

Rocket DHO

# **Expert Platform**

Evaluation methodology for the project's business model

Methodologist: Andrei Kuryan

# Evaluation section: Business Model

## 1 General instructions

This methodology is developed within the framework of the Rocket DA0 Expert platform. The methodology is addressed to startup teams, innovation experts and investors who are interested in evaluating a business model of the startup.

Business model can be decomposed on 3 key components:

- Value Proposition Model;
- Value Creation Scheme;
- Revenue and Cost Model.

Value proposition defines how product solves the Customer's (so called Job-To-Be-Done) problem [1,2]. Business model explains how the company is scaling its value proposition to the market to a lots of different customers.

Section 2 contains description of checklists for the evaluation of the other key components of the business model. These checklists allow us to get answers for the following questions:

- How does the company (startup) create, produce and deliver value proposition (Value creation schema)?
- How does the company (startup) generate revenue (Revenue model)?
- How does the company (startup) spend money (Cost Structure)?

Section 3 contains notes for stakeholders about the business model evaluation process. Section 4 contains references and links.

# 2 Business Model Evaluation Checklists

#### 2.1. Value Creation Schema

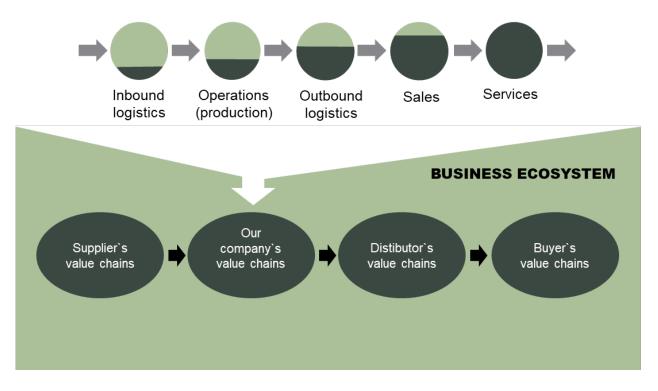
We can represent company as a segment of general value chain in a specific business eco-system.

According to [3], value chain is a set of activities that a company operating in a specific industry performs in order to deliver a valuable product or service for the market.

In a broad sense, the value creation system covers the entire business ecosystem and includes the value-added chains of:

- Suppliers (and the suppliers' suppliers all the way back to the beginning of the chain);
- The company itself;
- The marketing channels;
- The company's customers (and supposedly extend to the product consumers up to end users).

Schematically, the value-added chains of the company and business ecosystem are represented in the Fig. 1.



#### **OUR COMPANY**

Fig. 1. Business ecosystem value chain

We can outline the following key parts of the value-added chain in the business ecosystem:

- Product development;
- Production;
- Logistics (inbound and outbound);
- Sales and Customer Relations System;

• End-user support system (services).

Value creation schema represents what parts of the general value-added chain are implemented in the company (startup) and what parts are implemented by other companies in business ecosystem.

The following checklist allows to evaluate the place of the company in the general (business ecosystem) value-added chain and define VC\_Schema\_rate (VC - Value Creation).

Part of general value- added chain	Example	Points
Product development	The company contains the own product development team and develops new products (Boeing, Apple, Tesla)	2
	The company manufactures the existing product developed by others (Dell, eBuy)	1
Operations (production)	The company itself manufactures all or some key components of the product and assembles the product (Intel, IKEA)	2
	The company assembles product from third-party components only (Apple, Toyota)	1
Logistics (inbound and outbound)	The company controls the inbound and/ or outbound logistics such as network of suppliers (Boeing, Toyota), network of carriers (FedEx, APM-Mayersk), network of h y p e r m a r k e t s ( Wa I m a r t ) o r marketplace platform (Amazon, AppStore)	2
	The company attracts the external logistics providers (IKEA, Tesla)	1
Own Sales and Customer Relations System	The company contains own sales system like network of hypermarkets (Walmart) or sales platform (Amazon, AppStore, Uber)	2
	The company uses existing sales networks or platforms (Flo Health)	1
End-user support system	The company itself provides support and additional services to the end-users	2
(services)	The company supply its product to other business (B2B)	1

NOTE: If any part of the general value-added chain is missed in the company then you can assign 0 points for this part.

