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Marketing Management and Innovations: Challenges and Opportunities in the Marketplace; Guest Editor's Introduction to the Thematic Issue

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The increasingly changing business environment in the twenty first century, which is characterized by the consequences of demanding customers with complex value requirements, aggressive global competition, turbulent markets, rapid technological changes, and escalating globalization, has forced many firms to be innovative in all areas of business activity. Markets have become increasingly complex and hypercompetitive. Globalization and rapidly increasing innovation are drastically altering opportunities and the competitive space.

Innovation, as part of the process of marketing management in enterprises, is a prerequisite for maintaining competitiveness because it can lead to the creation of an offer, which represents added value in the eyes of the customer. Innovations are not always strictly focused on products but can also be applied to processes. Companies can create competitive advantage through new ways of implementing activities on the market, that for the customer means added value, or in other words, innovation.

Today, new ideas can completely transform any aspect of the value chain. Thus, the marketing function within companies is increasingly of strategic importance, as it can contribute significantly to a company's competitive edge. The role of marketing in strategic management is linked to entrepreneurship within the organization through innovation. Companies that own marketing knowledge and skills can develop unique products or services not offered by the competition. They can create a successful brand and help enhance the profitability of the company.

We have to realize that innovations in products and services are just the tip of the innovation iceberg. Consequently, the efforts and resources that enterprises dedicate to introducing new sales meth-

ods into their business are currently regarded as marketing innovations and as being just as important as technological innovations when it comes to boosting companies' competitiveness. Innovations such as the ability to generate and implement new ideas in the process of marketing management in modern social and economic conditions is one of the most effective ways to generate competitive advantages to maintain position in the industry and increase market share.

This thematic issue explores the links between marketing management and innovations and their challenges and opportunities in the Marketplace. It begins with a paper written by John L. Stanton who presents a quantitative measurement of the success or failure rates of new products from various food groups and examines three scenarios that might explain the lack of 'breakthrough innovation.' In the second paper, Joanna Paliszkiewicz and Magdalena Madra-Sawicka present a critical literature review of the concept of impression management and describes the strategy of self-presentation in LinkedIn. In the third paper, Radosław Mącik describes the implementation of the concept of extended consumer decision-making styles in explaining consumer choices made in a product comparison site environment in the context of a trust-based information technology acceptance model. In the fourth paper, Gregor Jagodič looks at how which information-communication technology (ICT) tools students use to help and establish their own business depends on different factors, such as their level of basics knowledge and skills, their ideas, the ease of using ICT tools and also the availability of the tools (especially if they are free of charge). In the last – fifth paper, Adrienne Schaefer and Julia Klammer draw on a case study of the Swiss Federal Railways (SFR), exploring how 'value-in-context' and 'co-creation' can be put into practice.

We are grateful to the organizers of the MakeLearn & TIIM 2016 International Conference, which was held in Timisoara, Romania, between 25 and 27 of May 2016. All papers were put through a double-blind peer review process and the five papers that were mentioned have been accepted for this thematic issue. A special thanks go to the writers of these papers.

Food Innovation: The Good, the Bad and the Ugly

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Innovation is critical to the life of any global food company and new product development is a major activity in the innovation process. However, innovation is not always a first choice to corporate growth. This article addresses the reasons why companies may fail to innovate and provides evidence that some of these obstacles are surmountable. It is presumed, without significant evidence, that most new products fail. This research will show that the failure rate of new product development is exaggerated. It also reports that there is variation in success rate across the food categories. It will show that the strategy used to introduce new products varies significantly across the spectrum. This article will also show that the strategies used introduce new products. This research shows that there is a statistically significant difference between global regions over the 3-year period.

Key words: innovation, new product development, new product success rate, and new product entry strategies

Introduction

Virtually no one disagrees with the idea that new products are the lifeblood of any business. But in many cases the search for new products through real innovation is often done as a last resort. The late Malcolm Forbes is attributed to have said, 'The greatest obstacle to business is success' and for most of the past, the food industry has been successful. However, two things are taking place that are likely to have a negative impact on the industry if some major changes are not made.

The first is a failure to innovate. It appears that the major food companies have eschewed risk by letting entrepreneurs start food businesses and then buying the fledgling businesses. This is less risky but it is also less likely to produce long term profit and growth.

And yet history shows that, in at least half of all cases, after the deal closes the acquisitions sour. There are dozens of studies and papers, and estimates of how many M&A deals fail to meet financial expectations. This can run from 50 percent to as high as 90 percent according to Jim Price of the University of Michigan (Price 2012).

Most research indicates that M&A activity has an overall success rate of about 50% – basically a coin toss (Sher 2012).

A major cause of the failure of acquisitions as a way to innovate is the inability to integrate the new business into the existing one. The irony is that a big food company buys the innovative company and being the 'big famous company,' it tries to integrate the innovative company into the policies and procedures of the behemoth. There is a clash of cultures in which the giant usually wins and the new products fail to live up to expectations. The big losers are the big brands. A recent *Ad Age* article headline proclaimed 'Big Food's Big Problem: Consumers Don't Trust Brands' (Schultz 2015).

A second cause of failure is that today's connected consumer is aware that the product that they fell in love with was absorbed by a big food company. Campbell Soup Company CEO Denise Morrison recently recognized this fact by saying, 'We are well aware of the mounting distrust of Big Food. We understand that increasing numbers of consumers are seeking authentic, genuine food experiences and we know that they are skeptical of the ability of large, long-established food companies to deliver them.' (Wahba 2015) Recently Kraft changed the recipe for its widely successful Macaroni & Cheese. The company wrote on its website, 'When we took the artificial flavors, preservatives and dyes out of Kraft Macaroni & Cheese, we wanted to make sure it still tasted like the Kraft Mac & Cheese you know you love. So three months ago, we quietly started selling the new recipe in our old boxes to see if you'd notice. And your silence spoke volumes.' According to this logic, I guess a consumer had to take an affirmative action and call Kraft to say you don't like its new product whereas many consumers think they would just stop buying it!

The lack of innovation had led to our favorite brands turning the discovery and creation of the products consumers want over to others, while at the same time they try to find a new flavor for an old product. This is not the type of innovation that made our heritage food companies great.

Innovation is not restricted to the area of food product quality but rather any area within the marketing channel. While some food companies have focused on product innovation, they have fallen short on innovating their channels of distribution and the failure to recognize major changes in the way consumers are buying food. Most major food processors are wedded to the traditional distribution channel aka supermarkets and hypermarkets. These companies do everything humanly possible to get onto the shelves of these stores includ-

ing kowtowing to every financial request that is made by the retailer. Now let me be clear, one should not begrudge the supermarkets, they should ask for all they want. If food processors capitulate that is their business.

There are so many emerging channels of distribution that are being ignored by the food processors. For example, Amazon added 10 million new Prime customers and 60% were first time buyers this Christmas (Loeb 2014). Pharmacies, convenience stores, limited assortment stores, even office supply stores, TV shopping stores, subscription services, etc. are all selling more food, and at the same time being ignored by major food companies.

Regardless of the reason, in my opinion, the lack of innovation has led to a reduction in margins and a failure to remain attractive to the new consumers. Innovation is a lot more than a line extension or a new package design. It is the major way and should be the primary way to keep corporations in sync with their consumers. To paraphrase the late Peter Drucker, there are only two functions of a firm: marketing and innovation. He didn't say a marketing department but a company dedicated to finding out what consumers want and giving it to them. By innovation he didn't mean just the R&D department. He meant a commitment to the overall direction of the company being focused on future needs as well as current ones.

Ironically, reducing the efforts to be innovative was meant to cut costs and increase margins. It may have worked in the short term but many of our legacy food companies are suffering today because of cost cutting decisions made years ago especially in the area of innovation. The authors are reminded of a CEO who came to the Board of Directors with a plan to make the company a leader in their category in the near future. He had a growth plan where innovation was the primary success vehicle. He did tell the board that to get to a profitable point, the company would sustain some low profits until the changes 'kicked in.' He was fired! The next CEO sold off almost everything of value, drove up the share prices, and then left the firm. Guess what? That company is now struggling. If our legacy food processors are going to be viable in the future, they will have to be more focused on the future: future consumers, future channels of distribution and future employees. The era of fat and happy is over. The era of renewed innovation must begin in earnest.

New Products and Innovation

Over the years marketing managers have complained that in general their new products have failed and in many cases this was due to

sloppy research. They would argue that rather than innovate and have failure rates estimated as high as 75% to 80% it was cheaper to simply buy successful products and let the entrepreneurs do the innovation. Recent research set out to provide an estimate of the actual failure rates of new products.

In order to quantitatively measure the success or failure rates of new products, the following definitions and data were used. Product failure was simply defined by answering the question, 'Was the product available for sale and identified on the corporate website 18 months to two years after its introduction?' The new products were identified in the Mintel Global New Products Database. Since this database included information not just on the new product but also on the company and the category, it was decided to break out the categories in detail to estimate exactly what the failure rate was for each category.

In order to answer the success rate question empirically, the Mintel GNPD and company websites were used. A sample of the new product introductions from 2010 through 2012 for various food groups was selected. About 1,500 new products from 8 food categories: Baby Food, Bakery, Breakfast Cereals, Chocolate Confectionery, Dairy, Desserts and Ice Cream, Fruit and Vegetables, Meals and Meal Centers were used.

One of the difficulties in developing an industry standard for product success or failure is that there is no real consistency in how new product failure (or success) is defined. Each product may have a specific strategic purpose. After it serves that purpose it is removed from a product line. For example, One company used a number of new products to make a competitor's new products more difficult to introduce. As soon as the competitor's product failed, the company removed its own new product entries. It was a strategic success not a failure, even though the 'new' product was no longer on the market.

Using the aforementioned definition, 66% of all new products that were sampled and reported by Mintel were *successful*. This is far more than the 20% to 30% that has been reported in the past. As can be seen in table 1, the success rates were also calculated for the 8 product categories separately and interestingly there is a significant variation across product categories as shown below:

It was also hypothesized that there might be a relationship between product failure rates and the new product entry strategy that was used. We used the same data set for this analysis: Mintel Global New Products Database and used about 1,800 new products cases.

TABLE 1   Product by Category Success Rates

Food Category	Success rate
Baby Food	87.5% successful
Bakery	70.9% successful
Breakfast Cereals	65.1% successful
Chocolate Confectionery	78.2% successful
Dairy	61.5% successful
Desserts and Ice Cream	57.6% successful
Fruit and Vegetables	62.2% successful
Meals and Meal Centers	70.9% successful

The GNPD database defined five different types of new product entry strategies.

1. *New Product.* It is assigned when a new range, line, or family of products is encountered. This launch type is also used if a brand that already exists on GNPD, in one country, crosses over to a new sub-category.
2. *New Variety/Range Extension.* It is used to document an extension to an existing range of products on the GNPD. Think of these as line extensions or brand extensions.
3. *New Packaging.* This launch type is determined by visually inspecting the product for changes, and also when terms like New Look, New Packaging, or New Size are written on pack. This can include as 'new' a physically identical product in a new package.
4. *New Formulation.* This launch type is determined when terms such as New Formula, Even Better, Tastier, Now Lower in Fat, New and Improved, or Great New Taste are indicated on pack.
5. *Relaunch.* This launch type depends entirely on secondary source information (trade shows, PR, websites, press).

The results as shown in table 2 indicated that 40% of all new product launches were in the 'new product' category with 59% of those being successful. The launch rate for 'new packaging' was 21% with 50% success. The results of using launch strategy 'New Variety' was 34% of all launches with 58% being successful. Product launches using 'New Formulation' were used 1.8% of the time yet firms using that strategy were successful 74% of the time. Finally, product introduction strategy 'Relaunch' was used 1.4% of time and was successful 75% of the time.

This raises a separate question as to whether these results are unique to the United States or if other parts of the world use similar new product/innovation strategies. Additional analysis on different

TABLE 2   New Product Launch Strategies

Strategy	Count	Percent region
New Formulation	532	1.89
New Packaging	5989	21.27
New Product	11496	40.82
New Variety/Range Extension	9748	34.61
Re-launch	397	1.41
Total	28162	100.00

TABLE 3   Differences in Each Region Between 2009 and 2011

Strategy	USA	EU	K&J	China
New Formulation	−48.70	−248.44	−381.66	118.76
New Packaging	436.38	897.99	199.71	−15.87
New Product	−117.84	−1210.05	−89.52	−73.43
New Variety/Range Extension	−383.01	204.23	−44.29	96.58
Re-launch	113.17	356.27	315.77	11.48
Chi-square	383.31	1029.02	902.59	33.49

parts of the world including the USA, the EU, China, Korea and Japan using the GNPD databases was conducted (Salnikova, Stanton, and Wiley 2013). Two hypotheses were tested to see if there were differences in the strategy of introducing new products.

HO1   *There is no difference in the new product introductory positioning over a three-year period in each of the four geographic areas.*

HO2   *There is no difference in the new product introductory positioning across the four geographic areas.*

As can be seen in table 3, HO1 is rejected as it appears that there is a statistical difference between the various countries over the 3-year period. Note that the smallest Chi square was for China which has the least amount of change in their new product introduction strategies between 2009 and 2011. It appears as if the method of introducing new products did vary over time for each country.

HO2 is rejected as well, as can be seen in table 4. It appears there is a significant difference between the way the four geographic areas introduce new products. The USA is using more New Packaging introductions and less New Product than expected. The EU is doing somewhat the opposite with less than expected New Packaging and New Variety/Range Extension and more New Product than expected. J&K and China seemed to be less focused on New Packaging

TABLE 4 Differences between Observed and Expected across the Regions

Strategy	USA	EU	J&K	China
New Formulation	−659.29	−423.31	1431.97	−349.37
New Packaging	2605.16	−974.10	−916.07	−714.99
New Product	−1637.97	4093.09	−4524.11	2068.99
New Variety/Range Extension	−59.31	−2103.40	2842.80	−680.08
Re-launch	−248.59	−592.28	1165.41	−324.54

with much more use of the launch types of New Formulation and New Variety/Range Extension for J&K and of New Product for China. Note, only J&K introduces more than expected of Re-launch.

What does this all mean? It means the most common methods of new product introduction may not be the strategies that lead to the highest chance of new product success. It behooves each marketing manager to at least question their new product strategy and consider all the options.

The other side of the coin is that while there is evidence of some successful innovation and new product development, there really doesn't appear to be the kind of innovation in the food industry that we see in the very successful technology industry. There may be more opportunities for breakthrough innovation and technology in other areas than in the food business. However, we do not see front page articles on innovation in the food industry like we do in many other industries.

How much innovation has there been in other industries? Would anyone have thought that the largest chain of hotel rooms would be Airbnb, or the largest taxi cab company in the world would be Uber, or that the largest retailer would be Alibaba? Some of the changes at the CES (electronics conference) included a computer embedded in a refrigerator where you can simply push on the screen icons to order more food.

However, what really seemed to be missing in the food industry is something that was just new, out-of-the-box, and exciting. Think of big innovations in the food industry, but you most likely can't think of too many.

Some food companies have tried and failed. Many thought that Procter & Gamble's Olestra (artificial fat) was an absolutely breakthrough innovation. Here are a couple of things that are innovations that someday may or may not be successful.

Subscription meal service may someday be a very profitable, niche business. The idea is that you can have all the ingredients as well as

the recipe shipped to your house so that you can make the meal your-self. Making a meal is the way a cook shows their love and affection for their family or partners. There is a big difference between say-ing, 'Which hamburger is yours, honey?' and 'Look at what I made for you tonight, honey.' This is a big innovation because it totally changes the channels of distribution and gets people away from the traditional supermarket which is slowly dying away.

Another innovation is the virtual supermarket where photos of products are shown in a variety of different venues with QR codes or the equivalent, and consumers need only to expose their cell phones to the various codes and those products will be delivered to their house. These systems have been tried in places like bus stops where consumers have time to browse the board with all the foods, or in other types of brick-and-mortar stores where the actual products do not need to be carried on a shelf in those stores. French grocer Casino undertook a first trial of its digital shopping wall in Lyon in October 2012, and Tesco South Korea caused a stir in 2011 with a QR code wall – enabling shoppers to add items to online baskets by scanning the code. Orders were then delivered that evening.

