

# Dynamics of Digital Customer Experience Journey 디지털 고객 경험 여정

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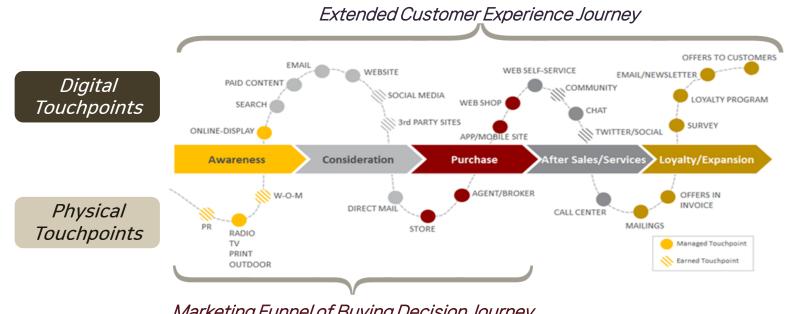
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### Introduction



- Traditional concept of customer buying behavior process model, 'Marketing Funnel' as AIDA (Attention-Interest-Desire-Action) model (Howard and Sheth, 1969; Lavidge and Steiner, 1961)
- 'Customer Experience' was defined and extended to post-purchase stage with customer relationship and engagement with recognized value of non-purchasing interactions (Libai et al. 2010; Van Doom et al. 2010; Brodie et al. 2011)
- With the 'Digital Transformation', touchpoints are places or moments where points of contact arise between customers and companies either physically and digitally delivered.



### Introduction



Related Domain	Focus / Mainstream	Research Gap		
Consumer Experience Journey / Purchase Process Model (Lemon and Verhoef 2016; Kotler and Keller 2015)	<ul> <li>3 stages of purchase process (pre, at, post-purchase)</li> <li>5 stages of purchase process (need recognition, information search, evaluation of alternatives, purchase, post-purchase)</li> </ul>	<ul><li>X Dynamic estimation (Journey)</li><li>X Lack of Empirical Test</li></ul>		
Experience Quality / Brand Experience (Klaus and Maklan 2011; Brakus et al. 2009)	<ul> <li>Sensory, Affective, Behavioral, Intellectual</li> <li>Product Experience, Outcome Focus, Moment of Truth, Peace-of-mind</li> </ul>	X Dynamic estimation (Journey)		
IS Quality Measurement (DeLone and McLean 2003; McKinney et al. 2002)	<ul> <li>DeLone &amp; McLean IS Success Model (Information Quality, System Quality, Service Quality)</li> <li>Web satisfaction &amp; Technology Acceptance Model</li> </ul>	<ul><li>X Dynamic estimation (Journey)</li><li>X Focus on Individual level</li></ul>		
Personalization on Digital Transformation (Parasuraman and Zeithaml 2000)	<ul> <li>Matching the own needs / Recommendation systems</li> <li>Attention (Recognition), Needs and Interest, Knowing the customer</li> <li>Synchronization and Connectivity through channels</li> </ul>	Add individual characteristics		

#### Research Question

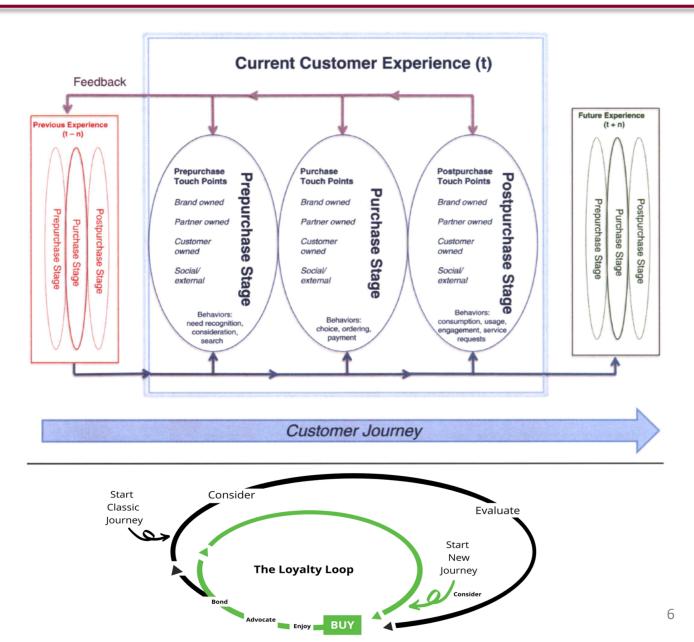
What are the key success factors in the consumer experience journey across digital touchpoints throughout the entire purchase process?



### Literature Review Horizontal Perspectives



- Consumer Experience Journey is defined in time-series of repurchasing behavior like 'Loyalty Loop' (Koray 2020)
- The customer experience is divided into three main stages: 1) pre-purchase, 2) at-purchase, and 3) post-purchase, each of which involves different interactions between the business and the consumer (Lemon & Verhoef 2016).
- After going through three stages of the consumer experience journey in one loop, consumers use their past experiences to inform future decisions.



