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Private and Public Business Models in Internationalization of VET

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Abstract

The funding program “Internationalization of VET”, funded by the German Federal Ministry of Education, recently subsidizes different projects which are funded for implementing education and training services (initial vocational education and training as well as further education) in different countries abroad. This paper analyses two cases from the funding line in regarding their business model approaches and their (current) outcome. The project in Greece, dealing with modernization of curricula and vocational orientation, is successful in another way than the project in Serbia which strives for a demand-driven development and model-like implementation of a dual VET school in Serbia.

Keywords

VET reforms

1 Introduction

A special interest of the funding programme is to support the development of context-related and need-driven business models. This is a challenge for the involved VET providers as they mostly lack the experience of offering services abroad. Based on the “business model generation approach“ by Osterwalder and Pigneur (2010) and Osterwalder et al. (2014) we present a comparative analysis of the developed business models with the focus on nine elements: key partners, key activities, key resources, value proposition, customer relationship, channels, customer segment, costs, revenue.

Results of our first online survey¹, completed by all funded projects of the funding program, conducted in fall 2018 and executed by our project partner IIT in Berlin, show that 69% (N=40) of the projects actually work on a project in their respective target country for the first time and only 31% have been active already in the country during the last five years. This

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¹ All projects of the IBB funding line which started between 01.07.2017 and 31.03.2018 have been asked to participate in the online survey.

means a large share of the organizations face the challenge of expanding to a new context and of having to establish new cooperations and connections with potential business partners, clients and local decision-makers such as government representatives.

Currently, 14 projects (which started between mid-2017 and end-2018 and run three years usually) work on the issue: How can a vocational education and training-related service be placed on the market – a foreign, in many cases even unfamiliar market? The countries of interest are Greece, Spain, Serbia, Tunisia, Iran, Kazakhstan, China, South Korea, Brazil, Mexico, and the Philippines.

The goals of the funding program are divided in two dimensions. On the one hand, the first objective is to implement a sustainable business model on the foreign market, meaning after the duration of funding, there should be a lasting business activity. This targets the achievement of economic gains for VET providers next to the competitiveness of German companies on international markets. On the other hand, there is the target regarding the output-system-level: In how far can the projects support and push reforms and structural developments of the VET system in the target countries? Here, the aim to support international VET cooperation is included in the funding scope (respectively included in each funded project). This division is kept in mind for the analysis of the presented cases.

Hereinafter, we demonstrate the practical application and development of a Business Model Canvas (BMC), named by the kind of presentation of a business model, by drawing on two of the projects: NEMID², a project located in Serbia, and GRÆEDUCATION³, a project working in Greece. For NEMID and GRÆEDUCATION, we present the categories of BMC and how and why they changed in an iteration process including political actors and other stakeholders.

Our research questions are:

- How are the nine elements defined and how are the relations between the nine elements defined?
- How and with which strategies are the change agents (VET providers) managing the challenges to offer their service(s) abroad?
- Which impact has the project approach on the development of demand-oriented and international VET business models and on the success of the project?

2 Methods

2.1 Case study methodology

We use the case study methodology. Selected by the funding regulation, our cases are projects that are funded in “Internationalization of VET”. This paper focusses on two contrasting justified cases. We focus on different cases: different in respect of the environmental conditions (e.g. regarding political and economic frameworks: Serbia is not a EU member state and is an accession candidate since 2012; Greece just went through a tough economic crisis; political upheaval in both countries but with very different backgrounds) and the service conditions (e.g. product: a dual VET school in Serbia and curriculum development in Greece).

We apply a mixed methods approach using qualitative and quantitative survey methods (Kuckartz, 2014). Our main data survey form is guided expert interviews which are conducted, transcribed and evaluated.

² The acronym NEMID stands for "Nachfrageorientierte Entwicklung und modellhaften Implementierung einer dualen Berufsschule in Serbien“, which can be translated with “demand-driven development and model-like implementation of a dual VET school in Serbia”.

³ GRÆEDUCATION is an agnomination of the words *Greece*, *green skills* and *education*.

