Differences in the development of new services between developed and developing financial markets

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Abstract: There is a lack of literature regarding development of service innovations in developing financial markets. The study addresses the factors influencing the success/failure of innovations in developing financial markets. We hypothesized that the factors such as new service development process, quality of service, organizational culture and knowledge have the significant impact while market characteristics have no impact on the success of new financial services. The hypotheses are tested on the sample of 60 innovations offered on Slovenian financial market, as one of the developing financial markets. The discrepancies between the development of financial innovations in developing and developed markets with respect to the impact of these factors are also revealed. The most important differences referred to the impact of two factors, i.e. market characteristics, and technical development and technical activities.

Key-Words: Innovation, Financial Service, Success Factors, Slovenia

1 Introduction

During the last decade the bank sector has undergone through major changes caused by deregulation, increased internationalization of banks, as well as mergers and acquisitions. These changes have contributed to dramatically harsher competition, pressures on profitability and the need for differentiation [1]. On the other hand, convergence in the fields of electronics, communications, computer and information technology have created enormous opportunities for creating totally new-to-the-world services, as well as for reinventing past service offerings [2].

These services experienced the greatest level of growth and dynamism over the past several years [3]. In such an environment, banks need more than ever to adapt their offerings constantly to the changing needs of customers, to become more flexible, more efficient and more innovative. Service firms today are expected to delight customers with their creativity and innovation [4].

Therefore, innovation in financial sector is increasingly considered to be one of the key drivers of the long-term success in these competitive markets. This innovation imperative is even more evident in transitional and developing markets.

Owing to the opening up of the financial markets in transition countries to external competition, its financial sector has faced strong competition from banks and similar institutions from developed markets in the time of its intensive transformation and socialist legacy. Slovenian financial sector had to adapt to a transformation of the economic system, mass privatization replacing the prevailing social ownership of the banks, deregulation of the banking sector and structural changes within the financial system. Slovenian banks are relatively small and have difficulties in achieving cost effectiveness [5].

The increasing innovation impact on the service sector has influenced the extent of studies in which the critical success and failure factors when introducing new financial service have been identified [6], [2], [7], [8]. In these studies, the new services have been investigated from different viewpoints, but the common characteristic of all past studies is that they investigated the key success factors of new services only on the developed markets. Therefore, the key success factors of new services developed in transitional markets, hampered with socialist legacy and the way of thinking are an uncharted topic.

Based on this background, the purpose of this paper is to identify success and failure factors of new service in Slovenian financial market which is one of transitional markets. The paper is structured as follows. In the next section, we provide the review of literature, followed by the research methodology. Next, there is a
presentation of data analysis and the research results. Finally, the article is concluded with the discussion of the results.

2 Literature Review

Innovation involves the creation of a new product, service or process. Therefore, innovativeness or newness refers to the degree of familiarity or users have with a product or service [2]. Researchers distinguish between “really new” or discontinuous innovations and “incremental” or continuous new products or services. Discontinuous or radical innovations are characterized as: truly novel or unique technological solutions, the development or application of new technologies, or state-of-the-art breakthroughs in technology or product category [9]. They are perceived as totally different and require major changes in thinking and behavior on the part of customers [2]. Continuous or evolutionary services are projects at the opposite end of the newness spectrum; they are typically described as new products involving only minor changes in technology, simple product improvements, imitations or line extensions.

According to Grönroos [10], firms compete today on the basis of services, and not on the basis of physical products. Advances in IT have reduced the life-cycle of products and, in addition, have revolutionized the way in which business is conducted in the new economy. Moreover, the nature of business demands that firms interact with their customers and business partners using technology to provide services instantaneously across international borders [4].

New services are intangible and they are perceived as easier and more quickly to develop than their physical product counterparts. For this reason the firms can respond relatively quickly and at relatively low cost on new services developed by their competitors. Since services are not patentable and usually require little up-front investment, innovative ideas can be quickly imitated [11], [12]. Most services actually consist of acts and interactions, which are typically social events [13].

Services are produced and consumed more or less simultaneously. The process which customers experience, the delivery environment, and the personnel who interact with customers all become an integral facet of the service itself. Furthermore, frontline personnel often embody or represent the service itself [6]. All these facts should be considered in developing and launching new services.

