Packaging for E-commerce:
Being Perfect or Perfectly Fit?

Abstract- The distinct characteristics of E-commerce supply chains have elicited new packaging requirements. The question is "How to design an effective packaging solution, fulfilling the product, logistics, and consumers requirements?"

"Good quality. Product arrived in good condition!"
"Not satisfied. The delivery was fast, but the product seal was broken."

Are you familiar with those reviews? Yes, these are the typical consumers feedback when buying products online. Convenience has been one of the main factors why people do online-shopping. Nevertheless, even a great service will still end up in consumer dissatisfaction when the products arrive in damaged condition. This implies the importance of packaging protection features. Most packaging that is currently available in the market was initially built for traditional stores, which have a way milder distribution scheme compared to E-commerce, thus changes might be required to adapt to the new channel.

E-commerce has been growing fast in the past decade. Thus, it is logical for the industrial actors, including packaging suppliers, to look into this area and anticipate any changes required. Tackling the modern business challenges, not only protective packaging is needed, the package must also be sustainable and affordable. Other than these three general requirements, from the logistics perspective, the packaging is expected to be fit to the system; fostering efficient handling, flexibility and traceability. Furthermore, it must engage consumers by delivering the brand value and commitment through functionality, convenience, and consistent quality. Meanwhile, promotional graphics on packaging might not be essential, as the purchase decision is mainly driven by digital promotion.

Through a comprehensive literature review and a series of deep interviews, this thesis project leveraged some interesting points within E-commerce and packaging. Firstly, since there are several types of E-commerce players with different supply chain settings, the initial research question of whether there is a need of change, evolved into who needs the changes and what changes suit which player. The study showed that changes in the packaging mechanical properties might be necessary for the pure players (e.g. Amazon), but not for the omnichannel players (e.g. ICA).

Secondly, there was an assumption that E-commerce is much faster than offline stores, thus opening an opportunity to have products with a shorter shelf-life. Apparently, although it is true that E-commerce has a fast order fulfilment service, its effect in the overall supply chain is not as significant as the product turnover rate. Thus, regardless of the channels, the key for fast product sales is the alignment between supply and demand. Furthermore, shelf-life is not a mere number saying how long a product could stay on the consumers' shelf. In a broader scope, it means how much flexibility is offered to produce, transport, store, and finally consume the product.

Thirdly, a liquid products packaging supplier may wonder, "Should I modify the bottle/carton or the outer box?" The answer depends on the probability of repacking, the efforts to adopt the new solutions, and the system fitness among actors. Alternatively, redefining the concept of group and individual packs might be interesting to look at. For instance, instead of having 12-packs per box and selling them as individual packs, producers could sell a box containing 4 individual packs. This will improve the mechanical properties with less effort.

Underlying all the detailed aspects, the essential features of E-commerce packaging are protection, sustainability, and affordability. The success key is not trying to be perfect, but to be perfectly fit.