Consumers and Mass-customisation

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Is the death of ready-to-wear on the cards?

At a time when the fashion system fills the consumer landscape with products and images aimed at provoking desire in a very broad public, is there any sense in dreaming of a "unique" garment by choosing different options proposed by the manufacturer, as if one were buying a computer or a car? European consumers were, for the most part, born in the ready-to-wear age, as such, can they aspire to getting out of this stage to force fashion designers to totally rethink the manufacturing process?

The development of ready-to-wear cannot be disassociated from the "Trente Glorieuses" (the years of post-war prosperity), and more to the point, the newly found access for the middle classes to quality mass-produced consumer products. The appearance of big distribution in out-of-town and edge-of-town sites at the end of the sixties enabled the economic shift of mass produced goods and, at the start of the eighties, the sales of hyper-markets and supermarkets that specialise in low-cost items represented a quarter of the French garment market. Without getting back to Maslow's hierarchy of needs, the physiological needs and the need to belong were satisfied by the uniformity of the range of products on offer. The development of specialised chains from the middle of the eighties answered needs in terms of self-esteem by the segmentation of the market: the "everything under the one roof" gave way to specialisation.

Revived at the start of the new millennium by the striking development of a few emblematic stores weaving a world-wide web, the concept of specialised chain today retains all of its strength, reflected in a market share of almost 30% in Europe and progression levels of over one point per year[1]. The business models of Zara and H&M that rely on rapid renewal of collections and short series seem indeed to be the most adapted today to the "air du temps" and to constantly revive desire for fashion in a clothes market that is saturated and undergoing harsh budget restrictions. At the top of the range, international luxury or sports brands are remarkably effective in creating a demand for the same iconic objects (a bag or a pair of trainers), from North to South. This attraction reflects "*the formidable social diffusion of democratic-individualist aspirations for material wealth and good living*"[2]. But does this confluence of desire not merely generate a need for individual affirmation as a reaction? After the democratisation of the offer and mass-distribution, then hyper-segmentation and limited editions, the customisation of the relationship with the end-user client and the concept of "solution"[3] has strongly developed in certain sectors (automobile, DIY, services…) but has only entered fashion to a limited extent. The question, that was already posed in the eighties by a few engineers, Anglo-Saxon for the most part, of production on demand is coming back in force with the development of new technologies and direct Internet access for all consumers. Rather than selling off remaining stock at a reduced price, why not manufacture a product to order that is adapted to the morphology and taste of each person with a choice of sizes and options? History has shown us that innovations that split with what has gone before happen due to the encounter of technological innovation and societal change (the automobile and mobility, elasthane and comfort…): is the digital economy the sign we are moving toward production on demand? Finally, there is the direct link, that can be recreated between manufacturer and consumer through the concept of customisation, while globalisation has parted them. With Asian goods taking over 50% of the European market in terms of value, the clothing sector leads the charge for a number of other industries and any sign, however slight, of the reversal of the trend towards supplies from far away would obviously be examined carefully by the actors from other sectors. All of these questions created the background for the research carried out by the IFM for the competitiveness pole Up-Tex on the theme of mass customisation. Let's begin with a presentation of the concept retained by the study:

mass-customisation =
co-conception (involvement of the consumer) +
post-production +
complex organisation of the different stages
between the order and delivery.

In this article we will examine the motivations and interest of fashion consumers for mass-customisation that we will compare with the current and predictable proposals.