Why is it that the food industry never seems to have products fea-tured in *Time* magazine's new products of the year issue? Is it that the food category has already extracted all the innovation we can, or have we become so focused on the next quarterly financial report that we're not really searching for that breakthrough innovation?

There are at least three scenarios that might explain the lack of 'breakthrough innovation.' One is that food is something which con-sumers are very comfortable and familiar. They just don't want the change. Maybe in the area of food, consumers really want small changes and not big innovations. For example, American consumers seem to be willing to try some new foods like Thai or Indian, but they won't venture into the area of proteins from insects (which many think will be an innovation in the future).

The second scenario might be that the food industry is unwilling to take those big steps to create a 'breakthrough innovation.' If this scenario is true, it might be because they believe the first scenario. That is, why try to push consumers into something very new when they may be less than willing to try it? It could also be that the food industry is slowly looking for 'breakthrough innovations.' This may be a very reasonable strategy as we know Aesop told us that the tortoise beat the hare. And some companies want to be 'first at being second.'

A third scenario could be that some food companies are coming

up with breakthrough innovations, but they are so hush-hush that the public is not aware of them. The food industry unquestionably needs innovation to survive. Whether it is the mini innovation such as line extensions of a similar brand, or larger innovations such as Amazon's 'no store' food shopping, the industry must keep up with the changing world of the consumer.

Some people have suggested that in the food industry only the big strong companies survive over time. However, remember the words of Charles Darwin who said, 'In the struggle for survival, the fittest win out at the expense of their rivals because they succeed in adapting themselves best to their environment.'

Those companies that don't disappear are not necessarily large or small but rather are nimble and prepared to make the changes, and to innovate their products and their company into the changing world of the consumer.

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Impression Management in Social Media: The Example of LinkedIn

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Nowadays, the relationships are often initiated and maintained in online environments, the formation and management of online impressions have gained importance and become the subject of numerous studies. The impression management is a conscious process in which people attempt to influence the perceptions of their image. They do it by controlling and managing information presented in social media. The presentation of identity is the key to success or failure for example in business life. In the article, the critical literature review related to impression management in social media is described. The example of the way of self-presentation in LinkedIn is presented. The future directions are indicated.

Key words: social media, impression management, LinkedIn, social networks

Introduction

Social media and online community attendance have increasingly become a significant part of our social lives (Burkell et al. 2014). Social media gives new opportunity for business to contact with stakeholders, including for example job candidates (Madera 2012; Bohnert and Ross 2010). Job candidates are putting great attention to a way of presenting themselves in online communities to impress employers (Dekay 2009). Impression management in social media is becoming more important. Some researcher started to examine how self-presentations strategies affect job seekers' behaviours (van der Heide, D'Angelo and Schumaker 2012).

LinkedIn has initiated a new era of workforce recruitment (Guillory and Hancock 2012) in which recruiters, head-hunters are screening candidates and job seekers are encouraged to create professional identities (Davison, Maraist, and Bing 2011), which will enable them to create positive impression on others (Caers and Castelyns 2011).

LinkedIn is the most successful network for recruiters and job seekers (Adams 2013). It enables to create business connections for establishing large, professional networks and sharing employment opportunities (Thew 2008).

The aim of the article is to present a critical literature review of the concept of impression management and describe the strategy of self-presentation in LinkedIn.

The Concept of Impression Management: Literature Review

Managing self-presentation in online communities is an integral part of private and professional life (Rui and Stafanone 2013). When people become members of a community, they must select the relevant and appropriate pieces of information for their self-presentation to be consistent with the profile of the group. According to Schwämmlein and Wodzicki (2012) the willingness to provide personal information in member profile is high because members gain acceptance through extensive self-presentation that facilitates the establishment of relationships with other network members. The relationship between interactions and self-identity have been investigating by many researchers, for example, Goffman (1959), Jones and Pittman (1982), Leary (1996), Pontari and Schlenker (2006), and Snyder (1974). One of the first researchers who described this concept was Goffman (1959). He insisted that people not only try to convince others to see them as respectable and trustful individuals, but also they want to maintain established desired positive image.

Nowadays, people do not only seek to manage their impression face-to-face but also in computer-mediated environments especially in social media (Zhao, Grasmuck, and Martin 2008).

Impression management can be defined as a study of how people attempt to manage or control the perceptions which others form of them (Bozeman and Kacmar 1997; Drory and Zaidman 2007). The main aim of impression management is to steer others' impression with the use of controlling information, photos, and videos and present them in a proper way in social media. In real life, the impression management takes place through both verbal and nonverbal communication, including body language, posture, speech and rank (i.e., status) (Bolino and Turnley 1999; Leary and Kowalski 1990). Both in real life and online, self-representation connects the idea of who we are to the outside world (Rosenfeld, Giacalone, and Riordan 2002). Thanks to the feedback from recipients, people can explore

their presented images and develop or adjust it to the desired images.

Impression management is recognized as the key element of successful communication with co-workers, team members, and colleagues. According to Gardner and Avolio (1998), it can help managers who are charismatic leaders to achieve an authentic self-representation, allowing them to increase their trustworthiness, credibility, esteem and power (Jung and Sosik 2003).

Impression management is used in individual life as also can be applied at the organizational level (Avery and McKay 2006; Mohamed and Gardner 2004). Organizations use impression management in social media to build the positive image. The impression management model consists of the two key players: an 'actor' who engages in 'impression management behaviours' and an 'audience' who interacts with 'actors' under certain 'environmental settings'. This actor – audience relationship often occurs between managers and their subordinates (Barsness, Diekmann, and Seidel 2005). Impression management can by divided into two strategies: assertive (which an actor uses to establish desirable image), and protective (which are excuses and justifications to repair damaged identities) (Drory and Zaidman 2007). Very interesting taxonomy of organizational impression management was presented by Mohamed, Gardner, and Paolillo (1999). According to them, it can be categorized into four types: direct and assertive, direct and defensive, indirect and assertive, and indirect and defensive tactics. Organizations use (Mohamed, Gardner, and Paolillo 1999):

- direct tactics to present information about their skills, abilities, and accomplishments,
- indirect tactics to enhance their images by managing information about the people and events with which they are associated with,
- utilize assertive tactics when they see opportunities to boost their image,
- defensive tactics to minimize or repair damage to their images.

Members of social networks have various socio-discursive needs – expressive, communicative, or promotional. People engage in self-presentation for many social and professional reasons, including gaining employment, to conduct business, to establish friendships, to express themselves (Shepherd 2005; Bolino et al. 2008) or to correct inaccurate impressions that colleagues have of them (Giacalone and Rosenfeld 1991). The topic of self-presentation was examined by

Birnbaum (2013), DeAndrea and Walther (2011), Labrecque, Markos, and Milne (2011), and Schwämmlein and Wodzicki (2012). The importance of being recognized in a positive light has become very important in social circles. The development of social media like LinkedIn has facilitated identity construction through the abilities to shape the information, photos, and video posted on an individual's profile in attempts to control how others will perceive them in real and internet world. Goffman (1959) highlighted the fact that the perception of others socially influences our behaviour.

Impression Management Strategy: The Example of LinkedIn

LinkedIn is a social network dedicated to professionals and is focused on business relationships and interactions. It has more than 364 million members in over 200 countries. LinkedIn was launched on May 5, 2003. Its founders are Reid Hoffman, Allen Blue, Konstantin Guericke, Eric Ly, and Jean-Luc Vaillant (see https://press .linkedin.com/about-linkedin).

LinkedIn can be used to build awareness and gain referrals (Kietzmann et al. 2011; Mas-Bleda et al. 2014). It is very popular among recruiters and job seekers. This platform is used to find jobs, recommend others in the network, and receive recommendations from others.

LinkedIn allows users to fill in information, which includes profile summary, experience, volunteer experience and causes, projects, languages, certifications, publications, education, discussion posts and comments, recommendations, endorsed skills and expertise, interests, honours and awards, and contact information. A properly filled-out profile gives information about one's job title, detail employment history, business accomplishments, and where they were educated. On the profile, individual can also present a portrait (photo). There are also presented the recommendations from others. People can join groups, especially those offering jobs, recruitment, and business deals. LinkedIn enables to share Amazon book-reading lists, slide presentations, documents, travel itineraries, and blog entries.

LinkedIn helps to find people based on a variety of criteria for example: by defining the specific industry, the size of the company, the seniority level, and the groups of which a particular person is a member (Bradbury 2011).

LinkedIn is giving a lot of opportunities for people who are looking for new challenges. A lot of companies use it for talent acquisi-

tion. The impression management is very important concept related to this social network. Tsai et al. (2011) and Guillory and Hancock (2012) found that a job seeker can influence recruiter evaluations through impression management.

Individuals use various self-presentation tactics in social media to present themselves in favourable ways. The self-presentation tactics can be described as: 'behaviours used to manage impressions to achieve foreseeable short-term interpersonal objectives or goals' (Lee et al. 1999, 702).

LinkedIn presents information about a user that viewers can use to make judgments about the source, such as their credibility, trustfulness, social and professional attractiveness.

One must fill in all information in the LinkedIn profile to create a positive image (Ivcevic and Ambady 2012). It is important to put the photography. Results of the research presented by Edwards et al. (2015) indicates that users who post a profile picture along with their LinkedIn profile are perceived as more socially attractive and more competent than users who do not post a picture. Images help to increase social presence in electronic communications.

Neuberg and Fiske (1987) highlights that the appearance of an individual is most prominent when we first come into contact with somebody. However, the more information a person has on the profile, the more likely hiring professionals will gain an understanding of the individual's personality and behaviour looking at this information.

Also, the information is people's interests and hobbies. According to Goffman's (1959) theory of identity management, people strategically present characteristics that they believe others will approve. For example, people who are looking for a job may be aware that posting specific interests personal or professional can sway how attractive they are to recruiters because they may coincide with recruiters' hobbies. Spelling and grammar mistakes on the LinkedIn Profile are believed to be more troubling, than on paper cv, because it can very fast create a negative impression. And for example, recruiters may dismiss a candidate based on a single spelling error. Another important characteristic of the LinkedIn profile is the number of connections users have in their network. The number of connections is important for a candidate in certain careers (i.e. sales, marketing, public relations, recruiting, etc.). It also shows how this person can create a social network. For good impression management also is important to put attention to defining the skill set. Social network LinkedIn users are asked not to provide their life story

but to highlight specific skills, thus promoting their strengths for different business stakeholders. LinkedIn users, who are not writing a comprehensive list of skills and expertise, will be found less often than those members who do list them.

The use of LinkedIn, as a recruitment tool is very popular because it is easy to manage and it is a low-cost solution (Zide, Elman, and Shahani-Denning 2014; Chiang and Suen 2015). Potential candidates from all over the world are easier to find. There are opportunities for introduction to new professional connections through existing networks.

Conclusion and Future Directions

LinkedIn is a social networking site dedicated to making business connections for building a professional network and sharing employment opportunities. The users generate the content, and they can professionally prepare the information which they would like to publish on the Internet. Nowadays, it is very important to have knowledge about the strategy of self-presentation in social networks because the presentation of identity is the key to success or failure for example in business life. Summarize, it is very important to create professional LinkedIn Profile in which user will:

- build a complete profile,
- highlight only relevant information,
- always include photography,
- limit recommendations to trustful people,
- add credible people to network,
- join different groups, and
- provide high-quality and researched-based information.

People should be conscious and active in impression management and be aware what information exists about them in social media and if the information is protected by the appropriate levels of security and privacy.

The social networks are growing, and there is a need for further research to provide more definitive guidelines on both the potential advantages as well as disadvantages of using professional networks. Although using LinkedIn for recruitment purposes is commonplace in today's workforce there is a need to solve many ethical and legal problems related to use private information published in social media in the process of recruitment and selection. Privacy in social media is critical issue that deserves reflection and research, especially cyberstalking and location disclosure, social profiling and third

party disclosure, invasive privacy agreements. Questions that need attention regarding this privacy issue are: Will social media sites be honest and competent in dealing with users' information? Will social media be capable in preventing users against cyberstalking, location disclosure, social profiling?

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Consumer Decision-Making Styles Extension to Trust-Based Product Comparison Site Usage Model

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The paper describes an implementation of extended consumer decision-making styles concept in explaining consumer choices made in product comparison site environment in the context of trust-based information technology acceptance model. Previous research proved that trust-based acceptance model is useful in explaining purchase intention and anticipated satisfaction in product comparison site environment, as an example of online decision shopping aids. Trust to such aids is important in explaining their usage by consumers. The connections between consumer decision-making styles, product and sellers opinions usage, cognitive and affective trust toward online product comparison site, as well as choice outcomes (purchase intention and brand choice) are explored trough structural equation models using PLS-SEM approach, using a sample of 461 young consumers. Research confirmed the validity of research model in explaining product comparison usage, and some consumer decision-making styles influenced consumers' choices and purchase intention. Product and sellers reviews usage were partially mediating mentioned relationships.

Key words: consumer decision-making styles, online product comparison site usage, cognitive and affective trust, products/sellers reviews, purchase intention, PLS-SEM

Introduction

Paper goal is to extend trust-based acceptance model in the context of online product comparison site by including consumer decision-making styles concept and brand choice on the example of the simulated choice of an automatic coffee machine in a quasi-experimental setting. The sample of 461 young consumers participated in an online quasi-experimental setting. As mentioned extensions were not previously analysed, research made is exploratory in nature. The main research question is which and how consumer decision-making styles influence trust toward product comparison site usage and product brand choice. Data analysis utilises PLS-SEM approach,

including PLS-MGA (multi-group analysis) for main chosen brands, as a way to explore postulated relationships.

The paper is organised in ten parts. After the short introduction, the online product comparison sites mechanics and business models are presented, with the description of trust-based technology adoption model and introduction to the concept of consumer decision-making styles. Next, conceptual research model with research questions is introduced, followed by detailed description of used sample and measures (with reliability and validity assessment). Results part is organised along main research model, its estimates, and multi-group comparisons regarding groups for main chosen brands. Obtained results are discussed in next part of the paper, ending with research implications, limitations of the study, and conclusion.

Contemporary Online Product Comparison Sites

Common access to online shopping changed buying habits of many consumers in last 20 years. The share of online retail spending (on goods) increased over the time with 15–18 percentage points growth y-o-y, up to over 10% share in total retail on mature markets as United Kingdom (the leader with about 15% share), United States or Germany (see http://www.retailresearch.org/onlineretailing.php). This involves a large number of decisions to find products and sellers online, with two most common alternative approaches:

- the choice of the well-known online store brands (like Amazon, Zalando etc.) or places where someone previously bought with satisfaction (without comparison of sellers), or,
- finding the best deal – often with the help of product comparison sites.

The second strategy is in the scope of presented research. Contemporary online product comparison sites evolved from simple price comparison engines introduced nearly 20 years ago. They are also working under different business model than their predecessors. Product comparison engines are working as infomediaries typically in business model assuming paid integration (via API and parsing structured XML file with offers data) of particular vendor offers with comparison engine. Solutions using bots crawling the net to seek online store and their assortment to include in comparison engine without payment and direct integration are nowadays rare – even Twenga makes possible shop integration for a fee.

In both cases, the mechanics of product comparison site working is to aggregate information from product comparison agent (or

bot), that is configured to gather product information (such as actual price, product availability, product description etc.) from online vendors and/or product information databases.

As consumer interacts with product comparison site, typically having recognizable brand, he/she is not interested about underlying technology (allowing the site to present demanded information on request) and/or nature of commercial agreements between comparison site and online vendor, this suggests that product comparison agent should be transparent to the comparison site user. Aggregated information retrieved on online shopper request is revealed to him/her in the form of ranking. By interacting with product comparison site consumers leave some traces of their behaviour, that are valuable for online vendors and comparison sites for their marketing activities. Figure 1 shows the flows between online vendor, product comparison site, and consumer.

Product comparison sites are nowadays enhanced by opinions from consumers about products and sellers (possibly so called 'trusted opinions' of non-anonymous for the site users who bought a particular product). Those opinions are usually presented as average ratings – particularly for sellers' credibility and detailed pieces of text.

Young consumers are more innovative toward information technology usage. They also are using online decision shopping aids including mobile tools more often and in the more extensive way (Mącik and Nalewajek 2013), so studying this group behaviour can be useful to make predictions by analogy for consumers later accepting new technologies. Previous research also suggests the power of online opinions and reviews for this group of consumers (Nalewajek and Mącik 2013).

