

UNDERSTANDING CUSTOMER NEEDS – THE KEY TO INNOVATION SUCCESS (AN EMPIRICAL RESEARCH OF SOFTWARE COMPANIES IN BULGARIA)

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Abstract

Innovation is one of the main sources for long-term economic growth and structural change, and has always driven economic progress. It involves the creation of new designs and ways of doing things, their commercial exploitation, and subsequent diffusion through the rest of the economy and society. Innovation must increase value for the company, the consumer or the producer. For consumers, innovation means higher quality and better value goods, more efficient services, and a higher standard of living.

The crucial condition for the innovation to happen is the implementation stage. Implementation means the exploitation and the use of the innovative product. That distinguishes innovation from invention. A new or improved product can be called an innovation when it is used by the customers and satisfies their needs. Companies need to take steps to ensure that the created innovation meets their customers' needs. Understanding customer needs plays a central role in the process of creating an innovation.

This paper presents different concepts for understanding customer needs and gives different interpretation of the meaning of “customer need”. The paper presents an empirical research of how software companies in Bulgaria understand their customers' needs, how important they think that process is for the success of the software innovations. Based on the results of the conducted research, a new model for understanding customer needs is proposed to the innovative companies in the software industry. Its aims to help them develop innovation that customers want to buy and use.

Keywords: *understanding customer needs, traditional methods, job to be done theory, software industry*

1. INTRODUCTION – THE IMPORTANCE OF UNDERSTANDING CUSTOMER NEEDS

In the scientific literature, many authors focus on customer needs and the company's ability to understand these needs. “To sustain a competitive edge, more focus must be given to meeting users' needs, and not simply those explicitly stated in market research — but rather those latent user needs which can be revealed by alternative analytical methods, and by the users themselves” [Nordic Council of Ministers, 2006, p. 10]. Harvard Business School professor David Garvin [2005, p. 5] notes “studies comparing successful and unsuccessful innovation have found that the primary discriminator was the degree to which user needs were fully understood”.

According to another author “A creative mind may bring new ideas, but a new idea alone is not enough; the new idea needs to catch customers' hearts. Without knowing the real voice of the customer, you cannot catch the customers' heart, so you cannot succeed” [Yang, 2007, p. 6]. The British innovation and entrepreneurship expert Paul Sloane also defines the understanding of customers' needs as a key factor for the development of innovations. „Eliminate the risk in product innovation – get your customers to choose“, „Seek unhappy customers“, „Every problem is an opportunity for innovation” are just few titles that represent his findings. Steve Jobs also supports the idea that “you have to start with the customer experience and work backwards to the technology”.

Donald Ross conducts a study among 400 innovative companies in America and also defines the understanding of customer needs as a leading factor for the innovation success.

For 12 years, Anthony Ulwick, an American expert on innovation and entrepreneurship, studies the behaviour of companies and customers, making the following conclusion: “Companies ask their customers what they want. Customers offer solutions in the form of products or services. “I'd like a picture or video phone.” – they say, or “I want to buy groceries on-line.” Companies then deliver these

tangibles, and customers just do not buy. Customers should not be trusted to come up with solutions. They are not expert or informed enough for that part of the innovation process. That is what your R&D team is for. Rather, customers should be asked only for outcomes – that is, what they want a new product or service to do for them. The author defines the innovation as a process of figuring out what customers want.

2. UNDERSTANDING CUSTOMER NEEDS FOR SUCCESSFUL INNOVATION

2.1. Traditional method

The success of any company depends on its ability to create innovative products that meet the needs of customers. To achieve this goal, it is necessary to define the term of “customer needs”.

For many years, “customer need” has been defined as a description, in the customer’s own words, of the benefit the customer want fulfilled by the product or service. However, nowadays it seems that obtaining inputs in the customer’s own words results in the wrong inputs. Companies just do not know if these needs are a description of customer benefit, a measure of customer value, a statement of a problem. Under the traditional method of understanding and defining customer needs (Table 1), the main type of information that innovative companies are trying to get from their customers in order to create innovative products is in the form of:

Table 1. Definition of “customer need” according to the traditional method

Customer Need		Solution
		Specification
		Need
		Benefit

Solution: Many customers offer their requirements in the form of a solution, which includes statements of ideas, new concepts or suggestions for product or service features. A solution is the physical or tangible deliverable that is included in the product or service. Why is this information useless? Most customers are not technologists, engineers or scientists and do not know the best solutions. Customers are unaware of the product’s capabilities; do not know its features. As a result, giving customers the solutions they request often leads to customer disappointment.

