

Consumers' Opinion about Mass Customization in Dhaka City

Mohammed Masum Iqbal*

Rokeya Parvin Jui**

Hemanta Bahadur Gurung***

Abstract: "Mass customization" is an important strategic approach where elements of the marketing mix are individualized for each customer. This article describes an empirical study in which 200 consumers who lived in Dhaka city were interviewed regarding their experiences with and opinion about mass customized products. The principal findings are that opinion about mass customization are gradually positive, nearly half of the respondents reported buying a personalized product, they were very satisfied with their purchase. It is found that most of the consumers of this type of product tend to be higher educated, younger, and higher than average income levels. Our findings suggest that there is a market for all kinds of customized products, at least in Dhaka city. Marketers should target downscale consumers with strategies designed to change negative opinion before sales are made.

1. Introduction

Customizing products is not new. For decades, consumers have been able to buy products made expressly for them, such as custom shirts and other apparel. Market segmentation has emerged a revolutionary key for successful marketing over the past decade. This strategic approach, popularly called "mass customization" (Pine, 1993) or "one-to-one marketing" (Peppers and Rogers, 1993), involves tailoring the product differently for each and every consumer while retaining the principles of mass production.

The widespread use of mass marketing has obscured the facts that for centuries consumer were served as individuals: The tailor custom-made the suit, the cobbler designed shoes for the individual, the cabinetmaker made furniture to order. Today, however new technologies are permitting many companies to return to customized marketing. Customized marketing has been called one-to-one marketing, individual marketing, and markets-of-one marketing. More-powerful computers, detailed databases, and flexible manufacturing, and immediate and interactive communication media such as e-mail, fax, and the internet - all have combined to foster "mass customization". A good deal of attention has already been paid to mass customization in the business press but there is an absence of empirical research describing how consumers react to it in Bangladesh.

* Assistant Professor, Faculty of Business and Economics, Daffodil International University, Dhaka.

** Assistant Professor, Department of Accounting, Jagannath University, Dhaka.

*** Senior Lecturer, Faculty of Business and Economics, Daffodil International University, Dhaka.

2. Mass Customization [MC] Defined

Mass customization is the process through which firms interact one-to-one with masses of customers to create customer-unique value by designing products and services tailor-made to individual needs (Kotler and Armstrong, 2003). Mass customization (MC) is attributable to two converging phenomena: the interactive flow of information made possible by the internet and flexibility in production made possible by robots and just-in-time inventory (Lampel and Mintzberg, 1996).

Consumer actions were usually associated with the “rich and famous”. What is new is the ability to offer customization for the masses – the ability to tailor a product to fit the desires of consumers one by one with mass production facility – and the spread of this idea to many types of businesses. The internet especially provides a medium to make one-to-one personalization practical for a variety of firms (Schibsted, 2001). According to Maskell (1994), “Agile manufacturing is the ability to use a flexible, diverse production environment to quickly create products that meet or exceed customer expectations for customization, variety, low cost and high quality”.

Although the concept of MC is unique and exciting, it has not been validated with consumers in Bangladesh. The marketing concept, which holds product development and production being after consumer wants and desires have been measured, has not been applied in this area. Consequently, the overall purpose of this study is to explore consumer adoption of MC and their attitudes toward it.

The following definition of mass customization has been developed, and it is used in the fieldwork described later in this article: “A mass customized product is a product which we do not buy from the shelves or racks in a store - rather we order it directly from a manufacturer, and the producers make it according to our exact requirements or specifications. Typically, it arrives at our home a few days after we order the product – it is customized for each individual consumer”.

3. Literature Review

Two management trends are behind the growth in customized marketing-the first is an increased emphasis on customer value and satisfaction, and the second comes from applying technology to marketing, including database methods of consumer research (Kotler and Armstrong, 2000, P.251).

One major potential advantage of MC traces to its ability to reduce inventory and working capital costs, allowing customized goods to be provided at the same of lower cost than mass-produced goods (Alexander, 1999). MC also provides marketers with an opportunity to build very strong relationships with customers, which may translate to more satisfaction, more transactions, and higher profits in the long run. A sustainable competitive advantage may be created via MC. According to Gilmore and Pine (1997) there are four different approaches to accomplish mass customization.

- a. **Collaborative customizers:** In this approach we have a dialog with individual consumers to discover their unique wants and needs, after which a customized product is created for them.
- b. **Adaptive customizers:** It offers one standard product that can be modified to some extent by its users.

c. **Cosmetic customizers:** A standard product is marketed differently to different customers.

d. **Transparent customizers:** Marketers may provide individual customers with unique products without letting them know that they have been customized for them.

Personalization can take many forms, from the customization of Web sites to the customization of products. Whatever the extent of it, it is an expensive and time-consuming activity.

