

## REFLEXIVE MODERNIZATION, INDIVIDUALIZATION AND MASS CUSTOMIZATION

### ABSTRACT:

In this paper we argue, that individualization in mass customization business model should be seen as part of the reflexive modernization theory, which takes into account uncertainty in solving customer problems. This article is structured in the following way. The first part describes the idea of reflexive modernization and suggests some broad areas where the theory may illuminate activities in the economy. The second part describes individualization in mass customization business models. The third section offers some thoughts, how individualization from the reflexive modernization point of view and from the intercultural point of view can help to improve mass customization business model.

### KEYWORDS:

Reflexive Modernization, Individualization, Mass Customization

### INTRODUCTION

At the present time, the amount of sociological time analysis is growing increasingly. Present civilization is undergoing fast, basic and international social changes. These fundamental evolutions are explained in more than a few methods. Using extremely diverse terms, sociologist try to recognize the dissimilarity between history and present time trying to grasp in a methodical mode the huge number of social transformations by recognizing fundamental systems.

### IDEA OF REFLEXIVE MODERNIZATION

German sociologist Ulrich Beck (1986) has defined time diagnosis in terms of so called reflexive modernization. German sociologist indicates a thoughtful transformation in the character of the modernization process itself. This transformation is typified as a changeover from uncomplicated/simple/first modernity to reflexive/automatic/late modernity. First modernity represents the progress from a conventional, undeveloped social order to a modern, developed social order. In this period of transformation, reasonableness stays over convention and false notion. Methodical reasonableness functions as a perfect source of authentic and purposeful awareness. The societal group dissimilarity has replaced the previous dissimilarity between the 3 feudal domains. According to Beck, however, this 'classical' modernity is a 'semi-modern condition'. The manufacturing, developed background intrinsically encloses more than a few anti-modern

essentials which stay resistant to additional modernization. It means that the contemporary institutional prototypes of social group and sexual category are reasoning novel social disparities. These contemporary disparities actually substitute the conventional hierarchy. The methodical fascination with development produces significant hazards that are no more controllable.

However, these unmanageable risks stay unseen behind a contemporary frontage of lucid dominance and ideal managing systems. Knowledge and expertise reach therefore a self-disagreement with the as yet uncontrolled increase of dangerous side-effects of their success. Beck argues that industrial civilization threatens itself throughout its imperfect structural design. Through the disagreement with its partially contemporary restrictions, developed civilization becomes the energetic power of its own alteration progression. Reflexive modernization thus represents a transformation of the developed civilization itself. From the wrecks of developed civilization, first-order modernity occurs. This essential transformation breaks through the semi-modern nature of the ordinary contemporary developed period. Away from the charts of developed civilization, it produces a dissimilar and not unavoidably better, institutional form, so called hazard social order full of risks.

This novel institutional circumstance is typified by a basic insight into the critical and repeatedly increasing consequences that are methodically shaped together with the rising accessibility of well-being.

The hazard social order refers to the mixture of stability and instability. While in traditional developed civilization the sense of prosperity creation prevails, transformation does not just mean prosperity increase, but also the methodical creation of increasing and universal hazards like nuclear risks, which can't be understood as simply handy consequences of a smooth transformation progression. On the opposite, they more and more come into view as intrinsic products of additional transformation. Furthermore hazard social order refers to the far-reaching societal transformations that are reasoned by the transformation progression. These split as ordinary characteristic the immanent disagreements flanked by modernity and anti-modernity within developed civilization and indicates the progressions of globalization and individualization, to altering relations among men and women, within the family etc. to progresses in the area of employment, economical development and political affairs.

Consequently, the development of automatic, reflexive transformation and modernization deeply manipulates the social surroundings of persons. The developed dynamism of improvement also challenges the philosophy of social groups and categories, qualified employment, family, sexual category roles, church, manufacturing, political affairs etc. which are extremely entrenched in individual life. Novel, radicalized structures are taking forms alongside the environment of the outstanding but collapsing mature ways of life. In these unfinished and opposing circumstances among history and prospect, person's life obtains some novel attribute appearances as uncertainty, randomness, temporality and doubt linked with the loss of identity. This uncertain based individualism has impacts on the tailored mass customization, which will be explained in the following.