Specification: A specification is an input in which the customer states the desired, for example, size, weight, color, shape, look, feel or other product and service performance characteristics – in an attempt to shape the solution. Again, customers are not experts, they do not know that a certain specification can create convenience in carrying out a particular activity, but it can also hinder another. Accepting specifications as customer inputs inherently prevents engineers and designers from using their creative skills to devise superior solutions.

Need: A need is a universal form of customer input and is typically stated as a high-level descriptor of quality. It is not uncommon for a customer to say that they want a product or service to be “reliable,” “effective,” “stable”. These needs are characteristically stated in the form of an adjective and inherently do not state a specific benefit to the customer. Although these statements provide some indication as to what customers are looking for, they turn out to be useless for developers. These needs are impossible to be measured or controlled and developers experience difficulties trying to figure out just what customers mean by “efficient” or “reliable”.

Benefit: A benefit is a statement, for example, “easy-to-use”, “faster”, “better”, that customers use to describe what value they would like a new feature or solution to deliver. These definitions give a general

idea of what the customer wants, but they prove to be impossible to measure and control, making this information unnecessary and useless to developers of the innovative product [Ulwick, 2003, p. 4].

The described traditional method of understanding and defining customer needs is well known and widely used by the software companies in Bulgaria too. In many cases, customers of software products are well aware of the business processes they perform and know exactly what they want. In Table 2 the author of the paper presents the traditional method for understanding customer needs with exemplary software product.

Table 2. Traditional method for understanding customer needs (for developing a Property Management system)

Solution
▪ Nomenclatures with the main objects - buildings, units, services, contacts, price lists, cost centers. ▪ Setting an unlimited number of buildings, linking buildings to a particular contract. Add, remove, and edit building information. ▪ Set contract numbers, starting and ending date of contracts, negotiated units.
Specification
▪ The cost center accounts are divided among the units. ▪ A button in the user interface for issuing an account. ▪ Selecting a period for the issued account.
Need
▪ Flexible generation of accounts payable. ▪ Scalability of the system. ▪ High productivity.
Benefit
▪ Easy access. ▪ Convenient to use and easy to navigate interface. ▪ Collection of obligations.

2.2. “Job to be done” theory

In scientific literature, the concept of “Job to be done” is introduced. Its founder is the American lecturer and author Clayton Christensen. He says, “Most companies segment their markets by customer demographics or product characteristics and differentiate their offerings by adding features and functions. However, the consumer has a different view of the marketplace. He simply has a job to be done and is seeking to “hire” the best product or service to do this”. It is very important for the innovative companies to be able to ask the right question. Very often, they ask inaccurate questions like: What do you expect from the product? What functionality do you want to get?” Clayton Christensen concludes that the most accurate question for understanding and defining customer’s needs is “What job do you want to use this product for?” [Christensen et al, 2016, p. 8]. Stephen Wunker, Jessica Wattman and David Farber also define the importance of “Job to be done” theory for creating an innovative product. Innovative companies need to focus on the question of why rather than the question of what. That means focusing on why the customer wants to use the innovative product, what job he wants to accomplish [Wunker, Wattman & Farber, 2016, p. 17]. David Silverstein, Philip Samuel and Neil De Carlo say,

“Job to be done highlights the human need you are trying to fulfill. „Job to be done” is the higher purpose for which customers buy products, services and solutions” [Silverstein, Samuel & De Carlo, 2012, p. 3].

Success in innovation comes from a deep understanding of the job the customer is trying to get done. Customer needs analysis must focus on the job the customer is trying to do. “Job to be done” theory gives a definition of the term of “customer need” (Table 3).