Goldsmith (1999) describes the evolution of marketing strategy from the 4 Ps (associated with goods) to the 8 Ps (associated with service). He proposes that in the next evolutionary step another strategic p be added, personalization, which brings the marketing mix into the twenty-first century by incorporating database marketing, relationship marketing, and mass customization (Pitta, 1998). Marketing managers face strategic choices including the extent to which they will personalize their offerings. Personalization is a more comprehensive concept than MC as it involves tailoring any or all aspects of the marketing strategy for each consumer. These strategic decisions could involve promotional activities including advertising (Nuzum, 2002), distribution (Lardner, 1999), pricing (Cortese, 1998; Stellin, 2000) as well as the product (Rich, 2001).

Huffman and Kahn (1998) experimentally studied personalization and customer satisfaction. They found that when customers were asked to choose items from a wide assortment, both the way the information was presented and the type of customer input to the information gathering process influenced customer satisfaction. Too much variation and complexity of choice decreased the customer satisfaction. By simplifying the choice process, they were able to increase satisfaction.

4. Objectives of the Study

The study has been carried out with the following objectives:

1. To explain the idea of mass customization [MC].
2. To assess the extent to which MC would be suitable to a variety of consumer products.
3. To measure the opinions of consumers about mass customization.

5. Research Methodology

The study has been conducted by using both secondary and primary data. Secondary data was collected from published books and articles. Primary data was collected through questionnaire. We prepared our research questions focusing consumer perspectives on MC. Do consumers understand what is being proposed? What do they think of it? Do they opt for MC products when offered? What product classes do consumers find customization desirable? These are some of the questions that motivate our study. Personal interviews were conducted at various locations in Dhaka city. The locations provided a sample of adult consumers with geographic dispersion. Participants residing in a variety of locations gave us a sample with greater geographic dispersion in an effort to provide a realistic sample of consumers.

Ten students of marketing of Daffodil International University as interviewers collected the information in a one-on-one interview with shoppers in a quota sampling routine. First, subjects were told about the concept of mass customization and then were asked a series of questions about it (perceived advantages, disadvantages, and experiences with such products). Second, respondents

were asked to think about a variety of products and were also asked how appropriate they thought these would be suitable for MC (utilizing a five-point scale from “very inappropriate” to “very appropriate”). Cross tabulations have been performed to measure the relationship between demographic characteristics and mass customization.

6. Findings of the Study

The purpose of the study was to explore consumers' opinions and behaviors regarding MC products. The sample was quite diverse demographically. We surveyed 200 consumers and asked them questions concerning the opinions and behaviors with regard

Table 1: How appropriate is mass customization

Products	N	Mean	Std. Deviation
Apartments	200	4.35	.727
Dressy clothes	200	4.14	.831
Household furniture	200	3.99	.842
Life insurance	200	3.93	1.035
Computers	200	3.90	.962
Exercise equipment	200	3.70	.956
Software	200	3.63	.989
Cars	200	3.42	.817
Cosmetics	200	3.00	.992
Casual clothes	200	2.93	1.171
Kitchen appliance	200	2.84	1.058
Valid N (listwise)	200		

Note: Responses were: 1= very inappropriate, 2= somewhat inappropriate, 3= neutral, 4=somewhat appropriate, 5= very appropriate

to mass customized products. The results provide important information about these consumer reactions. The respondents speculated that MC would be appropriate for a variety of consumer goods and services. Almost half of our surveyed consumers reported that they had purchased at least one personalized or customized product. Overall they reported high levels of satisfaction with these customized purchases. The interview presented the respondents with a list of 11 product categories, which we felt were likely candidates for MC, based on published descriptions of this strategy. For each category, the respondents were asked to indicate, “How appropriate you think mass customization would be for each one” using a scale where 1 = very inappropriate, 2 = somewhat inappropriate, 3 = neutral, 4 = somewhat appropriate, and 5 = very appropriate. The summary results appear in **Table-1**. All these responses may reflect “desires” as well as

appropriateness evaluations, they do indicate in the concept of MC. While all product categories were seen as “appropriate” or “very appropriate”, MC was judged most appropriate for apartments, dressy clothes, household furniture and life insurance. The distributions of these responses show both how variable these judgments were and that overall the respondents felt that MC was applicable to a variety of products.

Table 2: Demographics and the Purchase of Customized Products.

Demographics		n	Status of Purchase				Chi-Square [df]	P value
			Did Purchase		Didn't Purchase			
			N	%	n	%		
Sex	Men	125	61	48.8	64	51.2	.085(1)	.770
	Women	75	35	46.7	40	53.3		
Age	20-45	128	64	50	64	50	.570(1)	.450
	45+	72	32	44.4	40	55.6		
Education	Secondary	17	4	23.5	13	76.5	13.015(3)	.005
	H. Secondary	43	15	34.9	28	65.1		
	Graduate	84	41	48.8	43	51.2		
Occupation	P. Graduate	56	36	64.3	20	35.7	7.665 (4)	.105
	Students	32	15	46.9	17	53.1		
	Executives	74	37	50	37	50		
	Professionals	34	20	58.8	14	41.2		
	Business person	35	18	51.4	17	48.6		
Income	Housewives	25	6	24.0	19	76.0	24.640 (3)	.000
	10,000 and below	42	10	23.8	32	76.2		
	10,000—20,000	77	35	45.5	42	54.5		
	20,000—30,000	43	21	48.8	22	51.2		
	30,000 & above	38	30	78.9	8	21.1		

Table 2 shows that, as planned, the sample is divided between men and women and between ‘older’ versus ‘younger’ consumers. Cross tabulations of the demographic variables show that sex and age are unrelated, as are sex and occupation. One question asked “Have you actually purchased a customized product in the past 12 months?” The proportion of MC buyers are surprising; 96 (47.75 percent) indicated that they had made such a purchase, suggesting that MC strategies are spreading as more and more companies make customization a part of their marketing strategies.