#### **INDIVIDUALIZATION IN MASS CUSTOMIZATION BUSINESS MODELS**

The idea of mass customization is based on the observation that there is a customer interest in products that are adapted to his/her individual needs and preferences, since the adaptation will increase perceived performance. As the standard of living has increased in the last 50 years, individualization has received increased focus, since customization has come within reach of the average consumer. At the same time there has been a massive development of technologies (Svenson and Jensen 2001, p. 1). In this environment customers have the power to demand individually tailored products that are specifically designed and manufactured to suit their needs.

The required shift in thinking is so great - and the danger of not making the transition is so serious - that the National Research Council commissioned a study to articulate the problem and help prepare american manufacturers to meet the challenge.

Their conclusion was that we are in the midst of a fundamental revolution in the nature of business, one that, in their words, "has the potential to alter the manufacturing landscape as dramatically as the industrial revolution" (Taylor 2004, p. 18). The companies that respond properly to these changes are now exploring and beginning to master yet another frontier in business competition, one whose terrain is decidedly different from that of Mass Production. They have found, that customers can no longer lumped together in a huge homogeneous market, but individuals whose individual wants and needs can be ascertained and fulfilled. Leading companies have created process for low-cost, volume production of great variety, and even for individually customized goods or services. They have discovered the new frontier in business competition: Mass Customization (Pine 1993, pp. 6-7). The concept of mass customization was first identified in "Future shock" by Toffler (1971) and was later described in "Future perfect" by Davis (1987). Stan Davis, who coined the phrase in 1987, refers to mass customization when "the same large number of customers can be reached as in mass markets of the industrial economy, and simultaneously they can be treated individually as in the customized markets of pre-industrial economies" (Davis 1987, p. 169). In order to address the implementation issues of mass customization, Tseng and Jiao (2001) provide a working definition of mass customization that is very useful. The objective of mass customization is "to deliver goods and services that meet individual customers' needs with near mass production efficiency" (Piller, 2003). Doing so, mass customization is performed on four levels. While the differentiation level of mass customization is based on the additional utility (value) customers gain from a product or service that corresponds better to their needs, the cost level demands that this can be done at total costs that will not lead to such a price increase that the customization process implies a switch of market segments. The information collected in the course of individualization serves to build up a lasting individual relationship with each customer and, thus, to increase customer loyalty (relationship level). While the first three levels have a customer centric perspective, a fourth level takes an internal view and relates to the fulfillment system of a mass customizing firm: Mass customization operations are performed in a fixed solution space that represents (Piller, 2003) "the pre-existing capability and degrees of freedom built into a given manufacturer's production system" (von Hippel, 2001). Customized products might be a differentiator now, but what happens when every company can make customized clothing, customized bags, etc.? What happens when customized products become a commodity? How will you differentiate? Mass customizers need to be at once product-centric and user-focused (Aaronson, 2003). Personalization should therefore be clearly distinguished from customization.

Both customization and personalization are based on the assumption that a homogeneous offering is not sufficient in meeting the customer's needs (...). As defined by the Webster dictionary (2003), personalize means "to make something personal or individual; specifically: to mark as the property of a particular person" (Fung et. al. 2001, p. 2). The definitions of mass customization and of personalization implies that the goal is to detect customers needs and then to fulfill these needs with an efficiency that almost equals that of mass production. A precondition of the business model Mass Customization

is the trend to individualization based on classical modernization theories. Beck et al. (2003) argue, that these theories (first modernity) are interested in deconstruction without reconstruction, second modernity (reflexive modernization) is about deconstruction and reconstruction. Second modernity is therefore different to modernization and postmodernism. Reflexive modernization (Böhle and Weihrich 2009, p. 10; Bonß 2009) is based on the idea of a risk society, forced individualization and multidimensional globalization (Beck and Grande 2004, p. 50).

#### CULTURAL DIMENSIONS, SOCIETAL CHANGES AND THEIR INFLUENCE ON THE INDIVIDUALIZATION

The patterns of thinking and acting are dominated by the specific environment the individuals and groups living in. Inter cultural analysis supports to find the causes of specific behaviour, based on empirically cultural differentiation and analysis of the national cultural environments. Culture has an understanding role for the affiliates of a group, which share that special culture. Even though all affiliates of a group or the nation might share their specific culture, appearances of consequential, cultural behavior are personalized by the person's character, childhood, educational background and experience to a substantial level. As the jointly arranged outlines of beliefs and the way of acting, individuals and groups have nowadays in the modern world increasingly more liberty to define their way of life as well as their individual decision-making processes autonomously. As argued by Beck and Beck-Gernsheim (1996), the conventionally homogeneous life route has been replaced by so called 'do-it-yourself biography' which persons have to create themselves.