Table 3. Definition of “customer need” according to “Job to be done” theory

Customer need		Jobs customer wants to get done
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2.3. Anthony Ulwick’s understanding of customer needs

Anthony Ulwick adds the term “desired outcomes” to the job to be done theory. Firstly, he defines the job customers want to get done and secondly he defines how customers measure success in getting a job done. The author says that “customer need” is best defined as a statement that describes how a customer measures success and value when getting a job done. He calls these statements “desired outcomes”. A desired outcome statement is structured to detail how customers define value and how a company can help create it. If a product completely satisfies all the outcomes, customers will be able to accomplish their job perfectly. Thirdly, the author says that it is important to understand the “constraints” that stand in the way of customers that prevent them from executing the job. He calls these constraints “roadblock to success”.

Ulwick identifies three types of information that must be captured from customers. They are the “jobs” customers are trying to get done when using a product or service; the “outcomes” they are trying to achieve when performing these jobs in a variety of circumstances and the “constraints” that stand in the way of them adopting or using the innovative product. These are the customer inputs needed for the creation of a successful innovation (Table 4).

Table 4. Definition of “customer need” according to Anthony Ulwick

Customer need		Jobs customer wants to get done
		Outcomes that customer desires to achieve
		Constraints that customer tries to overcome

This notion has led to the creation of a new way of defining, capturing the customer needs for developing innovative products. Anthony Ulwick transforms job to be done theory into a practical method for understanding customer needs.

3. RESEARCH METHODOLOGY

The conducted research of understanding customer needs for the creation of innovations in the software industry in Bulgaria is part of a larger research of the Innovation Commercialization in software companies in Bulgaria. The empirical research is conducted by the author of this paper and is part of her dissertation.

The object of the empirical research is the SME, members of BASSCOM, developing product innovations. BASSCOM is an association of leading Bulgarian software development companies, established in 2001. The association includes more than 80 software companies (full members) and over 120 associated members, including higher education institutions, foundations, venture capital funds and

more. The aim of the research is the development of a model for Commercialization of the innovations, created in the software industry.

The research strategy involves the application of both the quantitative and the qualitative method. The quantitative method is presented by the conducted questionnaire survey among the software companies – the object of the research. The qualitative method is presented by the conducted interviews with product managers of the software companies.

The object of the empirical research is presented by 73 software companies (units), which is the entire population. For selecting the companies to participate in the survey, the stochastic selection method is used, where all units in the entire population have an equal chance of being selected. The advantage of this method is that the structure of the sample reproduces with certain precision the structure of the entire population.

In accordance with the selected research strategy, two samples are formed. The first sample is formed for the purposes of the questionnaire survey. The generated sample consists of 33 companies (Table 5). They are asked 25 closed-ended questions.

The second sample refers to the selection of respondents to participate in the interview (Table 6). They are asked 19 open-ended questions.

Table 5. Survey respondents allocated in the three enterprise's categories

	Personnel number		
	Micro	Small	Medium
A relative share of the respondents to the entire population, %	23%	32%	45%
Absolute share of the respondents to the entire population, units	7	9	17

Table 6. Interviewees allocated in the three enterprise's categories

	Personnel number		
	Micro	Small	Medium
A relative share of the respondents to the entire population, %	23%	32%	45%
Absolute share of the respondents to the entire population, units	1	2	3

4. RESEARCH RESULTS

4.1. Survey results

The analysis of the survey results is based on information obtained by 33 companies (SME, members of BASSCOM).

The results of the survey show that 100% of the software companies believe that the creation of innovations is important for their development and growth (Figure 1). 45.5% of them determine innovation as their main priority and 54.5% - one of their priorities.

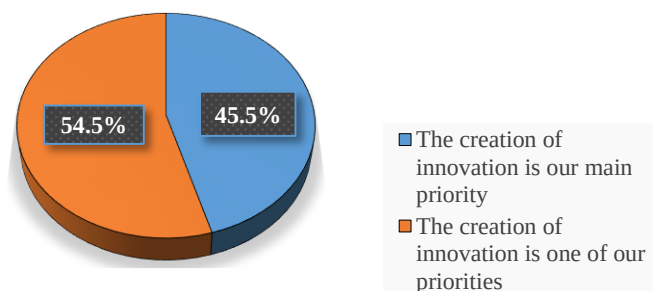


Figure 1. Share of software companies in terms of their attitude towards innovations

