

# GUIDELINES FOR SETTING UP SUCCESSFUL PRODUCT CONFIGURATOR PROJECTS

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**Abstract:** When observing product configurator projects that are started by companies to enable a conversion-driven online interaction between customers and the companies' product or service offerings it becomes obvious that a high number of these projects fail. In analyzing these failures it is important to understand and prioritize the requirements of users and the requirements of companies in customization approaches. Matching the findings with lessons learned from setting up a large number of configurator projects for companies we developed guidelines that highlight crucial success factors in creating victorious interaction environments.

**Key Words:** Product Configurator, Mass customization, Lessons learned, Guidelines

## 1. INTRODUCTION

The *Configurator Database Report 2015* [1] states that »mass customization is in a constantly evolutionary process«, which can be seen very ambiguously. In this report 1050 online B2C product configurators in 16 different industries that are listed in the *Configurator Database* ([www.configurator-database.com](http://www.configurator-database.com)) have been analyzed and compared with the number of configurators that were captured a year earlier in the *Configurator Database Report 2014* [2]. As depicted in figure 1 below generally a growth in numbers has taken place - between 3% to 52% of configurators depending on the industry have been added from 2014 to 2015.

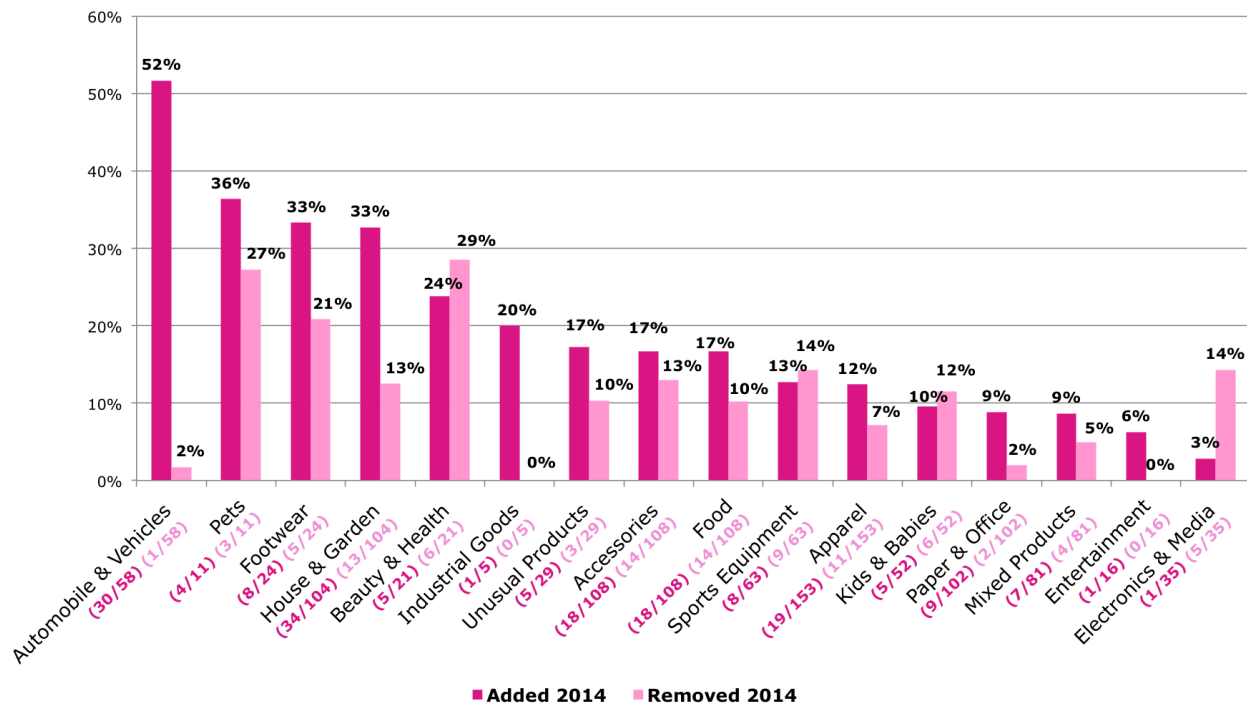


Fig. 1. Added versus removed configurators in 2014

Nevertheless up to 29% of the configurators have been removed within one year [1]. The study *The Customization 500* analyzed initially 600 product configurators. About 17% of the monitored configurators went out of business during the time of conducting the study, so in the end only 500 configurators are listed in the study [3].

As observed by both sources there is a quite high dropout quote of configurators every year. The following paper focuses on detecting why configurators are vanishing and what the failures of configurator projects may be. By taking a closer look at literature and by analyzing configurator projects that use *Combeeneration* as configurator management system, challenges of configurator projects are detected and guidelines to cope with these are suggested. With *Combeeneration* companies can develop their own flexible product configurator, including an all-in-one web shop. The research takes advantage of the experience gathered through numerous configurator projects which were personally supervised by the authors.