New service performance is found as a multidimensional construct [14], [15], [7], [16]. Gounaris et al. [8] revealed two different dimensions, namely financial and non-financial performance. The financial performance dimension is more likely to capture short- to mid-term performance; it is measured by the indicators such as level of sales, profit, market share. The non-financial dimension is considered to capture mid- to long-term achievements; it is measured by the indicators such as image enhancement, customer acquisition, customer loyalty, competitive advantage development, etc.

Agarwal et al. [17] consider performance as a two-dimensional construct. Objective performance is one dimension comprising financial or market-based measures such as capacity utilization, profitability, and market share. The other dimension is the judgmental performance, which involves customer- and employee-based measures such as perceived service quality, customer satisfaction, and employee satisfaction. Companies that offer superior customer value are expected to enjoy superior long-run competitive advantage and superior profitability [18]. Fact that front-line personnel often represent the service itself influences the company’s goal, especially in service organizations, to satisfy employees. Heskett et al. [19] observed that service quality, and especially superior value is created by satisfied, loyal, and productive employees. Employee satisfaction, in turn, results primarily from high-quality support services and policies that enable employees to deliver results to customers.

A new service development (NSD) process is mentioned in all past studies investigated the critical success factors as important factor. NSD activities describe the way of how firms undertake and manage the NSD process. It is well established that firms with a high proportion of winning new products usually have in place, and actually use, a set of preplanned stages – beginning with establishing clear objectives, to involving customers in the “design” process (i.e. concept development and testing), to carefully mapping or “blueprinting” alternative processes, to market testing, and to planning and tracking the launch – with formal “gates” at each level to ensure that the new product continues to meet company- and market-related performance criteria [2]. According to Milakovitch [20] the process improvement has become the prime focus of the service quality revolution. The key to total quality service depends namely on understanding the process, as a mechanism to transmute knowledge and respond to customers faster than the competitors.

According to the new product development (NPD) and NSD literature [15], [21], [11], [2], [8], NSD process consists of the following stages:

- Idea generation and screening activities consist of:
  - Systematically collecting ideas about the service to be developed;
  - Initial screening of the service idea;
Translating the idea into a full service concept;
Exploring the performance implications of the new service on other company services; and
Exploring the business implications from the development of the service.

Business analyses and marketing planning activities include:
- Identification of market characteristics and trends;
- Conducting a complete market study;
- Analyzing competitors in detail;
- Identifying “appeal” characteristics that would differentiate the service from competition;
- Developing program for “service positioning”; 
- Preparing a complete marketing plan for the service; and
- Assessing time, human resource, investment requirements and setting the performance objectives of the service.

Service development activities comprise the following activities:
- Deciding on the final service specifications,
- Determining the operating/delivery process procedures that would support the service,
- Inspecting and adjusting the operating/delivery systems that would support the service,
- Building a service “prototype”,
- Executing operating tests of the service “prototype”; and
- Conducting the necessary adjustments to procedures and systems;

Testing activities are:
- Executing service tests within company’s personnel;
- Executing service tests within potential customers;
- Evaluating the results of product testing; and
- Conducting appropriate adjustments to the service;

Launching activities include:
- Finalizing the marketing plan of the service,
- Launching the service in the marketplace,
- Extensive training of service personnel,
- Receiving feedback from customers regarding the service, and
- Taking “corrective actions” regarding service launching;

In the study of financial services in Greece two stages, i.e. business analysis and marketing strategy formation as well as launch were revealed as the stages of NSD process with the great impact on the success of a new service irrespective of the degree of their innovativeness [8]. In the same study idea generation stage was related to the performance of discontinuous projects while Song and Montoya-Weiss [22] found that this part of NSD did not relate to the outcome of the project. Technical development and testing was found to be more important stages for the success of incremental new services [8]. Stage “Formal testing and launch” was found as important to the successful performance of the radical as well as incremental new services [2].

Taking into account the results of the previously mentioned studies we hypothesized that:

H1: There is a positive relationship between the NSD process and the new service performance.

Numerous models for measuring service quality can be found in the literature. The SERVQUAL instrument of Parasuraman et al. forms the keystone for all other works [23]. It consists of 22-item scale that measures service quality along five dimensions, namely:
- Reliability;
- Responsiveness;
- Assurance;
- Empathy; and
- Tangibles.

This instrument has been subjected to criticisms regarding the conceptualization, dimensionality, operationalization, measurement, and applications. Sureshchandar et al. [13] identified three factors of service quality as critical and overlooked in the SERVQUAL model. They are:
- The service product or the core service;
- Systematization/standardization of service delivery (the non-human element); and
- Social responsibility of the service organization.