Furthermore authors state that the individualization's concept articulates this procedure of biographic freedom. At an especially basic plane, in addition it creates area for independent structures of individuality creation. The choices individuals and groups have to take in daily life unavoidably have extensive existential effects. In the dialogue about individualization there is often claimed that there are no obvious or correct responds to essential questions in life. As a result, the lately achieved autonomy in life is of a doubtful character.

Liberated options are inescapably hazardous and random choices, whereby individuals and groups are completely liable for incorrect options chosen. Based on these thoughts Fitoussi and Rosanvallon (1996) argue that the individualism can be positive and negative. Some researchers of the modernization processes claim that, individualized society does not exist (cf. Laermans 1991, p. 215) because the conditions for the creation of the personal course of life are different. Even more the individual levels of the welfare are according to author, precondition for the creation of the specific way of individualism. Therefore those who do not have these social and intellectual abilities and real financial potentials experience considerable obstructions to an individualized utilization of own autonomy. This view is very personalized, and do not include the impact of the society on the individuals and groups. It is known from our own experiences that there is society existing which are traditionally more or less individualized or rather collectivistic. Even political systems have a great impact on the degree of the individualization and therefore on the mass customization. This observation doesn't claim the existence of the personalized individualization, but it indicates the existence of the individualized society. Taking into consideration the work of social psychologists as e.g. Hofstede or Schwartz the existence of the individualized society can be specified. As stated by Jewell and Abate (2001, p. 865) individualism has conventionally been recognized as "the habit or principle of being independent and self-reliant...". Hofstede (1980, 1983) among others describes cultural dimensions of individualism compared to collectivism. So called Individualism vs. Collectivism index (IDV) is the level to which persons are included and incorporated into social group. In cultures where come across many nonconformists and individualistic people and where emotional and social links between individuals are informal and limp is expected, that persons in this society look after themselves and their firsthand families. On the other side, in cultures where come across many conformists and collectivistic people and where emotional and social links between individuals are strong and expected, because people in these societies are from birth beyond integrated into well-built, consistent groups and frequently comprehensive families including relatives like cousins, aunts, grandparents and uncles which keep on look after them in substitute for automatic faithfulness and familiar honesty. Hofstede emphasizes that the terms individualism or collectivism have no biased meaning and have no reference to the matters referring the national-state but only to the social groups. Also this dimension is enormously basic one, and concerns all civilizations worldwide. There are several empirical studies which have been carried out to identify the levels societies' individualism and respectively collectivism. The levels of individualization of some national states are presented in the table below.

**Table 1: Hofstede's cultural dimensions**

| Country | IDV |
|---------|-----|
| Germany | 67  |
| USA     | 91  |
| Russia  | 39  |

The graduation of the scores is based on the reference, highest score of 100. The more the score of the cultural dimension for the individualism compared to collectivism dimension, the society seems to be more individualistic. Similar consideration has been made by Schwartz (1990,1994) whereby 10 different motivation goals defining 7 polar cultural dimensions. The motivation goals which can be taken in consideration to define the level of the autonomy of the society and the individuals and groups living in, which are open to take the risks for own short- or long-term goals, and reproducing these decisions on their behavior as consumers, are so called "self-direction", "hedonism" and "stimulation". Self-Direction as an individual value has an motivational goal of the achievement of self-governing act as for instance, selecting, constructing, discovering. Stimulation as an individual value has an motivational goal of the achievement of enthusiasm, innovation, modernism and comfort in life. Hedonism as an individual value has an motivational goal of the achievement of enjoyment or luxurious satisfaction for oneself. Cultural bipolar dimensions reflecting these motivation goals have a high scores of so called "mastery", "intellectual autonomy" and "affective autonomy". Mastery as a polar cultural dimension describes a person and groups as human beings which prefer to manage, master, direct and modify the collective and natural surroundings through self-confident act with the intention of creation of the further individual or group goals. Intellectual Autonomy has a intellectual stress on the interest of persons autonomously following their own thoughts and rational guidelines as for example inquisitiveness, liberalism or originality. Affective Autonomy as a polar cultural dimension describes a person as an autonomous human being which has an intellectual stress to encourage and defend the person's autonomous aspiration of individual affectively optimistic experience as for example like happiness, thrilling and diverse life and so on. Societies with the high scores of these cultural dimensions reflecting the tendency of the person living in this society, to be inclined to consume mass produced goods or services, especially categorized in the scope of the soft customized consume, as for instance service individualization like for instance music programs for passengers with divers airlines; delivery with the catering; telephone disturbance hotline etc. or implicit personalization services, as so called "my-services" like -my ebay, -my yahoo- etc. Within the scope of the hard customization, people from these societies tend to find the satisfaction in the unique products, like personalized products of different kind.