## 2. FAILURE OF MC PROJECTS

Various reasons for failed mass customization projects can be found in literature. Walcher and Weger [4] analyzed the question whether these closures and failures of mass customization organisation are a result of conventional business failure reasons or caused by weak points in the concept of mass customization. They developed a classification system for failure reasons based on publications and qualitative expert interviews. This classification system distinguishes between the categories *market & customer* (*customer benefits, configuration, communication*), *product & process* (*finance, production, organization*) *personal factors*) and *mass production to mass customization & change management*. Each being separated into four phases: *innovation phase, customer requirements & customer interaction, inbound logistics & operations* and *outbound logistic & after sales* derived and adjusted from *Porter's value chain* [4].

By taking a closer look at startups a failure might be that they do not progress out of their startup phase into a scalable business model. Reasons may be a lack of money, wrong or no investment policy, a poor business model or even a wrong team structure [3]. But also existing companies, which want to expand their product range with individualized products may have problems introducing a mass customization strategy. The main reason for failure is that companies don't define a target group for the configurable product; instead they just offer features fitting to their existing process. Consequently the configurator is not used or the products are not purchased resulting in wasted money and lost efforts [5].

## 3. DEFINED CHALLENGES OF CONFIGURATOR PROJECT PROCESSES

A growing number of mass customization companies utilize the powerful SaaS product configurator management system *Combeeneration* to run their customer-product interaction ([www.combeeneration.com](http://www.combeeneration.com)).

In accompanying these configurator projects frequently recurring challenges have been observed.

In the following there is a list of all common detected challenges of eight chosen projects based on the matrix of

Walcher and Weger [4]. To protect the privacy policy of the companies their names are not stated. Nevertheless all of them are operating in the field of B2C mass customization.

### Market & Customers

- No clear definition of the target group concerning the MC product
- Didn't speak to target group
- No appropriate solution space (too many choices) → product complexity is too high/too much customization options
- Market not appropriate for MC → enough standardized products
- Too complex process
- No marketing budget or knowhow to promote the product
- Too much time wasted on adjusting the configurator before launch
- No clear or tested product price strategy (to high price)
- Wrong expectation/assessment of the defined target group (market not appropriate) → not meeting customers' expectations

### Product & Process

- No clearly defined targets → output of the configuration – no measurement
- Inability to make a got for it → lack of management knowledge or marketing skills

### Mass Production (MP) to Mass Customization (MC) & Change Management

- No responsible project manager
- MC approach is not fitting to brand

The graphic below shows all elicited challenges in the matrix of Walcher and Weger [4]. Each company who faces a challenge of the previous list has been marked in the adequate field. The total sum of each field is visualized by the color red. The darker the field the more companies face challenges in this category. The heat map depicts that the most common challenges occur in A1 (*market & customer/innovation phase*), B1 (*market & customer/customer requirements/interaction*) and C1 (*market & customer/inbound logistics*).

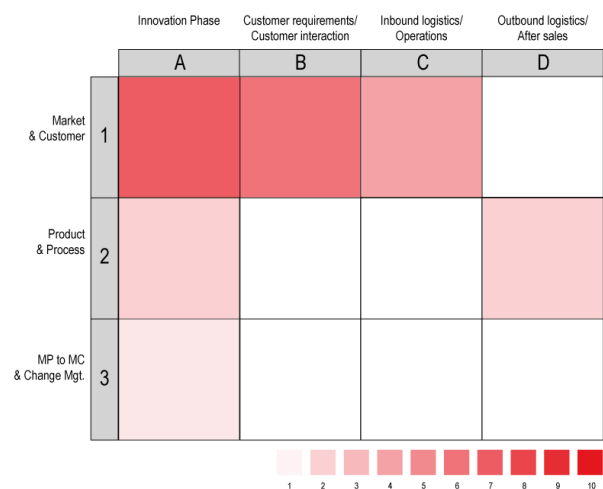


Fig. 2. Heat map with challenges of the analyzed configurator projects (own representation based on Walcher and Weger [4])

Summing up most of the evaluated companies face challenges in the category *market & customer* as well as in the *innovation phase* and *customer interaction phase*. So it seems that the requirements of companies and customers have not been defined from the very beginning. Nevertheless the requirements should be detected and prioritised as a starting point.

#### 4. REQUIREMENTS FOR CONFIGURATOR PROJECTS

##### 4.1. Requirements of customers

To provide customers with a positive configuration experience the following criteria should be considered: *help*, *usability* and *visualization*. Help can be offered with an overall customer-help, a process navigation bar stating the progress of the process, an overall overview of the already done selection, system recommendations and many more. By means of usability the configurator should be easy in use, user-friendly designed and consequentially structured [5].

