



SUSTAINABLE MCP: THE ENABLER CLOSED LOOP OF TEXTILE UTILIZATION WITH CONSUMER

YASUYUKI CHO

Independent Customer Experience Consultant, Kyoto, Japan

Abstract: *Managing environmental impact has become the center issue for every industry. Textiles and apparel industry should utilize reuse of products and materials as a key approach in this direction. The realization of this textile closed-loop, cooperation among business partners and involving customers should become essential practice. In this paper, the author uses the practitioner knowledge as well as in his current consultancy experience to formulate and share reflections on how mass customization and personalization could and should take into consideration this environmentally respectful perspective. The paper pays particular attention on the role of the final customer dialogue.*

Key Words: *Extended Producer Responsibility, EU Strategy for Sustainable Textile, Separate Collection of Textiles*

1. CURRENT TREND AND THE COMMON BACKGROUND

Quest for Sustainable business has been the buzz words for years, well before COVID-19 Pandemic, with growing drum beat and our common vision of the 2030 Agenda for Sustainable Development (UN SDGs) [1]. Without reading the background principles such as UN Global Compact [2], UN Guiding Principles on Business and Human Rights [3], and OECD Due Diligence Guidance for Responsible Business Conduct [4] UN SDGs [1] has been referred as the essentials for every business, especially among consumer goods business and also individuals. As a veteran of apparel industry I would like to share some insights on MCP focusing on the future of textile business.

UN had proposed Milenium Development Goals (MDGs) [5] in 2000 and after one and a half decade SDGs has been adopted as the successor of MDGs in 2015. The difference between them contains the role of private sector. NGOs had been invited to develop SDGs draft since the previous one solely focused on and developed by policy makers of member states of UN. The current goals introduced for the first time that all stakeholders should be responsible for achieving every goals adopted at the UN General Assembly. No one should be left behind and no one should be exempted to play the expected role.

As globalized supply chain became common among broad industry sectors and emerging of Multi National Enterprises (MNE) business issues became also as the hot diplomatic topics for international organizations, OECD and UN. We should know these background of current international norms and also the limits such as the result of compromise and inadequate inclusiveness to get onboard.

Another emerging issue might be the economic democratization or relations between business and consumer. Current view is based on mostly the notion of subject and object, business produce goods and services and the final form of customer is the individual consumer. Personalization and customization has been discussed on that basis to streamline the process and business efficiency. More than a decade ago co-creation and open innovation with consumers had been introduced but still focused on efficiency, customer satisfaction and innovation, the business stand point of view needless to mention one by one..

Not much referred to the background of UN SDGs the current status lies on the fragile earth and we all should live within the planet boundary. It's the reason the word sustainability imposed that we rely solely on earth except energy from the sun to continue our activities on earth. In modern centuries, human activity has showed a great influence on nature, so it is also called the Anthropocene. Inadequate inclusiveness shows compromise during the development discussion among NGOs and policymakers on business growth under economic and social affairs on the line of development agenda. Today business should be regarded heavily to grow in size and development should be conducted eternally.

2. FUNDAMENTAL PROBLEM

There are many topics to be solved among consumer good business like garment and textile but the business model shift with its next practice should be the most important. Most of practices currently we see had been focused on their process only from the industry point of view as made by business for getting more efficient result. The mass production system introduced to eliminate production cost for garment business since efficiency improves as proficiency increases for labor intensive

garment business. They are not for customers nor employees to provide decent work unfortunately.

Even in these practices of Co-Creation and Open Innovation the reason inviting outsiders had been optimization of business process efficiency to get better figure of the bottom line of profit and loss statement. Customer satisfaction had been pursued to maximize the life time value of every customer by providing better experience. Open innovation had provided outsiders chances to communicate directly with business process owners and in most cases these innovation could be realized in shorter period and low cost for business. The current practices might not be the real collaboration but merely demonstration as one of marketing tactics. The quest for sustainable practice should need involvement with both consumer customers and employees in decent manners. Especially in the period we face the common issue to change our business and social structure, regardless by intentionally or not, to avoid catastrophe that will surely come.

