Online Customization

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MBA Fellows Project

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Agenda

What is Online Customization?

Case for Online Customization
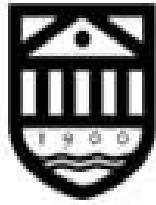
Implementation Considerations

Case Studies

Online customization = mass customization via the internet

Online Customization

Company's Perspective

- Online customization allows manufacturers to forgo bills of materials and mass production and produce only what their customer wants, eliminating finished goods inventories in the process.

Consumer's Perspective

- Online customization provides superior customer value by producing goods and delivering services that meet **individual** customer needs with near mass production efficiency.

Online customization sounds good…why didn't it work?

"The promise of online customization has been a near-complete bust. Many people don't really want it and companies have a hard time doing it."
- Wharton Professor Peter S. Fader, 2002

- I posit technology and customers' shopping behaviors were the main two issues impeding the advancement of online customization.

Technology

Customers' Shopping Behaviors

Issues

- Browser war between IE and Netscape
- Lack of 3rd party browser applications to provide "enhance" experience to consumers
- Limited ability to "try and build" product before purchase

- Small percentage of US households shopping online
- Shoppers are not trusting of online shopping systems
- Shoppers are not satisfied with their online shopping experience

The evolution of information technology makes online customization a reality.

Since technology is not longer a hurdle, we should study online customization because customers want it and companies can reap many benefits

"Forty-seven percent of online consumers want to buy custom products online."
- Forrester Research, 2002

We should care about Online Customization because:

1. Initial technological hurdles are cleared

2. Customers want it

3. Companies can reap many benefits

Customers want online customization and are willing pay for it

"It is the customer who determines what a business is."
- Peter F. Druncker

Gadget guys

- Gadget guys account for 61% of the 16% of online consumers who are interested in buying customized consumer electronics online.

Fashion-forward females

- Account for at least 10% of online consumers.
- Want to customize products ranging from apparel to jewelry to footwear online.
- Spend at least 25% more than the avg. online household in each category they are interested in customizing online.
- Younger, wealthier, and more likely to buy online than the average online consumer.

Children

- When asked, "Would you like to be able to purchase your own custom model in the LEGO Factory gallery?" 47% responded "Yes they would love to buy it!" and 39% responded, "Maybe, it depends on the price."

	All online consumers	Paper greeting cards	Consumer electronics	Apparel
Percent interested in customizing each product online		17%	16%	15%
Demographics				
Average age	44	41	41	41
Average household income (US$)	$61,900	$63,600	$66,300	$66,700
Female	50%	65%	39%	66%
Have college degree	41%	45%	51%	44%
Children in household	46%	53%	56%	55%
Product spending index†	1.00	N/A†	1.72	1.38
Technology profile				
Web buyers	49%	59%	56%	58%
eCommerce tenure (years)*	3.0	3.1	3.4	3.1
Online spending (past three months)*	$426	$478	$595	$462

	Jewelry	Linens and home décor	Footwear	Apparel accessories
Percent interested in customizing each product online	13%	12%	11%	10%
Demographics				
Average age	40	40	40	39
Average household income (US$)	$66,500	$66,900	$68,300	$68,600
Female	65%	74%	64%	68%
Have college degree	40%	42%	45%	40%
Children in household	57%	59%	57%	55%
Product spending index†	1.26	1.25	1.38	1.55
Technology profile				
Web buyers	57%	61%	56%	63%
eCommerce tenure (years)*	3.2	3.0	3.1	3.2
Online spending (past three months)*	$532	$510	$526	$506

Base: North American online consumers

*Base: Web buyers
†We did not ask consumers how much they spent on greeting cards.
†This index represents the average HH category spend (US$) in the past month for each category's shoppers divided by the average HH category spend in the past month for all US HHs

Many companies have realized tremendous value from online customization. The benefits include…

"All people want to be unique. We receive a 200% markup for our customized sneakers."
- Blak, CEO Blak-out.com

- ***Increase average unit selling price by 50%.***

Company/Product	% increase	Mass Customized Price	Mass Production Price
Timbuk2/sports bags	48.4%	$95	$64
Lands' End/chinos	54.3%	$54	$35
NikeiD/ sports bag	63.3%	$98	$60
Target/Jeans	~50%	$35	$23
Mattel/Barbie	~50%	$40	$20

Source: "A Mass Market of One," Business Week, 12/2/02. "Made Especially for You, in Industrial Quantities," New York Times Personal Business, 3/11/01.