##### 4.2. Requirements of companies

The main objectives companies pursue by offering individual products are *image*, *profit* and *learn*. Especially big companies focus on improving their image by offering custom products. Learn means that companies want to gather information from configured products to get a better insight in possible product trends as well as the preferences and demographic characteristics of their target group [5].

Successful MC startups want to react flexible and quickly to the demands of the market. They desire to develop minimal viable products to enter the market at an early stage. By constantly testing their offerings with different options they try to identify what their customers want [5].

Matching these requirements with lessons learned from accompanied configurator projects we introduce the following guidelines for companies they may consider when setting up a product configurator project.

#### 5. RECOMMENDED GUIDELINES

The findings show that already in the innovation phase companies face challenges. The following guidelines should give a basis to avoid misleading in the beginning of a configurator project.

1. **Target groups should be defined from the very beginning by using personas and customer journeys.** It is essential to specify who the customer is, what his/her requirements and expectations according to the customization process are and where he/she is being found (online vs. offline). This can be done by creating personas, who are fictitious characters with a specific look, habits and curriculum. Personas should have special characteristics such as a certain age, sex, desires, predilection for devices (laptop, smartphone etc.), special shopping habits and many more. Visualising a persona has no limits - pictures from the internet (i.e. photo

databases) or comic characters can be used. The more details a persona has the more it comes to life. The main function of personas is to reflect a certain customer and target group and they are usually developed only for the internal use. By sketching preferred customer journeys for these personas, the essential requirements for the whole project can be determined. The customer journeys can include several components such as touchpoints, used devices, location, desires and many more. Not only for the configuration process these components are necessary, also for the overall marketing strategy and sales force it is crucial to know how and where to reach the customers.

2. **Configurator projects should start slim and stay flexible after launch.** In a customization project the configurator is the main touchpoint to the customer. That is why a lot of effort is put in the concept phase and implementation of the configurator. However, we recommend not to wait too long to launch the configurator or delay the initial launch; instead it makes sense to start slim and extend the configurator over time. This guarantees no delay in the project planning and to save money from the very beginning. Even if the configurator had a great launch, it is important to stay open according to the customer requirements. To name an example the company *Flaschenhelden GmbH* launched a brand to individualize sparkling wine called *DeinSekt.de* – during operations the user tracking data showed that a growing number of customers use the website and the configurator with mobile devices. Consequently they decided to make the configurator responsive by implementing a modified navigation, product positioning and extended content to serve customer device needs. In that case the modification has been facilitated by using the flexibility of an adequate customization software (i.e. *Combeonation*). Figure 3 and 4 show a screenshot of the mobile and desktop version of the *DeinSekt.de* configurator.



Fig. 3. Desktop version of *DeinSekt.de*



Fig. 4. Mobile version of DeinSekt.de

During the concept phase of a configurator project it is sometimes not clear which price strategy or process navigation is the best. These open decisions should not hinder the project launch, but be taken seriously. Such indicators can be tested with rapid prototyping and A/B testing. Using an appropriate software facilitates configurator projects by having the possibility to implement two simple prototypes to test functionalities, process steps, design or pricing models. Also an already launched configurator can easily be adjusted with the right software to meet customer desires (i.e. *Combeeneration*).

3. **Existing brands and products should not overestimate themselves.** Whether the company which offers a configurator is established or not, customers attention has to be drawn to the advantages of an individualized product. Brands should not expect that people use their configurator or purchase an individual product, just because they offer it. It is important that a continuous marketing strategy is embedded in the whole company and that a person or a team feels responsible for the configurator project.
4. **Companies should track and analyse customer data and stay curious.** Even if a configurator project has been successfully launched, the market can change very rapid and customers may create other or new needs. Permanent data tracking and analyzing the traction will guarantee that occurring trends and new customer desires will be detected. To facilitate the data tracking for companies *Combeeneration* implemented a service to read the configuration and website interactions. Not only interpreting the statistics of the own project is relevant, also monitoring competitors and benchmark companies gives insights into market trends and opportunities for differentiation.

## 6. CONCLUSION

Taking a closer look at the challenges that occur in configuration projects there is a need for optimization right from the start. Beside declaring a concrete target group, rapid prototyping and building a configurator on a

flexible system is essential. The guidelines are just a recommendation that may be considered in configuration projects. Nevertheless the limitation of this paper is that the guidelines are based on a personal experience by accompanying several configurator projects. Even though the experience is gathered from projects of various industrial sectors and different complexities the guidelines are not empirically proven.

## 7. REFERENCES

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