The core service presents the content of a service. Rust and Oliver [24] defined that the service product is whatever service ‘features’ are offered. No matter how affable, amiable and courteous a bank’s personnel are to the customers, if the bank fails to offer a broad range of services/or more features in every service it provides, the customer may not attach a very high value to the quality of service it offers [13].

The service delivery has two distinct and disparate features:
- Human element of service delivery, which has been effectively included in the SERVQUAL.
- The processes, procedures, systems and technology that would make a service a seamlessness one, which has not been addressed by the SERVQUAL.

The second aspect is as crucial as the first one. Customers would always like and expect the service delivery process to be perfectly standardized, streamlined and simplified so that they could receive the
service without any hassles or undesired questioning by the service providers [13].

Social responsibility helps an organization to lead as a corporate citizen in encouraging ethical behavior in everything it does. It means that an organization cannot count only on financial performance to survive in this ever-changing scenario of global competition, but also has a responsibility to the society in which it exists.

Grönroos [10] defined service quality with two dimensions i.e. functional service quality and technical service quality. Functional service quality relates to the nature of the interaction between the service provider and customer and the process by which the core service is delivered. Technical service quality refers to the quality of service output [25].

The service superiority or distinctiveness has also been shown to be an essential success factor of financial innovations. For incremental new service offerings lack of a physical dimension can make it difficult for service providers to effectively demonstrate the differential or superior facets of a new service offering. For discontinuous service innovations, interaction with clients offers the opportunity to explain and convince buyers of the value embodied in a totally new and unfamiliar service [2]. Factor “Front line expertise” describing the extent to which firms use trained and skilled human resources for service production and delivery, as well as for creating new service offerings was found as highly significant, ranking third in importance for the success of radical- as well as incremental new services in de Brentani’s study [2]. Given these findings we propose the following hypothesis:

H2: There is a positive relationship between NSD process and the quality of new services as well as between quality and new service performance.

Market-related factor can be defined by at least two dimensions, i.e. market competitiveness and market potential. Market potential is defined by the extent to which the new service is aimed at market with a high growth rate and with high volume potential. High growth potential was found to have either a secondary (in the case of incremental projects) or no effect on new service outcomes [2]. One of the most important trends in financial markets has been deregulation which increases market competitiveness. Highly competitive market is determined by aggressive market and price competition, highly similar service offerings, frequent service introductions and modifications, and sometimes dominant competitor with a large market share. Different authors investigated the influence of market competitiveness on the success of new services [10], [11], [2]. The obtained results are not unique. Market characteristics of the new service are one of the factors with the greatest explanatory value of the explained variance [11] or market competitiveness was found as nonsignificant factor [2], [15]. Given these findings we hypothesized that:

H3: There is no relationship between market related dimensions and the new service performance.

Culture in organizations is defined as the deeply seated values and beliefs shared by employees at all levels, and it is manifested in the characteristics of the organization. An innovation culture is a multidimensional context which includes the intention to be innovative, the infrastructure to support innovation, operational level behaviours necessary to influence a market and value orientation, and the environment to implement innovation [26]. Innovation will only flourish under the right circumstances, determinants of which include vision and mission, customer focus, management processes, leadership, support mechanisms, employee constituency, and others [27]. Creating an entrepreneurial and team-oriented climate, with strong support and involvement from top management, is considered important for facilitating successful innovation by firms [2], [28]. The literature provides a very strong link between culture and innovativeness [29], [22]. Outstanding performance on this factor is the primary key for achieving success in highly innovative, new-to-the-world, business services but of only secondary importance for continuous new service projects [2]. Considering all these findings the following hypothesis was proposed:

H4: There is a positive relationship between the organizational culture and the NSD process.

Nowadays, the knowledge and information technology are critical success factors for strategic formulation [30]. According to Drucker knowledge represents a key personal and primary economic resource [31]. Moreover, he asserts that knowledge is the only meaningful resource today. Innovation process depends upon the accumulation and development of relevant knowledge of a wide variety [32]. In the environment of rapid changes and uncertainty, where the demands of the markets keep changing, the only way for an organization to make a breakthrough and obtain a competitive advantage is through knowledge accumulation [33]. In fact, knowledge and knowledge workers can be interpreted as a company’s intellectual capital, and also a key factor to its sustainable development [30]. Knowledge is a potentially significant resource to the firm as it may possess valuable, rare, inimitable and non-substitutable
characteristics particularly if it has a tacit dimension [34].