One step forward should be adding economic externalities to the precondition of our thinking. For business it might go beyond traditional accounting rules to calculate profit and loss. Introducing carbon pricing in internal accounting, regardless mandate or voluntary, has been started and one step for this practice. Reducing environmental impact of consumer businesses including entire supply chain, should change the whole notion of business efficiency beyond cost calculation. Accounting rules should change as the needs shift to the next level. In the United States the Securities and Exchange Commission (SEC) revealed its proposal to require that public companies disclose climate-related information [6] with an effective date in December 2022.

Extended Producer Responsibilities (EPR) [7] discussed by OECD since 1994 but it has been utilized not so much until COVID-19. Modern business has been pretended to look at EPR out of sight and responsible for only regulated duties. That responsibilities has been regarded also as economic externalities [8]. ESG and EPR have their long history we should know and we could learn from them. Every new business should have their scopes to contain broad economic externalities in the post COVID-19 Pandemic. In newly published on 30 March 2022 EU strategy for sustainable and circular textiles [9] contains a mandatory EU extended producer responsibility scheme. In Japan one brand started to express merchandising policy such as 'making things is like continuing to make garbage if you make a mistake [10].

3. ESSENTIAL ELEMENTS

The emerging requirements related to sustainability have become the hot issue for every business. Life Cycle Assessment (LCA) for decarbonization, risk based sound chemical management beyond existing regulations and Due Diligence Guidelines are some of new fundamental norms.

Japan has quite a number of long-established business and most of them are Micro, Small and Medium size Enterprises (MSMEs). Kyoto, the ancient capital of Japan has large number of long-established business and with

firm customer base. Contribution to the customer and society has been common Purpose of such enterprises. The family precepts which contains such Purpose, hand written by the founder, are often posted on the office pillar. Most of their CEOs agree that business is nurtured by customers with strict eyes. That words represents the essence of MCP which greatly needs such customers.

Their common policy contains mutual learning habit between their customers and enterprises and that has been the foundation of their business though not all of them provide personalizing services. Such customer's criticisms and suggestion voice have nurtured these enterprises and well before the notion of Co-Creation published in 2004 [11]. Such traditional relationship has been formulated behind where others could not observe so the strong point discussed among researchers of such long-established enterprises has been focused mainly on the high flexibility of enterprises and strong governance system including unique risk management policy when encountered socio-economic turning points.

Most of these MSMEs have strong relation with their suppliers. Their business has been conducted with the trusted partners with firm knowledge of personalities both side for generations. Among their network they devote all one's effort to protect credibility.

When discussing these uniqueness of such dialogue with consumer customers we should take note that there are no specific event such as interview or customer research activities for them but daily conversation with customers. Also such dialogue provide useful insights for both sides and mutual learning often occurred. There are no organizers and invitees but equal partners of collaborators. Through these dialogue customers could join certain business process and their improvement or development as a result and they could feel sense of unity and true value of familiar customers with moderate tension. These relationship are based on their invisible contract with no compensation as equal partners, not similar to modern monitor hearings with payment of consideration. If the customer felt some dissatisfaction more than twice the relationship would be released unilaterally without any vocal notice, the business would lose such customer of active dialogue participant and should prepare some followers behind the sight.

When I disclosed most of the planning process of sleepwear for ladies at my previous job using home page and e-mail notice for dedicated prospect member customer [12]. At that time SNS had not been introduced, even such mock dialogue could strengthen the relationship with them since for them that might be the fresh experience to communicate with garment company. They could not consider themselves as consumer monitors but product planning accompaniments. I held another chance to have dialogue with them to invite some from the registrants to our office to have fitting session with actual samples for them. They could receive no money except actual travel fees and some beveledges. Utilizing these dialogue had been utilized to make final decision of production volume with detailed design and got the precise forecast over 95% accuracy. In garment business one third could be sold at the initial set price, one third at reduced price and the remaining one third discarded in average [13]. The case above was not a sample of MCP but we could

learn some insights on customer inputs, almost not so much dialogue with business. Such interested customers have strong will to communicate on some topics as equal partners for their own satisfaction with the desired product.

