Designing an ICT tooling platform to support the needs of SMEs in business model innovation

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Keywords (up to 5)

Business model innovation, business models, digital platform, business model tooling, SME

1. Introduction and purpose

The relevance of Business model innovation (BMI) to survival and competitiveness of companies is largely acknowledged by academia and industry. Still, a recent study by Bouwman et al (2016) showed that 37% of Europe's small and medium sized companies (SMEs) are engaged in BM Innovation. This means that almost two thirds of the SMEs do not change their business logic, thus staying within their familiar comfort zone. This can be fine for some, but many more SMEs will need to adjust and innovate their business model as the world changes around them especially due to digitalisation.

Moreover, very few SMEs use formal methods to improve their BM - of those SMEs that do BM Innovation, only 19% make use of formal methods (Bouwman et al., 2016). This raises a question whether it is possible to support the BM innovation of SMEs by providing them tools that fit their strategic aims and practical BMI needs.

In this paper, we present two design cycles for an online platform with ICT-enabled tooling that supports business model innovation by SMEs. The platform connects the needs of the SMEs regarding BMI with tools that can help to solve those needs and questions. The needs are derived from our earlier case study work (Heikkilä et al. 2016), showing typical BMI patterns of the SMEs needs - labelled as 'I want to's - about what an entrepreneur wants to achieve with business model innovation. The platform provides sets of integrated tools that can answer the typical 'I want to' questions that SMEs have with innovating their business models.

2. Method

We follow the approach described by Verschuren and Hartog (2005) for designoriented research. We derived requirements from interviews with SMEs and SME helpers, brainstorm sessions, literature on existing tooling, the partners' experience with tooling in practice and earlier research results and intermediate evaluation (De Reuver at al., 2016; Heikkilä et al., 2016).

3. Results

The platform is a first that provides BMI tooling specifically for SMEs. We adapt 29 BMI tools for the specific needs of SMEs, including `paths' that integrate multiple tools for reaching a particular `I want to' goal (Table 1). The platform has been implemented through a prototype, see Figure 1 for the homepage and Figure 2 for the business model innovation paths. Evaluation is ongoing using log data from the platform and action research case studies in which the tools and platform will be applied by actual SMEs in real-life innovation projects. In May 2017, we have about 2,000 sessions by almost 1,000 users, with an average number of 6.4 page views.

Table 1: I-want-to's and business model tooling in the platform

I want to	Start a new busi- ness	Test my busi- ness	Grow my busi- ness	Make my busi- ness profi- table	Tools in the	e platform to I-want-to	support the
know my customers	X			х	Target group selection	Focus group	Persona
reach my customers			х		Persona	Marketin g cards	Marketing mix
test the attractiveness of my product	х	X			Thinking hats	Focus group	
test if my business is financially sound		х			ВМС	Profit calculator	
test if my business is futureproof		X			ВМС	PESTLE	BM stress test
better discuss my business		х	х		SWOT	ВМС	BM patterns
develop a (viable) business model	Х		х		VPC	ВМС	ROI calculator
improve		Х		х	Process	Deadly wastes	

efficiency				journey	canvas	
improve my offering			X	Persona	Competit or analysis	VPC
explore new ways of making money		х	х	ВМС	BM patterns (red cards)	(BMC)
explore (new) markets	x	x		PESTLE	Five Forces	SWOT
implement my new business	Х			ВМС	ВМС	BM roadmap
convince partners			X	Partner analysis	Partner value matrix	

^{*)} Sometimes it may be useful to add an explanatory footnote to a table element

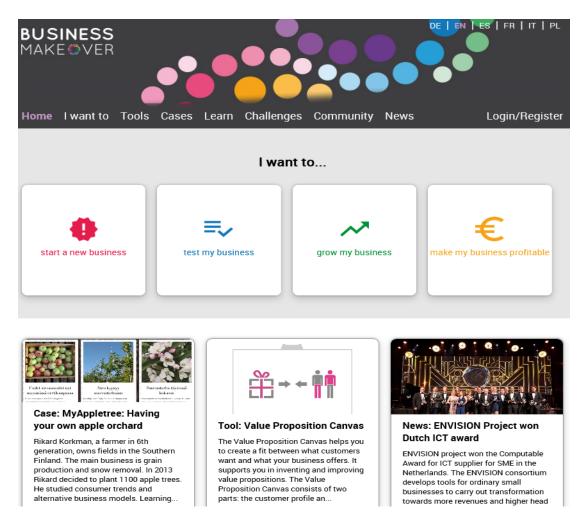


Figure 1: Homepage of the platform www.businessmakeover.eu

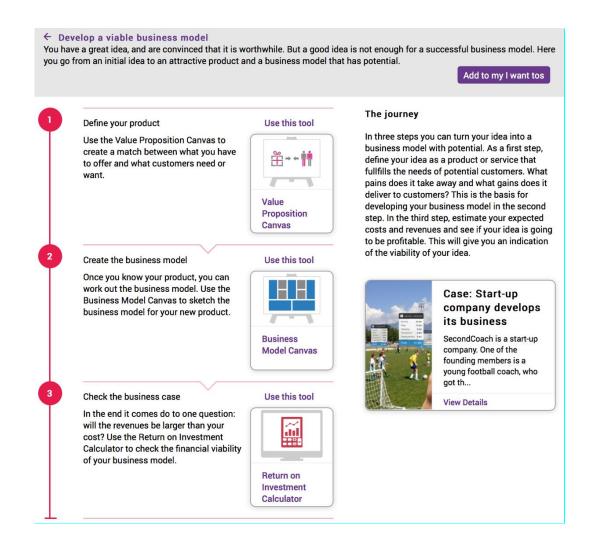


Figure 2: I-want-to paths implementation on the platform

4. Acknowledgements

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5. References

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