In Nonaka et al.’s [35], knowledge is described as dynamic, since it is created in social interaction amongst individuals and organizations. Knowledge is context specific, as it depends on a particular time and space. Without being put into context, it is just information, not knowledge [36].

Knowledge and information derived from data are required for competitive initiatives such as improving customer satisfaction, developing new products and markets, and providing faster response [30]. The innovative efforts are also the right consequence of the investment in knowledge and knowledge workers. In a conceptual model designed by Carneiro the innovation is the function of the knowledge management [30].

In competitive environment where innovation is crucial, the organizational ability to create knowledge becomes the foundation of innovating firms. Therefore, the critical issue for existing firms in pursuit of organizational innovation is how to effectively absorb external knowledge and how to integrate their own knowledge and creativity in creating new technologies, new products and new management ways [37].

Wu [38] contends that if knowledge type firms can create an effective knowledge system, it will allow for the effective creation and circulation of knowledge within these organizations and make effective and continuously innovative products possible. Chang and Lee [33] adds that the better the expansion capability of knowledge obtainment, the more it will benefit the performance of administrative and technical innovation. Considering all these findings, the following hypothesis was proposed:

H5: There is a positive relationship between knowledge and innovation process.

Davenport and Klahr [39] believed that within the friendly culture of knowledge application, experience, professional levels and the need for rapid innovation will in the end replace the authority of position with the authority of profession. A climate of openness and trust amongst organization members is the basic condition that allows tacit knowledge to be created, shared and used in the innovation process [36]. A precondition to activate tacit knowledge in the innovation process is to make sure that one is able to identify the relevant tacit knowledge in the organization. The stage at which tacit knowledge is gained and utilized in the innovation and production process is an important strategy and policy issue [40].

H6: There is a positive relationship between knowledge and organizational culture.

3 Research Methodology

3.1 Data Collection and Sample

The data for testing the hypotheses was collected from financial companies with permission to operate in the Republic of Slovenia. This procedure produced a sampling frame of 93 financial companies with their branch offices of which 38 took part in this research. Respondents were new service development project leaders who were asked to select two financial services, one successful and one unsuccessful that they had developed within the last five years. In total, the survey yielded 60 usable projects of which 38 were successful and 22 were failed new service projects. The projects included in the study were ranging from the bank services to pension funds and from minor modifications of current services to new-to-the-company innovations.

The collection of the data was undertaken on a six page self–administered questionnaire. Respondents used a 1-9 point Likert scale to rate 68 items (see Appendix). Respondents were also asked to classify selected new services into one of the following groups, namely: service modification, service newness to the company, service newness to the company and customers on Slovenian market, and new-to-the-world services. No Slovenian new service was classified in the new-to-the-world group.

3.2 Measures

New service performance has been reported as a multidimensional construct [14], [41]. Therefore, 4 performance-related items were applied to measure financial and non-financial performance dimension. The financial performance dimension consists of profit and market share while non-financial dimension include indicators such as the level of customers’ satisfaction and new opportunities created by new service. The respondents were asked to estimate the level of success of new service with respect to the success of other company’s new service, with respect to the success of the strongest competitor’s new service, with respect to the achievements of the company’s objectives and with respect to new opportunities on a -5 to 5 scale (-5: the company’s new service is worse, 5: the company’s new service is better in comparison with other services or target values).

The NSD process was measured by 23 activities included in five stages. These activities were drawn from the NPD literature [15], [12]. The respondents were asked to estimate the extent to which these activities were undertaken during the development process in one to nine scale (1: not at all, 9: to a very large extent).

The quality of a new service was measured by 5 items on 9 point Likert scale (1: strongly disagree; 9:
strongly agree). High values on this scale mean that the new service was superior and distinctive with respect to functional and technical quality in comparison with competitive services. The items were drawn from scale applied by Zeithaml et al. [42].

Culture was measured by 12-item scale. High scores on this scale indicate that the organizational culture is entrepreneurial, market oriented and innovative. It means that firm has a clear sense of mission; its interdisciplinary teams work on important projects, the staff is encouraged to be creative and innovative; failures regarding innovative efforts of individuals are tolerated and used as the opportunity for further learning; risk-taking, proactiveness and customer satisfaction are important values in the organization.