4. THE FEASIBILITY STUDY OF THE NEXT MCP

Long waited EU strategy for Sustainable Textile has nine policy measures to introduce targeting 2030. It implements the commitments of the EU Green Deal [14], the new circular economy action plan [15] and the industrial strategy [16].

- Set design requirements for textiles
- Introducing Digital Product Passport
- Tackle greenwashing
- Reverse overproduction and overconsumption
- Extended Producer Responsibility for textiles with ecomodulation of fees
- Address the unintentional release of microplastics
- Restrict the export of textile waste
- Incentivise circular business models
- Encourage companies and Member States to support the objectives of the Strategy

Around 73% of the clothing and household textiles consumed in Europe are produced in and imported from countries outside the EU [17]. That means EU garment supply has been relying on overseas so EU could not get the needed change without their cooperation to meet those requirements. Published strategy has strong global influence as EU planned. Furthermore EU has signed economic partnership agreement (EPA) sharing the common notion and regulatory harmonization with foreign countries including Japan where I live. EU might ask their counterparts to implement the same regulations by leveraging these EPAs, though not binding treaties.

Directive on corporate sustainability due diligence [18] was adopted on February 23, 2022. Commission lays down rules for companies to respect human rights and environment in global value chains. EU explained companies play a key role in building sustainable economy and society. As I wrote before that consumer customer should act also important role.

MCP has contributed to increase customer satisfaction which could maximize product value for consumer. If the configuration process shift to the next level where consumer customer plays as equal partner for business and share more information on products, MCP could contribute circular business model better to avoid discarding end of life products. Shared information could contain its material source and its background and with these the consumer customer could contribute to select most preferable return method.

In EU from 2025 all textile collection should be carried out separately [19] but the current collection method are vary country by country. The most common case is roadside collection using container, mostly made of steel, maintained and collected by collector companies, some are profit organizations and some non-profit such as salvation army. In some countries textile collection is conducted by local governments. The collected textiles are sent to sorting companies to divide

number of valuables and in-valuable. Also the products in good condition worth re-sale and re-use are picked out during this sorting process.

Among the Strategy these function for product information sharing explained with developing Digital Product Passport [20]. EU disclosed to implement DPR for every consumer products but some product groups to be introduced in advance. Textiles are selected to be one of such categories together with electronics and furniture, based on the pilot work of batteries [21]. The detailed information to be carried in the passport and the reference markers are currently not finalized. With DPR products should be key information for consumers and also improve proper handling of post consumer process essential for circular economy. Today product collectors and sorters could have limited access of contents information and that has remained as one of the barriers to close the loop of circular textiles. They have to rely heavily on manual sorting and most players conduct sorting at the places in the single market where low wage employees could be recruited for the labour intense process, sometimes beyond the country boundaries globally. Existing sorting facilities are built and run for bulk operation and MCP products could be also sorted at such factories.

EU had funded to develop sorting technologies such as Fibersort machine utilizing infra-red light for textile products sorting [22]. With that technology developed the outer fabric of single-ply products can be identified, but not the lining fabric, so there still remains manual work to put single-ply products only into the machine.

MCP could contribute to mandate business due diligence as the equal partner consumer. Due diligence requirements included to publish the status reports regularly but when product processed by MCP partner consumer could contribute as driving factor to play as the third party assessor of whole process. Consumer audit had been regarded as the ultimate way and the dialogue between customer and process owner if performed without losing a moderate sense of tension. Successful MCP process has been regarded as the conversation between professional and amateur but these view should be based on traditional notion of producer and consumer. A real expert could be a good listener to the voice of the customer and eager to learn from such dialogue. A real MCP customer is someone who can learn from the voice of expert and could be flexible to accept professional view. We still have some technical and business barriers in recycling, closing the loop of textile resource usage. The real expert could explain such limitation and share them with MCP customer in designing and selecting material including sawing threads suitable for collection and recycling when needed. The priority of measures in the future is generally considered to be reduction, reuse, repairability, remake, and finally recycling fiber to fiber as much as possible. The most early adopter of EPR is France and the EPR policy for textiles was introduced by the Article L-541-10-3 of the Code de l'Environnement, which came into effect on 1 January 2007 [22]. Those entities – which include textiles and clothing manufacturer importers and distributors – can accomplish this legal obligation through two distinct ways: either by financially contributing to an accredited producer responsibility