- ***Eliminate finished goods inventory risk, while ensuring availability.***
  "Making each product one at a time could greatly reduce returns, overstocks and the costs associated with warehousing finished goods."
  - Ron James, Lands' End Internet project manager

Many companies have realized tremendous value from online customization. The benefits include…

- ***Capture more of the demand curve.***
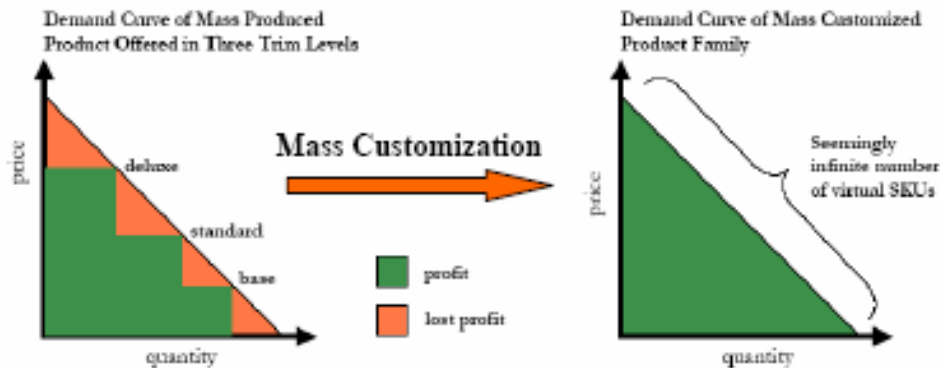
- ***Enable sophisticated data mining that will allow transition from mass marketing to relationship marketing.***

  By knowing what your customers want, you can provide specific products to fill their needs. "You're able to really satisfy customers in a new way. They think they are getting something that is completely unique, even if it really is not. That is a huge customer- retention tool." - Jim Williamson, senior research analyst at IDC

Since 1999, many companies have joined NikeiD by successfully providing customized products

Apparel	LANDS'END	JCPenney	POLO.COM RALPH LAUREN	⊙ TARGET	AMERICAN EAGLE OUTFITTERS
Accessories	NIKE iD	reflect	TIMBUK2	GAP	L.L.Bean	eBags
Footwear		VANS	Timberland Make it better.™	FOOTJOY
Electronics		DELL™	Apple	ALIENWARE
Home		LENOX®	smith+noble®	EasyClosets.com

- NikeiD was formed in 1999 and is one of Nike's fastest growing business units.
- Custom chinos accounted for 40% of Lands' End's overall chino category within the first year of launch.
- This success has prompted other such as Target, JC Penney, Gap, L.L. Bean, and Vans to begin offering custom products in 2004.
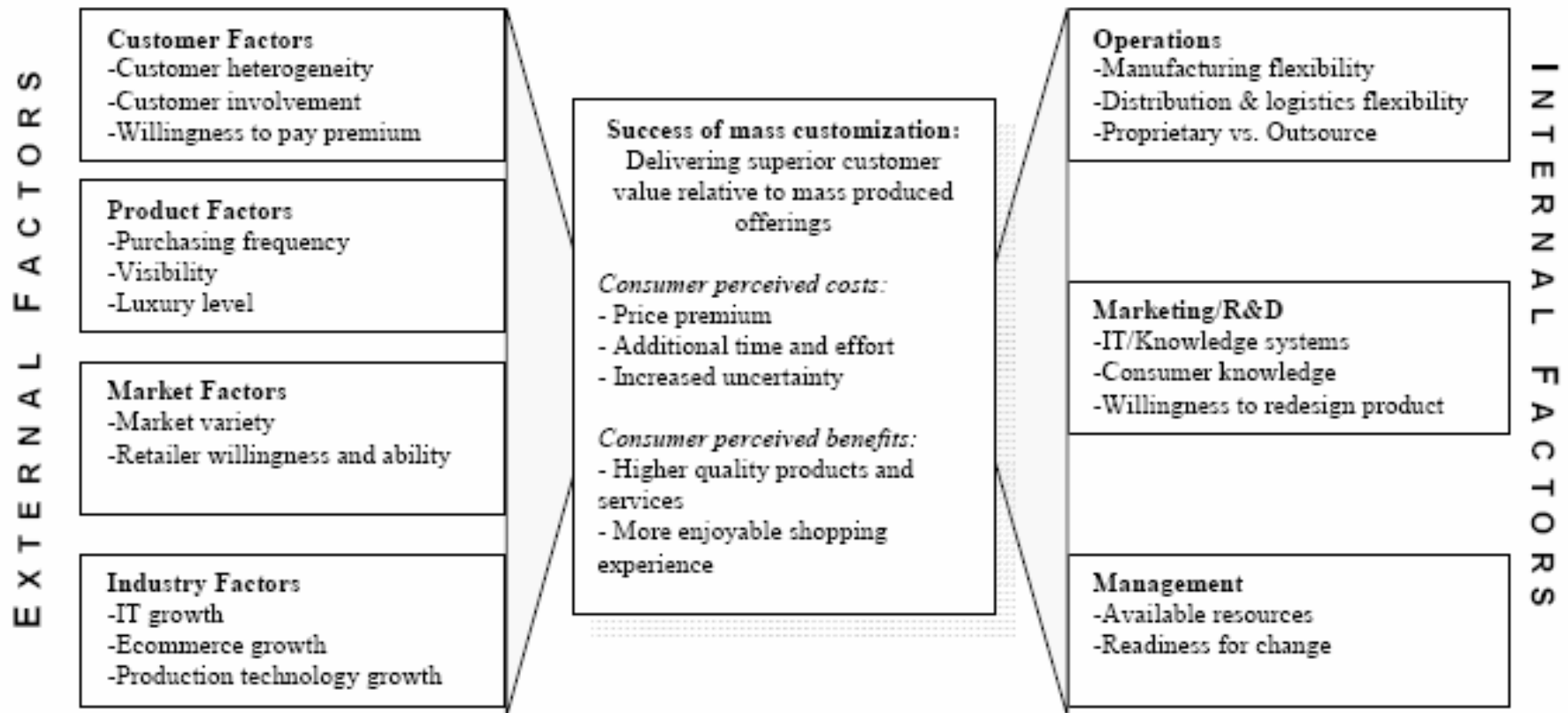
It makes sense to customize when…