Market characteristics were measured by six items on the one to nine scale. Two out of six items refer to market potential, two items measure the market competitiveness, and the service-market fit is also measured by two items. High scores on this factor indicate that new service responds to a clearly identified customer need/problem on the highly competitive market with great potential.

Knowledge was measured by 6-item scale. High scores on this factor mean that firm has created an effective knowledge system which allows for the effective creation and circulation of knowledge.

3.3 Data Analysis and Results
In order to test hypothesis H1 and reveal the relationship between the NSD process and the performance of new services we compared the successful with the unsuccessful new services. First of all, the factors investigated in this paper are presented by their means and standard deviation. This information is provided for successful and unsuccessful new services in Table 1. In the literature, the NSD process is usually split in five stages. In our study, factor analysis provided only four stages, i.e. idea generation, business analyses and marketing planning activities, service development in testing activities, and launching activities. Service development and testing activities are merged in one stage in our study, in other studies development and testing activities are split in two stages (see Appendix).

We continue our study with discriminant analysis to determine the impact of stages of the NSD process on the success of new services. The reliability of four stages measured by Cronbach’s alpha and discriminant loadings are presented in Table 2.

Table 1: Mean values and standard deviation of factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Successful services</th>
<th>Failure services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>St.Dev.</td>
</tr>
<tr>
<td>Idea generation and screening</td>
<td>7.416</td>
<td>1.731</td>
</tr>
<tr>
<td>Business analyses and marketing planning</td>
<td>6.730</td>
<td>2.127</td>
</tr>
<tr>
<td>Service development activities</td>
<td>6.375</td>
<td>2.522</td>
</tr>
<tr>
<td>Testing activities</td>
<td>4.947</td>
<td>3.042</td>
</tr>
<tr>
<td>Launching activities</td>
<td>6.784</td>
<td>2.097</td>
</tr>
<tr>
<td>Quality</td>
<td>7.124</td>
<td>1.712</td>
</tr>
<tr>
<td>Market characteristics</td>
<td>6.567</td>
<td>1.814</td>
</tr>
<tr>
<td>Culture</td>
<td>6.383</td>
<td>1.946</td>
</tr>
<tr>
<td>Knowledge</td>
<td>6.495</td>
<td>1.936</td>
</tr>
</tbody>
</table>

Table 2: Comparison between successful and unsuccessful new services with respect to the NSD

<table>
<thead>
<tr>
<th>Stages</th>
<th>Cronbach’s alpha</th>
<th>Discriminant loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launching activities</td>
<td>0.874</td>
<td>0.804</td>
</tr>
<tr>
<td>Idea generation</td>
<td>0.851</td>
<td>0.446</td>
</tr>
<tr>
<td>Business analyses marketing planning activities</td>
<td>0.872</td>
<td>0.341</td>
</tr>
<tr>
<td>Service development and testing activities</td>
<td>0.850</td>
<td>0.160</td>
</tr>
</tbody>
</table>

As it can be seen from Table 2, one stage of the NSD process, namely launching activities is the most important differentiator between the successful and unsuccessful new services followed by idea generation, and business analyses and marketing planning activities. The impact of service development and testing activities on the success of new services is very small. Considering the multidimensionality of the success the impact of the NSD stages on the different success dimensions was also analyzed using Pearson
The success of new financial services was measured by four indicators, i.e. market share, profit, customer satisfaction, and new opportunities (Table 3).

Table 3: Correlations between NSD process and the success measures

<table>
<thead>
<tr>
<th>Stage</th>
<th>Market share</th>
<th>Profit</th>
<th>Customer satisfaction</th>
<th>New opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idea generation</td>
<td>0.286*</td>
<td>0.327*</td>
<td>0.206</td>
<td>0.380*</td>
</tr>
<tr>
<td>Business analyses and marketing planning activities</td>
<td>0.374**</td>
<td>0.340*</td>
<td>0.285*</td>
<td>0.373**</td>
</tr>
<tr>
<td>Service development and testing activities</td>
<td>0.111</td>
<td>0.146</td>
<td>0.150</td>
<td>0.222</td>
</tr>
<tr>
<td>Launching activities</td>
<td>0.472**</td>
<td>0.487**</td>
<td>0.393**</td>
<td>0.516**</td>
</tr>
</tbody>
</table>

Remark: * Correlations are significant at the 0.05 level  ** Correlations are significant at the 0.01 level

The correlation coefficients presented in Table 3 show that the NSD process has the greatest impact on the creating of new opportunities followed by the profit and market share. Taking into account the results in Table 2 and Table 3 hypothesis H1 can be confirmed.