To assess the relationships between demographic characteristics and whether or not a respondent had purchased a customized product, cross tabulations were performed [Table-2]. These analysis show that sex, age, and occupational status are unrelated to the purchase of a customized product. Level of education and income are positively associated with the purchase of a customized product.

7. Managerial Implications

These findings suggest that there is a market for all kinds of customized products, at least in Dhaka city. Most consumers felt they were a good idea, and these positive attitudes were related to reported purchases. Whether existing MC products are targeted toward upper income/upscale consumers, ignoring downscale consumers, or whether higher levels of education and income lead consumers to buy MC products cannot be determined from these data; but most of the prospects appear to come from the higher educational and income levels.

Both men and women are equally likely to be good prospects for mass customization, but younger consumers of both sexes so far seem to have more favorable opinions. Consequently, marketers may have an easier time selling mass customized goods to younger, more well educated, and more affluent consumers. In addition, we may need to target older and downscale consumers with strategies designed to change negative opinion before sales can be made. One specific hurdle lies in the perception that mass customized products cost more.

8. Limitations of the Study

The main limitation of this study is its exploratory goals. Future studies should be focused on hypothesis testing so as to contribute to consumer theory. The sample was relatively large and consisted of only adult consumers, it was not randomly selected, so our estimates cannot be generalized with confidence to a larger population. As customization spreads globally, studies of non-Bangladeshi consumers will broaden our knowledge of this topic. Further studies using scientifically selected random samples can satisfy this shortcoming. Finally, we used our own measures to assess only a few aspects of mass customization.

9. Conclusion

The study attempted to initiate empirical research into some aspects of mass customization by assessing consumer reactions and perceptions. The results suggest that, overall, this will prove to be a successful strategy for marketers to pursue as many consumers seem to welcome and respond positively to mass customized products. Customization improves consumer satisfaction, which it appears to do, and then it will lead to successful marketing and improved sales and profits as well.

References

1. Agrawal, M, Kumaresh, T.V. and Mercer, G. (2001). The false promise of mass customization *The Mckinsey Quarterly*, No.3, pp.62-71.
2. Alexander, S. (1999). Business Quick Study: Mass Customization, *Computer World*, 6 September.
3. Cortese, A.E (1998). Good-bye to fixed pricing, *Business Week*, 4 May, pp.71-84.
4. Gilmore, J.H. and Pine, J.B (1997). The four faces of mass customization, *Harverd Business Review*, Vol. 75 No. 1, pp. 91-101.

5. Goldsmith, R.E. (1999). The personalized marketplace: beyond the 4Ps, *Marketing Intelligence & Planning*, Vol.17. No 4, pp. 178-85.
6. Huffman, C. and Kahn, B.E. (1998). Variety for sale: mass customization of mass confusion", *Journal of Retailing*, Vol. 74 No.4, pp. 491-513.
7. Kotler, P. and Armstrong, G. (2000). *Principles of Marketing*, Prentice–Hall, Upper Saddle River, NJ.
8. Kotler, P. and Armstrong, G. (2003). *Principles of Marketing*, Prentice–Hall.
9. Lampel, J. and Mintzberg, H. (1996). Customizing customization *Sloan Management Review* Vol.38 No.1, pp.21-30.
10. Lardner, J. (1999). Your every command, *US News & World Report*, 5 July, pp. 44-6.
11. Maskell, B.H. (1994), *Software and the Agile Manufacturer: Customer Systems and World-Class Manufacturing*, Productivity Press Inc, Portland, OR.
12. Nuzum, C. (2002). Advertisers want to get personal and tailor TV ads for individuals, *Wall Street Journal*, 5 June, pp.B.4.E.
13. Peppers, D. and Rogers, M (1993). *The One-to-One Future*, Double Day, New York, NY.
14. Pine, J.B. (1993). *Mass Customization*, Harvard Business School Press, Boston, MA.
15. Pitta, D.A. (1998). Marketing one to one and its dependence on knowledge discovery in databases, *Journal of Consumer Marketing*, Vol.15 No.5, pp.468-80.
16. Schibsted, E. (2001). What your breakfast reveals about you, *Business 2.0*, 12 March, p. 80.
17. Stellin, S. (2000). Net companies learn to personalize, *New York Times*, 28 August.