VC\_Schema\_Rate is a sum of points in the table.

#### 2.2. Revenue model

A revenue model is a framework for generating revenues. It identifies which revenue source to pursue, what value to offer, how to price the value, and who pays for the value. It is a key component of a company's business model [4]. The following diagram [5] illustrates the main driving forces determining your business revenue.

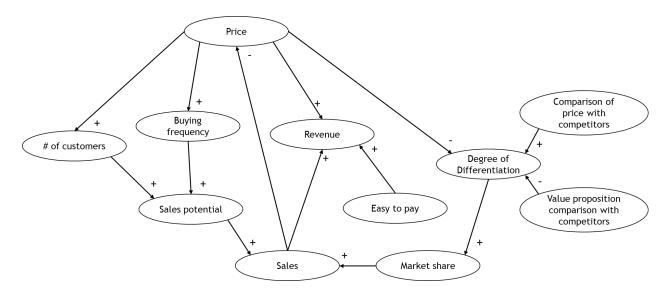


Fig. 2. Revenue model transaction mechanism

Behind each arrow on Fig. 2 a mathematical relation need to be defined by analyzing existing data or rough estimation.

We can estimate the following drivers that have an impact on the growth of revenue:

- Value proposition is differed from competitors;
- Price is lower than that of competitors;
- Buying frequency can be increased;
- Number of (potential) customers can be increased;
- Easy to pay process.

The following checklist allows to evaluate the revenue model and define Revenue\_rate.

Description	Points
Value proposition is critically differed from competitors means that we can	Yes – 2
attract new customers as well entice customers of our competitors and in this way we can increase our market share	No - 0
Price is lower than that of competitors means that we can attract customers by	
lower price	No - 0
Buying frequency can be increased means that customers will return and buy	Yes – 2 No - 0
Number of (potential) customers can be increased means high potential of	
scalability for our business and growth of revenue	No - 0
Easy to pay process means that payment process is as easy as possible for the	Yes – 2
customers	No - 0

Revenue\_Rate is a sum of points. If you answered all "Yes" than Revenue\_Rate = 10; if you answered all "No" than Revenue\_Rate = 0.

#### 2.3. Cost structure

The cost structure describes all costs incurred to make a business model work. Such costs can be calculated relatively easily after defining Customer Costs and Operation Costs (including Costs of Key Resources and Key Activities) in your Business Model.

#### CAC (Customer Acquisition Cost)

Do you know how much it costs you to attract each customer? That's what your CAC will show you. It's a good way to monitor how efficient your sales process and sales team are. If the proportion of spend to impact is lower than competitors or not improving over time, you need to make some changes.

The simplest formula [6] for calculating CAC is: (Money + Time Spent) / Number of Customers Acquired Churn Rate

How sticky is your customer base? Your churn rate shows how well you hold onto customers. The absolute value is important, but again, so is the trend. It should descend over time. If it suddenly spikes or plateaus at a high level, you need to figure out why. The numbers will be your guide.

Churn Rate for SaaS or mobile apps means customers who cancel their subscription. For ecommerce, this means customers who fail to make a repeat purchase within an average timeframe for the business (could be 90 days, 120 days, or some other length of time) [7].

Company size	Monthly Customer Churn Rate, %	Annual Customer Churn Rate, %
Small & Medium Business	3 – 7	31 - 58
Mid-Market	1 – 2	11 – 22
Enterprise	0,5 – 1	6 - 10

In order to evaluate your churn rate use the following Customer Churn Rate benchmarks [7]:

#### **Operational Efficiency**

How much operational efficiency does your startup have? In other words, are you getting a return on your spending or are you shortchanging your business by underinvesting in critical but low profile areas? The ratio of SGA (selling, general and administrative expenses) to sales will give you a picture. You'll have discretion in areas like sales, marketing and payroll, but not for expenses like overhead and utilities.

Low margins could signal that your cost structure is out of whack, that you're spending too much to get the business to scale, your pricing is too low, or a combination of some or all of the above. Outsourcing as much as you can is one way to get a handle on some of the biggest drivers. But when you're just ramping up, you'll need to spend more on sales and marketing to get traction. Spending in the right proportions will deliver the most bang for your buck. The results will eventually show up in your sales and cash figures.