The digital economy is only in its infancy

The digital economy has already changed our lives on a profound level but this revolution, that happened relatively quietly thanks to its rapid and fun-based appropriation by most westerners, has definitely not finished having repercussions in the economic world. Let's take, for example, the development of digital photography that has brought down the traditional giant Kodak and all of the professions linked to photographic development and printing. In a few years, the accessibility in terms of price linked to the progress in miniaturisation and the globalisation of markets has enabled consumers to appropriate the technology and to use editing and special effects software. Some have thus found a manner in which to express their artistic talent and share their "work" with the broad community of Internet users, even though photography purists raise their eyes to heaven. Others, the same people perhaps, got ahead of the media by capturing the first few minutes of the 2005 tsunami or the London bombings, as cameras and phone cameras enable people to broadcast their images almost instantaneously on the Internet. The blogging phenomenon must be given a mention here, despite its widespread media coverage: beyond the verbal diarrhoea of certain uninteresting ego-trippers, many blogs project the personal investment of their authors and their wish to share well-thought out experiences and expertise. Along with text and photos, videos and personal musical creations are also exchanged[4]. This is a gear-change introduced by web 2.0 technology that places the user and his or her relations with others at the heart of the Internet. According to certain estimations[5], the "blogosphere" in March 2006 included 150 million blogs in the world with 40 million of those active. And France is even the world champion in terms of blogs per Internet user (0.35), confirming the French attraction for a form of "collective individualism". As Jean-Claude Kaufman shows us, self-expression, as part of individualist modernity, does not produce fruit unless it is accompanied with a feeling of belonging to a community: "*The individual, as of now, at the centre of the definition of his or her meaning of life, has problems supplying significant content when he or she is not part of a community. The broadening of the perimeter of identification enables him paradoxically to feel himself*"[6]. The first industry to be totally upset by web 2.0 is the media: journalists and advertising execs have, in fact, trained us to express ourselves in small numbers aimed at the most people possible, while web 2.0 organises a gigantic conversation, what the newspaper *Libération* refers to as a "revolution of amateurs".

How can the world of fashion remain enclosed in its ivory tower and ignore the mutations in progress while its designers breathe in the "air du temps" every day? Can we imagine that the bloggers or image-makers that exchange DIY advice and personal recipes, don't want to interact with the clothing industry? In the course of research on mass customisation, the IFM carried out an in-depth study in January 2006 among a representative sample of 1 200 French fashion consumers: 47% women and 37% of men are in agreement with the proposal "*Sometimes I feel like personally decorating a garment*".

Fashion does not escape the debate on the society of hyper-consumption

On another level, fashion risks, in the short or long term, to "trip itself up" in a frantic renewal rhythm: thus in France, spending given over to clothes has progressed very slowly between 2001 and 2006 while quantities went up by over 20%. A recent study carried out by the IFM[7] reveals the relevance of the H&M and Zara models with their short, renewable series, with the perspective evoked by the actors in European fashion of passing from 4.7 collections per year to an average of 6.8 in 2010. So, the fashion sector thus constitutes a model for other industries in its capacity to provoke desire, newness and happiness. But it can not ignore the debate that is ongoing, on a global level, on the subject of ethics and environmental protection and, in a context where social, political and religious rules are being diluted, consumption could become a means through which one affirms values of identity.

Under real scrutiny from sociologists[8] the trend for alter-consumers is in this vein and it is interesting to examine the contours for our mass-customisation study: with a part of the population between 15% and 30% according to surveys, the fans of this trend are quite wealthy, urban, active and mature (aged 35-64). The plethora of the standardised offer stimulates their desire to possess objects while they reject precisely this too rapid renewal and the production of "fake" new products. While they are against the overpowering presence of brands and advertising in their daily lives, they are not against brands per se, as long as they are in line with their own values. According to Eric Fouquier: "*they are not revolutionary, they are optimists, utopians, activists. They are not against… but for something else*"[9].

In addition they are consumers of quality products, aware of their manufacturing conditions, and are wary of middle men who are seen to grab the profits from the producers. A major part of French opinion seems to share this view. Thus, in the IFM survey mentioned above, 65% of those interviewed are more or less or absolutely in agreement with the opinion "*I am prepared to pay more for a garment manufactured in France*" and 64% with "*I would prefer to buy a garment straight from the manufacturer*". The percentage of individuals that are agree totally with one of these proposals is almost 30% which brings us close to the estimates of the weight of the alter-consumers in French society. We should mention at this juncture, that mass customisation and ethical consumerism have no visible links in theory, but that the two notions do fulfil the expectations of a population that is trying to escape from mass consumerism. In our survey, 51% of the interviewees interested in mass customisation have "*already personally bought fair trade products*".