Regarding the sources that drive innovations in the software industry in Bulgaria (Figure 2) the research results show that 15.6% of software companies define the lead customer as a source of innovation and 13.1% of them identify the non-lead customer as a source of opportunity for starting innovations. 11.5% of software companies determine the competition as a source of innovation, 16.4% - the employees, and 20.5% - the new technologies, 9.8% - the top management, 7.4% - the partners, 4.1% - the educational institutions and 1.6% - the suppliers. That means that 28.7% of software companies (which is the highest percentage of them) define the customer as a main source of opportunity for innovations.

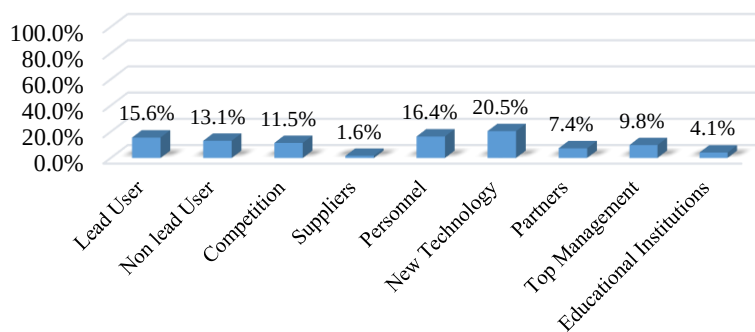


Figure 2. Share of software companies in terms of innovation sources

Regarding the relative share of new and/or improved software products created with focus on customer needs (Figure 3), 36.4% of software companies say that between 11% and 30% of their new/improved software products are created with focus on customer needs. 24.2% of software companies say that between 31% and 50% of their new/improved products are based on customer needs, 15.2% of software companies – over 50% and 24.2% of software companies – up to 10%.

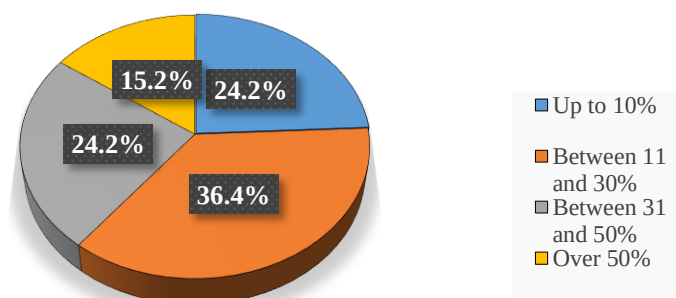


Figure 3. Share of software companies that develop need driven innovation

As a main reason for the unsuccessful implementation of the new/improved software product (Figure 4) 30.2% of software companies point the “Incorrect understanding of customer needs”. 72.2% of the responding software companies (Figure 5) believe that using the right model for understanding and properly defining customer needs is critical for creating innovations in the software industry.

Software companies in Bulgaria note the importance of understanding and the properly defining the customer needs for the successful development of their innovative products. Software companies openly search for ways that could guarantee the accurate execution of this process.

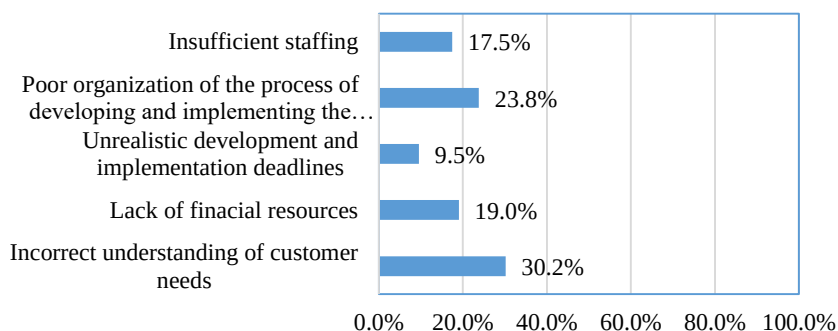


Figure 4. Share of software companies in terms of reasons for the unsuccessful implementation of their innovations