#### Absolute Operational Efficiency

Ideal benchmarks to measure efficiency are usually developed in a design laboratory under perfect operating conditions. However, it is not easy to identify the sources of efficiency loss between ideal performance and the best observed performance. For instance, in a manufacturing process operating in perfect conditions, one machine's ideal throughput is 100 units per hour, yet the actual throughput is 80 units per hour due to operator's skill, scheduling, etc. We can estimate an absolute operational efficiency (A0E) [8] as: A0E = (actual through put) / (ideal throughput) = 80 / 100 = 0,8

Note ideal benchmarks can be observed at the machine or process level, but are almost never observed at the firm level. Thus alternative metrics are beneficial in the cases when ideal benchmarks are not observable.

#### **Relative Operational Efficiency**

Relative operational efficiency (ROE) is the ratio of actual throughput compared to best observed throughput. Relative benchmarks are often used to measure efficiency because similar comparable machine, process, firm, etc. are often easily identifiable. We estimate ROE by identifying the best observed performance in a data set of multiple operations performing the same task, for instance, a data set of multiple machines performing the same manufacturing process. We find that the best observed throughput is 90 units per hour, but machine A produces 80 units per hour. We can estimate the relative operational efficiency (ROE) of machine A [8] as:

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R0E = (actual throughput) / (best observed throughput) = 80 / 90 = 0,88
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Best observed throughput is often determined by using historical performance data under the assumption, if all conditions are unchanged, actual throughput should be equal to/or close to the historically best performance.

#### **Cost Structure Checklist**

The following checklist allows to evaluate qualitatively the Cost Structure of the company (startup).

Description	Examples	Points
1. CAC (Customer Acquisition Cost)	AppStore provided more easy way for customers to get new applications for smartphone than centralized updates of Symbian from Nokia. It allowed to Apple have lower CAC than Nokia Nokia failed	3
2. Customer Churn Rate	If your Customers Churn Rate is less than benchmark If your Customers Churn Rate is over benchmark (+/- 1%) If your Customers Churn Rate is higher than benchmark	3 2 1
3. Operational Efficiency	You have been defined an Absolute Operational Efficiency Ratio and it is higher than 0,9 Your Relative Operational Efficiency is higher or equal than 1	4 3
	Your Relative Operational Efficiency is less than 1	1

Cost\_Structure\_Rate is a sum of points in the table.

### 3 Notes about the business model evaluation process

This section contains notes for stakeholders about the business model evaluation process.

#### 3.1. Notes for Startup team

Startup team has to provide the information about the markets, customers, suppliers, and accounting data (revenue, costs). This information can be presented as the reports:

- Market analysis report;
- Customer analysis report;
- Value proposition model;
- Suppliers report;
- Accounting report;
- Competitors Analysis Report.

#### 3.2. Notes for Experts

The total business model rate is calculated by next formula:

Total\_Business\_ Model\_ Rate = (VC\_Schema\_Rate + Revenue\_Rate + Cost\_Structure\_Rate) / 3

#### where

VC\_Schema\_Rate demonstrates the place of the company in the general (business ecosystem) value chain. It is calculated by the algorithm in the section 2.1 of this document.

Revenue\_Rate demonstrates how the company will collect revenue. It is calculated by the checklist in section 2.2 of this document.

Cost\_structure\_Rate demonstrates how company will spend money. It is calculated by the checklist in section 2.3 of this document.

#### 3.3. Notes for Investors

Points	Recommendations for decision making
7-10	The business model has the high potential and can be interested for investors
4-6	Pay attention to the details of the business model: something wrong with it
0-3	Casino, girls You know a lot of interesting ways to waste money

## 4 References

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6. Emily Bauer. All About Customer Acquisition Cost (CAC).

https://www.propellercrm.com/blog/customer-acquisition-cost

7. Geckboard blog. Customer Churn Rate. https://www.geckoboard.com/learn/kpi-examples/ startup-kpis/customer-churn-rate/

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