuable data. This will shift focus from cost based structure to a value based selling. It can also fit into subscription based offering which cut high investment costs.

4.2.2. Threat of potential entry
One can compare this with when Internet was “launched” around mid-1990. There were a lot of companies starting up but several of them failed. I believe that in this case there is strong benefit of “First movers advantage” to establish standards. The first movers will also benefit of collected data, the earlier one start, the more data will be collected by time.

New entrants must first build up the complex software which will require manpower, then there is a need for operations, management and sales. There is always a threat from large IT companies like Apple or Google, which historically have entered new markets with high potential to become profitable.

4.2.3. Bargaining power of suppliers
As much of the software can be built on open source code and several of the major actors (IBM, Amazon etc.) offer readymade frameworks, there should be little power of the suppliers. However, it will require high level technical competences and the software developers that possess that knowledge are today very attractive, i.e. have high cost.

As the need for hardware is minimal or none, there is little concern for that. Even if there is need, the hardware’s today is so commoditized. I.e. there are today several suppliers and powerful devices have low cost and keep on declining. I rather see this as potential, instead of purchasing hardware, the hardware manufacture can add software to their product to add value. It will create an eco-system of integrated products (IOT).

4.2.4. Bargaining power of buyers
First, there are demands that have been requested for a long time from the customers. No one have mange to deliver a solution that meet all the requirements, until now with the new technology. This give the buyer little power.

Second, by adding value to existing production (i.e. industrial factories) one can move away from pricing alone and focus on what value it actually creates.

4.2.5. Threat of substitutes
When it comes to disruptive ideas most initial products will be tailormade and it will not be until the longer perspective we see substitute products on installed base. With tailormade solutions the customers are tied up to the system and it will probably be costly for them to change.

However, in the longer perspective when standard interfaces are in place and laws like GDPR make it easy for the end user to get all collected data. Then it will be
easier for the customer to change to a substitute. Business models like pay-for-usages will also give more power to the buyer.

5. Reflection and critics

5.1. Red/Blue ocean vs. Porter’s five forces in general
If one should compare the two strategies one could say that Porter is similar to the Red ocean strategy. I.e. it is focusing on organizations competing in an existing market. Still, by conquer Porters five forces does not necessarily mean that you become the market leader. On the other hand, when being in the Blue ocean then the whole organization might have to enter an area where the competitors have not moved into yet.

Both theories aim at pointing out that it is better to move away from competitions. While Blue ocean advocate for innovative ideas in new and fast-growing markets, does Porter not necessarily mean that one must be innovative to the extreme. He means that there can be a lot of opportunities in existing markets. By being innovative in an existing market can be an effective strategy since research show that many of the established players have been laid back and comfortable in their position. By being adaptive, incremental one can always be on the front edge of the market.

But where is the line between innovation and adaption? It might not be the innovation itself that create the profit, instead it might be the ones that adapt to the new innovation. E.g. iTunes took advantage of portable music. One can argue if iTunes is an innovation or adaptation. It is a bit up to the interpreter to judge that. I would say that it must not be a totally disruptive idea to be called innovation.

If one mange to come into Blue ocean strategy one must continuously review it. After some time there will be more products similar to the one that once was new and innovative, which will erode the profit. This means that one might need to move over to Porter’s five forces strategy. However, it is a slow process that would take around 15 years before it is needed to change.

Today is a very dynamic market with swift change in the business landscape. New technologies arise and fall quicker, and in software the changes are easier to adapt than in traditional manufacturing industry. Today we also see much more of startup companies with little initial funding and limited fixed costs. Porters model assume static environment based on companies that first collected funding’s to finance inventory and then go to production. The supply chain is also very limited when working in software, all distribution can be on Internet.

5.2. Porter’s five forces
Porter argues that the theory can be applied to all firms (which in fact means their organizations). The focus is on analyzing the profitability of the firm. What this comes down to is actually how attractive a company or an industry is to invest in.
Porters theory is best suitable for simple market structures. It gets more difficult when the structure is based on eco-system or even eco-system of eco-systems where multiple and nested relationships are. One risk to miss out on important parameters. The value chain for Porter are based on more or less one product. Not solutions based on multiple actors, all with their own business model.

What I think Porter miss out on is the established value in the company. Does it have a monopoly situation? Is there a brand recognition that can compensate for other flaws? Does the company possess any patents that are de-facto standards in the industry and then are licensed to others? As an improvement I would suggest that more focus where in this area.

What is worth to always consider is the risk/advantage of improving an existing product. I.e. I think there can be several positive aspects (such as minimizing of risks) by not be too disruptive in new products.

5.3. Red ocean vs blue ocean
Several Asia companies has proven that they can survive and make profit competing on low price in an overcrowded red ocean. Volume and a large domestic market can make this possible. Red/blue focus on western world economics.

From what I see they prove their theory in retrospective. E.g. by pointing out companies like Apple and Cirque de Soleil they state that their theory is valid. What I miss is the “negative proof”. I.e. by not following this theory the profit will fail. Neither are there examples of companies that have fail although entering the blue ocean. One should remember that it can be dangerous to go into a non-competing zone, sometimes the timing is not correct.

What I think could be improved is the cost of creating/implementing a new product. What is the time and cost aspect from start to market introduction?

Some positive aspects are that this theory can be used not only in profit making companies. It can also be used in government institution to be more efficient and even for personal matters such as creating a resume for a job application that differs from the crowd.

5.4. Conclusion
From my point of view is Red ocean vs. Blue ocean more modern then Porters five forces. It gives you several tools to use in various aspect. One can argue that “Bargain of Supplier power” (Porter) does not make so much impact in a digital economy as more and more source code is open source.

For a new company trying to establish and get funding’s, there are benefit using long established theories. Usually the investor has been in the game for a long time and are subconsciously more comfort with terms they know.

The market is moving away from price competitions which actually does not add value to the customer, and customer wants more value. One can see the same in modern companies. By not inventing in-house they corporate to faster meet the market need and make adaptation. Today’s technologies are a lot about several
individual technologies coming together to make an easier and better user experience for the end user. Today’s market is no longer a battlefield where there can be only one winner, today traditional rules can be bent and there can be many winners.

The outcome of the research is in line with expectations. However, it was a bit surprising how similar or complementary the two theories were.

My final recommendation is to use these two theories together as they complement each other. However, when it comes to digital economy one should cherry pick those sub items that is valid for that specific product.

6. References


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