

# BEAMIT: EXPANDING FROM PRODUCER TO PARTNER IN ADDITIVE MANUFACTURING

---

Knowledge Dimension:  
Business Model Development

---

Teaching Notes  
02 2019

---

Written by  
Fondazione Democenter-Sipe



Institut für Arbeitsforschung und Arbeitspolitik  
an der Johannes Kepler Universität Linz

**IAA** | Institut für Arbeitsforschung und Arbeitspolitik  
an der Johannes Kepler Universität Linz





These teaching notes were developed solely as the basis for class discussion. Teaching notes are not intended to serve as endorsement, sources of primary data or illustrations of effective or ineffective management.

### License

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) License. You can find the complete license text under:

<https://creativecommons.org/licenses/by-nc-nd/4.0/>



### Funding

This work is supported by the Interreg CENTRAL EUROPE Programme funded under the European Regional Development Fund (ERDF).

<https://www.interreg-central.eu/Content.Node/home.html>

 [interreg-central.eu/Content.Node/InnoPeerAVM](https://www.interreg-central.eu/Content.Node/InnoPeerAVM)

 [facebook.com/InnoPeer-AVM-142695166341360/](https://facebook.com/InnoPeer-AVM-142695166341360/)

 [twitter.com/InnoPeerAVM](https://twitter.com/InnoPeerAVM)

 [linkedin.com/in/innopeer-avm-94392014b/](https://linkedin.com/in/innopeer-avm-94392014b/)



## Teaching Notes: BEAMIT

- 1. Changing the business model is far away from an easy task. Many firms fail to do so even if they are in severe crisis (e.g. Kodak). How did BEAMIT come up with the idea to establish the service unit? What do you think about the timing of this move? What were the next steps in the process of developing this new service?**

To constantly keep a business model aligned with the reference market, is fundamental to understand the clients' real needs. First of all, BEAMIT was good in nurturing and exploiting a constant dialogue with the final customers. Secondly, the company built on its previous business experience to learn lessons for tackling new issues.

- 2. Producing goods is completely different from offering a service. What are the key success factors in manufacturing? What are the key success factors in the technical consulting business? What are the key success factors for developing hybrid offerings (i.e. combinations of goods and services)?**

Deciding to update its own business model is a strategic challenge. Like in the case of BEAMIT, such a change has to be promoted and driven by the upper management. Yet, as it affects the company as a whole, all the relevant divisions and functions have to be involved and have to play an active role. Strategic and transformative leadership and collective intelligence are two sides of the same coin (i.e. corporate change).

- 3. Which capabilities did BEAMIT have to develop in order to offer the new service? Which capabilities did BEAMIT have to develop the two businesses in parallel?**

In developing the new service, BEAMIT followed a simple and straightforward work plan: a) identification of which clients' need could be a new business opportunity; b) definition of a value proposition to sell them (i.e. a possible solution to the identified clients' need); c) organization of the service at operative and marketing level; d) launch of the service (promotion and experimentation). The work plan was implemented quickly and the timing was fundamental: the service was launched as a prompt answer when the potential clients really "felt" the need.



- 4. Adding a service unit to a manufacturing firm can be considered a reinvention of an existing business model. Use one concept (e.g. business model canvas) to describe the change from the existing to the new business model.**

Although a product and a service are different items to deliver to a client, providing them has some aspects in common. In both cases it means to identify and leverage assets, to organize production and delivery process, to establish and to manage a day-to-day collaboration with the client. The experience of BEAMIT shows that, in order to design, implement, integrate and cross-fertilize the product and service pipelines, the necessary starting point is the corporate knowledge asset. BEAMIT was able to analyse its know-how, to understand its value and to exploit it as common basis for its products and services.

- 5. What are the synergies between the two businesses? How can they be exploited further?**

In order to manage the product and service pipelines in an integrated way, BEAMIT designed an internal flexible organization at operative level, which can be activated on demand.

- 6. BEAMIT seems to be strong in engaging in innovative cooperation. How could BEAMIT use existing partnerships for the new business field? Which new partnerships are worthwhile exploring?**










As knowledge is the main asset leveraged and delivered through the new service, all the external collaborations that can increase the value of such an asset are the most strategic ones for BEAMIT.