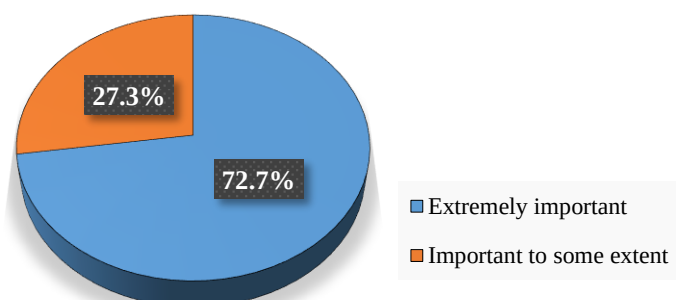


Figure 5. Share of software companies that define the usage of a right model for understanding customer needs as crucial

Regarding the key factors for the innovation commercialization, 63.6% of the software companies in Bulgaria believe that “Developing a need-based innovation” is “extremely important”. 36.4% of

software companies identify this factor as “important” (Figure 6). Software companies define the need-driven innovation as more successful regarding the process of the innovation commercialization. These results again emphasize on the importance of customer needs and the ability of the software company to understand these needs.

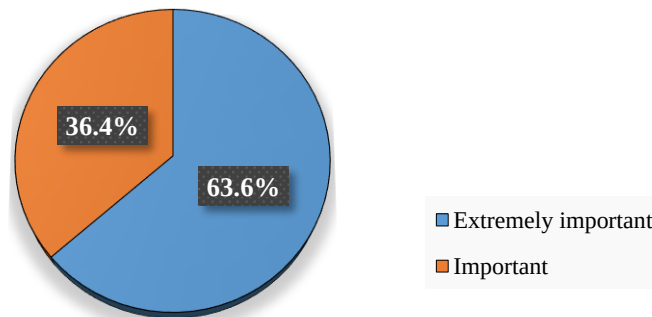


Figure 6. Share of software companies that define the “need-based innovation” as important for the process of Innovation commercialization

Regarding the main reasons for the unsuccessful commercialization of the innovations in the software industry in Bulgaria, the results are very similar (Figure 7). 20.5% of the software companies in Bulgaria say that the main reason for the innovation commercialization failure is “Innovation does not meet the needs of the market“. 15.2% of respondents believe that “Customers cannot understand the functionality that innovation offers” and identify this as the main reason for commercialization failure. Another 15.2% of software companies define the “Inability to generate customers’ interest in innovation” as a major reason. 13.4% - “Innovation offers functionalities that the customer does not need“, another 13.4% - “Lack of information about customer preferences towards the developed innovation“, 12.5% - “Innovation is offered to customer that are not interested in it” and 9.8% define “Customer cannot afford the innovation” as a main reason for the unsuccessful commercialization.

The defined reasons determine the importance of creating innovation that meets customer needs. A different model should be proposed to the software companies in Bulgaria that could help them understand their customers’ needs and develop innovations that meet those needs.

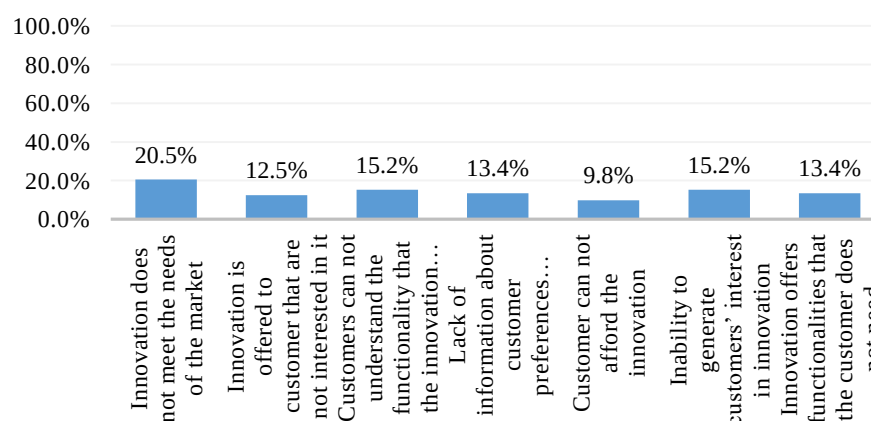


Figure 7. Reasons for which software companies experience difficulties in the process of Innovation commercialization

4.2. Interview results

The interview with the product managers of the software companies is conducted after the survey. The interview questions that focus on understanding customer needs are part of a larger interview that researches the Innovation Commercialization in the software industry.