Standard sizes fit by default

Another form of rejection of the mass-produced range is linked to an issue that is a recurrent one in the textile sector but one that is less and less accepted by the final clients, that of the sizes proposed in shops and the way they are totally unsuitable for the diversity of morphologies that exist. In the same January 2006 survey, 39% of women and 24% of men are of the opinion: "*I have problems finding things to fit me in shops*". As part of a European programme carried out for France by the Ifth (Institut français du textile-habillement)[10], between 2003 and 2005, 12 000 French people had their measurements taken in a 3D cabin that measures 32 points. The results are striking: compared with 1970, supposed to be reference for sizes, French women are taller by 2.5 cms and heavier by 2 kilos, moving from size 38 to size 40. On the other hand, French men have grown over 5 cms and are heavier by 5 kilos… Beyond these averages, this campaign has enabled to highlight different types of morphologies within the same size as well as a significant change in age conformation. By taking the pulse of their clientele, brands have more or less adapted their size charts over time, which means that there is a huge disparity among the basic models used to establish sizes. Consumers make do, have garments altered and/or choose their size by default when trying things on, which often results in an "average fit".

The situation gets complicated when, apart from age, one must take into account the country and ethnic origin. The Americans have developed a sharp ethnic marketing method relying on observing taste differences in terms of style, colour and conformation between Afro-Americans, Hispanics, Asians, or Wasps. The development of ethnic marketing seems to be slightly embarrassing in Europe and especially in France, where there is a strong attachment to a multicultural integrational approach and individual statistics do not take ethnic origin into account.

Another aspect of the difficulty of adapting size standards to diverse morphologies is linked to a problem that is endemic in Western society, weight: in France there are currently 14 million people who are considered to be overweight to which are added the 5 million obese. As they often find the clothes made for bigger sizes to be unattractive or out of their price range, the consumers concerned are thus pushed outside of the "fashion system".

Finally, we cannot touch on these morphological questions without mentioning the question of the ageing European and Japanese populations and, in the longer term, the Chinese. In societies that are confronted with this ageing and the quest for eternal youth, clothes bring comfort and well-being to older consumers and make them more attractive to others. Why should fashion remain separate from an ageing population that today make up a significant part of the market for cosmetics after over a decade of investment in research and development?

Today, standard sizes that fit individual morphologies badly are being felt in all age-groups, the projective group that we carried out during the Up-Tex study reveals notably the silent suffering of very small or very big young women. With pressure from big name brands (Nike, Décathlon, H&M, C&A), Europe carried out research that is about to come to an end on the normalisation of sizes around three simple and clearly communicated size points: chest size, waist size and height[11]. This approach relies on real measurements, appears more universal than current sizes and will probably facilitate mail order, as proposal charts (chest, waist) for the same height can be broadened with a centralised stock. But the criss-crossing of morphologies, styles and colours will remain limited to avoid over-stocking perishable fashion products that concern only a small category of individuals.

Imagine another world…

The above observations show the limits that we have reached today in the way the ready-to-wear market works, with a certain upturn in the renewal rhythms that doesn't prevent the risk of banalisation, it even reinforces it, while consumers aspire to garments where their personal and/or creative preferences are taken into account, as is already the case for other products or services. In parallel, world-wide overproduction and the multiplication of series makes for unsold stock and loss of profit margins. In France, the weight of promotions in garment sales is almost at 30% for 2006, in other words, a hike of 2 points in one year.

Let us imagine a world where the consumers make their clothing choices from among different propositions of fabric, cut and detail (collar, buttons, wristbands, belt…). They would give their measurements (or they would already be stocked on a personal card) and could even, the cherry on the cake, add a personal signature. The manufacturer would then put the garment into production and deliver it a few days later. The consumer thus becomes the order giver: utopia or the emergence of a ready-to-produce garment? The basics of marketing are a little thrown into disarray with this perspective: usually, market surveys and in-depth data analysis of sale results ends up with products being manufactured that are considered to be the most desirable. The shop displays and advertising campaigns contribute to sales results after the fact. In the mass-customisation system, everything is inverted as the consumer buys the product before it is manufactured and marketing and advertising will be in charge of working with an offer with options and making it visible and attractive: this perspective does not announce the end of marketing, far from it, but it is causing a sea change towards an economy that is piloted, in a controlled way, by the user/client.

