

APS 1028H
Operation and Production
Management

Team Project

**Mass Customization Operations:
Applications in Health, Beauty and
Fashion**

Executive Summary

In the era of the ‘experience economy,’ customers do not satisfy with generic products, but rather demand products with more uniqueness and more personalization. This phenomenon has driven companies across industries to implement mass customization in order to gain a competitive advantage while meeting heightened customer expectations. Mass customization at its core is a business strategy and process aiming to fulfill customer needs by providing customized products with near mass production efficiency and at prices that provide superior value.

Though customization has been practiced by companies in various industries since the 1990s, it has remained a challenging task to adopt such strategy successfully. This is in part because of the exceeding number of companies currently attempting to implement mass customization. With this rise in companies trying to reap the benefits of such strategy comes fierce competition with real world complexities in managing operations and executing strategy effectively. It has been identified from the present market analysis that mass customization is indeed being heavily pursued in the fashion, beauty and health and wellness industries. As a result, this report has taken the unique approach of investigating real-world companies in these three sectors by conducting case studies in order to determine whether and how these companies can effectively implement mass customization.

Through examining the business strategies, manufacturing processes, and other relevant components pertaining to accompany operations, the success factors of deploying mass customization are identified. These are further classified into external factors (i.e. market segmentation, customer experience and buyer-seller relationship) and internal factors (i.e. IT, manufacturing capability, product design and quality). It is concluded that the major paradigm shift in the manufacturing process within these industries is heavily related to four competitive priorities: process flexibility, product quality, cost and lead times.

Although there is some common overlap between the challenges faced by the companies under review, it appears that many of the particular challenges tend to diverge based on their corresponding industry. For example, it was found that companies in the health and wellness sector have greater difficulty in dealing with regulations and supply chain management when implementing mass customization. Whereas companies in the beauty sector appear to be challenged by making customized products and services both more affordable and available to their diverse customer base. The companies studied in the fashion industry face their own unique challenges in that they are more challenged by reducing the cognitive overload on their customers. This is often manifested in providing customers with too much choice which can lead to analysis paralysis and thereby have a negative impact on purchase conversions. In an interesting manner, it was also found that some fashion companies such as the luxury brands are not well suited for mass scale customization as this can lead to their brand dilution.

The analysis and case studies can provide the reader with valuable information regarding the critical success factors, challenges and opportunities that need to be considered in each industry. As a standalone report this information can provide useful insights to any C-level executive, operational manager, consultant or thought leader that is currently thinking about implementing a mass customization strategy. Yet this report aims to go beyond providing vital knowledge to the reader and actually lays down actionable steps in implementing mass customization. Based on the findings, two recommendations are proposed. First, a framework along with four competitive priorities is proposed to help companies in various industries determine the feasibility and success potential in executing mass customization. Second, an array of questions in a checklist format is provided which intends to aid decision makers in building up their operational management strategies. It is expected that these recommendations will offer an insightful guide on mass customization and promote more opportunities for companies to implement it in order to thrive in the current competitive global marketplace.