The correlation analysis was applied to test hypothesis H2 (see Table 4). The impact of NSD process on the quality increases from the start to the finish of the NSD process. The highest impact on the service quality had the stage launching activities while the smallest impact had the stage idea generation. Taking into account these results we can conclude that the quality of new financial services has been the important success factor of. Therefore, we can confirm hypothesis H2.

Table 4: Correlations between quality and the NSD process as well as success indicators

<table>
<thead>
<tr>
<th></th>
<th>Idea generation</th>
<th>Business analyses and marketing planning activities</th>
<th>Service development and testing activities</th>
<th>Launching activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Market share</td>
<td>0.279*</td>
<td>0.388**</td>
<td>0.397**</td>
<td>0.488**</td>
</tr>
<tr>
<td>Quality New opportunities</td>
<td></td>
<td></td>
<td>0.398**</td>
<td></td>
</tr>
<tr>
<td>Quality Profit</td>
<td></td>
<td></td>
<td></td>
<td>0.341*</td>
</tr>
</tbody>
</table>

Remark: * Correlations are significant at the 0.05 level  ** Correlations are significant at the 0.01 level

Hypothesis H3 was tested with Pearson correlation coefficients (see Table 5). All correlations are positive and highly significant therefore the hypothesis H3 is not confirmed. This finding raises an important question about the impact of factors market characteristics and quality on the success of new service. The results of discriminant analysis revealed us that the highest loading belonged to the factor market characteristics (0.985) followed by loading of the new service quality (0.390). It can be concluded that factor market characteristics has been very important differentiator between successful and unsuccessful new services on Slovenian financial market.

Table 5: Correlation coefficients between market dimension and the success measures

<table>
<thead>
<tr>
<th></th>
<th>Market share</th>
<th>Profit</th>
<th>Customer satisfaction</th>
<th>New opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market characteristics</td>
<td>0.481*</td>
<td>0.532**</td>
<td>0.458**</td>
<td>0.514**</td>
</tr>
</tbody>
</table>

Remark: * Correlations are significant at the 0.05 level  ** Correlations are significant at the 0.01 level

Correlations for testing hypothesis H4 are presented in Table 6. The relationship between culture and the NSD process is positive and significant except for one stage, i.e. launching activities. It can be concluded that market orientation of Slovenian financial companies has not supported the stage of NSD process with the greatest impact on the success of new Slovenian financial
services. This finding should be of great importance for managers of Slovenian financial institutions.

Table 6: Correlation coefficients between the NSD process and culture

<table>
<thead>
<tr>
<th>Culture</th>
<th>Idea generation</th>
<th>Business analyses and marketing planning activities</th>
<th>Service development and testing activities</th>
<th>Launching activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.469**</td>
<td>0.560**</td>
<td>0.525**</td>
<td>0.313</td>
</tr>
</tbody>
</table>

Remark: * Correlations are significant at the 0.05 level
** Correlations are significant at the 0.01 level

The reliability of factor knowledge was measured by Cronbach’s alpha, which is 0.888 and exceeds the threshold value proposed by Nunnaly and Bernstein [43]. To test hypothesis H5 the correlations between factor knowledge and the NSD stages were calculated provided in Table 7.

Table 7: Correlations between knowledge and the NSD process

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Idea generation</th>
<th>Business analyses and marketing planning activities</th>
<th>Service development and testing activities</th>
<th>Launching activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.432**</td>
<td>0.468**</td>
<td>0.594**</td>
<td>0.333*</td>
</tr>
</tbody>
</table>

Remark: * Correlations are significant at the 0.05 level
** Correlations are significant at the 0.01 level

All correlations are positive and significant. Therefore, hypothesis H5 is confirmed. In the development process of services, knowledge has an important impact on the stage of service development and testing. As the obtained results show the support of knowledge to launching activities is smaller than it is expected.

Hypothesis H6 was tested with the correlation coefficient between factors knowledge and organizational culture. Its value is 0.823 and is significant at the 0.01 level. Its high value allows us the conclusion that Slovenian financial institutions have created the culture that allows knowledge to be created, shared and used in the innovation process.

4 Conclusions

Our study revealed both the similarities and dissimilarities between Slovenian new services and new services offered on the developed markets. First of all, we looked at the similarities.