Another question, even more serious, is about design; if the clients decide the look and details of their garments, are we not taking the risk of killing creativity and innovation and producing a sea of similar, even unattractive, clothes, that don't even gain the admiration of their peers for the designers/buyers? If this were to be the case, is it better not to launch ourselves into this adventure, the failures of which would be so obvious in our avid society, on the one hand, of aesthetic experience and on the other markers that produce identities within communities that share the same taste. The success of a mass-customisation offer relies, as a result, on the strength of the proposals put out by the designers sensitive to the "*air du temps*" with a varied, seasonal choice of options. The challenge will consist of placing the cursor between a sufficiently broad product range to answer the expectations among consumers and seasonal, fashion-based collections. Another stress-producing risk is that of disappointment. Certain consumers that we have interviewed are conscious of this problem, especially men: "*It's a risk, all the same, to design your own clothes, it could be nice on paper but then you realise it doesn't suit you once you get the garment*" (man, aged 25). Advice in silhouette and combining options would be essential as a result, especially for a client's first order. The same goes for the virtual but faithful rendering of the result before confirming the order, whether this is done over the Internet or in a physical sales outlet.

As we just mentioned, the fact that the starting point for production is in the hands of the consumer does not belittle the role of the design team. They can even benefit from a broader field of expression in order to develop innovative, insolent proposals, the craziness that is today covered up by management who are focussed on sales and stock costs.

A good fit and personal sensibility to fashion constitute the two axes of structure of motivations for a mass customisation offer

On the basis of 1 200 interviews carried out in January 2006, 56% of women and 39% of men were considered to be potentially interested in a range of garments by options. A factorial analysis enabled us to highlight two major axes of differentiation within the interested population. The first is linked to the creativity/conventionalism of individuals in reaction to fashion and the second to the facility/difficulty in finding clothes they like in the standard range. All three main groups of consumers interested in a mass-customisation offer can thus be isolated, with motivations that necessitate responses that are different from the offer: the first group concerns people that have problems finding products adapted to their morphology while their taste itself is conventional. They are very frustrated by fashion, don't buy many clothes and aims for basic outfits while regretting the fact the made-to-measure products are rare and expensive. On the other end of the scale we have a second group of men, but mostly women, who are passionate about fashion and have no problem finding clothes that they like in the current range. They are big fashion consumers, they like small, unknown brands that are a little different. They aspire to take part in the design themselves, to put their personal touch on their outfits: "design it yourself". This section of the population is mainly attracted to new technology and the idea of "piloting" a couture workshop is a very seductive one to its members, whose purchases of customised products will be carried out to complement the standard range, for special occasions and/or particular products. The third and final group, the most interesting probably in terms of developing the offer concerns individuals, mainly women who, first of all, have problems finding clothes that suit them for reasons of conformations and/or specific taste and secondly, express an attraction for fashion and have strong design aspirations: they like to seduce and stand out through their clothes and have huge imaginations when it comes to anticipating the ideal personal offer.

The current product offer occupies a niche that is developing well but is weak in terms of proposals

Mass-customisation offers have existed since the beginning of ready-to-wear. In the sixties and seventies they were mainly concentrated in made-to-measure and/or industrial made-to-measure proposed by manufacturers to satisfy a need for a better fit. These made-to-measure offers concerned mainly formal men's wear (suits, shirts) and were swept away, for the most part, in the eighties and nineties by the development of fashion chains, the drop in price of ready made articles and the rise in popularity of sportswear. The diagnostic of the actors present in Europe however, reveals that the new needs of customisation that are emerging among consumers is evident from a redeployment of offers and a significant progression in turnover since 2004. While top of the range specialists like Zegna, are leaders, we have also seen certain proposals in the mid-level range (Devianne or Cyrillus in France, mail order catalogues in Germany…). Despite this take-off, made-to-measure today lacks attractiveness, the products on offer remain essentially masculine and traditional, with a limited range of styles and fabrics. The constraint of taking measurements is heavy and demands the skill of an experiences salesperson, which creates an accessibility barrier for clients and makes it more expensive. The measures necessary for shirts are less numerous and as they can be managed by the buyer, a number of made-to-measure shirt companies can sell online. They have had a certain success but are penalised by a low level of trust for the first purchase. Without going into the details of the technological aspects, the research that we have carried out shows, unsurprisingly, the importance of technical innovations so that the made-to-measure offer can get out of its limited niche. A first solution could be the generalisation of body scanning, made possible by the imminent drop in the cost of scanners. This perspective implies however that the reticence among certain consumers will disappear, however the analogy with medical scans is not very encouraging for the fashion sector. Getting away from made-to-measure per se, developments in morpho-typing are also on the cards, notably in the mass market, like the questionnaire proposed on the site of the American distributor Land's End, a pioneer in the area: "*What is interesting is that the service can be offered only over the Internet. No call centre could gather information as delicate as a detailed description of your bottom (flat, rounded, etc.) or your breasts. No one would dare answer such personal questions out loud*", said Sam Taylor, VP of Land's End.