organisation named Re-Fashion or by setting-up an individual take-back programme approved by the French public authorities. In some cases brands and retailers install collection boxes in their retail outlets but most of them selected financial contribution due to their business focus has been traditional practices optimized for manufacturing and selling products. They basically they have optimized one way logistics system from warehouses, or direct from factories, to retail outlets. Their retail shops don't have capabilities to accept post consumer products and check the brands of their own or not. Installing such take-back counter means huge impact on the bottom line of outlet operation.

MCP could have the possibilities to accept end of life products from dedicated customers. The operators could have all the information of the materials and processing details that includes chemicals used without DPR. Though MCP could not have the power to make self-collection of brands majority, the essential responsibility of brand companies under EPR, MCP could contribute for the shift as it extends beyond the sale to include the collection and subsequent optimal handling of the product.

How the next MCP contribute to every step needed towards circular textiles shown as table 1 below.

Table 1 Comparison of Fast Fashion vs Next MCP

	Fast Fashion	Next MCP
Wearing Period	Short	Considerably Longer
Reuse	Not Considered but partially Realized as Secondhand	Not Suitable due to Customization and Personalization
Repairability	Not Considered	Available on Demand
Remake	Not Considered	Not Considered but have Capability
Collection	Not considered but potentially capable	Suitable for Collection directly from the Consumer
Recycle	Not considered and need proper Sorting	Suitable with full Material Information

The Next MCP shall contribute to extend wearing period considerably because of the psychological attachment. Because of affordable price of Fast Fashion people has bought and discard more items than before. For the needed practices such as reuse and remake the next practice of MCP should not be suitable. It still could find capabilities and provide great opportunities for remake could be available on demand. The important strong points could exist as reducing the number of purchasing and recycling. Due to the waiting period to get the ordered product of MCP, consumers could learn to wait and that might lead to rethink the volume of garments needed. EU Strategy declared that Fast Fashion is out of fashion [9]. The second point should be related to the process of

collection and recycling could become more easily due to precise information of each material used of every product obtained by the company involved when the company commit these post-consumer processes. Traditionally the production and supply process holders, which could be said as the arterial industry, has been called the textile industry, and the vein industry has not been regarded as the same industry by the textile industry. To close the loop of textile industry EU has started to invite both sides on the same table to streamline the entire process. We see more than a couple of industry initiatives already such as Accelerating Circularity, the industry project on both side of the Atlantic by textile industry [23]. But at this moment none of these initiatives have not changed the existing product make and sale model.

I should add one point that the rights of possession of product customized. Once the rights handed to the customer the accurate collection might not be realized as collection should turn to only volunteer action. The average mixing rate of other brand of collection box installed at single brand shops is almost forty percent in Japan [24]. Due to the mix-up and indifference of customers the post collection process of sorting has been inevitable widespread practice globally. The next practice of MCP could contribute to eliminate such labour intense process since current products marketed have vast variety of configuration and unfortunately not recyclable one such as using multiple types of yarns still exist certain numbers. We do not have practical application of separation and recovery technology for each composition of products using multiple types of yarn especially more than two.

On current Fast Fashion product design and material the background and the reason could not be shared with customer through retail processes. EU hope to propell sustainability labeling with broad information related to product environmental footprint along with DPR, but such self-service type information sharing might not serve well as information hub. We all know that push out and one-sided type of information providing is only noise for the recipient. Dialogue should be the most smart solution for information sharing which should contains also bitter part such as the new price structure which reflects EPR scheme for consumers to accept. MCP could contribute more in sustainable circular business targeted by the strategy even though not myself as an EU citizen. The issue should be not the region specific but the global one.

