Shaping the future of fashion-tech - business models, roles and skills aiding digital transformations

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Abstract

Background scientific research: According to BoF & McKinsey (2020) the global fashion industry is transforming rapidly owing to the impact of the current COVID-19 outbreak, with 80% of it expected to be under economic distress imposed by lockdown and recession, with a 27-30% contraction in global revenues. However this has simultaneously opened up new opportunities for driving a paradigm shift of the fashion industry powered by digital technologies and virtual connections with the promise of enhancing innovation and sustainability along the entire fashion value chain (Brydges et al. 2020; Gonzalo et al. 2020); believed to be resulting in faster, more intelligent and more efficient processes, products, services, and business models (Bertola and Teunissen 2018; Kalbaska and Cantoni 2018).

The application of digital technologies in the fashion industry is in its exploratory phase; and existing research primarily focuses on technological advancements required for its widespread adoption (Papachristou and Bilalis 2015). Even though digitalization is a 'silver lining' that offers opportunity to re-imagine the fashion industry, create operational and financial stability, and underpin focus on sustainability and circularity, it is crucial to explore in-depth how to capture the value of being 'digital' in fashion industry and what new fashion-tech business models and revenue streams can be created through it.

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Research issue to be addressed: The purpose of the paper is to identify emerging revenue streams and business model opportunities offered within fashion-tech, and what transformational roles and skills will be required in companies in order to support fashion-tech business model transformation and value capture.

Methodology used: The study is conducted via three digital focus groups episodes with eminent invited experts from both fashion and digital industry sectors and academia. Specifically the industry practitioners represented fashion brands, technology firms, telecom operators and provider of circularity services.

The first episode discussed the current state of revenue streams in fashion industry and envisioning future revenue streams enabled by fashion-Tech, such as connected fashion and virtual products. The second was devoted to identifying innovative business ideas and changes required to support business model transformations for capturing future revenue streams. Finally the third was structured around discussing relevant fashion-tech professional 'personas' and their skills to identify digital talents that need to be developed in order to accomplish essential business model transformations and thus unleash untapped revenue streams offered by fashion-tech.

Results achieved (conclusions) or expected as well as their relevance for theory and practice: Results from the episodic focus group shed light on diverse critical aspects of fashion-tech business model transformation and value capture.

The focus group highlighted that while revenue streams related to subscription and provision of digital products/services online could potentially be less affected in times of high risk and uncertainty, e.g. COVID-19, other revenue generation streams from provision of digital products and services in the physical environment (e.g. consulting fees) are in decline while revenues generated from offline sales of physical assets could suffer the most. Additionally it was emphasized that effect of digitalization in fashion-tech industry should focus both on using technologies to improve efficiency/productivity and customer value/experience. A plethora of digital technologies can lead to such end-to-end transformation, amongst which digital twins, digital product development and design tools, and artificial intelligence and machine learning are the most crucial ones to consider.

Further among emergent fashion-tech business models, those based on designing new ecosystem/platform were identified as preferred for the industry during the digital transformation phase, as it allows creation of new and diversified revenue streams, and combining complementary business models within and between organizations across different industries (e.g. fashion, tech, gaming, movie, telco). These business models are characterized by: servicification and customization/personalization enabled by smart business-to-business and business-to-consumer data; virtualization of products (e.g. digital clothing) and customers experience (e.g. digital fashion shows); and improved sustainability and circularity performance where user and usage data can be accessed and used to inform better product/service concept, design and more efficient supply

chain operations. Eight key categories of capabilities were identified as relevant for realizing these fashion-tech business models for new ecosystem/platform revenues. Connected to these capabilities a number of skillsets are also identified to be necessary to further support fashion-tech transformation, that includes ability to collect and analyze data, digital modelling and prototyping, digital marketing and storytelling, traceability, user interaction, and along with softer skills related to management leadership and collaboration.

Along with three most discussed roles among future fashion-tech professionals were emergent that included traditional fashion roles that require upgrading to incorporate more digital aspects; new digital fashion roles; and with particular appreciation of the "bridge" roles between the design and the technology teams. Key skillsets applied across different fashion-tech roles included sustainability and circularity knowhow, creativity and innovation and critical understanding of markets and users.

Suggested approach of starting from revenue streams/revenue models and then aligning it with transformations in business model elements can help solving so-called "digital paradox" faced by firms i.e. inability to capture value from investments in digital initiatives. It is suggested that aligning value capture to other business model components can reduce the likelihood of encountering digital paradox. Nevertheless, understanding how firms can manage the digital paradox and capture value in digitalization is an issue of considerable importance (Parida et al. 2019).