The influence of online reviews on purchasing behaviour has been confirmed by many studies in the information systems and consumer behaviour fields (e.g., Forman, Ghose, and Wiesenfeld 2008; Khammash and Griffiths 2011). Typically the effect of positive and negative reviews for particular e-commerce site have been studied, and product reviews have been left from detailed consideration. Negative reviews are believed to have a stronger effect on consumer decisions than positive ones (Park and Lee 2009), as being more diagnostic and informative (Lee, Park, and Han 2008). Typically the consumer using product comparison site faces with a mix of positive and negative product reviews and seller opinions, this is known as inconsistent reviews setting (Tsang and Prendergast 2009). For this study, both types of opinions have been used: about products and about sellers.

FIGURE 1   Flows Between Online Vendor, Product Comparison Site and Consumer:
Simplified Approach (numbers represent steps of flows between
ecosystem members; own elaboration, loosely based on concept of Wan,
Menon, and Ramaprasad (2007, 66))

Focus was on declared number of opinions read more or less precisely, leaving out of consideration their negative or positive connotations, under the assumption: the more opinions read, the greater trust to product comparison site.

Trust-Based Acceptance Model

Numerous research studies show that trust toward online business is a key driver for the success of e-commerce (Cheung and Lee 2006; Hong and Cho 2011), particularly for online retailers (Kim and Park 2013). Many studies researching consumer trust toward e-commerce site are following Komiak and Bensabat (2006) trust-based acceptance model built upon widely used in e-commerce studies theory of reasoned action (TRA) (Hoehle, Scornavacca, and Huff 2012; Komiak and Benbasat 2006). According to TRA individual's behaviour is pre-

dicted by his/her behavioural intention, while behavioural intention is formed as an effect of attitude, beliefs, and subjective norms (Fishbein and Ajzen 1975). Those connections are causal relationships, so they are typically modelled using SEM approach.

Komiak and Benbasat (2006) developed mentioned trust-based acceptance model for explaining the adoption of online recommendation agents. They examined two types of trust in the model: cognitive trust and affective trust. Cognitive trust is conceptualized as trusting beliefs while affective trust should be considered as a form of trusting attitude. In online environments, consumers often affectively evaluate trusting behaviour. High affective trust suggests having favourable feelings toward performing the behaviour. The trust-based acceptance model highlights that cognitive trust affects emotional trust, which further leads to individuals' adoption intention (Komiak and Benbasat 2006). This is convergent with TRA approach when adoption process resembles the following sequence: belief 'attitude' intention, although the subjective norm is the construct dropped in trust-based acceptance model as adoption behaviour is considered as voluntary rather than mandatory according to Komiak and Benbasat (2006).

Cognitive trust can be analysed in three main categories: competence, benevolence, and integrity as suggest McKnight, Choudhury, and Kacmar (2002). Trust in competence refers to the extent to which consumers perceive an online retailer or service provider as having skills and abilities to fulfil what they need (Mayer, Davis, and Schoorman 1995). Trust in benevolence is consumers' perception that the retailer/service provider will act in their interest (Hong and Cho 2011). Trust in integrity refers to consumers' perception about honesty and promise-keeping by online retailer/service provider (McKnight, Choudhury, and Kacmar 2002). Those concepts are used in this research in the context of product comparison engine usage.

Consumer Decision-Making Styles

A consumer decision-making style concept is defined as 'a mental orientation characterizing a consumer's approach to making choices' (Sproles and Kendall 1986, 268), and consumer decision-making styles can be perceived as 'basic buying-decision making attitudes that consumers adhere to, even when they are applied to different goods, services or purchasing decisions' (Walsh et al. 2001, p. 121). Consumer decision-making styles are connected to consumer personality, and research suggest that they are relatively stable constructs (Sproles and Kendall 1986; Lysonsky, Durvasula and Zotos

TABLE 1   Description of Consumer Decision-Making Styles: Extended version

Style name/short name		Description
Perfectionistic	PERF	Sensitive to high quality products, prone to spend money and/or time to get the expected quality, expecting customer care, thoroughly comparing the available options
Brand-Conscious	BC	Believing that price of branded products is appropriate to their quality, buying well-known and heavily advertised brands, often in shopping malls and specialty stores
Novelty Fashion Conscious	NFC	Willing to put extra effort to obtain a trendy, new products sooner than others; follower of fashion, always in line with current trends, often buys due variety-seeking motives
Recreational Shopping Conscious	RSC	Hedonistic, perceiving shopping environment as pleasant and desirable, spending much time on shopping
Price-Value Conscious	PVC	Prone for getting highest possible 'value for money' – sensitive to price reductions, looking for low prices, often carefully comparing products before purchase, rarely buys cheapest products
Impulsive	IMP	Relying on impulse to buy, does not plan purchases, not paying much attention to how much is spending, prone for buying on sales
Confused by Overchoice	CO	Feels the fatigue of to many products, brands and shopping options, often has trouble in deciding
Habitual Brand-Loyal	HBL	Has strong habits for buying specific brands and/or at the same places
Compulsive	COMP	Having tendency to uncontrolled spending, and addiction for shopping (style added by author)
Ecologically Aware	ECO	Prone to choose products that are ecologically safe for him/her and for environment (style added by author)

NOTES   Own elaboration, including early insights by Sproles and Kendall (1986).

1995). Particular shopping activities and attitudes toward shopping can be perceived as direct outcomes of consumer's decision-making styles (Tai 2005), and tendencies revealed in particular person styles profile are modified in particular shopping process by situational factors. Consumer decision-making concept has been used in several contemporary studies (Walsh et al. 2002; Tai 2005), and proved to be useful to explain outcomes of particular shopping activities and attitudes toward shopping, including usage of online channel (Mącik and Mącik 2009).

Consumer decision-making styles are measured typically via PCS (Profile of Consumer Style) questionnaire proposed by Sproles and Kendall (1986). In this research extension and reconstruction of PCS has been used, with 2 new styles have been added on the base of pre-
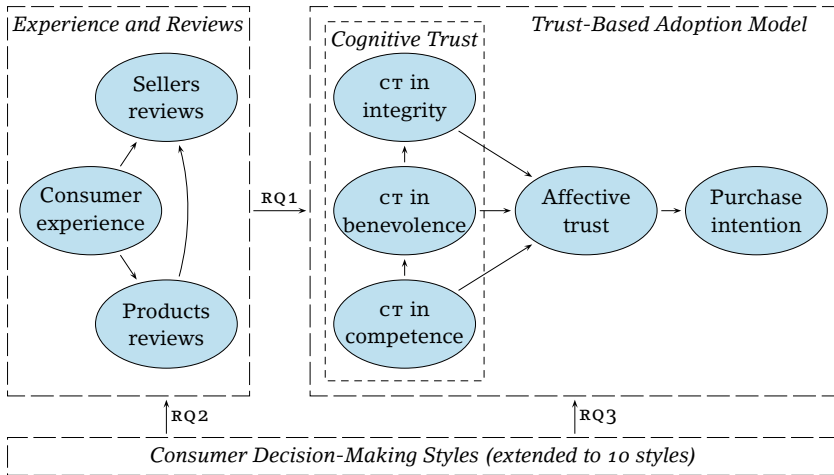
FIGURE 2 Conceptual Research Model

vious author research. In result 10 styles (including original 8) were measured by 30 items scaled as Likert-type scale with five variants of answers (short form of reconstructed by Mącik and Mącik (2015) PCS scale named SPDZ14K). Those styles are described in greater detail in table 1.

Listed styles are forming personal profile consumer decision-making styles – particular person possesses an individual combination of them, when all styles are manifesting itself on different levels, with some styles more intense or prominent (Sproles and Kendall 1986).

Conceptual Research Model and Research Questions

Mentioned concepts of trust-based adoption model and consumer decision-making styles putted in context of online product comparison sites usage were leading to propose conceptual model (figure 2).

In this approach gained with time experience in online product comparison sites usage and opinions about products and sellers are antecedents for cognitive and affective trust for online product comparison site according to trust-based adoption model, where cognitive trust measured in three sub-dimensions (trust in competence, trust in benevolence and trust in integrity) influences affective trust and later purchase intention. Experience with opinions usage and trust-based adoption model constructs are explained by some of consumer decision-making styles measured in ten dimensions (it was assumed that only selected styles will be useful).

Because of exploratory character of the study three main research questions have been formulated:

RQ1 *How previous consumer experience with product comparison site usage and opinions about products and sellers usage are connected with trust toward product comparison site constructs from trust-based adoption model?*

RQ2 *Which and how consumer decision-making styles are influencing the level of experience with product comparison site usage and opinions about products and sellers?*

RQ3 *Which and how consumer decision-making styles are influencing constructs from trust-based adoption model for product comparison site usage?*

No exact hypotheses were assumed for this research, particularly the set of consumer decision-making styles included in model was exactly exploratory, and modified during the modelling. Research model derived from conceptual one has been assessed via structural equation modelling approach utilizing PLS-SEM – recommended for exploratory stages of theory extensions (Hair, Ringle, and Sarstedt 2011) – and later via multi-group analysis using PLS-MGA algorithms.

Sample and Measures

SAMPLE

Data have been collected during March 2015 through CAWI questionnaire with e-mail invitation sent to authors students and their peers, that returned 461 usable responses from 575 sent invitations, giving response rate of 80.2%. Students were awarded small increase in course activity grade for participation and recruitment of their peers (this award was less than 4% of total possible grade).

In effect, the sample consists of 60.2% women and 39.8% men. The average age of participants is 24.5 years with standard deviation of 5.1 years (range: 18–46 years old, median: 23 years). Each 1/3rd of participants were inhabitants of different level of urbanization areas: rural areas, small towns and larger cities. All participants must be active internet users and make at least one online purchase during a year prior study. Sample structure regarding gender and age is close to population of both full-time and part-time students of public university located in the South-Eastern part of Poland, where the data have been collected.

MEASURES

Items to measure constructs used in this study were adapted from previously published research or have been developed by the au-

TABLE 2　Scales Used in Study

Construct	(1)	(2)	(3)	(4)
Consumer experience in product comparison sites usage	Consumer Experience	Own development[a]	N/A	9
Cognitive Trust in Competence	CT_Competence	McKnight, Choudhury, and Kacmar (2002)	travestation	4 (3)[b]
Cognitive Trust in Benevolence	CT_Benevolence	McKnight, Choudhury, and Kacmar (2002)	travestation	4 (3)[b]
Cognitive Trust in Integrity	CT_Integrity	McKnight, Choudhury, and Kacmar (2002)	travestation	4 (3)[b]
Affective Trust	Affective Trust	Komiak and Benbasat (2006)	reconstruction	4
Purchase Intention	Purchase Intention	Gefen, Karahanna and Straub (2003)	reconstruction	4
Product Reviews Usage	Product Reviews Usage	Own development[a]	N/A	2
Sellers Reviews Usage	Sellers Reviews Usage	Own development[a]	N/A	2
Brand Conscious Style	BC	Sproles and Kendall (1986)	reconstruction	3
Confused by Overchoice Style	CO	Sproles and Kendall (1986)	reconstruction	3
Ecologically Aware Style	ECO	Own development[c]	N/A	3
Perfectionistic Style	PERF	Sproles and Kendall (1986)	reconstruction	3

Continued on the next page

thor. As questionnaire language was Polish, this required to translate and culturally adapt (by authors) scales written originally in English, including reconstruction procedures where needed. In effect, used scales are derived from original measures. Basic data about used scales is provided in table 2.

Data analysis for this study has been performed using SmartPLS 3.2 software (see www.smartpls.com), as most of the measurement variables were not normally distributed. Bootstrap procedure (resampling with replacement, sample size equal of original sample size – 461 observations) with 10000 repetitions for PLS procedure and 5000 repetitions for PLS-MGA algorithm has been utilised to get inference statistics for measures and evaluated models.

TABLE 2 *Continued from the previous page*

Construct	(1)	(2)	(3)	(4)
Price-Value Conscious Style	PVC	Sproles and Kendall (1986)	reconstruction	3
Recreational Shopping Conscious Style	RSC	Sproles and Kendall (1986)	reconstruction	3

NOTES Column headings are as follows: (1) name in tables and diagrams, (2) items derived from, (3) level of adaptation, (4) number of items. Only consumer decision-making styles included in model are shown in table, other four excluded. [a] Used also in Mącik and Mącik (2016b). [b] One item dropped due to low factor loading. [c] Used also in Mącik and Mącik (2016a). Only consumer decision-making styles included in model are shown in table, other four excluded.

RELIABILITY AND VALIDITY OF MEASURES

Reliability of measures in this study has been assessed by two commonly used measures: Cronbach's Alpha coefficient and Composite Reliability (CR) measure, as they represent lower and upper boundaries of true scale reliability respectively (Henseler, Ringle, and Sarstedt 2015). Using both criterions reliability of most constructs meets typical requirements – values of CRS are all over suggested value 0.7 (Hair, Ringle, and Sarstedt 2013, 7), with some Alphas for CO, PERF and PVC lower than desired – tables 3 and 4.

TABLE 3 Reliability of Measures: Cronbach's Alpha

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.802	0.801	0.020	39.344	0.000	0.758	0.837
BC	0.719	0.718	0.024	29.446	0.000	0.667	0.762
CO	0.618	0.616	0.035	17.797	0.000	0.542	0.679
CT in Benevolence	0.713	0.710	0.029	24.506	0.000	0.649	0.763
CT in Competence	0.732	0.730	0.027	27.218	0.000	0.675	0.779
CT in Integrity	0.777	0.775	0.023	33.363	0.000	0.726	0.817
Consumer Experience	0.928	0.928	0.006	157.430	0.000	0.916	0.938
ECO	0.788	0.788	0.020	39.697	0.000	0.746	0.824
PERF	0.566	0.565	0.031	18.258	0.000	0.501	0.623
PVC	0.617	0.615	0.036	17.283	0.000	0.541	0.680
Product Reviews Usage	0.788	0.788	0.025	31.112	0.000	0.735	0.834
Purchase Intention	0.797	0.796	0.021	37.739	0.000	0.750	0.833
RSC	0.867	0.866	0.012	74.794	0.000	0.841	0.888
Sellers Reviews Usage	0.835	0.834	0.021	40.181	0.000	0.791	0.872

NOTES (1) original sample (O). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) *t*-statistics (|O/STERR|), (5) *p*-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

TABLE 4   Reliability of Measures: Composite Reliability (CR)

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.871	0.870	0.012	75.399	0.000	0.846	0.891
BC	0.840	0.829	0.035	23.985	0.000	0.662	0.852
CO	0.787	0.772	0.047	16.631	0.000	0.569	0.810
CT in Benevolence	0.839	0.838	0.014	61.789	0.000	0.810	0.863
CT in Competence	0.849	0.848	0.013	66.398	0.000	0.822	0.872
CT in Integrity	0.871	0.870	0.012	74.503	0.000	0.845	0.891
Consumer Experience	0.940	0.940	0.005	198.685	0.000	0.930	0.948
ECO	0.870	0.848	0.083	10.531	0.000	0.263	0.885
PERF	0.770	0.762	0.024	31.480	0.000	0.678	0.789
PVC	0.794	0.789	0.019	42.068	0.000	0.736	0.816
Product Reviews Usage	0.904	0.904	0.010	87.166	0.000	0.884	0.924
Purchase Intention	0.868	0.867	0.012	72.181	0.000	0.841	0.889
RSC	0.915	0.909	0.036	25.182	0.000	0.850	0.926
Sellers Reviews Usage	0.924	0.923	0.009	104.208	0.000	0.906	0.940

NOTES   (1) original sample (O). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t-statistics ($|O/STERR|$), (5) p-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

TABLE 5   Convergent Validity of Measures: Average Variance Extracted (AVE)