The ultimate stage, that is also relevant to the automobile, furniture and health industries, would involve giving each of us a detailed card with our measurements or a measurement file available at specialised suppliers on the Internet that could be brought up to date on demand. What is not so sure is when this will be possible, ten years being touted by the experts. In the shorter term, the continued progress in 3D imaging coupled with the growth in broadband means regular improvement in virtual rendering of fabrics and products from all angles and will make the choice of options on screen easier. Another part of the current offer of customised products relies on what's known as "delayed" differentiation of standard products by adding designs, logos, photos and personal text either printed or embroidered. The consumer's motivation is one of pleasure with variable aims according to the individual and the occasion: to wear a image, a symbol one likes, affirm membership of a community, develop an artistic bent and become a fashion designer, wear your own brand, make a unique gift… The market seems to be booming today with the ease of ordering online and the numerous occasions that lend themselves to customised gear among all generations (clubbing and private parties, amateur musicians, schools and student groups, sailing, role-playing…). The actors present on the market are from different universes: small and medium sized business of clothing, printing or embroidery that develop this type of service to complement their traditional B to B business, people from the textile industry who have set up a specialised businesses and, more and more, Internet start-ups developed by IT fanatics. This development is in line with the culture of web 2.0 mentioned above that entails letting each client design their own things and pay them on each sale[12].

The sea-change in perspective opened up by mass-customisation raises certain questions

The first question is about the actors the best qualified to carry an ambitious mass-customisation project and the most appropriate sales methods. Quite early in our research, selling to consumers over the Internet stood out as the priority circuit due to its capacity for touching interested clients over a national, even international zone. The development of on-line commerce has, in addition, become a reality for the fashion market, sales of clothes online having reach 3% of the French market at the start of 2007[13] and passing the 5% bar in the US with a high growth rate. But, at a time when the "click and mortar" approach is becoming generalised, the preference for online sales does not exclude the development of physical sales outlets, that are totally necessary to advise consumers and to gain their trust during a first purchase.

Having controlled the sector since the 80's, big distribution can not permit itself to remain on the sidelines in terms of the emerging modes of consumption and will very probably develop proposals for customised and/or made to measure products. In the short term, it is difficult to imagine this offer being any more than "cosmetic" in its development and minor in terms of turnover for chain-stores not including mail order or Internet sales. To attract a high number of consumers, the prices for personalised goods will have to remain within an acceptable range in relation to the average price of a ready made article: during our survey, a possible increase range of 10% to 20% was mentioned, by the consumers as well as by some professionals, luxury products and exceptional articles not included. The value chain of the specialised chains that rely on minimising manufacturing costs to benefit design and distribution with very high property and refurbishment costs, the business models appear to be very different to those linked to made-to-measure production that is sent directly to the consumer. A solution for distributors would be to develop a specific entity. Manufacturers seem to be in the strongest position while in the US, a growing number of brands have recently decided to "jump in" and start selling straight to the consumer. In this case, the options proposed will probably be limited to choosing measurements, colours and details that are within the creative register of the brand. Innovative smaller and more flexible companies are also in a strong position to propose their ranges and to recapture a part of the profit margin in the value chain, as long as they have the necessary funds for the industrial and IT development necessary to constitute a reactive chain with their partners and suppliers. Finally, pure players that co-ordinate manufacturing networks and raw materials products also seem in quite a strong position to set this up. Another question is linked to the place of production, the temptation is great to consider mass-customisation as a means to relocate manufacturing faced with the growing power of countries with low salary costs and in particular China. This slight short-cut does not resist an objective economic analysis: first of all, the activity of mass-customisation relies on the transmission of data that is not detrimental to production abroad while transport by place of articles that consume "manufacturing minutes" is frequently practiced today in the luxury goods industry. In addition, it is useful to remind ourselves that Asia has a made-to-measure tradition that is very strong and very much alive specially in top of the range men's wear, as ready-to-wear appeared later there than in Europe. On another level, there are arguments in favour of production closer to the consumer's location, whether this means the European Union or Mediterranean countries. The deadline is becoming a key variable in the attractiveness of mass-customisation: here we don't just mean the deadline given (with an optimum time frame of one week for normal garments, that can be much longer for exceptional items) but also respecting the deadline, as disappointment could be irreversible in case of later delivery. Another thing is the complexity of the organisation of data and materials and the optimisation of deadlines and whether they are favourable to cultural and physical proximity, a source of comprehension between the manufacturing partners and consumers.