## Business Model Canvas<sup>1</sup>

Within the basic trainings, each group was given a blank business model canvas with the task to analyse BEAMIT's business model accordingly (cf. Figure 1). The groups were asked to fill out the business model canvas, to identify connections between elements (e.g. key partners and sales channels) and to discuss discrepancies in the provided teaching case information. The following sections will describe the results that the basic training participants elaborated with regard to BEAMIT's business model.

Figure 1 Exemplary Illustration of BEAMIT's Business Model Canvas

|   |   |   |  |  |
|---|---|---|--|--|
| <p><b>Key Partners</b> </p> <ul style="list-style-type: none"> <li>▪ Educational institutions</li> <li>▪ Key suppliers to synergise production and raw materials</li> <li>▪ Already existing key partners</li> </ul> | <p><b>Key Activities</b> </p> <ul style="list-style-type: none"> <li>▪ Manufacturing mechanical components</li> <li>▪ AMCC consulting service (including training courses)</li> </ul>                                      | <p><b>Value Proposition</b> </p> <ul style="list-style-type: none"> <li>▪ Knowhow of design</li> <li>▪ Implementing additive manufacturing processes</li> <li>▪ Access to expert knowledge</li> <li>▪ Ability to tailor trainings and services to the actual needs of customers</li> </ul> | <p><b>Customer Relationships</b> </p> <ul style="list-style-type: none"> <li>▪ Switch from simply manufacturing components to working on joint projects with customers</li> <li>▪ Innovation partnership</li> <li>▪ All-around carefree package to foster customer relationships</li> </ul>                                   | <p><b>Customer Segments</b> </p> <ul style="list-style-type: none"> <li>▪ Manufacturing companies (already contracted manufactures and new ones) who want to introduce AVM</li> </ul> |
| <p><b>Cost Structure</b> </p> <ul style="list-style-type: none"> <li>▪ Personal costs (new hired personal, new group formation for each project)</li> <li>▪ Customer acquisition</li> </ul>                        | <p><b>Key Resources</b> </p> <ul style="list-style-type: none"> <li>▪ R&amp;D department</li> <li>▪ Qualified personnel</li> <li>▪ Interdisciplinary teams</li> <li>▪ Machine park for additive manufacturing</li> </ul> |   | <p><b>Channels</b> </p> <ul style="list-style-type: none"> <li>▪ Own sales department</li> <li>▪ Other machine producers</li> <li>▪ Word-of-mouth marketing</li> <li>▪ Online marketing</li> <li>▪ Learning platforms</li> <li>▪ Platform marketing</li> </ul>  |  |
|   |   |   | <p><b>Revenue Streams</b> </p> <ul style="list-style-type: none"> <li>▪ Maintenance agreement contract for certain services per year with options of purchasing complementary services for additional fees</li> <li>▪ Mutual sales commissions (BEAMIT and machine producers)</li> <li>▪ Daily rates per project</li> </ul> |  |

### Key Partners

With regard to key partners, BEAMIT has to consider that due to the change from a producer of additive manufacturing components to an AMCC consulting service, it needs new competences in teaching and didactics which would have to be developed. Therefore, educational institutions could function as new key partners additionally to the already existing ones. In this regard, also key suppliers should be considered because the production processes related to additive manufacturing and the required raw materials need to synergise in order for the value chain to work flawlessly.

<sup>1</sup> Exemplary results from the regional Basic Trainings



## Key Activities

In addition to the existing activities of manufacturing mechanical components, BEAMIT now also provides the AMCC consulting service which is profitable not only for customers, but also for BEAMIT itself. Consequently, also BEAMIT's key activities changed. While the customer gets access to expert knowledge in additive manufacturing, BEAMIT gets valuable insights into other company's struggles and problems with the same technology and learns how to avoid such struggles for themselves. Moreover, general training courses are a new activity within the AMCC business model. This could be enhanced with a specific project support provided by BEAMIT, such as an accompanying series maturity and development of new products and production processes respectively.

## Key Resources

An efficient R&D department and qualified personnel are two of the most important resources for maintaining BEAMIT's new AMCC service. The R&D department is essential in order to always be on the forefront of additive manufacturing technology. Qualified personnel is necessary because teaching is done by people and quality is determined by their knowledge on the subject and teaching methods. In addition to that the interdisciplinary team is a vital resource for the company. Many employees from many different fields (construction, thermal processing, optimisation, etc.) have to come together to make a successful consulting service happen. Moreover the machine park, having access to the newest machines and technologies, plays a key role in providing BEAMIT with a frontrunner position in additive manufacturing.