The strategy also contains reversing overproduction and overconsumption and it means shifting from Fast Fashion to Slow Fashion. In Slow Fashion customer might purchase less and avoid impulse buying and MCP could contribute much with smart configurators or real dialogue in person. Therefore I see the bright light.

5. REFERENCES

- [1] 2030 Agenda for Sustainable Development <https://sdgs.un.org/2030agenda>
- [2] UN Global Compact <https://www.unglobalcompact.org/>
- [3] UN Guiding Principles on Business and Human Rights <https://www.unglobalcompact.org/library/2>
- [4] OECD Due Diligence Guidance for Responsible Business Conduct

- <https://www.oecd.org/investment/due-diligence-guidance-for-responsible-business-conduct.htm>
- [5] United Nations Millennium Development Goals
<https://www.un.org/millenniumgoals/>
- [6] The Enhancement and Standardization of Climate-Related Disclosures for Investors
<https://www.sec.gov/rules/proposed/2022/33-11042.pdf>
- [7] Extended producer responsibility - OECD
<https://www.oecd.org/env/tools-evaluation/extendedproducerresponsibility.htm>
- [8] Arthur Cecil Pigou, The economics of welfare, Macmillan and Co., London, 1929
- [9] EU strategy for sustainable and circular textiles
https://ec.europa.eu/environment/strategy/textiles-strategy_en
- [10] The two roles tasked for the new appointed design office manager of MUJI, interview, Nikkei XTrend, May 10, 2022
https://xtrend.nikkei.com/atcl/contents/watch/00008/0130/?i_cid=nbpxr_child
- [11] C. K. Praharad and V. Ramaswamy, The Future of Competition, Co-Creating Unique Value with Customers, Harvard Business School Press, Boston, 2004
- [12] V. Ramaswamy and F. Guillard, The Power of Co-Creation, Build It With Them to Boost Growth, Profitability, and Profits, Free Press, New York, 2010
- [13] One third of all clothing "never sold", Ecotextile News, April 21, 2016
<https://www.ecotextile.com/2016042122078/fashion-retail-news/one-third-of-all-clothing-never-sold.html>
- [14] Green Deal: New proposals to make sustainable products the norm and boost Europe's resource independence
https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2013
- [15] Circular economy action plan
https://ec.europa.eu/environment/strategy/circular-economy-action-plan_en
- [16] European industrial strategy
https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en
- [17] Questions and Answers on EU Strategy for Sustainable and Circular Textiles
https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_2015
- [18] Just and sustainable economy: Commission lays down rules for companies to respect human rights and environment in global value chains
https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1145
- [19] Directive 2008/98/EC on waste, as amended by Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:150:FULL&from=EN>
- [20] EU Digital Product Passport Revealed: Time to act!
<https://www.gsl.eu/news/eu-digital-product-passport-revealed-time-to-act>
- [21] Digital product passports: What does the Sustainable Products Initiative bring?
<https://www.epc.eu/en/publications/Digital-product-passports-What-does-the-Sustainable-Products-Initiative-484018>
- [22] M. A. Bukhari, R. Carrasco-Gallego and E. Ponce-Cueto, "Developing a national programme for textiles and clothing recovery", March 4, 2018
<https://doi.org/10.1177/0734242X18759190>
- [23] Accelerating Circularity Putting textiles to good use™
<https://www.acceleratingcircularity.org/>
- [24] Interview with Masataka Higashitani, Higashitani company, textile sorter and recycler located in Izumisano, Osaka, Japan, conducted on May 20, 2022

CORRESPONDENCE



Yasuyuki Cho
Independent Customer Experience
Consultant, Lecturer on Textile
Sustainability and working for
Industry Organizations as
contract base
1-5, Matsugasakihorimachi,
Sakyo Kyoto, 6060945, Japan
y-cho@yckyo.com