The hypothesis posed for verification here is “The proposed model for understanding and defining customer needs is applicable to innovative companies in software industry”. Firstly, it should be noted that despite the size of the software companies (micro, small or medium-sized), each one of them agrees that in the modern business there is nothing more important than the customer. This is a prerequisite for focusing the attention of the management of software companies on the needs of their customers.

According to the software companies, the process of identifying the customer needs involves researching their everyday business processes, talking to them, asking them specific questions. Moreover, this is not a one-time act, but a process that ends when customer needs are fully and properly defined. The process of interaction between the company and the customer continues with the establishment of a “joint definition of the needs and the adopted solutions”. The approach used by software companies requires a different model for understanding customer needs that will ease the process of revealing the problems that customers face. The following definition of “customer need” is proposed to the interviewed companies: “The customer needs can be defined as jobs the customer wants to execute; results that customer wants to achieve and the constraints that customer wants to overcome”. All interviewees give one answer: “Yes, it sounds very structured. This definition of needs is comprehensive and would be more useful to us”.

The next question, after receiving this positive answer, is “If I propose to you a model for understanding and defining customer needs in which needs are defined as jobs, desirable outcomes and constraints, do you think this model could be applicable in the software industry”? The answers is: “Yes, as I said, it is very important for us to understand the needs of the customer correctly. We take a lot of time and resources to do that. We could use this model”.

The results of the questionnaire survey and the conducted interview proves that customer needs have a central role in the process of developing and commercializing the innovations in the software industry. The above statement requires the finding of an accurate model that could help software companies develop innovative products that their customers want to buy and use.

5. A MODEL FOR UNDERSTANDING AND DEFINING CUSTOMER NEEDS FOR SUCCESSFUL SOFTWARE INNOVATION

It could be said that the customers of software products know exactly what they want the product to do for them. In this cases software companies focus on the product and its features. They believe that customers exactly know what they want and expect them to describe the product characteristics. However, it seems that at the end these software companies fail to create successful innovations – innovations that their customers want to buy.

The researched software companies in Bulgaria say that very often they develop an innovation that does not meet their customer needs. Software companies waste a lot of time and resources to fix the innovation.

It could be concluded that very often, the customers of the software products cannot clearly define the product features or solutions that could help them perform their business processes. What the customers know is what kind of activity they want to accomplish, the results they want to achieve and the obstacles they have to overcome.

Anthony Ulwick develops a model for understanding and defining customer needs for creating successful innovative products where customer needs are not defined as a solution, specification or benefit. Based on the empirical research’s results and the nature and characteristics of the software product, this model is proposed to be applied to the customers of the innovative software products.

The model contains three types of information that the innovation company must get from its customers in order to create an innovation. The model can be represented as consisting of three phases of understanding the customer needs.

1. The jobs that customers are trying to accomplish using the innovative product.
2. Outcomes that customers want to achieve by performing this job.
3. Constraints that prevent customers from performing the job and which they want to overcome.

In this context, the innovative product aims to:

1. Help the customers perform the job.
2. Help the customer achieve the desired results.
3. Help the customer remove the obstacles that would arise in the process of doing the job.

3.1 Understanding the “job”

Understanding and defining the job that customers want to accomplish is the first information that an innovation company obtains from its customers. In many cases, along with the definition of the main job that the customer wants to perform, the innovation firm can also define secondary jobs that the customer also wants to accomplish [Ulwick, 2003, p. 6]. The job is defined as the main goal customers want to achieve or the problem they are try to resolve.

Anthony Ulwick offers a method for accurately defining what customers want to do. The method is called “job mapping” and represents the main job as separate steps. By decomposing the job into separate steps or components, the innovation company gets a complete insight into what the customer wants to do from the beginning to the end. The proposed method aims to determine what the customer is trying to do in every step of the job, not what the customer is currently doing. The method enables the innovation company to obtain information about the advantages and disadvantages of the current product that the customer uses. In this stage, the innovative company aims to find ways to improve shorten or speed up the process of implementing the separate steps of the job.