## Value Proposition

Regarding BEAMIT's value proposition, there have been some changes that occurred with the implementation of the AMCC service. Precisely, knowhow of design, implementing working manufacturing processes, access to expert knowledge of BEAMIT and their ability to tailor trainings and services to the actual needs of customers have become even more important value propositions for the company.

## Customer Relationships

A change in customer relationships between the two business models can be noticed. BEAMIT is no longer only the supplier of manufactured goods but now also a partner providing AMCC services. Therefore, customers switched from simply contracting certain parts to working together on a joined project with BEAMIT. Although a much deeper interaction between BEAMIT and its customers is needed, an innovation partnership could be a feasible option to get the best results. This, in turn, could enable BEAMIT to transfer some of the knowledge acquired in such projects



back into the company. In addition to that, the all-around carefree package that BEAMIT provides fosters the bond between the firm and its customers, thus strengthening customer relationships.

## Channels

Aside from BEAMIT's own sales department, different channels could be used: those very companies, which neglected to properly train their customers to use the purchased machines. A partnership between BEAMIT and other machine producers could therefore be formed. In this sense, BEAMIT could provide the consulting service on how to effectively use the machines manufactured by their partner - a win-win situation, as each services could complement the other well and boost sales in both companies. By turning machine producers into customers the relationship between the two elements, key partners and channels of the business model canvas, were to be deepened which could result in mutual support.

Further alternative channels are machine producers, word-of-mouth marketing and online marketing activities to possible sales channels, such as learning platforms. Moreover, through platform marketing another customer segment (e.g. private inventors, artists and amateur craftsmen) could be reached with the old business model as a component manufacturer. BEAMIT could establish a platform (very much like LEGO did) where people could design their own models/parts, or BEAMIT simply designs it for them (for a price of course). Afterwards, either BEAMIT could manufacture the desired part themselves or commissions the contract to a third party while taking a cut of the profit.

## Customer Segments

Through the new business model, BEAMIT can reach new customer segments, such as manufacturing companies that want to introduce additive manufacturing technologies into their processes. These new customers who want to introduce additive manufacturing technologies into their processes are often actually already contracted manufacturers of BEAMIT. By producing their own parts under the instruction of BEAMIT, old manufacturing customers might be driven away. In this case, the business model creates overlapping customer segments between the old and the new model which not necessarily has to result in driving one customer segment away. It would be a viable strategy for BEAMIT to offer their AMCC services for parts that can be produced easily while at the same time offering to produce difficult parts themselves. Therefore, BEAMIT could enter the high-quality and sophisticated market of additive manufacturing with their production park and, at the same time, teach emerging manufacturing companies basic process engineering. They would be able to expand their market size while simultaneously mitigating the risk to be replaced by competitors in the easy-to-produce segment. Of course not every manufacturing



company that currently has contracts with BEAMIT wants to implement their own additive manufacturing. Nevertheless, BEAMIT risks weakening their manufacturing competition by empowering their customers to implement their own manufacturing processes. The next logical step for the development of the company could be to purchase a big machine manufacturer. This way, BEAMIT could cover a large portion of the customer segment in the business model and would be independent from other manufacturers.

### Cost Structure

Regarding BEAMIT's cost structure personal and customer acquisition costs have to be considered. By adding the AMCC consulting service new experienced consulting personal needs to be hired or existing staff needs to be trained for consultation tasks. Moreover, for every project a new team has to be formed based on the individual needs of a customer which increases personal costs as well. Central to a consultant service is customer acquisition for gaining potential customers- Therefore, customer acquisition is an additional variable to consider when it comes to costs.

### Revenue Streams

Two possible revenue models could be considered when looking at BEAMIT's new business model. The first is based on the "maintenance agreement" concept, whereby the customer signs a contract to receive certain services per year or when needed (e.g. when a new product is developed and production processes need to be designed). In addition to the cheap base contract, complementary services can be purchased at higher prices. This strategy is supposed to lock the customer in and prohibit him from changing to other competing companies. Moreover, mutual sales commissions for contracts between BEAMIT and machine producers could be a profitable idea to add another revenue stream. In this regard, one alternative could be to give estimates for each project based on their daily rates, as it is quite common in the consulting industry.