Each funded project has project coordinators and project personnel. With each project, we have the opportunity to interview several project participants within the project period: Firstly, an introductory discussion at the beginning of the project term; secondly, interviews with the German project participants within Germany; thirdly, interviews with project partners in each target country; fourthly, a final inquiry at the end term or after completion of the project.

Furthermore, regular online surveys are used to collect quantitative data. The surveys are filled out by different project actors to reach different varieties of perspectives (as project managers have different insights than project performers etc.).

For each target country, we draw up comprehensive context analyses, including not only the education systems but also labour market issues and political reform processes. The market of services for VET is being analysed as well. These studies are based on desk research mainly.

2.2 Business Model Canvas

Our theoretical research concept is located in a business model approach which is called “Business Model Canvas” due to its way of presentation (Osterwalder & Pigneur, 2010).

For the conceptual work, some of the projects work with the Business Model Canvas (BMC) already. Osterwalder and Pigneurs (2010) approach of the BMC is to compile an image of the own business model to improve the understanding of processes, relations and problems by visualizing. The scheme of the BMC is visualized in figure 1. The Canvas is all about thinking in categories of business and answer the following questions:

Value Propositions: What’s compelling about the proposition? Why do customers buy and use it?

- Channels: How are the propositions promoted, sold and delivered?
- Customer Relationships: How do you interact with the customer?
- Customer Segments: Who are the customers? What do they think, see, feel, and do?
- Key Partners: What can the company not do itself?
- Key Activities: What strategy does the business do to deliver its proposition?
- Key Resources: What unique strategic assets must the business have to compete?
- Costs and Revenues: What are the business’ major cost drivers? How are they linked to revenue?

The heart of the BMC is to link and to relate the elements with each other and with the business model environment. This can be done by prototyping, testing and trials to develop the “first ideas” to a running business model. After a testing phase, the BMC and its elements are supposed to be adjusted.