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.628	0.627	0.024	26.461	0.000	0.580	0.672
BC	0.637	0.624	0.036	17.838	0.000	0.444	0.658
CO	0.558	0.546	0.038	14.834	0.000	0.390	0.590
CT in Benevolence	0.635	0.634	0.023	27.447	0.000	0.587	0.678
CT in Competence	0.652	0.651	0.022	29.196	0.000	0.607	0.694
CT in Integrity	0.692	0.691	0.022	31.513	0.000	0.645	0.731
Consumer Experience	0.636	0.636	0.019	33.588	0.000	0.598	0.672
ECO	0.691	0.667	0.072	9.558	0.000	0.238	0.721
PERF	0.534	0.528	0.022	24.125	0.000	0.464	0.558
PVC	0.564	0.560	0.026	22.127	0.000	0.497	0.601
Product Reviews Usage	0.825	0.825	0.017	47.873	0.000	0.792	0.859
Purchase Intention	0.622	0.621	0.024	25.756	0.000	0.572	0.667
RSC	0.782	0.772	0.042	18.623	0.000	0.646	0.807
Sellers Reviews Usage	0.858	0.858	0.015	56.201	0.000	0.827	0.887

NOTES   (1) original sample (O). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t-statistics ($|O/STERR|$), (5) p-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

Convergent validity for used measures assessed via Average Variance Extracted (AVE) is very good – all constructs are meeting the cri-

Radosław Mącik

TABLE 6 Discriminant Validity of Measures: Fornell Larcker Criterion

Const.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1)	0.792													
(2)	0.171	0.798												
(3)	−0.039	0.150	0.747											
(4)	0.609	0.096	−0.026	0.797										
(5)	0.747	0.161	−0.022	0.657	0.807									
(6)	0.633	0.099	−0.035	0.691	0.700	0.832								
(7)	0.246	0.086	0.067	0.100	0.205	0.167	0.798							
(8)	0.132	−0.013	0.081	0.047	0.069	0.019	0.210	0.831						
(9)	0.070	0.310	−0.020	−0.018	0.111	0.014	0.220	0.125	0.731					
(10)	0.188	0.181	0.156	0.152	0.232	0.175	0.162	0.199	0.233	0.751				
(11)	0.262	0.110	0.173	0.121	0.185	0.121	0.327	0.145	0.142	0.074	0.908			
(12)	0.739	0.191	0.022	0.500	0.597	0.504	0.285	0.148	0.039	0.209	0.223	0.788		
(13)	0.188	0.171	0.073	0.143	0.162	0.148	0.040	0.090	0.069	0.336	0.053	0.198	0.884	
(14)	0.228	0.143	0.033	0.202	0.209	0.140	0.327	0.057	0.169	0.072	0.571	0.211	0.013	0.926

NOTES Constructs: (1) Affective Trust, (2) BC, (3) CO, (4) CT in Benevolence, (5) CT in Competence, (6) CT in Integrity, (7) Consumer Experience, (8) ECO, (9) PERF, (10) PVC, (11) Product Reviews Usage, (12) Purchase Intention, (13) RSC, (14) Sellers Reviews Usage. Numbers on matrix diagonal are square roots from AVE for constructs; numbers off-diagonal are correlations between them, this is alternative form to report Fornell-Larcker Criterion (Henseler, Ringle, and Sarstedt 2014, 117).

terion of AVE value higher than 0.5 as suggested by Fornell and Larcker (1981) – table 5. Even for constructs having lower internal consistency in terms of Cronbach's Alpha (CO, PERF and PVC) the AVE values are at least satisfactory.

Discriminant validity of used measures is also at very good (table 6). The Fornell-Larcker Criterion stating that AVE for each construct should be higher from all squared correlations between particular construct and other measures (Fornell and Larcker 1981) is met for all constructs (see also note for table 6, as in mentioned table this criterion is reported in alternative form).

Results

WHOLE SAMPLE MODEL

On the base or conceptual model shown on figure 2 and initial data analysis structural equations model presented on figure 3 has been estimated using SmartPLS 3.2 software. Previous analysis (Mącik and Mącik 2016) confirmed the validity of trust-based adoption model to explain purchase intention in product comparison site environment. In structural model depicted on figure 3 consumer experience explains both reviews constructs, that are also interconnected – as in virtual channel product choice is typically made earlier than vendor/seller choice, so it was assumed that product review usage should explain sellers review usage, also because of similar factors influencing reviews following as a whole – persons more often using
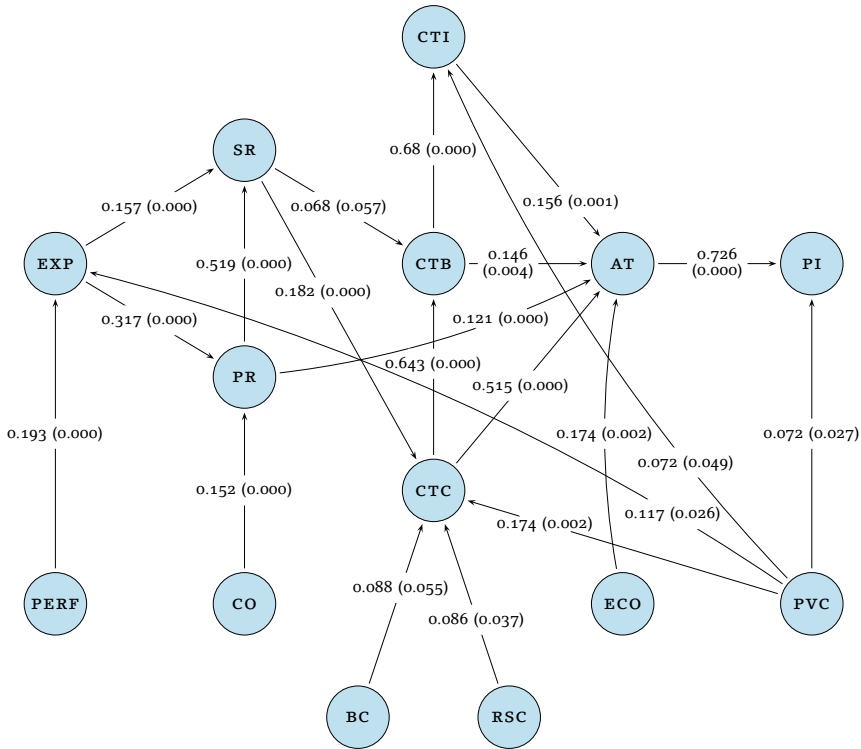
FIGURE 3   Research Model with Results Obtained via PLS-SEM (values on paths are standardized path coefficients with bootstrap obtained *p*-values reported in parentheses)

product reviews inside product comparison engine are more likely more heavily relying on sellers reviews, to establish sellers credibility.

Estimated model exhibits reasonable fit – proportion of variance explained, measured with R^2 statistics is over 0.5 for main explained variables, particularly 0.612 for Affective Trust and 0.551 for Purchase Intention. The level of coefficients of determination (R^2) for all constructs playing roles of dependent variables are presented in table 7. Also low SRMR (Square Root of Mean Residuals) value on the level of 0.039 suggests reasonable model fit to the data. Table 8 presents in detail path coefficient values in original sample and inference statistics for paths obtained via bootstrapping. Path coefficientsfrom original sample with significance levels are also shown on figure 3.

In general, consumer experience with product and sellers reviews

TABLE 7 Coefficients of Determination for Dependent Variables in Estimated Model (R^2 Values)

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust	0.612	0.617	0.034	17.974	0.000	0.559	0.691
cт in Benevolence	0.436	0.438	0.046	9.528	0.000	0.352	0.530
cт in Competence	0.106	0.119	0.029	3.676	0.000	0.086	0.207
cт in Integrity	0.482	0.483	0.044	11.005	0.000	0.401	0.571
Consumer Experience	0.061	0.071	0.025	2.462	0.014	0.038	0.143
Product Reviews Usage	0.130	0.137	0.030	4.267	0.000	0.090	0.215
Purchase Intention	0.551	0.555	0.041	13.311	0.000	0.482	0.640
Sellers Reviews Usage	0.348	0.351	0.040	8.603	0.000	0.279	0.436

NOTES (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t-statistics (|o/STERR|), (5) p-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

TABLE 8 Path Coefficients in Estimated Model

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust → Purchase Intention	0.726	0.726	0.032	22.941	0.000	0.663	0.786
BC → cт in Competence	0.088	0.097	0.046	1.916	0.055	0.024	0.206
co → Product Reviews Usage	0.152	0.159	0.043	3.529	0.000	0.089	0.256
cт in Benevolence → Affective Trust	0.146	0.146	0.051	2.866	0.004	0.045	0.245
cт in Benevolence → cт in Integrity	0.680	0.678	0.033	20.335	0.000	0.607	0.737
cт in Competence → Affective Trust	0.515	0.513	0.049	10.578	0.000	0.411	0.603
cт in Competence → cт in Benevolence	0.643	0.642	0.038	16.957	0.000	0.567	0.714
cт in Integrity → Affective Trust	0.156	0.157	0.049	3.208	0.001	0.064	0.257
Consumer Experience → Product Reviews Usage	0.317	0.317	0.042	7.529	0.000	0.235	0.402
Consumer Experience → Sellers Reviews Usage	0.157	0.158	0.044	3.600	0.000	0.074	0.245
ECO → Affective Trust	0.069	0.072	0.033	2.073	0.038	0.015	0.142
PERF → Consumer Experience	0.193	0.202	0.050	3.849	0.000	0.120	0.313
PVC → cт in Competence	0.174	0.176	0.056	3.107	0.002	0.071	0.288
PVC → cт in Integrity	0.072	0.074	0.037	1.967	0.049	0.005	0.149
PVC → Consumer Experience	0.117	0.119	0.053	2.222	0.026	0.020	0.227
PVC → Purchase Intention	0.072	0.074	0.033	2.218	0.027	0.015	0.143
Product Reviews Usage → Affective Trust	0.121	0.121	0.033	3.678	0.000	0.057	0.186
Product Reviews Usage → Sellers Reviews Usage	0.519	0.519	0.039	13.342	0.000	0.442	0.594
RSC → cт in Competence	0.086	0.091	0.041	2.091	0.037	0.020	0.181
Sellers Reviews Usage → cт in Benevolence	0.068	0.068	0.036	1.907	0.057	−0.003	0.136
Sellers Reviews Usage → cт in Competence	0.182	0.181	0.044	4.122	0.000	0.090	0.265

NOTES (1) original sample (o). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) t-statistics (|o/STERR|), (5) p-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up.

usage are loosely connected with trust-based adoption model constructs. Also the direct influence of six selected (on the base of correlation analysis) consumer decision-making styles is not so strong, although those relationships are statistically significant. Magnitude of consumer decision-making styles influence increases when total effects (including indirect effects) are taken into account.

As the model is quite complicated, some indirect effects are pres-

TABLE 9 Total Effects in Estimated Model

Constructs	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Affective Trust → Purchase Intention	0.726	0.726	0.032	22.941	0.000	0.663	0.786
*BC → Affective Trust	0.060	0.066	0.032	1.872	0.061	0.015	0.143
*BC → CT in Benevolence	0.057	0.062	0.030	1.895	0.058	0.014	0.134
BC → CT in Competence	0.088	0.097	0.046	1.916	0.055	0.024	0.206
*BC → CT in Integrity	0.039	0.042	0.021	1.852	0.064	0.009	0.093
*BC → Purchase Intention	0.043	0.048	0.024	1.825	0.068	0.010	0.106
*CO → Affective Trust	0.030	0.031	0.010	2.960	0.003	0.014	0.053
*CO → CT in Benevolence	0.015	0.015	0.005	2.669	0.008	0.006	0.027
*CO → CT in Competence	0.014	0.015	0.005	2.629	0.009	0.006	0.027
*CO → CT in Integrity	0.010	0.010	0.004	2.679	0.007	0.004	0.018
CO → Product Reviews Usage	0.152	0.159	0.043	3.529	0.000	0.089	0.256
*CO → Purchase Intention	0.021	0.022	0.007	2.994	0.003	0.010	0.038
*CO → Sellers Reviews Usage	0.079	0.083	0.023	3.465	0.001	0.045	0.134
CT in Benevolence → Affective Trust	0.252	0.252	0.046	5.496	0.000	0.164	0.343
CT in Benevolence → CT in Integrity	0.680	0.678	0.033	20.335	0.000	0.607	0.737
*CT in Benevolence → Purchase Intention	0.183	0.183	0.035	5.286	0.000	0.117	0.252
CT in Competence → Affective Trust	0.676	0.675	0.035	19.395	0.000	0.601	0.739
CT in Competence → CT in Benevolence	0.643	0.642	0.038	16.957	0.000	0.567	0.714
*CT in Competence → CT in Integrity	0.437	0.436	0.042	10.424	0.000	0.352	0.516
*CT in Competence → Purchase Intention	0.491	0.490	0.039	12.588	0.000	0.412	0.564
CT in Integrity → Affective Trust	0.156	0.157	0.049	3.208	0.001	0.064	0.257
*CT in Integrity → Purchase Intention	0.113	0.114	0.035	3.209	0.001	0.046	0.184
*Consumer Experience → Affective Trust	0.084	0.083	0.018	4.678	0.000	0.050	0.119
*Consumer Experience → CT in Benevolence	0.060	0.059	0.017	3.510	0.000	0.027	0.092
*Consumer Experience → CT in Competence	0.059	0.059	0.017	3.396	0.001	0.025	0.093
*Consumer Experience → CT in Integrity	0.041	0.040	0.012	3.501	0.000	0.018	0.062
Consumer Experience → Product Reviews Usage	0.317	0.317	0.042	7.529	0.000	0.235	0.402
*Consumer Experience → Purchase Intention	0.061	0.061	0.013	4.608	0.000	0.036	0.086
Consumer Experience → Sellers Reviews Usage	0.322	0.323	0.045	7.180	0.000	0.236	0.409
ECO → Affective Trust	0.069	0.072	0.033	2.073	0.038	0.015	0.142
*ECO → Purchase Intention	0.050	0.052	0.024	2.076	0.038	0.010	0.103
*PERF → Affective Trust	0.016	0.017	0.005	2.998	0.003	0.008	0.029
*PERF → CT in Benevolence	0.012	0.012	0.005	2.500	0.012	0.004	0.022
*PERF → CT in Competence	0.011	0.012	0.005	2.429	0.015	0.004	0.022
*PERF → CT in Integrity	0.008	0.008	0.003	2.506	0.012	0.003	0.015
PERF → Consumer Experience	0.193	0.202	0.050	3.849	0.000	0.120	0.313
*PERF → Product Reviews Usage	0.061	0.064	0.018	3.371	0.001	0.034	0.106
*PERF → Purchase Intention	0.012	0.012	0.004	2.965	0.003	0.006	0.021
*PERF → Sellers Reviews Usage	0.062	0.066	0.020	3.094	0.002	0.034	0.113
*PVC → Affective Trust	0.139	0.140	0.041	3.345	0.001	0.063	0.225
*PVC → CT in Benevolence	0.119	0.120	0.037	3.226	0.001	0.052	0.195
PVC → CT in Competence	0.181	0.183	0.057	3.197	0.001	0.076	0.296

Continued on the next page

ent. As total effect is the sum of direct effect and indirect effect(s), only direct and total effects are reported (tables 8 and 9). The indirect effect, in this case, is easy to calculate as the difference between total and direct effects (or as multiplication of particular path coefficients). In the case of lack of direct relationship total effect equals indirect effect – such cases are marked with asterisk table 9.