In our study, the positive and significant relation between the NSD process and new service performance was confirmed by H1. A well done NSD process was expected to be the important success factor since this dimension has emerged as a key factor in virtually every study of new services [2], [7], [13]. We revealed the positive impact of the NSD process on quality of the new financial service as well as that product superiority is linked to new service performance. These two findings are also in line with the findings of past studies [12], [2], [10]. We also confirmed the positive and significant impact of culture on the NSD process which was expected with respect to the findings of past studies. The nonsignificant relationship between the culture and launching activities was a surprise especially because the culture should support behaviours that dictate how employees think and react [17].

The greatest dissimilarities were revealed in two areas. The first is the market characteristics and their important impact on the success of new services developed by Slovenian financial companies. In almost all studies market potential and market competitiveness did not play any important role in achieving the success of new services. The second dissimilarity is associated with the impact of stage technical development and testing on the success of financial service innovations. In our study, this stage had no impact on the success which is in contrast with the findings of past studies in both goods and services [2], [7].

After 1991 when Slovenia became an independent state the Slovenian financial sector and financial market were substantially changed. Slovenian financial companies had to face increasing competition from EU companies which means that they are operating in a turbulent environment in comparison with very stable environment before 1991. The changes in the extent and aggressiveness of competitiveness could explain the importance of market characteristics on Slovenian service innovations.

The finding that technical development and testing stage has no impact on the success can be a challenge for Slovenian managers to improve the NSD process and consequently improve the success rate of service innovations. Namely, technical development and testing was found to be more important phases for the success of not-so-innovative projects [7]. Because of service
intangibility there is a great possibility that customers will perceive the new service with improved features of the existing offering as a very different service. Therefore, increased emphasis is needed on the technical development and testing phases in order to ensure that new service will actually fit the company’s existing portfolio. Taking into account the prevailing share of not-so-innovative projects among Slovenian new services these phases should deserve greater attention.

The finding that organizational culture of Slovenian financial institutions has supported the creation, share and use of knowledge reveals the opportunity for further fostering of innovation activities and for the improvement of competitive position of Slovenian financial institutions on Slovenian and other financial markets.

References:


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Appendix: Variables/items used in questionnaire

Idea generation and screening
1. Systematically collecting ideas
2. Idea was presented to management
3. Market evaluation of new service
4. Financial evaluation of new service
5. Exploring the performance implication of the new service on other company services

Business analyses and marketing planning
1. Identification of market size
2. Identification of market characteristics
3. Analysis of competitors
4. Conducting a research of customers
5. Preparing a complete marketing plan
6. Developing program for service positioning
7. Setting the performance objectives of service

Service development activities
1. Deciding on the final service specifications
2. Determining the delivery process
3. Building a service prototype
4. Testing of service prototype and conducting appropriate adjustments to the service

Testing activities
1. Service testing within company’s personnel
2. Service testing within potential customers
3. Evaluating the results of testing

Launching activities
1. Finalizing the marketing plan of the service
2. Launching the service in the marketplace
3. Collecting feedback from customers regarding service
4. Taking corrective actions regarding service launching

Quality
1. New service was more reliable than the services of competition.
2. Employees advise the customers about the new service.
3. Customers trust the employees who sell new service.
4. New service was focused on customers.
5. Business premises are harmonized with new service.

Market characteristics
1. Market potential was very high.
2. Market growth was very high
3. Competitors were very aggressive.
4. Competitors’ services were very similar.
5. Potential customers were informed about new service.
6. New service met the customers’ requirements.

Culture
1. Vision and mission support creativity and innovation activities.
2. Top management sets strategic objectives; staff mainly decide how to achieve the objectives.
3. Organizational structure supports the flow of information.
4. Responsibilities of staff are determined.
5. Inter-disciplinary teams work on important projects.
6. Every employee is important part of organization.
7. The relationships among employees and management are very good.
8. Communications among employees are very good.
9. The ideas are rewarded.
10. The share of idea transformed into new service was very great.
11. Mistakes regarding creative and innovative efforts of individuals are tolerated and used as the opportunity for further learning.
12. Possible conflicts are successfully solved.

Knowledge
1. We absorb external knowledge and integrate it with our knowledge and experience.
2. The development of new services is based on the customers’ needs.
3. Development and marketing of new services is well documented.
4. The investigation of new services is very well.
5. We are capable to respond on new opportunities.
6. Changes of procedures and methods are very fast.