An Exploratory Study of Consumers' Perceptions and Adoption Intention toward Fashion Artificial Intelligence

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Problem Statement

- Many studies investigated big data and algorithms of fashion AI (Kim & Cho, 2000; Thomassey & Zeng, 2018), while **little** has been done to investigate consumers' behavior toward fashion AI services.
- Since retailers should study consumers' shopping behavior and promote the future of on-demand manufacturing, a **better understanding of consumers' perceptions and adoption** intention toward fashion AI service is needed.

Research Questions

The main purpose of this study is to explore how consumers perceive fashion artificial intelligence service.

- What are consumers' **knowledge level** of fashion AI?
- What are consumers' **perceptions** of fashion AI?
- What are consumers' **intention** to adopt fashion AI?

Background

- Digital technology has become more and more important in the fashion industry.
- Artificial intelligence (AI) has emerged as an **important frontier** of technological innovation, it has also begun to be used as a new application in the fashion industry (Amazon Fashion, 2017).

## Significance of the Study

- From the academic perspective:
    - The results of this study will **fill a gap** in the literature on consumer behavior toward fashion AI service.
- From the managerial perspective:
    - To improve the **shopping experience** of fashion consumers.
    - To improve the **function** of fashion AI.

Related Theory

- Innovation diffusion theory (Rogers, 1995)
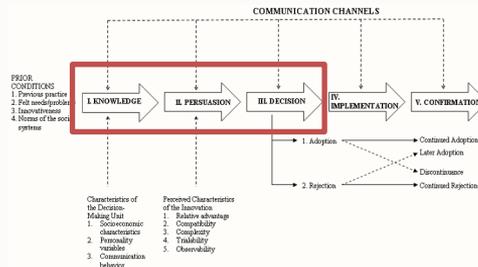
- Technology acceptance model (Davis, 1989)
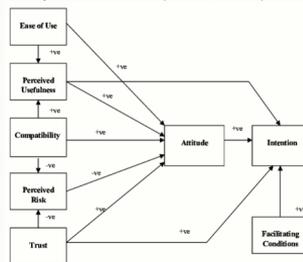
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Research Methods

- **Qualitative research**
- Research Design:
    - Participants shared their using experience of fashion AI
- Data Collection:
    - Online semi-structured interviews and customers' online reviews
    - Interview Sample: two graduate students majored in Textile Technology Management
    - Document: Randomly selected 50 reviews from the different five rating levels.
- Data Analysis:
    - Transcribing and memoing
    - Coding and identifying themes

Initial Findings

- **Limited knowledge:** consumers have little knowledge about fashion AI
- **Perceptions:**
    - Ease of use: Consumers think the using process of fashion AI is easy.
    - Enjoyment: Consumers think it is fun to use fashion AI service
    - Privacy issues: Consumers are worried about their privacy, their outfit photos and personal information may be revealed.
    - Usefulness: The functions of fashion AI service can **not** fulfill consumers' need on their daily outfit.
- **Intentions:**
    - Hesitant to try: only use for enjoyment

Implications

- The fashion AI service cannot meet consumers' need to be their virtual "personal style assistant".
- The developer of fashion AI should provide more functions to consumers.
- The fashion AI should provide a more detailed explanation on why they suggest consumers to match their outfit like that.