In conclusion, the perspectives of the fashion industry have been turned upside down by globalisation of markets analysed to the hilt, and, more recently, by the arrival of new technologies in the everyday lives of consumers. The drop in prices and the concentration of distribution have led to an accelerated rhythm of collection renewal that is not felt as generating more diversity in the range on offer. The gap seems to be growing, on the contrary, between individual expectation, probably heightened by the acquisition of "expertise" on the Internet, and the current product range on offer. However, according to different surveys[14], the first condition for a sector to orient itself successfully toward a customised offer relies on the conjunction of two factors: on a consumer level, choices are frequently operated by default, and, on a production level, the instability of the market caused by exacerbated competition. This condition seems today to have been taken on board 100% by the fashion industry.

Finally, the survey carried out by the IFM for the competition pole Up-Tex reveals that individual needs in terms of customisation go well beyond cosmetic customisation and touch on structural options such as measurements, fabrics, colours and shape. This article has been consumer-centred, we didn't deal with the question of the industrial equipment, information systems and sophisticated organisations[15] that will be necessary to establish this "disruption" strategy that combines the performance of both technology and craftsmanship. But, far from limiting it to a challenge for engineers or supply chain specialists, this ambitions project should attract dynamic designers attracted to the possibility of proposing their creative ideas directly to the consumer, marketing specialists that are resolutely "client oriented" and advertising professionals that want to package and make the virtual range desirable.

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1. IFM estimates after a consumer survey.
2. Gilles Lipovetsky, *Le Bonheur paradoxal. Essai sur la société d'hyperconsommation*, Paris, Gallimard, 2006.
3. Philippe Moati, *L'Avenir de la grande distribution*, Paris, Odile Jacob, 2001.
4. The illegal downloading of copyright-protected standard productions evidently is not part of this analysis.

5. *Journal du Net*, March 2006.
6. Jean-Claude Kaufman, *L'Invention de soi. Une théorie de l'identité*, Paris, Hachette, 2005.
7. IFM survey, January 2007 for Eurovêt.
8. Eric Fouquier (Thema) is the reference in France.
9. During an IFM seminar "Perspectives internationales mode et textile 2006", November 2005.
10. http://blog.ifth.org.
11. Article from the *Journal du textile*, n° 1902, p. 90.
12. See the article by Laurent Raoul in this review. We should underline the growing development of the public interfering in the creative process. Like eBay, Spreadshirt plays the double register of buyer/seller by creating online boutiques for communities (dog lovers to music lovers). The central site supplies the technology and the expertise to create personalised products and sites, the partners do not have to worry about stock, manufacturing or delivery or customer service. In 2006, Spreadshirt bought lafraise.com, a web 2.0 model that though the founder's blog and a call for votes from the community to publish limited series of the winning designs.
13. IFM monthly consumer survey.
14. Thorsten Blecker, Nizar Abdelkafi, *Mass Customization. State of the Art and Challenges*, Hamburg University of Technology.
15. Again, on this point, see Laurent Raoul's article.