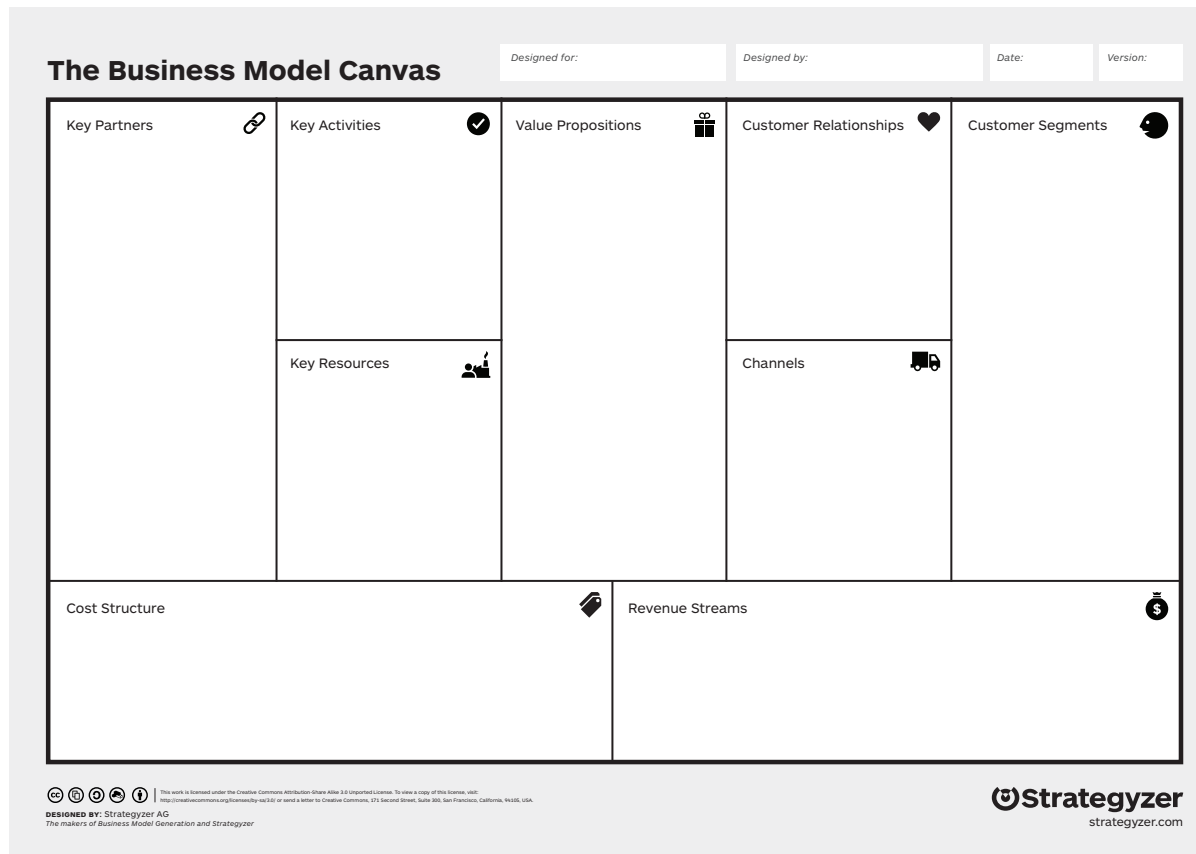


Figure 7 Business Model Canvas. <https://strategyzer.com>, CC-copyright.

In general, a private commercial business „describes the design or architecture of the value creation, delivery and capture mechanisms employed. The essence of a business model is that it crystallizes customer needs and ability to pay, defines the manner by which the business enterprise responds to and delivers value to customers, entices customers to pay for value, and converts those payments to profit through the proper design and operation of the various elements of the value chain.” (Teece, 2010, p. 191). Therefore, a private business pursues a profit orientation per definition. For sustainability it is, thus, necessary to protect the business model by a copy protection (e.g., intellectual property rights) or at least to impede imitations. These are the basic principles of a private business model: profit orientation and needed copy protection.

Another type of business models is a public business model which strives for opposite goals (in comparison to private businesses): The dissemination should be enabled and facilitated explicitly – it should be enabled and facilitated explicitly (e.g., open educational resources). Hence, profit is not only to be regarded in an economic way. Other profit dimensions can be, corresponding to Bourdieu (1986) the development of social capital (such as the establishment of networks, trust), cultural capital (e.g., certification, development of competences) and symbolic capital (like prestige or reputation).

Therefore, we propose to extend the classical BMC category *Revenues* (which actually only includes economic profit) towards more openly thought out types of capital: Social capital, cultural capital and symbolic capital need to be taken into account. Within our two cases, we substantiate our claim by showing a private and a public business model, their approaches, similarities and differences.

3 Results

3.1 The case of NEMID

NEMID, which was initiated by the German publishing house Klett Präsenzlernen GmbH, considered the following aspects for the first design of the BMC:

- Value Proposition. The product is a postsecondary theoretical vocational training in combination with productive workplace learning in a company. The duration is 2 years (Table 1). An accepted certification and good job prospects in the training company (for the trainees) as well as specialized junior employees (for the employer) are part of the proposition.
- Channels. A B2B (business to business) approach via chambers (PKS Serbian chamber of commerce; AHK Serbia) and direct contact with companies is used to reach customers.
- Customer relationships. Two focus groups need to be addressed in particular: teachers (VET school) and trainers (in-company trainers).
- Customer segments. The students in school and the companies are the customers whose needs the product (service) must be fulfilled.
- Key partners. Chambers (PKS; AHK) and ministries (German BMBF; Serbian Ministry for Education).
- Key activities. Theoretical training in professional expertise, methodical expertise and social expertise (in VET school); specific in-company training (workplace).
- Key resources. Teachers, teaching material, organization (VET school); trainers and company (company).
- Cost structure. For Klett, costs of ca. 150€/month/student will arise at full capacity; companies are supposed to pay school fees.
- Revenue streams. School fees paid by companies; revenue for companies results from the value added for the trainees during and after the training time.

The project chose the postsecondary education level due to two reasons: First, on the secondary level, general education subjects need to be included in the curricula and this is not the case in postsecondary schooling. Second, younger than aged 18 (which would be the case in secondary schooling) it is not allowed to young people to work for a company.

