

# SOCIAL MEDIA INFLUENCE ON MASS CUSTOMIZATION AND PERSONALIZATION PROCESS

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**Abstract:** *The objective of this paper is to discuss the influence of social media on mass customization and personalization process. Social media, made customers inevitably empowered. They got the opportunity to express what they felt about their brands, and to personalize its products and services. This leads to much better methods of sharing in company, and deeper interaction with customers. It is, on the other hand, powerful tool for producers to trace product during its lifecycle on the easier and more direct way.*

**Key Words:** *Social Media, Mass Customization, Personalization, Communication, Personalisation, Crowdsourcing*

## 1. INTRODUCTION

Social media empowered customers to engage differently with their brands. Customers are demanding immediate and direct communication, so old processes need to be reevaluated and updated to accommodate a new communication approach. Nowadays, professionals have to discover new research methods, experiment with content through variety of social media channels, and learn to connect and build relationships with stakeholders through new technologies. Communication through social media must be guided and directed, to benefit the brand and the relationships made while moving forward.

Modern-day communicator must understand business strategy – to not only respond and adapt, but to also help shape favorable outcomes for individuals, organizations and public they represent.

## 2. COMMUNICATION IN TIME OF INTERNET

The recent technology boom has created a digital age. The explosive growth in computer, communications, information, and other digital technologies has had a major impact on the communication. The widespread use of the Internet, and other technological advances, created the so-called new economy. Now, more than ever before, we are all connected to each other and to information anywhere in the world. Technology has become an indispensable part of our lives [1].

Digital technology has also brought a new wave of communication, advertising, and relationship building tools, ranging from online advertising, video-sharing

tools, and cell phones, to Web apps and online social networks.

### 2.1. Constant growth of Internet users

The most dramatic digital technology is the Internet. The number of Internet users is constantly changing (Picture 1).

World Regions	Population (2011 Est)	Internet Users 31. December 2000	Internet Users Latest Data
Africa	1,037,524,058	4,514,400	139,875,242
Asia	3,879,740,877	114,304,000	1,016,799,076
Europe	816,426,346	105,096,093	500,723,686
Middle East	216,258,843	3,284,800	77,020,995
North America	347,394,870	108,096,800	273,067,546
Latin America / Carib.	597,283,165	18,068,919	235,819,740
Oceania/Australia	35,426,995	7,620,480	23,927,457
WORLD TOTAL	6,930,055,154	360,985,492	2,267,233,742

Fig. 1. World Internet usage and population statistics [2]

It now stands at more than 1.8 billion users worldwide, and will reach an estimated 3.4 billion by 2015. This trend is also present in Serbia (Picture 2) [2].

Year	Users	Population	% Pop
2000	n/a	n/a	n/a
2006	1,400,000	9,778,991	14.3
2010	4,107,000	7,344,847	55.9

SERBIA	
RS - 7,310,555 population (2011) - Country Area: 77,474 sq km	
Capital city: Belgrade - population 1,764,650 (2007)	
4,107,000 Internet users as of Jun/10, 56.2 % penetration, per ITU.	
3,173,440 Facebook users on Dec 31/11, 43.4% penetration rate.	

Fig. 2. Number of Internet users in Serbia [2]

Whereas Web 1.0 connected people with information, the next generation Web 2.0 has connected people with people, using a set of fast-growing new Web technologies such as blogs, social-networking sites, and video-sharing sites. Web 3.0 is starting now. It has ability to put all these information and people connections together in ways that will make our Internet experience more relevant, useful, and enjoyable [3].

Many experts believe that by 2020 the Internet will be accessed primarily via a mobile device operated by voice, touch, and even thought by “mind-controlled human-computer interaction [1].

## 2.2. Net Generations

Three largest groups—the baby boomers, Generation X, and the Millennials—had an impact on today’s communication strategies.

The Baby Boomers were born between 1946 and 1964. The youngest boomers are now in their mid-forties and the oldest are in their sixties. The baby boom was followed by a “birth dearth,” creating another generation of 49 million people born between 1965 and 1976. The baby boomers are still the wealthiest generation in U.S. history.