TABLE 9 *Continued from the previous page*

*PVC → CT in Integrity	0.153	0.155	0.052	2.939	0.003	0.057	0.262
PVC → Consumer Experience	0.117	0.119	0.053	2.222	0.026	0.020	0.227
*PVC → Product Reviews Usage	0.037	0.038	0.017	2.122	0.034	0.005	0.074
PVC → Purchase Intention	0.173	0.176	0.044	3.942	0.000	0.097	0.269
*PVC → Sellers Reviews Usage	0.038	0.039	0.018	2.064	0.039	0.005	0.077
Product Reviews Usage → Affective Trust	0.194	0.193	0.036	5.334	0.000	0.122	0.263
*Product Reviews Usage → CT in Benevolence	0.096	0.095	0.024	3.957	0.000	0.047	0.142
*Product Reviews Usage → CT in Competence	0.095	0.094	0.025	3.829	0.000	0.045	0.143
*Product Reviews Usage → CT in Integrity	0.065	0.065	0.017	3.936	0.000	0.031	0.095
*Product Reviews Usage → Purchase Intention	0.141	0.140	0.027	5.301	0.000	0.088	0.191
Product Reviews Usage → Sellers Reviews Usage	0.519	0.519	0.039	13.342	0.000	0.442	0.594
*RSC → Affective Trust	0.058	0.061	0.028	2.045	0.041	0.013	0.125
*RSC → CT in Benevolence	0.055	0.058	0.027	2.027	0.043	0.012	0.119
RSC → CT in Competence	0.086	0.091	0.041	2.091	0.037	0.020	0.181
*RSC → CT in Integrity	0.037	0.040	0.019	1.961	0.050	0.007	0.083
*RSC → Purchase Intention	0.042	0.045	0.021	1.989	0.047	0.009	0.093
*Sellers Reviews Usage → Affective Trust	0.140	0.139	0.031	4.540	0.000	0.075	0.197
Sellers Reviews Usage → CT in Benevolence	0.185	0.184	0.045	4.148	0.000	0.094	0.269
Sellers Reviews Usage → CT in Competence	0.182	0.181	0.044	4.122	0.000	0.090	0.265
*Sellers Reviews Usage → CT in Integrity	0.126	0.125	0.031	4.123	0.000	0.061	0.181
*Sellers Reviews Usage → Purchase Intention	0.102	0.101	0.023	4.409	0.000	0.053	0.144

NOTES Column headings are as follows: (1) original sample (O). Bootstrap estimates: (2) sample mean (M), standard error (STERR), (4) *t*-statistics (|O/STERR|), (5) *p*-values. Bootstrap bias corrected 95% confidence interval: (6) low, (7) up. *indirect effect only.

MULTI GROUP COMPARISONS REGARDING CHOSEN BRAND

In this study, consumers were expected to make choice of an automatic coffee machine (as a suggestion for a neighbour buy) in product comparison site environment. This choice has been recorded on the level of particular product recognizable by exact type (described as producer alphanumerical code). To form groups for comparison chosen brand has been used.

Study participants can choose any of brands available in product comparison site although better-known brands (of large general

TABLE 10 Structure of Brand Choices Made by Research Participants with Size of Groups for PLS-MGA

Groups of brands	Brand name	Group size (*n*)	Share (%)
Included for PLS-MGA analysis	Saeco	150	32.5
	De Longhi	107	23.2
	Krups	75	16.3
	Bosch	63	13.7
	Siemens	42	9.1
Excluded from PLS-MGA analysis	Severin	3	0.7
	Zelmer	3	0.7
	other	18	3.9

TABLE 11   Path Coefficients in Five Analysed Brand Groups

Paths (direct effects)	Coefficient estimates					p-values (from bootstraping)				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Affective Trust → Purchase Intention	0.707	0.744	0.639	0.773	0.638	0.000	0.000	0.000	0.000	0.000
BC → CT in Competence	0.001	0.052	0.208	0.071	0.246	0.993	0.693	0.172	0.493	0.274
CO → Product Reviews Usage	0.318	−0.018	0.260	0.183	0.244	0.003	0.872	0.325	0.024	0.152
CT in Benevolence → Affective Trust	0.197	0.304	−0.033	0.211	0.019	0.147	0.001	0.718	0.033	0.939
CT in Benevolence → CT in Integrity	0.680	0.644	0.523	0.722	0.818	0.000	0.000	0.000	0.000	0.000
CT in Competence → Affective Trust	0.511	0.390	0.579	0.562	0.385	0.000	0.000	0.000	0.000	0.000
CT in Competence → CT in Benevolence	0.764	0.565	0.473	0.696	0.614	0.000	0.000	0.000	0.000	0.000
CT in Integrity → Affective Trust	0.179	0.102	0.295	0.020	0.359	0.179	0.265	0.007	0.816	0.111
Consumer Experience → Product Reviews Usage	0.114	0.372	0.286	0.398	0.030	0.420	0.000	0.023	0.000	0.878
Consumer Experience → Sellers Reviews Usage	0.229	0.235	0.115	0.199	−0.131	0.043	0.006	0.353	0.009	0.435
ECO → Affective Trust	0.048	0.055	0.093	0.145	0.046	0.567	0.539	0.397	0.010	0.776
PERF → Consumer Experience	0.314	0.311	0.073	0.163	0.020	0.002	0.000	0.784	0.085	0.943
PVC → CT in Competence	0.411	0.121	0.287	0.124	−0.029	0.004	0.448	0.030	0.325	0.850
PVC → CT in Integrity	0.223	0.000	0.089	0.041	0.199	0.036	0.998	0.395	0.602	0.061
PVC → Consumer Experience	0.260	0.155	0.082	0.037	0.360	0.065	0.226	0.657	0.773	0.037
PVC → Purchase Intention	0.078	0.059	0.261	−0.038	0.150	0.366	0.410	0.003	0.646	0.412
Product Reviews Usage → Affective Trust	0.195	0.215	−0.032	0.079	0.325	0.016	0.001	0.682	0.149	0.002
Product Reviews Usage → Sellers Reviews Usage	0.543	0.411	0.555	0.527	0.538	0.000	0.000	0.000	0.000	0.000
RSC → CT in Competence	−0.033	0.167	0.120	0.141	−0.212	0.845	0.089	0.366	0.095	0.413
Sellers Reviews Usage → CT in Benevolence	0.006	0.083	0.169	0.029	0.146	0.949	0.289	0.087	0.621	0.303
Sellers Reviews Usage → CT in Competence	0.298	0.222	−0.074	0.305	−0.199	0.006	0.011	0.495	0.000	0.282

NOTES   (1) Bosch, (2) DeLonghi, (3) Krups, (4) Saeco, (5) Siemens.

TABLE 12 Significance of Differences Between Groups: PLS-MGA Non-Parametric Test p-Values

Paths (direct effects)	Significance of diff. between path coeff. in groups: p-values (from PLS-MGA test)									
	(1)–(2)	(1)–(3)	(1)–(4)	(1)–(5)	(2)–(3)	(2)–(4)	(2)–(5)	(3)–(4)	(3)–(5)	(4)–(5)
Affective Trust → Purchase Intention	0.621	0.281	0.714	0.331	0.102	0.649	0.196	0.944	0.525	0.132
BC → CT in Competence	0.604	0.857	0.664	0.853	0.819	0.544	0.830	0.169	0.618	0.836
CO → Product Reviews Usage	0.022*	0.544	0.131	0.356	0.779	0.914	0.909	0.292	0.382	0.708
CT in Benevolence → Affective Trust	0.752	0.072	0.549	0.257	0.006*	0.244	0.141	0.965	0.567	0.227
CT in Benevolence → CT in Integrity	0.349	0.103	0.674	0.915	0.152	0.827	0.967	0.963	0.993	0.864
CT in Competence → Affective Trust	0.227	0.657	0.614	0.283	0.912	0.910	0.522	0.434	0.150	0.168
CT in Competence → CT in Benevolence	0.047*	0.022*	0.250	0.174	0.244	0.909	0.658	0.963	0.798	0.318
CT in Integrity → Affective Trust	0.312	0.748	0.157	0.769	0.919	0.253	0.858	0.020*	0.631	0.913
Consumer Experience → Product Reviews Usage	0.938	0.820	0.964	0.359	0.288	0.596	0.058**	0.788	0.135	0.041*
Consumer Experience → Sellers Reviews Usage	0.508	0.248	0.401	0.047	0.215	0.373	0.035*	0.712	0.124	0.048*
ECO → Affective Trust	0.541	0.635	0.831	0.480	0.610	0.818	0.458	0.645	0.388	0.263
PERF → Consumer Experience	0.485	0.220	0.126	0.180	0.219	0.105	0.178	0.527	0.438	0.356
PVC → CT in Competence	0.079**	0.262	0.056**	0.018*	0.799	0.502	0.241	0.168	0.063**	0.213
PVC → CT in Integrity	0.067**	0.183	0.084**	0.441	0.732	0.624	0.909	0.346	0.773	0.886
PVC → Consumer Experience	0.290	0.225	0.125	0.705	0.380	0.256	0.852	0.412	0.874	0.928
PVC → Purchase Intention	0.430	0.933	0.165	0.644	0.960	0.185	0.684	0.012*	0.291	0.830
Product Reviews Usage → Affective Trust	0.580	0.022*	0.115	0.840	0.009*	0.055**	0.820	0.877	0.996	0.982
Product Reviews Usage → Sellers Reviews Usage	0.144	0.540	0.442	0.510	0.875	0.838	0.800	0.402	0.478	0.557
RSC → CT in Competence	0.856	0.777	0.832	0.293	0.382	0.405	0.100**	0.547	0.147	0.118
Sellers Reviews Usage → CT in Benevolence	0.734	0.881	0.580	0.793	0.754	0.287	0.648	0.111	0.441	0.779
Sellers Reviews Usage → CT in Competence	0.284	0.010*	0.507	0.018*	0.017*	0.769	0.030*	0.998	0.268	0.012*

NOTES Groups numbered as in table 11. * $p < 0.05$, ** $0.05 < p < 0.1$.

appliances producers or coffee machine specialists) were selected more frequently than others (structure of brand choices, with aggregation rules used). This led to forming five groups for main brands and excluding less popular ones. The largest group was for Saeco brand – $n = 150$ (at the time of research it was presented on products in two forms: Saeco and Philips Saeco), and smallest one – for Siemens brand ($n = 42$).

Standardized path coefficients with significance levels coming from bootstrapping for five analysed groups are varying between groups. To compare groups PLS-MGA non-parametric test, not requiring distributional assumptions has been performed (Henseler 2012). Results of group comparison are gathered in table 11.

As brand formed groups are differing in size (including one group with size below 50), there is greater chance to obtain statistically insignificant estimates, also differences between groups must be relatively large to be significant.

As is visible in table 12, the number of significant differences and statistical tendencies between groups is rather low – this suggests that on general level brand choice not changes substantially the values of particular paths in estimated model, and the most of the differences apply to sellers reviews usage and cognitive trust in competence path.

Discussion

On the base of model estimation (on the whole sample and on groups level) it is easily confirmed that concept of trust-based adoption model is valid. As predicted cognitive trust constructs (particularly cognitive trust in competence – directly and indirectly) are explaining well the affective trust (with about 61.2% of variance explained) and later – purchase intention (about 55.1% of variance explained). This is convergent with results of other studies utilising trust-based adoption model by Komiak and Benbasat (2006), and findings from the case of online retailer (Zhang, Cheung, and Lee 2014). Also in group-wise estimation standardised path coefficients are similar, without significant differences between groups formed on a base of chosen product brand, although lack of corresponding research does not allow for direct comparison with other authors studies.

Taking into account part of the model including connections between consumer experience in product comparison sites usage and product/sellers reviews usage, the results are suggesting the stronger influence of experience on product reviews usage than sellers review usage, although the latter is quite well explained by the first

one. This is consistent with two stages approach in the decision of buy online – many consumers are choosing product first (including its brand and other characteristics), and later are selecting the seller from who they are deciding to buy. Comparing groups for this connections leads to finding that choice of Siemens brand (comparing to other ones) has been made by consumers for whom connection between their experience and both types of reviews usage, in reality, disappeared – this can be effect of automatic choice of previously used and preferred brand of electric appliances for other product categories. For all groups connection between product reviews and sellers reviews usage is clear and significant.

Answering research question 1 (RQ1) where there was focus on what connects previous consumer experience with product comparison site usage and opinions about products and sellers usage with trust toward product comparison site constructs from trust-based adoption model, one can tell that those connections are weak – obtained values of standardised path coefficients are significant, but rather low. Only paths connecting sellers review usage with two cognitive trust constructs (in competence and in benevolence), as well as path connecting product review usage directly with affective trust are significant in the whole sample, but not always in groups.

Three consumer decision-making styles affected directly mentioned constructs of consumer experience and product reviews usage – this allows to provide an answer to research question 2 (RQ2). Consumer experience has been in part explained by perfectionistic style (stronger) and rather obviously by price-value conscious style. The higher level of those styles the greater consumer experience in product comparison site usage, that is consistent with the description of shopping outcomes of people with those style pronounced (Sproles and Kendall 1986). Perfectionistic consumers are seeking perfect products and easily retrieve and compare information provided by product comparison site. Similarly, it is much easier find good deals and receive expected value for money or low price by using extensively product comparison engines. Exactly opposite meaning has the connection between confused by overchoice style and usage of product reviews – the more confused by overchoice consumer, the more important is for her/him obtaining easy comparisons and suggestions what to buy from product comparison site, that takes from consumer burden of retrieving much information. The indirect influence of PERF and CO styles on purchase intention via trust constructs is relatively low but significant.

Research question 3 (RQ3) was about the nature of connections

of consumer decision styles with trust-based adoption model constructs. There is clear that consumer decision-making styles are connected in greater extent with cognitive trust in competence of product comparison site. Such service makes easier to find good deals – so the highest path coefficient is for connection with price-value conscious style. Perceived competence of product comparison engine makes shopping decisions easier and more pleasant – this explains the path from the recreational (hedonic) style. As one of the most important concerns of consumers in online retail is the authenticity of merchandised products from excellent and desirable brands, brand conscious style positively influences cognitive trust in competence – the higher brand consciousness, the more positive evaluation of product comparison sites competences.

Direct connection with affective trust has been found for ecologically aware consumers – the higher ECO style level, the more positive affective trust toward product comparison site. Similarly, price-value conscious style level directly influences cognitive trust in integrity and purchase intention (that was expected). In general, the biggest influence on trust toward product comparison sites and purchase intention (directly and indirectly) from all of consumer decision-making styles has obviously the price-value conscious style – table 9.

Looking into differences between groups (chosen brands), there is the largest number of significant differences for sellers review usage and cognitive trust in competence. For consumer decision-making styles there are very rare situations when the choice of particular brand changes relationships between constructs in research model. Such approach has not been found in the literature up to date.

In previous research (Mącik and Nalewajek 2013, 116), where intention to use of virtual sales channel and actual usage of internet shopping aids, was studied, gave suggestion about influence of three consumer decision-making styles on those constructs – price-value consciousness (PVC), novelty-fashion consciousness (NFC), and compulsive tendencies (COMP) significantly explained virtual channel usage. Different construct than in this study has been explained by different consumer decision-making styles. The only style present in both studies is price-value consciousness (PVC), confirming that seeking possibly lowest prices is one of most important motives to use virtual channel by consumers.

On more general level, connections of consumer decision-making styles and intention to use as well as actual use of virtual channel have been studied on two different samples by Mącik and Mącik (2009, 1281–2). Obtained results include relatively strong influence

of perfectionistic style (PERF), weaker of habitual brand-loyal style (HBL) on intention to use of virtual channel. There were also found: negative influence of price-value consciousness (PVC) and positive influence of compulsive buying tendencies (COMP) on actual use of internet shopping. So those results are mostly inconsistent with current study results, although different constructs were explained in both cases, as well as virtual channel usage significantly increased at the time between both studies.

Implications, Further Research and Limitations

Research results, confirming conceptual model of relationships, are implying that to create purchase intention with product comparison site help, as high as possible affective trust toward such site is needed. Affective trust is created mostly from cognitive trust in competence, explained by sellers review usage and price-value conscious (PVC) consumer decision-making style, linked with brand consciousness (BC) and hedonic style (RSC). For product comparison sites operators valuable is knowledge that exist specific combination of consumer decision-making styles that encourage favourable trust beliefs toward product comparison sites. For instance promoting possible finding lowest possible price and certainty of branded products originality should attract more intensive usage of mentioned sites. Also, because of influence of products and sellers review usage intensity on trust constructs, there should be promoted more intensive usage of both types of reviews, particularly among consumers confused by overchoice and perfectionistic individuals.

Using one product category is important limitation of this study, although the choice of automatic coffee machine for this research was conditioned by the generally low level of this product expertise among consumers. Other limitation is relatively homogenous sample in terms of participants' demographic background – university students and their working or studying peers only were surveyed. This suggests that some of the influences in more diversified sample – particularly in terms of age – can be different than obtained, e.g. influence of previous experience in product comparison site on cognitive trust should be higher and more direct for older consumers. Also, different typical profiles for older consumers can lead to the slightly changed set of consumer decision-making styles explaining constructs of trust-based adoption model.

Further research can include changing and/or adding other product categories to validate model in different settings, as well as com-

bining used constructs with other approaches of technology acceptance measurement.