Anthony Ulwick presents the following eight steps that characterize the customer job:

1. Define. This step contains information about the goals, methods, resources needed to carry out the job. In this step, the innovative company can look for ways to minimize the time to complete this step, ways to optimize resources and the amount of planning needed.
2. Locate. In this step customer are asked the question “What inputs are needed to do the job? Inputs could be both tangible and intangible.
3. Prepare. The customer prepares the environment in which the job takes place. The innovative company can look for ways to facilitate the preparation process, minimize preparation time, and to create a guide that could help the innovative company prepare the environment needed to carry out the activity.
4. Confirm. In this step, the customer needs to verify and confirm the availability of the necessary resources, materials, environment for carrying out the job. In this step, the quality and functional capacity of the material and information components are validated. The innovation company could provide the customer with quicker ways for verification and confirmation so that to shorten this step and minimize the time required to perform the job.
5. Execute. The execution step is the most important part of the job. In this step, customers want to avoid problems and delays and to achieve desired results. Innovative company could help its customers by providing them with a real time feedback and correction of emerging problems.
6. Monitor. Customers should monitor the results of the executed job, whether these results are expected, whether corrective action is required. The innovative company can provide customers with solutions to measure the performance of the job, compare results with planned ones, and select specific measures and solution to problems.

7. **Modify.** In some cases, the customer may need to change something in order to complete the job. In this step, customers need help to decide what they need to adjust, and determine when, how, and where to make the changes. Searching for the right adjustment could be time consuming and costly. The innovative company could offer solutions to optimize the time needed for finding and making the right adjustment so that the job is successfully executed.
8. **Conclude.** This step answers the question “What must the customer do to finish the job. The customer carries out activities that can be related to the preparation of documentation for the executed job, description of the results, and preparation of a report. In many cases, customers ignore this step because the most important thing has already been done. The innovative company could help its customers by providing a quicker way of collecting and presenting this information.

3.2. *Defining the desired outcomes*

In this phase, the innovation company aims to determine the criteria the customer uses to evaluate the steps of the job he wants to perform. This is the phase in which the desired results are defined. This phase includes five steps.

1. **Plan a customer interview.** The innovative company conducts interviews, talks with customers, users of the innovative product. It is very important for this step a certain group of people to be involved. These are the people engaged in executing the job. These people have the criteria for evaluating the job and can provide information about the desired results (outcomes). At this step, people who are not directly involved in the process of carrying out the job can also be included. These may be people who support the process. The innovation company decides what kind of people to include in the interview. Anthony Ulwick believes that the involvement of a too wide group of people determines the generating of irrelevant information about the desired results.
2. **Capture desired outcomes.** This step requires the presence of a moderator (representative of the innovation company) who can distinguish the “desirable outcomes” from the useless information (product specifications, solutions and benefits). In most cases, customers start with proposals for solutions. The main function of the moderator is to paraphrase the question and ask it again in order to direct the customer's thinking to the desired outcomes of the executed job. During the interview, customers generate ideas, they share different product features. The moderator listens carefully and uses all these ideas, which can be definitions of features, specifications, solutions, and transforms them into statements containing information about the desired outcomes. The moderator validates the paraphrased statements with the customer.
3. **Organize the desired outcomes.** When the interviews are finished, the innovation company prepares a list with the desired outcomes. The information about the desired outcomes is grouped. Each group refers to a separate step in the process of defining the job that the customer wants to perform.
4. **Rate desired outcomes.** Once the document with the information about the desired outcomes is finished, it is provided to the customer for evaluation. Customers are asked to rate each outcomes in terms of its importance and degree to which the outcome is currently satisfied. Anthony Ulwick offers a mathematical formula that determines the significance of the individual “desired outcomes”. The author calls this formula “opportunity calculation” and presents it as “Importance+(Importance – Satisfaction)=Opportunity”. Customers rank the “desired outcomes” on a scale of 1 to 10 using two criteria – importance and degree satisfaction.
5. **Use the desired outcomes to start innovation.** The innovation company uses the survey among customers (different user groups) to evaluate the “desired results” and make a choice as to which one to use as an opportunity to develop an innovative product. The innovative company also takes into account the differences in the assessment of the “desired results” of different user groups. It develops an innovative product that meets the needs of different user groups [Ulwick, 2002, p. 91-97].