**Table 2: Schwartz's cultural values**

| Country | Intellectual Autonomy | Affective Autonomy | Mastery |
|---------|-----------------------|--------------------|---------|
| Germany | 5,26                  | 4,57               | 4,17    |
| USA     | 3,95                  | 3,67               | 3,83    |
| Russia  | 4,01                  | 3,61               | 3,88    |

Looking on the Hofstede's data, it is to be expected that in USA people tend to have very variable and specific taste in order to be satisfy the individualistic personality, which derives from the lesser emotional and social links between individuals in society and the tendency to the informality.

Therefore, in average, we argue that mass customization in the American society is strongly linked with the personalization of the services and the higher flexibility of the individualization within the mass customization. This tendency is gradually falling toward Russian society, followed by Polish and German consumers. Analysis the Schwartz's data indicate that Germans are very profound with the choice of the product, expecting the uniqueness of the goods and services. They express the high curiosity to explore the service or products expecting the repeat of the positive experience in the case of the previous positive experience or creation of the initial emotionally positive experience. Also, high degree of the influence on the customization in Germany is to be expected, as well as the importance for the values such as ambition, success and independence, which means that this cultural area is indeed very products sensitive but compared with the American society not as open to the mass customization, because of the higher expectation to the awesomeness and the enjoyment the product or service have to bring with to the person itself and the society. Germans, compared with Americas more prefer to modify social and personal environment, encouraging more reflexion and creating the increased doubt of the satisfaction with the service or product, questioning its adequacy. Tendency to challenge uniqueness of the product or service is increasingly declining toward Russian society, which correlates with the Hofstede's data. Anyway, the looking deeper on examination of the nature of the scores derived from cross-cultural analyses may indicate some limitation of the statements. Societal dynamism through the global movement of the individuals and information make at some level unable to transcend the inclination to make equal culture with the idea of the nation state. Furthermore, some cultural data to the national states may be too old to be of any contemporary value, mainly with today's fast changing worldwide environments and societal convergence. On the other side, cross cultural psychologists argue that empirically results of the cross-cultural investigation are founded on century of indoctrination, current reproduction of the data indicating the national values and behavior have supported the reality that culture will not revolutionize overnight (cf. Hofstede 1998).

Taking into consideration criticism and praise of cross-cultural analysis we argue that, cultural explanation of the phenomenon the individualism and its connection with the mass customization, can be used as an indicator. Many factors as for example individualistic data to the experience regarding the products and services already used, personal disposition to the decision-making process etc. but have to be included into analysis to explain exactly the mass customization behavior.

### CONCLUSION

Social changes are on the one hand reasoned by the occurrence and progression of modernization, which is on the other hand linked with the process of globalization. Modernization process breeds intrinsic disagreements stuck between modernity and anti-modernity within developed society and refer to the progressions of individualization. Individualization is uncertain process, which can have positive and negative consequences on the individual's choices in life. Against the claims of some researches we argue that, level of the societal individualization is ascertainable by using of cross-cultural analysis models, allowing the tendential predictions about the consumer behavior and therefore the openness to the societal mass customization. It is useful for the clarification of the economic activities and the improvement of mass customization business models, allowing more tailored business solutions.