Table 5 NEMID first business idea. Based on Ayen (2018).

Increment 1: 2 years postsecondary dual VET course	
Year 1	Year 2

After some months of project activity, as well as different interviews and feasibility checks with the German Chamber of Commerce (AHK, Außenhandelskammer) in Serbia and PKS, NEMID decided to adjust the original plans due to two facts: Firstly, the responses made clear that the heterogenous educational levels of students were not considered. Secondly, a two-year school fee is too high a risk (and cost) for companies.

Therefore, an iterative process of BMC development was initiated: The product was modified towards a postsecondary VET school which is modularized and which offers pre-courses (to make up for deficits accumulated during secondary schooling) (Table 2).

Table 6 NEMID second increment. Based on Ayen (2018).

Increment 2: postsecondary dual VET course, modularized with pre-course		
Pre-course 4 weeks	Module 1 6 months	Module 2 6 months
	Module 3 6 months	Module 4 6 months

After professional content-related feedbacks, NEMID realized that a modularized form might be risky, because for companies, each module is a decision to invest (or to not invest) for the company. Hence, companies and trainees could tend to buy the pre-course and one or two basic courses and leave the VET school afterwards.

A third iteration followed: The VET school offers a pre-course (duration: 4 weeks) and a two-year course (Table 3).

Table 7 NEMID third increment. Based on Ayen (2018).

Increment 3: postsecondary dual VET course with pre-course and mid-term exam			
Pre-course 4 weeks	Year 1	Mid-term exam	Year 2

Considerations and responses of companies – which are supposed to use the service finally and also pay for it – were positive, but they first wanted to ‘dip only a toe in the water’. Furthermore, companies do not want to pay for the entire amount of school fees. Therefore, a further adaption of the service offer has been made (Table 4):

Table 8 NEMID fourth increment. Based on Ayen (2018).

Showcase-course; 4 weeks	Increment 3: postsecondary dual VET course with pre-course and mid-term exam		Specific courses & staff retention; about 6 months
	Pre-course 4 weeks	Year 1 Mid-term exam Year 2	

Here, students pay the pre-course themselves and companies pay for both years of training, additionally to a training wage for the trainees in the second year.

NEMID plans to start implementation of this concept in autumn 2019 and the project is prepared to undergo additional conceptual changes. This actually is part of the approach: The

content and framing of the service is customized to the context of Serbia and the companies operating in the country which will draw benefits from the VET service.

3.2 The case of GRÆEDUCATION

GRÆEDUCATION was initiated by FIAP e.V., a German research center in cooperation with HBZ, the training center of the Chamber of Crafts Münster and cooperating with a private event and project management company. Moreover, being one of the projects of the funding program, GRÆEDUCATION is offering the development and proving of new educational services related to VET. The first idea was to offer consultation to develop Greek curricula, as well as to implement Green Tech and sustainability in the VET system. Coming from this starting point, occupational profiles can be made more attractive to the youth, as vocational education and training is regarded only as the second choice compared to general secondary or higher education, for both parents and young people (Cedefop, 2018). Therefore, one of the project's goals is to develop vocational and career orientation campaigns in the field of environmental and technical occupations. Furthermore, the project's scope is on train-the-trainer qualification for companies and vocational schools.

The following elements of the BMC's elements have been filled out by project actors (GRÆEDUCATION, 2019).

- Value Proposition. Modernization and Greening of VET curricula in Greece; service development; development of career and vocational orientation.
- Channels. Face to Face contacts and social media as well as a memorandum of understanding characterize the channels to reach the customers.
- Customer relationships. "Partnership and dialogue focused approaches" and "customer integrative development of educational services" describe the relationship to the target groups.
- Customer segments. Different groups belong to the customer segments: Companies that are working with green skills/green tech (regarding VET and in-service training), associations and schools regarding vocational and career orientation, as well as private and public institutions.
- Key partners. Educational institutions (public and private); companies; teacher; multipliers (DG-IHK; embassy; associations).
- Key activities. Within co-creative workshops, educational offers and services are developed; evaluated and optimized.
- Key resources. The main key resource of GRÆEDUCATION are reliable cooperations in Greece combined with open, dialogue-oriented and appreciative approaches to reach the target groups. Additionally, technical infrastructure (e.g. virtual reality) belongs to the key resources.
- Cost structure. Personnel costs for lecturers, moderators, translators; development costs for material and concepts; marketing costs, technical infrastructure.
- Revenue streams. Not yet planned except for public funding/public projects.

