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Chances and Challenges for Contemporary Business – from Human-Centred Design Philosophy to Omnichannel Environment

Summary

Contemporary enterprises, which function in a competitive environment, are forced to conduct prompt implementation and adjustment of international practices in their activities. A chance to achieve and maintain a competitive advantage is the introduction of an interdisciplinary output of technical and artistic sciences to business practice. A subject of analyses is the potential of human-centred design philosophy and omnichannel environment in enterprise functioning. A particular attention was drawn to the impact of the above-mentioned human-centred design, mobile technologies as well as omnichannel environment on the development of modern businesses.

Key words: human-centred design, design thinking, omnichannel.

JEL codes: M31

Introduction

A variable that strongly characterizes business environment is, among others, its susceptibility to introduce new ideas, including some taken from other areas. Dynamics of emergence of such ideas is diversified, depending on consumer preferences and ways of building their relations with an enterprise (Krämer, Tachilzik and Bongaerts 2017, pp. 53-70). Beside a trend to virtualize behaviour and needs, which so far were only present in the real world, a specific „de-virtualization” emerges i.e. transferring phenomena appropriate for online environment to the offline one. The concept of customer experience (transferred from *User Experience,* so-called UX) comprises a spectrum of emotions evoked in a recipient under the influence of stimuli provided by an enterprise (Shaw, Ivens 2002, p. 21) New trends such as the abovementioned UX or Human Centered Design are phenomena known from the virtual world, yet, for some time they have incorporated the real world into their scope, enriching it in a creative, managerial and analytical layer.

The aim of the article is to present selected trends that influence and, in the long term, will still exert an impact on behaviour of contemporary consumers as well as on market realities in which these consumers function.

Human Centered Design and its implications in customer experience management

Human-Centered Design (HCD) is a relatively new phenomenon. It is defined as a kind of philosophy focused on a man as a recipient of results of designing (including products)

but also as a superior methodology in relation to its other derivatives (Luma Institute 2012). The HCD philosophy focuses its attention on a man understood not only as a consumer of products created as a result of designing process, but also as their user that is usually a worker. Therefore, a key to designing (both, goods and services), building experiences and values becomes a man as an entity that interacts with the environment and a designed object. HCD is sometimes combined by the authors with the UCD (User-Centered Design) as a broader method of looking not only at a user of a designed solution, but at a wider context of all stakeholders involved in a product life cycle (from a phase of concept to its utilization or recycling) (Rouse 1991; 2007, p. 5). Rouse derives the HCD concept from the 1980s when produced jets were adjusted to pilots' needs. According to him three issues were the priorities in a presented methodology: increase of human abilities, overcoming human limitations as well as acceleration of acceptance of changes (by people) (Rouse 2007, p. 6). All the described elements refer to creating products and solutions which will in a maximum manner serve a man and facilitate his work (first two aspects), yet, a key point is also acceleration of acceptance of changes. „Ownership" of a solution thanks to its co-creating as well as a possibility to adjust at a designing stage allows not only to get psychologically bound to a created solutions but also – it provides an opportunity for early detection of potential shortcomings.

At the stage of designing HCD uses the detailed methodology that Design Thinking is. In its assumptions Design Thinking is convergent with the HCD methodology, moreover, it clarifies a scale of using individual tools as well as using them not only at the stage of designing solutions, but also during their later evaluation (Boy 2013, pp. 143-157). Some authors and creators isolate three stages in the process of creating a product according to the HCD philosophy: *looking*, *understanding* and *making* (Luma Institute 2012). The first two are of research nature that is concentrated on a diagnosis of customer needs, whereas the last one – of implementation nature.

It should be noted that in HCD the main burden is put on the research of qualitative character (mainly ethnographic and participating studies), subsequently, verified research thanks to a heuristic review or usability scales. Then, at the stage of understanding conducted research aims to verify and deepen the analysis of previously collected data. Conducted mapping of stakeholders, constructing a persona (with reference to socio-demographic, psychological, economic features, etc.), creating diagrams of experiences, mapping concepts, constructing diagrams and matrices as well as creating visualizations enable to understand consumer's needs and perspectives. Concurrently, at this stage the analysis of consumer's problems (solved thanks to a product) is conducted by using, among others, problem trees or decision ladders. The last stage enables to identify a product as well as to give a final assessment realized in a form of modelling, prototyping and testing. Product designing in such a form is a time-consuming process and requires strong involvement from an enterprise, yet, it has a potential of significant reduction of costs of unsuccessful implementation. Simultaneously, it enables to design solutions that are an answer to real consumers' needs.