Generation X (people born between 1965 and 1976) lie in the shadow of the boomers and lack obvious distinguishing characteristics. They are less materialistic; they prize experience, not possession. For many of the Gen Xers who are parents, family comes first and career second. They are the most educated generation to date.

Millennials (also called Generation Y or the echo boomers) were born between 1977 and 2000. This group includes several age cohorts: tweens (ages 10–12), teens (13–18), and young adults (19–33). One thing that all the Millennials have in common is their utter fluency and comfort with digital technology. They don’t just embrace technology; it’s a way of life [1].

A huge number of titles have been attached to a younger generation that is growing up in an internet-dominated, media-rich culture: “Net generation”, “Digital natives”, “Millennials” and many others. The untested assumption is that this generation is somehow qualitatively “different” from what went before: that they have different aptitudes, attitudes, expectations and even different communication [4].

Net Geners are not passive consumers. They expect interactive relationships with the companies they buy from. Net Geners approach commercial activity differently, so marketers must approach them differently, starting with their immersion in media. Rather than flooding Net Geners with standard broadcast ads, marketers must approach them on their terms: via relationships. Net Geners look first to their peers for feedback on new products, so sellers need to gain access to someone within their “N-fluence networks” (for instance bloggers that comment product and bring it to the attention of people on social media sites). Once Net Geners have some product, they customize it and share their opinions about it. When they ask questions, they want answers. They will judge a company not just on its products, but also on its behavior [5].

## 3. SOCIAL MEDIA AS A TOOL FOR MASS CUSTOMIZATION PERSONALIZATION PROCESS

### 3.1. Electronic mass customization

Term “mass customization” was primarily used by Davis in 1987, who defined it as “the same large number of customers can be reached as in mass markets of the industrial economy, and simultaneously treated individually as in the customized markets of pre-industrial economies” [6].

According to Kaplan and Haenlein, electronic mass customization is a value creation strategy through company-customer interaction with the aim of producing customized yet affordable products [7].

As technologies have emerged, mass customization has become a viable contemporary business solution [8].

More companies focus on electronic mass customization as a way to gain competitive advantage for the company and add value for customers [9]. Almost all configurator tools for MC are digital applications connected with some database of different parts [10].

### 3.2. Social media evolvent

In 2007, social media was related to blogs. Twitter and Facebook were just surfacing. The extensive growth of Twitter made consumers realize that they could air their concerns and complaints. Companies become conscious that there was a whole universe of conversations going on without them, about their products and services. Pre-social media didn’t actually discover customers’ reaction to specific product or service. No technology was in place that provided real-time data and feedback about customer behavior. Thanks to social media, customers became truly empowered. They got the opportunity to express what they feel about their brands [12].

The term social media is used for platforms through which individuals and communities can share co-create, discuss, and modify user-generated content. This includes blogs (Blogger, Wordpress), microblogging (Twitter), collaborative wiki-projects (Wikipedia), forums, professional networking sites (LinkedIn), and social networks (Facebook, Google+). While these applications are mainly using text, they can include other forms of media, like photographs (Flickr, Picasa), videos (YouTube, Vimeo), or music tracks (last.fm, Groveshark). Social media today also have expanded into virtual worlds (Second Life) and online gaming (World of Warcraft, Farmville). Recently, a new field of applications in social media is based on the usage of mobile data and the fast adoption of smartphones (Nomad Social Networks, Foursquare). These channels have been used by companies in order to improve their internal operations and to collaborate in new ways with their customers, business partners, and suppliers. Social media also impacts the relationship between customers and firms, as well as the relationships among the customers themselves [13]. For companies, value comes not from the platform itself (which is the source of revenue for the platform provider) but from how a particular social media platform is used and from the information that is created and shared on these platforms. The new process leads to much better

methods of sharing, and deeper interaction with company's customers. Social media spreads across the company, and there is no single department that handles all communication. All departments are involved and work together proactively to listen and participate with value to help customers [14].

Social media also offers customers a platform for easily sharing bad word-of-mouth which can seriously affect company's image [13].