The approach used by GRÆEDUCATION so far was to communicate with Greek actors of VET, where they see needs and requirements to revise and improve their system. For example, in cooperation with the Greek EPAS schools⁴, the curriculum of the electrician was chosen to be modernized. Also dialogue-oriented, the curriculum has been edited and greened (new green technologies were included) and is now being applied in all EPAS schools in Greece. Another

⁴ Secondary vocational schools

example for the co-creative project approach is the organization of the first Greek Girls' Day: GRÆDUCATION demonstrated occupational perspectives within new, green and sustainable technologies to more than 300 participants.

4 Conclusions

GRÆDUCATION and NEMID with their differences (framework conditions; business models; experiences) are two contrasting cases and we expect differences with regard to the projects' success concerning success dimensions.

Both cases use a dynamic and adapting strategy to implement their initiatives in the target countries. One difference is the kind of product: NEMID sells a further education training to companies, which can be sustainable beyond the funding period due to a revised and polished business model. GRÆDUCATION offers institutional consultancy and is also accepted by Greek partners in this role. Therefore, it is not an aspired goal to develop a marketable business model. For this objective of the funding line, GRÆDUCATION is not successful (in sense of profit orientation and sustainability), because without public funding the project will end after the funding duration.

For the other goal of the funding program, namely for the effects within the VET systems of the target countries, the essay shows that here the result is vice versa. NEMID offers a postsecondary private VET school, financed by firms and adapted to the needs of specific firms. Effects on the Serbian VET system do not exist (so far). In Greece, GRÆDUCATION already shows effects within the VET system: Curricula are being developed and improved in a long-lasting manner and actors of vocational education and training that were usually not cooperating in Greece could be brought together.

NEMID, a project which strives for the demand-driven development and implementation of a private dual VET school in Serbia, uses the BMC for its strategic planning. After some months of project activity, as well as different interviews and feasibility checks with the German Chamber of Commerce in Serbia, NEMID decided to adjust the original BMC plans. Thus, an iterative process of BMC development was initiated: NEMID iterated the BMC several times. The project uses the business model canvas to elaborate a private commercial business. GRÆDUCATION uses the BMC rather selective at different points in the project progression. This project is an example of a public business model. With regard to social, cultural and prospectively also symbolic capital, GRÆDUCATION earns revenues as well.

Subsuming, both cases refer to a dialogue and needs oriented approach in the target country including the question "What is the demand of stakeholders?" (in Serbia: companies; in Greece: companies, official bodies, and teachers). NEMID developed a business model that is successful within economic profit dimension; however, this business is dissociated from the regular VET system. Therefore, in Serbia, we can see no effects on the systemic level. The reference – a private commercial business model – is the explanation as well as the guiding principle. GRÆDUCATION does not establish a profit oriented business model as a public business model is the reference framework. Here, an economic profit concept is not excluded per se, but not compulsory as sole objective. However, effects on VET system are apparent already and a successful VET cooperation meets the aims of the funding line as well. Business is not to be thought in classical, pure-gain oriented dimensions: As in the case of GRÆDUCATION, we can see other gains than profit. Until now, only economic profit was acknowledged within business modeling and consequently, the theoretical conceptualization of business modeling needs to be re-designed. This inference also counts for the targets and objectives of the funding regulation.

To validate our results as gainful in general, a wider appraisal is necessary with other cases from the funding line and also with others unbiased by the funding program. This point affects also the limitation of our research: The cases were given through the funding line and a

reasonable choice of cases in terms of the research interest was not always possible. Due to this reason, scope and validity are limited hitherto. Furthermore, both analysed projects are still running in the meantime and the outcomes cannot be evaluated finally, so all findings are temporary.

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