It is important to say that the “desired outcomes” determine how the customer evaluates the developed innovation. Customers accept innovations that help them achieve their “desired outcomes” and reject innovations that do not meet the “desired outcomes”.

3.3 Defining the constraints

In order to receive information about the constraints that prevent customers from performing their jobs and achieving the desired outcomes, the innovative company conducts interviews with its customers. Customers outline the circumstances under which they cannot perform the job.

Anthony Ulwick defines these constraints as “roadblocks to success” [Ulwick, 2003, p. 7]. Some constraints may create obstacles for the customer to perform separate steps of the job or to perform the entire job. Other constraints may create obstacles for the customer to perform the job in certain situations.

In Table 7 the author of the paper presents the Ulwick’s model for understanding customer needs with exemplary software product.

Table 7. Ulwick’s model for understanding customer needs (for developing a Property Management system)

Job: Automatically charge of a rent, utility bills and generation of a document for liabilities
Step 1: Define
▪ Entering data for the renter, elements of the rented unit, the amount of the monthly rent and the penalties. ▪ Entering the common parameters of the property - quadrature of the units, common parts, etc. ▪ Entering data for the cost centers of the property (type, indications, range - for a single unit or several units). ▪ Setting of a template of a document for liabilities and the periodicity of its generation. ▪ An automatically generation of a document for liabilities on a monthly base with the option of subsequent adjustments.
Step 2: Locate
▪ User Interface for entering renter data. ▪ User interface for entering the contract data. ▪ User interface for entering the property data and its units. ▪ User interface for entering the cost center’s data. ▪ Algorithm for proportional allocation of accounts payable among units. ▪ User interface for issuing accounts to renters. ▪ User interface for changing the auto-generation of the documents for liabilities.
Step 3: Prepare
▪ Provide access to the program interfaces mentioned in Step 2.
Step 4: Confirm
▪ Availability of the renter and the contract data. ▪ Availability of up-to-date information on accumulated obligations by cost centers. ▪ Availability of a template for generating of an account payable.
Step 5: Execute

- Automatic allocation of obligations per unit, validation and suggestions for removing inaccuracies and adding a primary data. - Automatic generation of a document for liabilities on a monthly base. - Ability for a manual adjustments of the generated document.
Step 6: Control
- Matching the total amount base on the information from the cost centers with the collected amount based on the issued obligation documents. - Check for duplicate documents for same periods.
Step 7: Modify
Generation of a summary document for liabilities of different units hired by related parties.
Step 8: Conclude
- Successful entry of the property data. - Successful entry of the renter data and the rental agreement. - Successful entry of cost centers data and their allocation among the rented units. - Successful generation of document for liabilities.
Desired outcomes
- Reliable calculation and distribution of the monthly costs of multiple renters in the property. - Minimization of the time needed to generate documents for liabilities. - Detailed history of obligations per renters and units.
Constraints
- Lack of precise parameters for each unit, in order to precisely allocate the obligations. - Frequent changes in the reporting dates of household bills.

6. CONCLUSION

SMEs in the software industry are a major source of entrepreneurial skills and innovations. The software industry in Bulgaria is among the fastest growing sectors in the economy that has the knowledge and technology to develop innovations. In the scientific literature, the understanding of customer needs is determined as a key factor for creating successful innovations – innovations that are used by customers and satisfy their needs.

The results of the empirical research also confirms the importance of understanding customer need for the creation of successful innovation. The results of the conducted survey and the interview show that the proposed model for understanding and properly defining the customer needs is applicable in the software companies. Software companies spend a lot of time and efforts to define properly their customer needs. They search for new ways to make this process more efficient. The proposed model aims to help them obtain the right customer inputs for creating innovative products that provide value for the customer. This is the only way for innovations to become a real engine for economic growth and development.

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