Conclusion

Research results are generally confirming conceptual model as well as their measurement reliability and validity. Main paths of influences: cognitive trust – affective trust – purchase intention – choice satisfaction is confirmed by relatively high standardised path coefficients, although the effect of selected for model antecedents of trust-based adoption model constructs is significant but lower than expected. So main relationships in product comparison site usage are similar to those found in the case of online retailer (Zhang, Cheung, and Lee 2014). Also incorporating consumer decision-making styles to the model gave valuable insights – far from obvious – about their influence on purchase intention and brand choice. Comparison across chosen brands generally confirms that observed relationships are generally stable, with minor differences across product specialist brands and more diversified ones.

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Using of Information Communication Technology Tools by the Students with Entrepreneur Intent

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Nowadays, young people are more familiar with the use of computers, different applications and ICT (Information Communication Technology) tools available on the Web. Approach to different resources on the Web offers them various possibilities for the creation of their own business and supports the realization of their entrepreneurial intention. In our study, we analyzed entrepreneurial intention of students enrolled in one higher education institution in Slovenia in two consecutive study years (2014/2015 and 2015/2016). We also analyzed the usage of ICT tools for acquisition of additional knowledge and skills needed for the creation of new companies and new working places to enhance the employability of young people and students. In the study, we also focused on the level of knowledge, personal skills, needs and availability of different ICT tools, all of which depend on various factors (e.g. computers, internet connection). In the study, we found out that young people understand the current economic situation, and from that mainly generate their entrepreneurial intention. We found out that they mostly use ICT tools which are free of charge and easy to use such as E-classroom, E-books, Social Media and the Internet.

Key words: entrepreneurship, entrepreneurial intention, ICT tools

Introduction

Young people, finishing the schooling, may be faced with the problems related to the entrance into the labour market. One of the most problematic issues that may appear nowadays is a lack of the jobs. The latter is an issue in many of the developed countries as well. The young, educated people should, therefore, start thinking, how they could obtain adequate income for living.

As they cannot get a job, many young people try to create their job opportunity by themselves. Such solution may be the best way to deal with the problem of potential unemployment either on the individual or societal level. However, due to the current economic situation, it is not easy to enter the labour market following the entrepreneurial

path, especially in the case of lack of work experience. Today's society demand quality products and services requiring a lot of technical knowledge, sophisticated production procedures as well as low price. In such market conditions, the new entrepreneurs should find their market niche, in which they can offer their unique business ideas, products, and services. For that reason, they need relevant knowledge and skills, which they learn during the study as well as through the Web.

In recent years, we have been facing the quick development of information communication technology (ICT). Most young people are familiar with such technological opportunities. They are also familiar with the ways of using them, and aware that there is a lot of knowledge, business experience, and different entrepreneurs' skills available on the Web. They often try to use such resources (Banker 2003, 1–27; Youndt et al. 2004, 335–61; Power 2005, 554–72; Vukasović, 2012, 492–8). The young people usually know that ICT tools can help them to get the needed knowledge and skills, and that can even enable them to learn from the mistakes of other entrepreneurs as well. Indeed, it is possible to find quite some ICT tools on the Web, which can be helpful in developing skills of successful entrepreneurs. Some of those solutions are also reachable free of charge.

The economic situation in contemporary societies in many cases discourages the young people, who want to become an entrepreneur. For example, in Slovenia, we do not have a clear strategy on how to encourage the new entrepreneurs, neither have we known what kind of support they may need or what kind of support we can actually offer them. New entrepreneurs need a supportive entrepreneurial environment, relevant working experiences, a sound business idea as well as a strong desire to create their own business. Besides, they usually have to invest a lot of time and effort in finding the right information and appropriate ICT tools, which can help them in the realization of their business ideas.

The aim of the paper is to analyze entrepreneurial intention of Slovenian students and find out the reasons in modes of implementing the available ICT tools the young people usually use for developing the business idea. We organized paper in sections. In the second section, we explain the concepts of entrepreneurship and entrepreneurial intention, in the third section, we present the ICT tools and their use, and in the fourth section, we explain the connection between the entrepreneurial intention and usage of ICT tools. In the fifth section is a short description of research methodology followed

with the analysis and study results as well as discussion. In the end, in the sixth section, we present the conclusions.

Entrepreneurship

Entrepreneurship means different things to different people. However, in general, we can conclude that it means managing of and turning the business idea into a profitable business. The most common definitions of entrepreneurship are as follows:

- Knight (1921) and Drucker (1970) note that entrepreneurship is about risk taking.
- Drucker (1985) defines entrepreneurship as an act of innovation involving existing resources combined with new wealth-producing capacity.
- Shane and Venkataraman (2000, 217–26) believe that the field of entrepreneurship includes the study of the business opportunities' sources, the processes of discovery, evaluation and exploitation of business opportunities as well as the groups of individuals, who discover, evaluate and exploit these business opportunities.
- Ireland, Hitt, and Sirmon (2003, 963–89) define entrepreneurship as a context-dependent social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit business opportunities.
- Commission of the European Communities (2003) defines entrepreneurship as a mind process to create and develop economic activity by combining risk-taking, creativity, and/or innovation with management, and in a new or an existing organization.
- Onuoha (2007, 20–32) notes that entrepreneurship is a practice of starting new organizations or revitalizing mature ones as a response to identified business opportunities.

Kirzner (1973) believes that the entrepreneur recognizes and acts upon profit business opportunities. Schumpeter (1965) defines 'entrepreneurs as individuals who exploit business opportunity through technical and/or organizational innovation.' Hisrich (1990, 209–22) defines an entrepreneur as 'someone who demonstrates initiative and creative thinking, can organize social and economic mechanisms to turn resources and situations to practical account, and accepts risk and failure.' Bolton and Thompson (2000) define an entrepreneur as 'a person who permanently create, innovate or build something with value where they discover business opportunities.' Mostly, authors

describe an entrepreneur as a person who owns and leads a business.

Society, entrepreneurial education, support by different institutions and, in the last period, also the ict tools encourage entrepreneurial intention (Lans et al. 2008, 363–83). European Commission (2008) mentions that the eu countries should encourage entrepreneurial intention, create supporting institutions and develop different ict tools to promote new businesses and start-ups. Jagodič and Dermol (2012) also describe some supporting institutions and supporting ict tools for helping new entrepreneurs to create and develop their businesses. Very often, the success of entrepreneurial activity is based not only on their entrepreneurial intention but also on how the new entrepreneurs perceive the business opportunity as well as their innovative capabilities and available creative resources.

Authors define entrepreneurial intention from different points of view (e.g. personal motivation, attitude, marriage, social situation). The concept of entrepreneurial intention is based on the model of social learning (Bandura 1977), the model of the entrepreneurial event (Shapero and Sokol 1982, 72–90) and the theory of planned behaviour (Ajzen 1991, 179–211). In all the cases, essential elements mainly relate to personal conduct. Different authors (Nabi et. al. 2006, 373–85; Wu and Wu 2008, 752–74; Guerrero, Rialp, and Urbano 2008, 43–50) link the entrepreneurial intention with a situation in which people wish to start a business as a new firm as well within an existing organization.

Some of them (Turker and Selcuk 2009, 142–59; De Jorge-Moreno, Castillo, and Triguero 2012, 409–25) express the importance of entrepreneurial education for the strengthening of entrepreneurial intention. Individuals with more extensive formal education seem to have the stronger entrepreneurial intention (Arenius and Minniti 2005, 233–47; Turker and Selcuk, 2009, 142–59). Pruett et. al. (2009, 571–94) notes that the knowledge might be one of the main factors that may affect entrepreneurial intention among students. Specifically, the lack of experience, abilities, and skills in the field of management, administration, accountancy, business seem to be important when considering strengthening the entrepreneurial intention. The study by Linãn, Rodríguez-Cohard and Ruenda-Cantuche (2011, 195–218) points out that the main factors affecting entrepreneurial intention are personal attitude and perceived behavioural control. Sánchez (2011, 239–54) gets similar research results noting that the main factors are personality traits, risk acceptance, and self-efficacy. Every individual should set the goals and decide which activities,

experiences, and behaviour can help him or her to develop the business idea (Bird 1988, 442–53; Boyd and Vozikis 1994, 63–77). On the individual level, entrepreneurial intention effects personal beliefs, social, political, cultural and economic environment (Fishbein and Ajzen 1997, 488–543).

ICT Tools

We can find different understandings of ICT tools that relate to the understanding of the ICT. The latter can be split into information technology (IT) and communication technology (CT). IT includes all kinds of technology for data analysis and manipulation of data and information (e.g. computers, data transfer equipment, software equipment), while CT includes solutions for transfer of data or information (e-mail, phones, internet network). Senn (1997, 12–20, 25) describes the concept of ICT as the ability to create and forward the data and information with the use of essential components, such as networks, mechanical and software equipment, etc. Among ICT tools, we can also count different software and programs for learning, for getting knowledge and skills, video presentations explaining how to do something and the possibilities to collect the information.

Recently, the development of ICT tools and technology is extremely rapid and offers new business opportunities and better life quality (Bučar 2001). With the use of ICT tools, we can increase productivity and decrease costs (Hengst and Henk 2001, 129–33). Pinterič and Grivec (2007, 33–4) believe that contemporary ICT tools cause a significant change in the way of communication. Lajoie and Azevedo (2000, 247–71) note that ICT tools can be a useful tool for teaching and learning because the students can solve potential business situation and problems and develop their cognitive skills. Other authors note (Campbell et al. 2010, 505–11; Hsu, Wang and Runco 2013, 314–24) that the students can develop cognitive skills through the use of ICT tools as well as create critical thinking to solve complex problems.

McFarlane and Sakellariou (2002) believe that the students like to use the ICT tools during the learning process and study. Nowadays, the ICT tools for learning are readily available, and it is quite easy for the students to find them, to get the information. Some of those ICT tools offer access to knowledge bases, and business ideas exchange platforms. Nowadays, ICT tools provide the opportunity to work together with other entrepreneurs and learn how to solve the problems (Linn 2004, 9–26).

Entrepreneurial Intention

ICT tools may have a substantial impact on the entrepreneurial intention. Findings of Migisha (2011, 220–35) show that ICT tools are necessary for entrepreneurial and personal skills development and may help small entrepreneurs to grow and generate new working places, especially through innovations. The Internet as a part of ICT tools fundamentally changes how people discover, access, get and use their knowledge and skills, and exploit the business opportunities.

Google.com is one of the most successful entrepreneurial stories related to the use of ICT tools (Eduardo 2006, 320–38). Some other authors (e.g. Kollmann 2006, 113–28; Austins and Tygris 2010, 61–83) emphasize that ICT is a crucial tool and useful especially for the new entrepreneurs as it may make it easier for them to start an online business due to lower starting expenses. Extremely fast flow of electronic information allows the creation of extensive networks where any member of the network can get all the necessary skills, support, and advice, how to react or solve critical situation (Evans and Wurster 1997). From that reason, we can conclude that ICT tools may have a direct influence on the business development and innovation.

Zhu and Kraemer (2002, 444–63) claim that development of entrepreneurship and implementation of ICT tools importantly depend on availability and usefulness of ICT infrastructure. The latter is especially important for new entrepreneurs. They need to learn how to find the right tools as well as how to use them. ICT tools and ICT infrastructure provide a variety of platforms and applications, which can help the new entrepreneurs to grow their business by learning and getting new knowledge and additional entrepreneurial skills needed to start and develop the business. ICT tools can provide the new entrepreneurs also with business opportunities to develop their business ideas further.

To recognize a business opportunity and to formulate and exploit the business idea, the new entrepreneurs need appropriate competencies. Answers.com (http://www.answers.com/topic/competence) defines competence as the ability to perform or to do something. Lans et al. (2008, 363–83) define competence as personal traits and the combination of attitudes, skills, knowledge, abilities and usage of the acquired knowledge. New entrepreneurs can use the ICT tools for the development of their competencies. They can be developed either during the schooling or later through life experiences (Adeyemo 2003). New entrepreneurs should have a broad

range of competencies such as intuition, creativity, initiative, goal-orientation, responsibility, communication, research and management skills, optimism, skills of planning, organizing and coordinating activities, willingness to take risks and networking creating skills (Swedberg 2000, 7–44; Dougherty 2014). Such a combination of competencies may help them to understand the business environment better and even more easily use the ICT tools. ICT tools enable the connections and networking between and among the different information sources and ICT tools (Hynes and Richardson 2007, 732–44).

Empirical Study

RESEARCH METHODOLOGY

The target group which we involved in the study consisted of first Bologna cycle students attending the course of Entrepreneurship in one of the higher education institutions in Slovenia during the academic year 2014/2015 and 2015/2016. The sample consisted of 129 students, from which 68 students attended the course in academic year 2014/2015 and 61 students in academic year 2015/2016.

The questionnaire used in the survey consisted of different open and closed questions on demography, the social status of the students, entrepreneurial intention, working skills, abilities and knowledge about entrepreneurship, risks taking and ICT tools, which the surveyed students use.

For collecting the data, we used the web-survey-tool 1-ka, which allowed us to send the questionnaires to the participating students via e-mail. In the analysis, we used some basic descriptive statistics (proportions, percentages, and means).

About 66% of respondents were male. The average age of respondents was 23 years. About 20% of the respondents are employed, but almost all of the rest of the respondents work in free time (student work). Just 3% of the respondents run their own business.

ANALYSIS

With our research, we want to find out about the entrepreneurial intention of young people in Slovenia. We find out that 27 (21%) of the respondents will for sure establish their own business, 31 (24%) of them will probably establish their own business, 48 (37%) of them are thinking about establishing their own business, and rest of the respondents (23, 18%) will probably not establish their own business. On the 5-point Likert scale, the mean value of the responses is 3.43, which indicates that the respondents may have stronger en-
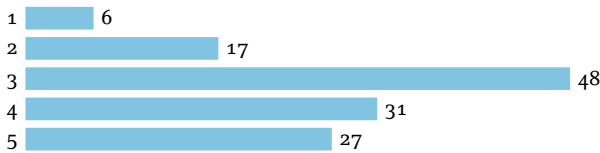
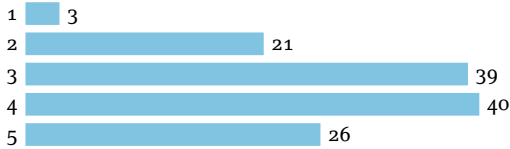FIGURE 1   Entrepreneurial Intention to Create Own Business

FIGURE 2   Willingness to Take a Risk

trepreneurial intention comparing to other population. In figure 1, we present the detailed data from our survey.

There are 26 (20%) of the respondents who are completely willing to take a risk for the realization of a new business opportunity. 40 (31%) of them are very willing to take a risk for the realization of a new business opportunity and 39 (30%) of them just willing to take the risk. The rest of the respondents (24, 19%) are not willing to take the risk to realize a new business opportunity. In this case, we use Likert 5-point measuring scale (1 – I am not at all willing to take the risk, 5 – I am completely willing to take the risk). The mean value of the responses is 3.5, which means that the score is above average. We can say that more than 80% of the respondents are willing to take a risk for realization a new business opportunity (figure 2).

24 respondents (19%) seem to be always and everywhere treating the problems as opportunity, 55 (43%) of them react in such a way in most occasions, 43 (33%) of them usually treats problems just as an opportunity, and only 7 (5%) respondents do not treat the problems in such a way. Again, we use 5-point Likert scale (1 – I do not treat the problems as an opportunity at all, 5 – I always and everywhere treat problems as an opportunity). The mean value of the responses is 3.74. The latter means that the score seems to be a bit above the average and is rather high. We conclude that almost 95% of the re- spondent treats the problems as being business opportunities (fig- ure 3).