- The consumer cannot assemble the desired product from current offerings.
- There are many different permutations for a product. It will be impossible for a company to offer all of them in a retail setting.
- Your consumers want choices. Customizing products will put more demand on the consumer to take part of process.
- Company culture will allow it. If designers want their products to go on the market untouched then customization may not be a good cultural fit.
- An operations strategy can be developed. Base the decision to outsource customization capabilities or develop proprietary systems on your companies' core competencies.

The key components of a customization strategy

■ When thinking about the key components of an online customization strategy, consider your current capabilities, external factors, and how will online customization help or hurt the company's bottom line.

External Factors

Customer Factors
- Customer heterogeneity
- Customer involvement
- Willingness to pay premium

Product Factors
- Purchasing frequency
- Visibility
- Luxury level

Market Factors
- Market variety
- Retailer willingness and ability

Industry Factors
- IT growth
- Ecommerce growth
- Production technology growth

Success of mass customization: Delivering superior customer value relative to mass produced offerings

Consumer perceived costs:
- Price premium
- Additional time and effort
- Increased uncertainty

Consumer perceived benefits:
- Higher quality products and services
- More enjoyable shopping experience

Internal Factors

Operations
- Manufacturing flexibility
- Distribution & logistics flexibility
- Proprietary vs. Outsource

Marketing/R&D
- IT/Knowledge systems
- Consumer knowledge
- Willingness to redesign product

Management
- Available resources
- Readiness for change

While there is great promise for online customization, there are still a few inefficiencies with the concept

Item sourcing capabilities

- By implementing a online customization system, you will have to deal with the unpredictability of the order flow. When you introduce smaller volumes to the sourcing companies, they may be less interested to work with and may charge a higher rate.

Wages vs. logistics tradeoff

- Due to the prohibitive costs of domestic labor, companies tend to work with international low cost providers. While this may offer wage benefits, it can create increase in logistic costs and order time.

Case Study - Barbie.com: Not all products may be good candidates for customization

"It was clear to us that the activity was extremely compelling but the item wasn't,"
- Christina DeRosa, VP Mattel responsible for the Barbie.com

- In 1999, launch the My Design feature on www.barbie.com.
- My Design allowed visitors pick the hair color and other characteristics of dolls.
- Only 0.2 percent of the visitors who used the feature then bought dolls.
- Reasons for lack of purchase:
  - Most of the users were too young to have credit cards
  - Mattel already offers hundreds of doll variations in stores, often at half the $40 price of a customized model
  - The cost could not be reduced because each customized doll was made by hand
- Currently visitors can still mix and match hairstyles, clothing, and eye color, but just for fun.

Case Study - NikeID.com: Pacesetter who made gradual progress with online customization

NIKEiD.

"NikeiD brings us back to our roots, when we designed and sold shoes one-by-one out of the trunk of my old Plymouth"
- Phil Knight, CEO Nike

- Started in 1999, Nike took the concept of selling its sneakers online to the next level through its NikeiD program.

- NikeId allowed customers to design and order sneakers online by using online customization software.

- The software takes consumers through a systematic process where they can choose the size and width of the shoes, pick the colors, and put their own 8- character personal ID on the product. Consumers can also view a model before purchasing the shoe.

- Limited initial orders to 400 a day due to factory constraints. This limit was reached several times during the first month .

- Early reviews, were full of complaints due to the limited selection and availability. So less than a year after its debut, Nike added additional shoe models and more customization options while increasing site capacity.

- Since the time of NikeiD's inception, Nike has incorporated apparel and accessories into NikeiD.

Case Study - Reflect.com: Using data to understand customer needs

reflect

- Reflect.com, a company partly owned by Procter & Gamble, was introduced in January 2000.
- More than a million products have been customized through the site.
- Shoppers can order beauty products — including mascara, shampoo, and fragrances — blended to meet specific tastes based on answers to questions about traits and preferences.
- By creating their own cosmetics, shoppers are formulating dermatological needs, evaluating new scents, bundling products, choosing packages, and developing new products for P&G.
- For P&G, Reflect.com is reported to be one of the most efficient market research tools and the data gathered has allowed Reflect.com to gain a better understanding of the needs of their customers.

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