HCD was also reflected in Customer Experience Management (CEM) that focuses not only on defining and providing stimuli influencing consumer experience but also – on their modification in order to improve consumers' feelings (Kandampully 2014). Customer expe-

rience management refers to the entire processes realized inside an enterprise. At the initial phase CEM relates primarily to collecting valuable and deepened information about consumers' experiences, needs and expectations in a form of insights. The necessity of entering a consumer's world in order to manage their experiences is continued at the level of defining experiences as well as their potential corrections. Experiences are defined at every stage of a relation with a consumer and verified on an ongoing basis. Customer experience management is additionally conducted at the entire level of the brand based on touch points defined in a form of key points on a consumer's path to purchase (Schmitt 2010).

All the above-mentioned methodologies, from the perspective of their impact on functioning of contemporary businesses, refer primarily to involvement of stakeholders at various stages of a decision-making process taking place inside an enterprise. Currently, the research into customer needs at the stage of product testing is no longer the main purpose due to a possibility of detecting faults already in a conceptual phase. Incorporating users (UCD) into decision-making processes allowed to create products that optimally meet consumers' needs. Due to significant narrowing of a target group, qualitative character of research and potential problems with subsequent production and distribution, it was considered purposeful to extend a target group by all stakeholders included in a product lifecycle (HCD). Designing focused on people gives an enterprise an advantage in the form of product customization to real stakeholders' preferences (internal and external ones).

Consumers' autonomization as well as their communication potential caused that their activity is also used at the earlier stages of product designing process – at the stage of concept. It is consumer insight that is already realized based on real needs and verified empirically (a stage of empathizing and defining) in order to materialize (ideating and prototyping) as well as to undergo consumer tests (testing). User is active during all stages of creative process, thanks to which they are more engaged and related not only to a product but also – to a co-operating brand (Ling 2015, pp. 27-65). Co-creation may take place in a real and virtual form, which does not change consumers' feelings and what follows – results for an enterprise (Gabrysiak, Giese, Seibel 2012, pp. 107-126). It is all the more groundbreaking that real consumer presence ceases to be indispensable to conduct the whole process of co-creating a product. It additionally reduces costs without a significant decline in an added value resulting from co-creation.

Paradigm of co-creation, also present in management sciences, has an impact on perceiving consumers as co-creators, to a certain extent co-managing certain areas of enterprise activity. Growth of consumers' engagement and resulting greater loyalty allow to build long-lasting business and emotional relations. Networking of relations between a company and consumers as well as between consumers themselves shows a potential of building a specific ecosystem that based on platforms used for co-creation unites entities working in such methodologies as HCD, Design Thinking or Customer Centered Design (Ramaswamy, Ozcan 2014).

Defining consumer experiences as well as their delivery definitely evolves in spite of a need for better understanding of consumers in qualitative terms towards a quantitative direction. Consumer experiences are often diagnosed based on quantitative methods (e.g. a questionnaire), which to a certain extent influences a character of collected data. The

analysis of abundant databases created and used in enterprises enables to verify the intensification of a problem in the context of its potential revision. Some emphasize that using databases should be counterbalanced by intensification of analyses of consumers' emotions because they represent the balance for analyses of behaviour of a rational nature, which were so far perceived as predominant (Walden 2017).

Omni-channel in the process of co-creating a value

The spread of the Internet as well as progressing virtualization concern not only an increase in the potential of enterprises' activities but also relate to changes in communication and consumption behaviour in enterprise –consumer relations.

The phenomenon of unification of communication channels together with permeation of tools used concurrently by consumers becomes a fact. Omni-channel environment, on the one hand, develops because of blurring distinctions between individual channels from consumers' perspective, however, on the other, – it influences the unification of tools and processes in enterprises at the analytical and implementation levels. The boundary between channels disappears because a channel itself ceases to have any significance from a theoretical and practical perspective while giving way to usefulness of a message itself (Gotwald-Feja 2016).

During one day consumers on average use three screens concurrently, while realizing simultaneous multiscreening on the contents level (contents watched on three screens are independent of each other) or synergic (contents are interdependent, they mostly concern the same offer or product). Permeation of contents of messages sent from numerous sources causes, depending on a type of multiscreening, dispersion or concentration of a message, which in turn, has an impact on the reception of transmitted contents. It should be noted that a phenomenon that is similar to multiscreening can also concern concurrent usage of traditional media, such as press, radio or outdoor advertising. Similarly, as in the case of multiscreening, concentration or dispersion of information is observed, depending on the message content that is received by consumers.

Integration of channels does not only concern marketing communication. A good example of that can be a phenomenon of integration of logistics chains, being a result of permeating online and offline orders (Iwińska-Knop 2016, pp. 45-58). M. Antonowicz suggests that an implication of appearance of omni-channel environment is, among others, a need for shortening delivery times, automation of warehouses or using cross-dock warehouses (Antonowicz 2017). A choice of a channel is determined by consumer preferences that are dynamic in time and space.