In our research, we realize that the respondents are quite familiar with the use of different ICT tools. Almost 93% (120) of them knows about Social Media (like Facebook, Twitter), 92% (119) of the respon- dents knows about E-books, for Web pages know 85% (110) of them,
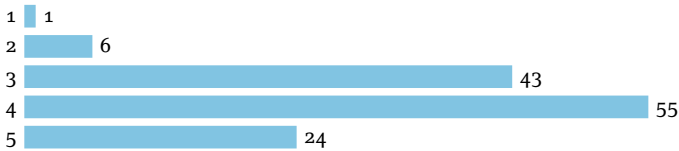
1	1
2	6
3	43
4	55
5	24

FIGURE 3   Treating Problems as Business Opportunity

Web pages — 85%
Platforms — 72%
Social media — 93%
Business plan template — 56%
E-classroom — 68%
YouTube video lectures — 83%
E-books — 92%
Information databases — 73%
Crowdfunding and start-up platforms — 64%
Business simulators — 68%
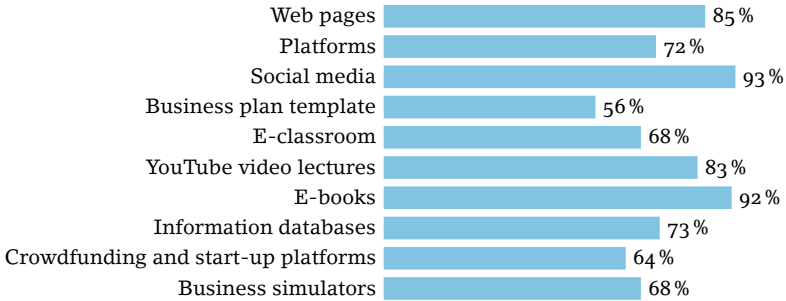
FIGURE 4   Mostly Known ICT Tools by Respondent

and 83% (108) of the respondents knows about YouTube and video lectures on the YouTube. 73% (94) of the respondents knows about Information Databases, 72% (93) of them knows about the Business Idea Exchange Platforms, and 68% (88) of the respondents knows about the Business Plan Simulators and at the time about the E-classrooms. Just 64% (83) of the respondents knows about Crowdfunding and the Start-up Platforms, and 56% (72) of them knows about the Business Plan Template Forms (figure 4).

The most commonly used ICT tool seem to be Web Pages. They are used at least sometimes or more often by more than 98% (127) of the respondents. E-books are used at least sometimes or more often by 97% (126) of the respondents, pretty much the same as the Social Media, and the E-classrooms (96%, 125). Around 89% (115) of the respondents uses the YouTube, 74% (96) of the respondent uses the Information Databases, 71% (92) of the respondents uses the Business Plan Templates, and 61% (79) of the respondents uses the Business Idea Exchange Platforms; all of them claim that they use the tools at least sometimes or more often. From the research results, we can see that Crowdfunding and Start-up Platforms, and Business Simulators are used less frequently – the are used at least sometimes or more often in just around 30% (39) of the cases (table 1). The Business Simulators are usually payable. For that reason, the new entrepreneurs do not use them very often. The same goes

TABLE 1   Mostly Used ICT Tools by Respondent

ICT tools	(1)	(2)	(3)	(4)	(5)
Web pages	0	2	15	50	62
Platforms	34	16	48	17	14
Social media	1	3	20	32	73
Business plan template	23	14	59	18	15
E-classroom	0	4	8	39	78
YouTube video lectures	5	9	59	45	11
E-books	0	3	10	57	59
Information databases	2	31	68	13	15
Crowdfunding and start-up platforms	53	37	23	11	5
Business simulators	62	28	11	16	12

NOTES   Column headings are as follows: (1) never, (2) rarely, (3) sometimes, (4) very often, (5) always.

FIGURE 5   Importance of Free of Charge ICT Tools

for the Crowdfunding Platforms, which are mostly used by the new entrepreneurs, who develop the business idea and want to enter the market. With the use of Crowdfunding Platform, they try to raise initial money to start the business.

By the opinion of 66% (87) of the respondents, it is very important that ICT tools are available free of charge. For 20% (26) of the respondents it is important that ICT tools are available free of charge, and for 7% (9) of the respondents, it is neither important nor unimportant that ICT tools are available free of charge. Just for 6% (7) of the respondents, it is not important, or it is irrelevant that ICT tools are available free of charge. We can see that for almost 94% (122) of the respondents it is either less important, important or very important that ICT tools are free of charge. To measure the importance of the ICT tools, we used 5-point Likert scale (1 – irrelevant, 2 – not important, 3 – neither important nor unimportant, 4 – important and 5 – very important). The mean value of the responses is 4.48. The result is rather high leading to a conclusion that the respondents wish free of charge ICT tools (figure 5).

Around 87% (112) of the respondents is not prepared for paying to use the ICT tools. Just 13% (17) of the respondents is prepared to

| Yes | 17 |
| No | 112 |

FIGURE 6   Preparation for Paying for Use ICT Tools

pay the use of the ICT tools (figure 6). As we can see from the last two figures, it is very important that ICT tools are available to the respondent free of charge.

Findings and Discussion

As we can see in our research, the young people with stronger entrepreneurial intentions are more familiar with different kinds of ICT tools that can help them to check their business ideas or start a new business. It is crucial that they search for possible business opportunities and sources of knowledge, and additional information, which may be helpful in developing their business ideas. As we discovered, they mostly focus on a problem, how to collect the money to start their own business and forget about other important issues. Some of them also regularly check for the business opportunities in a different Crowdfunding and start-up platforms.

By the research, the young people mostly use free of charge ICT tools. Namely, they do not have enough money to pay for the usage of services like Business Simulators or Business Plan Tools, which are usually not free. They may have limited financial capability also due to relatively high costs of living and the absence of a regular job. Nevertheless, the majority of young people live with parents and other members of the family, who can provide them with support and financial resources. We can conclude that free of charge ICT tools give the young people the opportunity and possibility to get additional knowledge and skills. With the creation of supporting network, they can better develop their business idea and more successfully start a business.

We believe that it is important for the young people to become highly aware of the economic situation. Besides the awareness, they should also be inventive, especially if they want to create their working place. Strong entrepreneurial intention shows that they have the business ideas, but more often, the problem is the money. Namely, some of them already have some entrepreneurial experiences as their parents may own a company, and they see the world with different eyes. On the other side, as entrepreneurs, they are forced to look for investors to develop and build a prototype of the product or service, prepare a persuasive presentation to convince the potential

investors about their product or services, etc. For all of those activities, they need financial resources.

Nowadays, the society might still not be prepared to help the entrepreneurs to develop their entrepreneurship potential. There are several reasons for that. For example, sometimes they have too futuristic business ideas, which an average user or consumer cannot imagine and understand. Despite this, the society has to develop the models for helping new entrepreneurs to develop their business models and business ideas.

Conclusion

The economic crisis and business situation in societies force the young people to think about the ways to get a job and make an everyday living. Nowadays, it is not easy to find a job, especially if the unemployment rate in a country is high. In many cases, if they want to start a business career, they have to be able to create their working place, which mostly means start their own business.

Our research shows that the young people have relatively high entrepreneurial intentions and the mean about entrepreneurial intentions was 3.43 on the 5-point Likert scale. Approximately 45% of respondents choose the grades of 4 or even 5 when evaluation the possibility to start their own business. They are also very willing to take risks, and the mean about taking risks was 3.50. As indicated in the survey, the majority of the respondents treat the problems as a business opportunity, and that is an entrepreneurial way of thinking (the mean was 3.74 on the Likert scale from 1 to 5).

However, the young people are mostly aware of the shortage of business experiences and lack of the necessary knowledge on creation and management of the business. It is logical that some of them try to find a solution for starting a business. Therefore, they try to find and use various ICT tools by which they may get additional information, skills, and knowledge.

The results of our research show that young people are familiar with different types of ICT tools. Nevertheless, they mostly use tools like E-classroom (as a part of teaching activities in the courses like Entrepreneurship and Marketing), E-books, Social Media, and Internet Web Pages. One of most often used ICT tool is also YouTube. In YouTube, they can get various information through downloadable videos, which make it possible to look as many times as they wish. A minority of young people use different Business Plan Templates as well as Business Simulators. Some of them have already started to look for investors to support the realization of their business ideas,

but just a few of them are well prepared for starting a business. The latter means that they have to prepare a final version of the product or service, define the target customers and markets, and approaches to reach them. Besides, they should be able to convince the potential investors to put the money into their businesses.

In the conclusion, we can note that it is important to develop and promote different ICT tools as well as make them free of charge for any user. The ICT tools make it possible to collect information, knowledge, skills and business ideas about market approaches to find and target the right customers, as well as build networks and promote the creation of new working places by which all the society can benefit.

We prepare an international research in which we are going to investigate entrepreneurial intentions of the young people from different countries. Especially, we want to identify ICT tools, which they use for the preparation of their business models and skills, knowledge, and abilities they already have. We would also like to find out where the young people see the problems, what kind of entrepreneurial support should be established, created and offered to them, and how can they develop their full entrepreneurial potential.

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Service Dominant Logic in Practice: Applying Online Customer Communities and Personas for the Creation of Service Innovations

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Many companies try to adopt a service-oriented perspective when developing new offerings by posing the question of how the creation of value jointly with customers can be improved. This requires a holistic view of customers beyond retrospective methods such as surveys. Observations of everyday life provide a valuable complement, because they initiate innovations not explicitly based on wishes formulated by customers, but on customer practices. Drawing on a case study of the Swiss Federal Railways (SFR), it is explored how 'value-in-context' and 'co-creation' can be put into practice. Online customer communities were used in the case study as they unveil value-in-context and practices of customers, which are important sources of innovation. The findings suggest that personas that were constructed based on the results from an online customer community consolidates user behaviour and contextual data and can help managers to improve their offerings in a service-oriented way.

Key words: personas, online customer communities, value-in-context, co-creation, service innovation

Introduction

What is the key to the success of Facebook, Google and Twitter? What's the reason why, within the space of just a few years, they are now enjoying a higher company value than long-established 'brick and mortar' companies? Traditional management and marketing literature, with its basis in the separation between producer and consumer, provides little in the way of approaches to explain this fact. In reality, this sharp dividing line is becoming increasingly blurred, with a rise in co-creation, and customers becoming increasingly involved in business activities and firms' marketing (Prahalad

and Ramaswamy 2000; Vargo and Lusch 2004). Companies taking a service-centred perspective in accordance with Service-Dominant Logic (sdl) can benefit considerably in their business activities. Beyond traditional word-of-mouth practices, customers attempt to influence public opinion and policies of companies, e.g. by negotiating directly with suppliers intending to bypass the provider (Vargo and Lusch 2009). This trend of perceiving customers as a part of the extended enterprise and co-producers of the firms' marketing is projected to rise over the next decade. 'Thus enterprises have to learn not to fear it but embrace it as a healthy part of a highly networked market economy' (Vargo and Lusch 2009, 6).

But how can companies fulfil these requirements that are known as the Service-Dominant Logic (sdl) paradigm and put them into practice? Companies are still hesitant in their use of methods that go beyond traditional one-way communication, e.g. surveys when it comes to new service development (Schäfer, Sager, and Stricker 2014). Yet there are approaches worth applying to innovation processes to gain a more service-oriented perspective. The Persona Approach for example (Cooper 1999; Adlin and Pruitt 2007), familiar from product and software development, offers a good starting point for this, as it supports companies with taking a service-centred perspective. The following contribution shows the results from a case study that was part of a research project of Swiss Federal Railways (sfr), applying specific approaches for sdl. An online customer community should unfold the 'value-in context' perception of the customers and help to adopt a customer-centred perspective for the development of new service offerings.

The sdl Perspective in the Case Study 'Integrated Mobile Work'

The starting point of the 'Integrated Mobile Work' (imow) research project reported herein was the observation that people increasingly use places and rooms as their workplaces which were not originally intended for this purpose. This 'expands' the generic service of mobility provided by public transport by a new component: Commuters and business travellers increasingly use the train as a place to work, and thus co-create new services. It is estimated that in Switzerland up to 50 per cent of the workforce manage their work flexibly as far as time and place are concerned (Grote and Staffelbach 2010). Swiss commuters increasingly use the railway as their main means of transportation: In 2012 their number reached 591.000 commuters; this is a significant increase compared to 327.000 in 1990 (Bundesamt

für Statistik 2014). The sfr reacted to this development not only by expanding the railway network, but also by investing in the infrastructure, for instance by installing sockets and creating business areas or quiet compartments on their trains.

But how can the service offering for mobile workers on the train be improved? And how can mobile and multi-locational knowledge work be managed and supported in a more efficient and effective way? These were the central questions of the research project that included the sfr, amongst others representatives of Swiss companies interested in mobile work, and researchers from the Northwestern University of Applied Sciences and Arts and Lucerne University of Applied Sciences and Arts.

In order to answer these questions, the sfr had to gain knowledge about this increasing customer segment. The service-oriented perspective supports the search for innovation potential by posing the question of how the creation of value jointly with customers (co-creation) can be improved. For that reason, the focus was placed on commuters and business travellers in their roles as co-creators including these customers' way of working on the train (e.g. preparing meetings), their use of electronic and other devices (e.g. working on a laptop or on paper) and their habits while commuting (e.g. choosing the best place to sit and work).

In the course of the transition to flexible labour, mobile methods of work are of increasing importance. To adequately support and manage these is central for performance and the realization of savings potentials in facility management. The imow research project that was carried out between September 2012 and March 2015 was employed to develop methods and tools to diagnose and design successful mobile labour and Swiss Best Practices.

Core Principles of sdl: 'Value-in-Use', 'Value-in-Context' and 'Co-Creation'

sdl considers the creation of value to be a process determined individually. If someone buys a material product, he does so to use it within a certain context; hence he benefits from it in a certain way. In consequence, all offers are services either provided in direct contact with customers (e. g. visit to the hairdressers) or with the help of a material commodity (a car serves to provide the benefit of mobility) (Vargo and Lusch 2004).

While the traditional economic model assumes that value – which is generally viewed from a financial perspective – is created through the exchange of products and services (value-in-exchange), sdl

makes a case for so-called value-in-use: Value is only created once customers use products and services. Customers are always contributing to the creation of value in the shape of co-creation by using products and services provided by the company for their own value-creating activities. As this use can vary, value-in-use also differs from one customer to the next (Vargo and Lusch 2004). Later, value-in-use was revised towards value-in-context underpinning the absence of the dichotomy between firms and their customers, but replacing them with a collective conceptualization of actors based on resources, service efforts and contexts (Vargo and Lusch 2011). Context is an important dimension of value co-creation because it frames exchange, service, and the potentiality of resources from the unique perspective of each actor, and from the unique omniscient perspective of the entire service ecosystem (Chandler and Vargo 2011).

The service-oriented perspective supports the search for innovation potential by posing the question of how the creation of value jointly with customers (co-creation) can be improved. This requires a holistic view of customers, along with customer details beyond retrospective methods such as surveys or interviews. Observations of everyday life provide a valuable complement, because they initiate innovations not explicitly based on wishes formulated by customers, but on the identification of customer-specific and context-related value-in-use. In practice however, a heavily product-focused concept of innovations often prevails. Statistics identifying the competitiveness of national economies consider the number of patents registered to be a yardstick for this purpose. This key figure, while important, is based on the idea that research and development is a process leading to technologically new and better solutions. However, this obscures new ways of finding solutions to customers' problems jointly with them (Michel, Brown, and Gallan 2008). The use of personas can support the process of raising awareness of co-creation and of making it visible.

Studying 'Value-in-Context' with Online Customer Communities

Applying SDL logic requires methods and tools to observe how customers are using products and services on an everyday basis. Self-reporting techniques and diaries of end-users are classic techniques for this purpose and have a long tradition in the social sciences, ethnographic studies and market research respectively. Nowadays, social technologies and mobile devices are opening up new opportunities to study customer behaviour in a real-life context and in real-

time. With self-reporting tools such as online diaries, customers can participate actively in generating new ideas, and such methods have attracted widespread interest, especially in design research (Hagen and Robertson 2010). More recently, so-called online research communities (ORC; or MROCS for market-research online communities) have been used, especially in studies that focus on customer usage of services (Poynter 2010). These new Internet-based survey and contribution methods make it possible to remain close to specific situations of how services are used, and therefore differ from traditional methods of market research (e.g. interviews, focus groups, surveys) this way.

Representing 'Value-in-Context' with Personas

Besides collecting 'value-in-context' data, there is also a need for analysing user insights and presenting them in a way that researchers, marketing specialists, developers and other stakeholders can understand and use for developing new services. We found that the persona approach would be most appropriate to consolidate user behaviour and contextual data. 'Personas are not real people, but they represent them [. . .]. They are hypothetical archetypes of actual users. Although they are imaginary, they are defined with significant rigor and precision' (Cooper 1999, 124). Although there is no common understanding in literature about the utilization of personas, all methodological approaches pursue the objective of obtaining a deeper understanding of users. The precondition for this is the creation of personas based on user behaviour and contextual data. 'Effective personas are based on the kind of information you can't get from demographics, survey data, or suppositions, but only from observing and interviewing individual people in their own environment' (Adlin and Pruitt 2007, 993). So far, personas have mostly been created from interview studies (Goodwin 2009). In our research case, we wanted to challenge this by creating personas from the data collected by customers from the online community. We report on this procedure in the following sections.