### **3.3. Crowdsourcing**

There are companies that work directly with their customers by crowdsourcing information. Today, companies create an online idea markets where consumers can post new product ideas that are evaluated for their market potential by their peers. This new approach is called "crowdsourcing". Jeff Howe named it and defined crowd as "the new pool of cheap labor: everyday people using their spare cycles to create content, solve problems, even do corporate R & D" [15]. Through platform, individuals can express their ideas, which are typically generated from their experience with actual product usage. The ideas that come from the customer crowds can reveal rich information about customers' preferences. Typical crowdsourcing platforms allow other customers to promote or demote ideas of their peers, thus providing an important early assessment of the potential of the proposed ideas. Firms can potentially obtain a large number of novel and profitable ideas at relatively low costs from such initiatives. Early adopters of this approach include some of the highly regarded business firms, such as Dell, Threadless, Starbucks, Adidas, Salesforce, BBC, BMW, Ducati, and Muji [16].

From the interaction and discussion comes innovation in the form of how they want to interact with their favorite brands. Crowdsourcing is an excellent way for the company to learn what its community thinks and what they want from the company [11].

### **3.4. New Communication Practice: The Communications (COMMS) Organizer**

Companies can no longer depend on the push method to distribute their messages. Older methods of communications are focused on the one-to-many, a broadcast approach. This kind of approach doesn't take into consideration how consumers want to communicate directly with the people or the humans behind a moniker. New types of stories have to be created by developing, coordinating and organizing content through different channels. The Communications (COMMS) Organizer is new profession, proposed by Deirdre Breakenridge in her book "Social Media and Public Relations", published in 2012 [11]. She stands that this role is vital in organizations in order to educate, redirect and implement a new communication process. Simply said, to turn noise into the articulated sound.

On the macro level, companies monitor for overall message penetration, reputation, Share of Voice (SOV), and customer service satisfaction level. On micro level, there's tracking for specific program awareness, sentiment, buzz or amount of conversations, sharing habits, community, growth etc.

Communication expert should be using information from virtual focus panels and create the content and strategy that map the needs of company's audience. It is essential to listen to all customer and stakeholder feedback. This all leads to much better content development, better methods of sharing and deeper interactions with customers [11].

## **4. EXAMPLES OF CUSTOMER PERSONALIZATION AND CO-CREATION BASED ON APPLICATION OF SOCIAL MEDIA**

Starbucks is well-known example of loyal fans offering their suggestions and ideas to improve the Starbucks experience. They actively participate on the website MyStarbucks.com. Tens of thousands suggestions are generated from this collaborative effort. This all gives better product, greater content and sometimes better service from Starbucks [11].

One of the most famous crowdsourcing websites is IdeaStorm.com, which was launched in February 2007 by Dell, as a way to communicate directly with its customers. IdeaStorm.com was created to give a direct voice to Dell's customers and an opportunity to have online brainstorming sessions, so the customers can share ideas and collaborate with one another and with Dell. The objective was to hear what new products or services Dell's customers would like to see Dell develop. Once registered, individual (not just customer) can post any relevant idea. Once an idea is posted, all the other individuals can vote on the idea. Dell's web managers maintain its website and pass the ideas generated by the individuals on to the corresponding groups within the company for review. Most of the posted ideas posted "Acknowledged" within 48 hours. If the web managers find an idea is already part of their existing product or services, they will change the status to "Already offered". Dell also provides details regarding the decision through comments or blogs [16].

The General Electric (GE) Ecoimagination project describes itself as a place "where businesses, entrepreneurs, innovators and students share their best ideas on how to build the next-generation power grid – and just might get funded." Innovators submit ideas to the website around themes of renewable energy, grid efficiency and eco-buildings GE and their partners have pledged up to \$200m to invest in the most promising start-ups, with the winner to be announced late 2010.

Proctor & Gamble have a programme called "Connect & Develop" which aims to source product and service innovations from outside the firm. They say "in the areas in which we do business, there are millions of scientists, engineers and other companies globally. Ideas are submitted via a secure portal.

Amazon was one of the first major corporates to operate a crowdsourcing model with the launch of Mechanical Turk in 2005. It operates as a marketplace for workers to complete "Human Intelligence Tasks" – essentially tasks which can't be done by computers, such as extracting information from web pages [17].