### REFERENCES

- [1] Aaronson, J. (2003) Personalization, *Meet Customization*, <Available> [http://www.clickz.com/experts/crm/crm\\_strat/article.php/3091931,21.06.2010](http://www.clickz.com/experts/crm/crm_strat/article.php/3091931,21.06.2010)
- [2] Beck U. (1986) *Risikogesellschaft. Auf dem Weg in eine andere Moderne*. Frankfurt am Main: Suhrkamp Verlag.
- [3] Beck U. and Beck-Gernsheim, E. (1996) "Individualization and 'precarious freedoms: perspectives and controversies of a subject-orientated sociology", in: Paul Heelas, Scott Lash and Paul Morris (eds.): *Detraditionalization. Critical Reflections on Authority and Identity*. Cambridge, MA/Oxford, UK: Blackwell Publishers, 23-48
- [4] Beck, U.; Bonß, W. and Lau, C. (2003) "The Theory of Reflexive Modernization", *Theory, Culture & Society*, Vol. 20, No. 2, 1-33 (2003)
- [5] Beck, U. and Grande, E. (2004): *Das kosmopolitische Europa*, Frankfurt/Main
- [6] Böhle, F.; Weihrich, M. (2009) *Ungewissheit, Uneindeutigkeit, Unsicherheit – Braucht die Theorie reflexiver Modernisierung eine neue Handlungstheorie?* In: Böhle, F.; Weihrich, M. (Hrsg.): *Handeln unter Unsicherheit*. VS Verlag für Sozialwissenschaften/GWV Fachverlage GmbH, Wiesbaden 2009. S. 9-21.
- [7] Bonß, W. (2009) *Das Subjekt als fiktiver Entscheider? Anmerkungen zur soziologischen Handlungstheorie*. In: Böhle, F.; Weihrich, M. (Hrsg.): *Handeln unter Unsicherheit*. VS Verlag für Sozialwissenschaften/GWV Fachverlage GmbH, Wiesbaden 2009. S. 149-166.
- [8] Davis, S. M. (1987) *Future perfect*, MA, Addison-Wesley publishing company, INC
- [9] Elizabeth J. Jewell and Frank R. Abate (2001) *The new Oxford American dictionary*, Oxford, UK: Oxford University Press.
- [10] Fitoussi, Jean-Paul and Pierre Rosanvallon, (1996) *Le nouvel âge des inégalités*, Paris: Seuil.
- [11] Fung, G., Boysen, A. and Chignell, M. (2001) *A Model of Personalization*. 1st Worldcongress on Mass Customization and Personalization, Hong Kong
- [12] Hofstede, Geert (1980) *Culture's consequences: International differences in work-related values*, Newbury Park, CA: Sage.
- [13] Hofstede, Geert (1983) "The Cultural Relativity of Organizational Practices and Theories", *Journal of International Business Studies*, 14:2, 75-89
- [14] Hofstede, Geert (1998). "Attitudes, Values and Organizational Culture: Disentangling the concepts." *Organization Studies* 19:5, 470-477.
- [15] Laermans, Rudi (1991), "Van collectief bewustzijn naar individuele reflexiviteit: media, consumptie en identiteitsconstructie binnen de 'reflexieve moderniteit'", *Vrije tijd en samenleving*, 9:4, 99-118.
- [16] Piller, F. (2003) *Mass Customization News*, Newsletter on Mass Customization, Personalization and Customer Integration, Vol. 6, No. 1 (May 2003), <Available> [http://www.mass-customization.de/news/news03\\_01.htm,18.06.2010](http://www.mass-customization.de/news/news03_01.htm,18.06.2010)
- [17] Pine, J. P. (1993) *Mass Customization*, Harvard Business School Press, Boston, MA.
- [18] Schwartz, Shalom H. (1990) „Individualism - collectivism: Critique and proposed refinements”, *Journal of Cross-Cultural Psychology*, 21:2, 139-157.
- [19] Schwartz, Shalom H. (1994) "Beyond individualism/collectivism: new cultural dimensions of values", in Kim, U. Triandis, HC, Kagitcibasi, C, Choi, SC, Yoon, G (Eds), *Individualism and Collectivism: Theory, Method, and Applications*, Sage, Thousand Oaks, CA, 85-119
- [20] Svensson, C. and Jensen, T. (2001): *The customer at the final frontier of mass customisation*, 1st Worldcongress on Mass Customization, Hong Kong
- [21] Taylor, D. A. (2004) *Supply Chains*, Boston
- [22] Toffler, A. (1971) *Future shock*, New York
- [23] Tseng, M.M. and Jiao, J. (2001) *Mass Customization*, in G. Salvendy (Ed.) *Handbook of Industrial Engineering*, 3rd edition, New York: Wiley, 2001, pp. 684-709.
- [24] Von Hippel, E. (2001) "Perspective: User Toolkits for Innovation", *The Journal of Product Innovation Management*, 18, pp. 247-257.
- [25] Webster Online (2003) Definition "to personalize", <Available> <http://www.webster.com/cgi-bin/dictionary?book=Dictionary&va=personalize,15.05.2010>

### AUTHORS & AFFILIATION

Dusko LUKAC<sup>1</sup>,  
Robert FREUND<sup>2</sup>

<sup>1</sup> RHEINISCHE FACHHOCHSCHULE KÖLN, UNIVERSITY OF APPLIED SCIENCES, KÖLN, GERMANY

<sup>2</sup> MARTIN-LUTHER-UNIVERSITY, HALLE-WITTENBERG, GERMANY