The Mobile Working Online Customer Community

In the research project, the online customer community 'iWORKmobile' with the look and feel of a social network site was employed. We selected a representative sample of 33 Swiss commuters and business travellers working regularly on the train. According to Poynter (2010) a sample between 30 and 40 participants is suggested to

deliver sufficient information within a two-weeks short-term community focusing on qualitative insights. The participants were recruited through a customer panel using a recruiting screener (questionnaire) to select participants according to specific criteria. The criteria were developed based on existing demographic data of SFR's customer segments and official statistics for commuting and business travelling in Switzerland, indicating for example that 60% of business travellers are male (Bundesamt für Statistik 2014). The resulting sample constituted 11 women and 22 men with an average age of 44 years and a range of 27 to 61 years. 73% were commuters, 85% were business travellers (overlapping categories). 82% of the participants were employees, 12% self-employed. Another important criterion was the frequency of mobile working on the train. Five participants indicated to work on the train five or more days a week, eleven said they worked three to four days a week, and eight persons stated that they worked three days a week. The rest of the participants worked less than two days a week on train. The last criteria to create a representative sample was the commuting time: In each case, a third of the participants had a commuting time of either 15 to 30, 31 to 60 or more than 60 minutes.

The main purpose of the online community was to document problems occurring while working on the train, and to collect ideas for new services directly from the customers. The online community was open for two weeks and could be accessed by computer or smartphone. This was especially important as participants reported directly from the train or wherever they experienced a critical situation. Participants created a personal 'mobile worker'-profile, kept a diary of mobile working experiences via blog articles and pictures of current situations on the trains, contributed to online discussions, and participated in ideation tasks like 'build the future mobile-working train'. Participants could also contact each other and initiate discussions with each other. The activities on the platform were moderated by one of the authors.

A content analysis was conducted of the qualitative material from the online research community. The categories we derived served as the basis for developing personas. The most important category with regard to co-creation of value was the behavioural category 'activities'. Within this category, different characteristics were identified, e.g. being on the phone a lot/rarely, reading a lot/rarely, or creating many/only a few documents. Looking for common features and differences in these characteristics helped to form groups. These represent the so-called 'persona skeletons' (Adlin and Pruitt 2007). To

Notes Nora, 50, self-employed Consultant

As a consultant, Notes Nora often travels to client meetings. She **travels second class** and has a **Half-Fare travel card subscription**. She would not buy a general travel card subscription, as she thinks this would not be worth it for her. Notes Nora does not have any seating preferences. However, it is important who she sits next to, as she likes to travel in a pleasant atmosphere.

Activities

Notes Nora usually makes a **spontaneous** decision about whether to work, and what on, while she is travelling. On the train, this mainly involves **reading** documents and reflecting on **client discussions**. For this reason, Notes Nora mainly travels with **paper and pen**. She very much appreciates paper as her working material. She only ever uses her **notebook** sporadically to correct documents or revise them.

Her attitude towards the train as a place of work Because her **work-life balance** is very important to her, she deliberately ensures she can relax. She considers trains to be both a place of work and also a chance to **relax**. She is therefore often bothered by the **noise** other passengers make, especially when they are on the phone.

Wishes and needs
- Bright, adjustable reading light
- Generous spaces to rest papers on
- Safety

Laptop Luis, 43, Department Head

Laptop Luis has a general travel card subscription and travels **first class**. He prefers to sit in the **business compartment** because of the large tables provided, providing him with plenty of space for his **laptop** and his papers. If he cannot find a seat there, he will look for a quiet four person compartment. The main thing is he can **work without interruptions**.

Activities

His activities on the train mainly involve the **creation of documents, reading** and processing **of reports and protocols** and working through e-mails. Laptop Luis is always **very well prepared** and structured, so that he can use his time on the train as effectively as possible. His working day starts on the train, and he considers his long journey times working hours. Internet interruptions really annoy him.

His attitude towards the train as a place of work The reasons for Laptop Luis to interrupt his work on the train are few. Very rarely he does read the papers. The thing Laptop Luis particularly appreciates about his first class general travel card subscription is the **SBB Lounge** at Zurich main station. He often spends his time there working while waiting for his next appointment. He would like to see such **"Wait & Work Places"** established at all larger stations.

Wishes and needs
- Comfortable furniture
- Better Internet connection
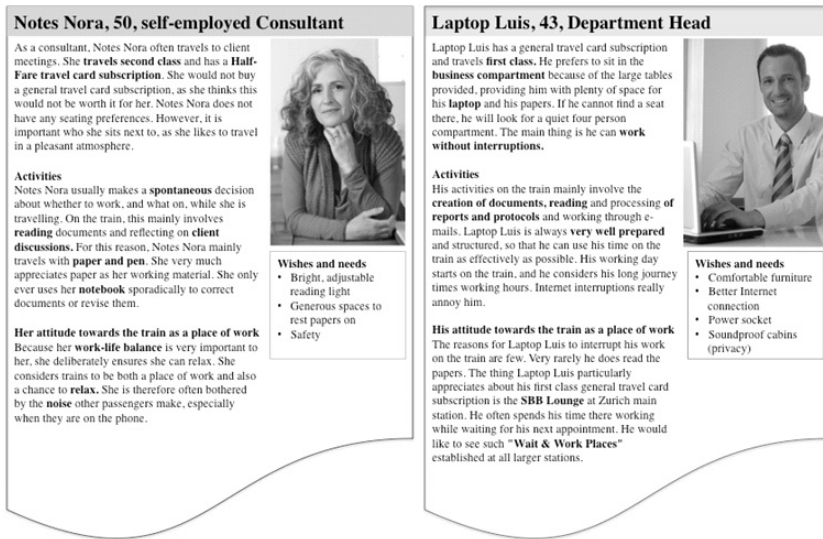- Power socket
- Soundproof cabins (privacy)

FIGURE 1   Personas Created from Online Customer Community

describe these personas in more detail, personal profiles and narrative text elements were used, e.g. describing which personal devices are used (smart phone, laptop, pencil and paper), which activities are done during the train ride (write emails, read, prepare meetings, talk on the phone, relax), whether a special seat is chosen (in the silent zone, where tables are available) and which desires and concerns are prevalent (free wifi, privacy). A succinct name was then selected to reflect the most important characteristics of each persona. In total four different personas could be identified: 'Tablet Toni', 'Comfort Karl', 'Notes Nora' and 'Laptop Luis'. They represent personas from the mobile working community. In picture 1 an example is given for two persona descriptions. In this way every persona becomes a representative of one user group and specifies a respective 'value-in-context': Notes Nora's 'value-in-context' consists of using the train ride to simply relax or to prepare client meetings. For this reason she reads documents that she printed out beforehand, and takes notes on paper. Laptop Louis, instead, uses his laptop a lot on the train. For him, travelling is valuable time to work on his emails.

Service Offerings Gained from the Mobile Working Community

With the help of the content analysis, we were able to be identified four main user needs and to represent them in the personas: Quiet-

ness allowing for concentrated work, privacy (confidential data and phone calls should not be seen/heard by others), ergonomic work-place design (e.g. suitable tables), and safety issues (e.g. anti-theft solutions for work equipment).

Commuters and business travellers not only documented their user behaviour and problems in the online community, but also their own suggestions for solutions to their problems. For example, to meet the need for privacy on the train, Laptop Luis suggested using telephone booths on trains for confidential discussions. Notes Nora would appreciate a lockable storage space integrated into her seat, and the use of sound-absorbing materials in train interiors.

To systematically generate solutions to the problems and needs identified in the online community study, we conducted a workshop with sfr representatives and customers. The personas served to se-lect participants for these workshops as representatives of their tar-get groups. The outcome of this workshop was the basis for a design sketch of a new business coach for mobile workers. For example, a 'single working space' area was created in a new business coach, al-lowing for individual and concentrated work. In a following step, the personas were sent on an imaginary journey in the new business coach. As a result it can be stated that the 'single working space' covers many demands concerning the mobile work of Notes Nora and Laptop Luis. Some details (e.g. the design of the tables and coat racks) not yet considered in the design sketch were uncovered and were considered in the further development of the concept.

Conclusions

The case study shows how 'value-in-context' and 'co-creation' can be put into practice. Applying an online tool for customers proved to be a useful instrument for reporting their daily experiences and for gathering information on value-in-use. Besides transportation from A to B, Notes Nora benefits from the train ride because she can read and relax, and Laptop Louis benefits by being able to deal with emails in an effective way. The personas were a major guideline for the design of the new train coach and helped to focus on the essence. In a complex reality, companies are often faced with the challenge of identifying the 'right' customer needs. Personas make it possible to condense a multitude of data and to reduce them to the most signif-icant points from a user perspective. The Personas generated from the online user content served to (1) getting to know and understand the user (Cooper and Reimann 2003), (2) raise awareness of the user perspective in the overall innovation process, and (3) take up

specific customer ideas. This way co-creation was put into practice.

Companies should shift their product-focused perspective on innovations towards a service-centred perspective. Increasingly, successful innovations are no longer developed in R&D labs, but are solutions arising from co-creation with customers. An important precondition for this is a basic understanding of the active role of customers and their involvement, systematically and continuously throughout the innovation process.

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Abstracts in Slovene

Inovacija hrane: dobro, slabo in grdo

John L. Stanton

Inovacija je za življenje katerega koli prehrambenega podjetja kritičnega pomena, razvoj novih izdelkov pa je zelo pomembna aktivnost v inovacijskem procesu. Inovacija pa ni vedno prva izbira korporativne rasti. Pričujoči članek razkriva razloge, zakaj podjetja ne uspejo inovirati, in nudi dokaze, da so nekatere od teh ovir premostljive. Predvideva se, in to brez znatnih dokazov, da večina novih izdelkov propade. Ta raziskava bo pokazala, da je stopnja neuspeha razvoja novih izdelkov pretirana. Hkrati tudi poroča o različnih varijacijah stopnje uspeha v prehrambenih kategorijah. Prikazala bo, da se strategija, uporabljena za predstavitev novih izdelkov, znatno razlikuje znotraj spektra. Članek bo tudi pokazal da uporabljene strategije predstavljajo nove izdelke. Raziskava pokaže, da med globalnimi regijami skozi triletno obdobje obstaja statisično pomembna razlika.

Ključne besede: inovacija, razvoj novih izdelkov, raven uspeha novih izdelkov, strategije vnašanja novih izdelkov
Management 11 (3): 193–201

Upravljanje profilov v družbenih medijih: primer LinkedIna

Joanna Paliszkiewicz in Magdalena Madra-Sawicka

Dandanes so odnosi pogosto spodbujeni in vzdrževani preko spletnih okolij, nastanek in upravljanje spletnih profilov pa je pridobilo pomembnost in postalo predmet mnogih raziskav. Upravljanje profilov je zavesten proces, v katerem ljudje skušajo vplivati na percepcijo svojega izgleda. To naredijo z nadzorovanjem in upravljanjem informacij, predstavljenih preko družbenih medijev. Predstavitev identitete je ključ do uspeha ali neuspeha, na primer v poslovnem življenju. V članku je predstavljen kritičen pregled literature, ki se nanaša na upravljanje profilov v družbenih medijih. Kot primer je predstavljen načina samopredstavitve v LinkedInu. Nakazane so prihodnje smeri.

Ključne besede: družbeni mediji, upravljanje profilov, LinkedIn, družbena omrežja
Management 11 (3): 203–212

Porabnikovi stili odločanja kot podaljšek modela uporabe na zaupanju zasnovane spletne strani s primerjavo izdelkov

Radosław Mącik

Članek opisuje implementacijo razširjenega koncepta stilov porabnikovega odločanja in razlago izbir porabnikov, opravljenih v spletnem

okolju primerjave izdelkov, v konteksu na resnici zasnovanega informacijskotehnološkega modela sprejemanja. Prejšnje raziskave so pokazale, da je tak model koristen pri razlagi nakupovalnega namena, in napovedale zadovoljstvo s spletnim okoljem primerjave izdelkov, kot primerom spletnih pripomočkov pri nakupovalnih odločitvah. Zaupanje takšnim pripomočkom je pomembno pri razlagi njihove uporabe s strani porabnikov. Povezave med uporabnikovim stilom odločanja, izdelkom in prodajalčevo uporabo mnenj, kognitivnim in afektivnim zaupanjem do spletne strani s primerjavo izdelkov na spletu pa tudi izidi izbir (namen nakupa in izbira blagovne znamke), raziskujemo preko modelov strukturalne enačbe in uporabe pristopa PLS-SEM na vzorcu 461 mladih porabnikov. Raziskava potrjuje veljavnost tega raziskovalnega modela za razlago uporabe primerjave izdelkov in nekateri porabnikovi stili odločanja so vplivali na izbire in nakupni namen porabnikov. V omenjenih odnosih so bili delni posredniki izdelki in prodajalčeva uporaba ocen.

Ključne besede: porabnikov stil odločanja, uporaba spletnih strani za primerjavo izdelkov, kognitivno in afektivno zaupanje, opis izdelkov/prodajalca, namen nakupa, PLS-SEM

Uporaba informacijsko-komunikacijskega tehnološkega orodja s strani študentov s podjetniškim namenom
Gregor Jagodič

Dandanes so mladi ljudje bolj seznanjeni z uporabo računalnikov, različnih aplikacij in orodij IKT (informacijsko komunikacijska tehnologija), ki so dostopna na spletu. Pristop do različnih virov na spletu jim nudi različne možnosti za ustvarjanje lastnega posla in podpira realizacijo njihovih podjetniških namenov. V naši študiji smo analizirali podjetniški namen študentov, ki so se vpisali v slovenske visokošolske izobraževalne inštitucije v dveh zaporednih študijskih letih (2014/2015 in 2015/2016). Analizirali smo tudi uporabo orodij IKT za pridobivanje dodatnega znanja in veščin, potrebnih za ustvarjanje novih podjetij ter novih delavnih mest, z namenom povečanja zaposljivosti mladih in študentov. V študiji smo se osredotočli tudi na nivo znanja, osebnih veščin, potreb in razpoložljivosti različnih orodij IKT, kar je vse odvisno od različnih dejavnikov (npr. računalnikov, internetne povezave). V študiji smo ugotovili, da mladi razumejo trenutno ekonomsko stanje in da v glavnem iz tega izhaja njihov podjetniški namen. Ugotovili smo, da večinoma uporabljajo orodja IKT, ki so na voljo zastonj in so preprosta za uporabo, kot so na primer e-učilnica, e-books, družbeni mediji in internet.

Ključne besede: podjetništvo, podjetništki namen, IKT

Storitveno dominantna logika v praksi: aplikacija spletnih skupnosti strank in osebnosti za ustvarjanje storitvenih inovacij

Adrienne Schäfer in Julia Klammer

Veliko podjetji skuša na storitve osredotočeno perspektivo ob razvijanju novih ponudb zavzeti s postavitvijo vprašanja, kako bi lahko izboljšali vrednost, ustvarjeno skupaj s strankami. Za to je potreben holistiчен pogled na stranke, ki sega onkraj rektrospektivnih metod, kakršna so vprašalniki. Opazovanje vsakdanjega življenja nam omogoča dragocene dopolnitve, saj sproža nastanek inovacij, ki niso eksplicitno osredotočene na želje strank, ampak na njihove prakse. Izhajajoč iz študije primera Švicarskih zveznih železnic (sfr) raziskujemo, kako lahko 'vrednost v kontekstu' in 'soustvarjanje' spravimo v prakso. V študiji primera so bile uporabljene spletne skupnosti strank, saj razkrivajo vrednost v kontekstu in navade strank, ki so pomembni viri inovacije. Ugotovitve nakazujejo, da osebnosti, ki so bile konstruirane na podlagi rezultatov spletnih skupnosti strank konsolidirajo vedenje strank in kontekstualnih podatkov in lahko pomagajo menedžerjem pri izboljšavi njihovih ponudb na način, osredotočen na storitev.

Ključne besede: osebe, spletne skupnosti strank, vrednost v kontekstu, soustvarjanje, inovacija storitev