## 5. CONCLUSION

Companies can no longer depend on the push method to distribute their messages. New type of communication includes developing, coordinating and organizing content through different channels. Professionals have to discover new research methods, experiment with content through variety of social media channels, and learn to connect and build relationships with stakeholders through new technologies.

Today, companies create an online idea markets where consumers can post new product ideas that are evaluated for their market potential by their peers through crowdsourcing. This is an excellent way for the company to learn what its community thinks and what they want from the company. Only companies that can follow these trends can maintain successfully on the market and keep their customers.

### Acknowledgements

This article has been produced as part of a research project no. 47028 "Advancing Serbia's competitiveness in the EU accession process" (2011-2014) supported by the Ministry of Education and Science of the Republic of Serbia.

## 6. REFERENCES

- [1] Kotler, F., Vong, V., Sonders, D., Armstrong, G. „Principi marketinga - četvrto izdanje”, Mate, 2007. (in serbian)
- [2] *Internet World Stats*. Retrieved April 22, 2012, from <http://www.internetworldstats.com/stats.htm>
- [3] *Semantic Wave Report: Industry Roadmap to Web 3.0 & Multibillion Dollar Market Opportunities*, Retrieved May 2012, from [http://www.euolibnet.eu/files/REPOSITORY/2009\\_0507165103\\_SemanticWaveReport2008.pdf](http://www.euolibnet.eu/files/REPOSITORY/2009_0507165103_SemanticWaveReport2008.pdf)
- [4] Ian Rowlands, David Nicholas, Peter Williams, Paul Huntington, Maggie Fieldhouse, Barrie Gunter, Richard Withey, Hamid R. Jamali, Tom Dobrowolski, Carol Tenopir “*Emerald Article: The Google generation: the information behaviour of the researcher of the future*”, *Aslib Proceedings*, Vol. 60 Iss: 4 pp. 290 – 310, 2008.
- [5] Don Tapscott “*Grown Up Digital How the Net Generation Is Changing Your World*” McGraw-Hill, 2009.
- [6] Davis, S., “*Future Perfect*,” Reading 1987.
- [7] Kaplan, A. M. and Haenlein, M. “*Toward a Parsimonious Definition of Traditional and Electronic Mass Customization*” *Journal of Product Innovation Management*, 2006.
- [8] Bardakci, A. and Whitelock, J. “*Mass-customisation in Marketing: the Consumer Perspective*” *Journal of Consumer Marketing*, 2003.
- [9] Krista Palmu, Jerry Lindholm and Petri Parvinen “*Collaborative Technology in Online Value Co-Creation: The Emergent Practice of Electronic Mass Customization*”, MCPC "Research and Innovation" Conference, 2011.
- [10] Anišić Z., Čosić I., Kuzmanović S. “*The Influence Of Customization And Requests For Prompt*

*Delivery On Gearmotor Design Concept*”, 6. Tools Conference, Kočovce, 11 April, 2004.

- [11] Deirdre K. Breakenridge “*Social Media and Public Relations: Eight New Practices for the PR Professional*”, FT Press, 2012.
- [12] Kaplan, A. M./Haenlein, M. “*Users of the world, unite! The challenges and opportunities of Social Media*, in: *Business Horizons*”, Vol. 53, No. 1, S. 59-68, 2010.
- [13] Frank T. Piller, Alexander Vossen, Christoph Ihl “*From Social Media to Social Product Development: The Impact of Social Media on Co-Creation of Innovation*”, *Die Unternehmung*, Vol. 65, No. 1, 2012.
- [14] Reed, Frank, “*Social Media for the Career Minded*”, Marketing Pilgrim, 2011.
- [15] Howe, J. “*The Rise of Crowdsourcing*”, *Wired Magazine* 14, 1-5. 2006.
- [16] Marion K. Poetz, Martin Schreier “*The Value of Crowdsourcing: Can Users Really Compete with Professionals in Generating New Product Ideas?*” *Journal of Product Innovation Management*, Volume 29, Issue 2, pages 245–256, 2012.
- [17] The Insight Exchange, Future of Crowdsourcing Summit, “*Five great examples of global companies embracing crowdsourcing*”, 2010.

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