The notions that are often mentioned include a so-called „New Consumer" (Gregor, Gotwald-Feja, Łaszkiewicz 2017, pp. 99-126), hybrid consumer (Gregor, Gotwald-Feja 2017, 128-136), (Iwińska-Knop, Skurpel 2015, 459-470) or digital consumer (Tarczydło 2016). These notions are connected, on the one hand, with the spread of the Internet as a means of marketing communication (Bajdak 2013) as well as its specific set of instruments, e.g. inbound marketing (Brzozowska-Woś 2014). Intensification and commercializa-

tion are also observed in already known tools, however, they are used for less commercial purposes. An example of that can be the emergence of social commerce (or s-commerce), i.e. electronic commerce by means of social media, in which a purchase process permeates thematically with recommendations of friends and a specific bond built in the virtual world (Gregor, Stawiszyński 2011). In relation to miniaturization and the spread of mobile devices, an observed interesting trend is also adding mobile devices to marketing activities as well as giving them a permanent place in this area (Ketchum 2003). On the basis of the above-mentioned trend the development of m-markerting is often mentioned as one of the dynamically developing areas of enterprise marketing activities (from the perspective of advertising costs) (Gregor, Gotwald-Feja, Łaszkiewicz 2017).

Additionally, virtualization influences a need for a change in an attitude to realization of marketing research from the perspective of applied methods and techniques (Sobocińska 2012) as well as a way of their usage. The questions that arise here concern an opportunity of conducting studies in the real time in relation to the existence of omni-channel of marketing communication.

Opportunities and threats stemming from new trends

Empowerment of consumers on a scale that was not experienced before causes significant changes in socio-economic environment. Their influence on shaping an enterprise policy is crucial in terms of almost all marketing activities undertaken by companies. A process of co-creating a value for and by consumers evokes a need for, not only including consumers into design processes and stimulating them to activity (Design Thinking methodology), but for interacting extensively in all communication channels (Gotwald-Feja 2017). Proximity of relations with consumers does not only facilitate a product delivery that is a response to actual needs of recipients but it also enables to build relations with them, which represents a crucial resource of an enterprise (Deszczyński 2014, s. 32-34).

Integration of processes, together with simultaneous inclusion of consumers, is stimulated by creating omni-channel, in which traditional and modern media, similar to their appropriate tools, permeate and complement. Evolutionary approach to parallel communication channels through multichannelity to omni-channel must evoke and truly evokes changes in creating, using and modifying marketing communication (Gotwald-Feja 2017). The future belongs to studies on the Internet of Things (*IoT)* and M2M (*Machine-to-Machine*) communication which consolidate the secondary nature of the channel itself to give significance to a delivered value (Geng 2017).

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Szanse i wyzwania dla współczesnego biznesu – od filozofii human-centered design do środowiska omnichannel

Streszczenie

Współczesne przedsiębiorstwa, funkcjonujące w wysoce konkurencyjnym środowisku są zmuszone wprowadzać ciągłe ulepszenia i dostosowywać swoje modele zachowań do wzorców międzynarodowych. Szanse osiągnięcia i utrzymania przewagi konkurencyjnej stwarzać może wprowadzenie dorobku nauk technicznych i artystycznych do praktyki biznesowej. Przedmiotem analiz jest potencjał filozofii *human-centered* design (projektowanie nastawione na człowieka) oraz środowiska *omnichannel* dla praktyki funkcjonowania przedsiębiorstw. Uwagę skoncentrowano na wpływie wspomnianej filozofii *human-centered design*, technologii mobilnych, jak również środowiska omnichannel w rozwoju współczesnego biznesu.

Słowa kluczowe: *human-centered design*, metodyka *design thinking*, omnikanał.

Kody JEL: M31

Шансы и вызовы для современного бизнеса – от философии *human-centred design* к среде омниканальности

Резюме

Современные предприятия, функционирующие в высококонкурентной среде, обязаны вводить постоянные усовершенствования и приспособлять свои модели поведения к международным образцам. Шансы на достижение и сохранение конкурентного преимущества может создавать ввод достижений технических и артистических наук в бизнес-практику. Предмет анализов – потенциал философии *human-centred design* (проектирование, направленное на человека) и среды омниканальности для практики функционирования предприятий. Внимание сосредоточили на влиянии упомянутой философии

human-centred design, мобильных технологий, а также среды омниканальности в развитии современного бизнеса.

Ключевые слова: *human-centred design*, методика *design thinking*, омниканальность.

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