### Literature Review Vertical Perspectives



#### DeLone and McLean IS Success Model (1992; 2002; 2003)

- It was developed to measure the success factors of information systems for digitization.
- To ensure the success of information systems, factors such as information quality, system quality, service quality, usage, user satisfaction, personal effects, and organizational effects (net benefits) must be considered.
- Net benefit should be interpreted as a holistic approach to the benefits obtained through information system activities.

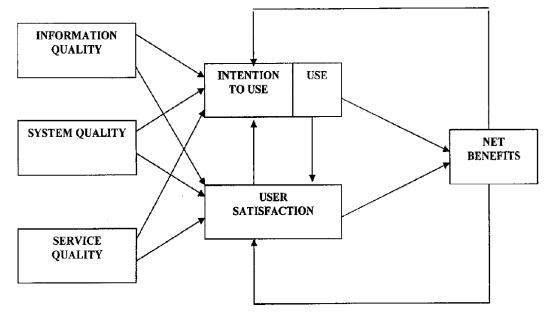


Figure 3. Updated D&M IS Success Model

#### Systems quality

- Adaptability
- Availability
- Reliability
- · Response time
- Usability

#### Information quality

- Completeness
- · Ease of understanding
- Personalization
- Relevance
- Security

#### Service quality

- Assurance
- Empathy
- Responsiveness

#### Use

- Nature of use
- · Navigation patterns
- · Number of site visits
- · Number of transactions executed

#### User satisfaction

- Repeat purchases
- · Repeat visits
- User surveys

#### Net benefits

- Cost savings
- Expanded markets
- Incremental additional sales
- Reduced search costs
- · Time savings

### Literature Review Vertical Perspectives



#### **Personalization**

- How much and how easily the site can be tailored to individual customers' preferences, histories, and ways of shopping (Zeithaml, Parasuraman & Malhotra 2000).
- Users who received personalized information were more likely to perceive it as relevant and useful, and spent less time searching for information (Tam & Ho 2006).

#### **Channel Synchronization**

- The impact of consistency on customer satisfaction and loyalty, emphasizing that consistent experiences lead to higher satisfaction and loyalty (Rahman et al. 2022).
- When a customer has a synchronized experience, they perceive that the different channels work seamlessly together and that their interactions are consistent across touchpoints (Rodriguez-Torrico et al. 2020).



# Literature review Scope of Research



We investigate digital touchpoints at both the universal and individual levels throughout the entire purchase process.

Literature	Method	Consumer Experience	Digital Touchpoints	Consumer Journey (Process)	Digital Transformation	Personalization	Channel Synchronization
Verhoef et al. 2009	Proposition	<b>✓</b>		<b>✓</b>			
Keller and Kotler 2015	Proposition	<b>✓</b>		✓			
Lemon & Verhoof 2016	Proposition	<b>✓</b>		✓			
Keyser et al. 2020	Proposition	<b>✓</b>	✓	✓			
Zeithaml et al. 2000	Survey					<b>✓</b>	
DeLone & McLean 2003	Survey		✓		<b>✓</b>		
Wixom & Todd 2008	Survey		✓		<b>✓</b>		
Brakus et al. 2009	Survey	<b>√</b>					
Klaus & Maklan 2012	Survey	<b>✓</b>					
Xu et al. 2015	Survey		<b>✓</b>		<b>✓</b>		
Rodríguez-Torrico et al. 2020	Survey				<b>✓</b>		1
Our Study	Survey	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>

# Research Model Development



#### **Literature Review**



# **Def. of Consumer Experience Journey Process**



Setting up a pool of measurable metrics



Internal expert exploratory analysis (Interclass Evaluation)



Optimization Latent Variables of Qualities



**Setting Latent Variables** 

- Aggregate and review relevant academic research (Lemon and Verhoef 2016; Butler 1998; Kotler and Keller 2015; etc.)
- Keywords: Customer Journey, Customer Journey Mapping, Customer Journey Scale, Consumer Experience on MIS, and Marketing Field
- To identify a foundational definition of the digital customer experience journey based on prior research
- To establish common and essential touch points and define stages (5 Stage Model / 3 x 3 CXI Model)
- To use research to identify measurable metrics within each customer experience journey process
- A total of 44 constructs and approximately 230 latent variable pool settings
- To conduct exploratory analysis with three researchers (checking the importance of factors and latent variables; scores as high, medium or low)
- To select metrics for the top 30% based on the average score of three study participants (importance weighted average; around 2.62 or higher)
- Operationalized definitions and cleaned up questions for top 30% metrics (230 total -> 81 metrics optimized)
- To collapse duplicate metrics and similar metrics / Minimize feasible metrics to ensure generalization of metrics
- To match existing papers (e.g., DeLone & McLean IS Success Model, E-SEVQUAL, E-REQ-QUAL, and so on)
- To select final universal latent variables based on existing research (to add a set of personalization)
- To determine the need to use metrics for each stage and map out variables for each stage

# **Research Model Development**



#### **Pre-Purchase**

- Consumers get a lot of information from digital environments (apps/web), and companies put a lot of effort into reaching the right target audience.
- Consumers explore information and evaluate alternatives (e.g., mobile push, mail, and SMS).

#### **At-Purchase**

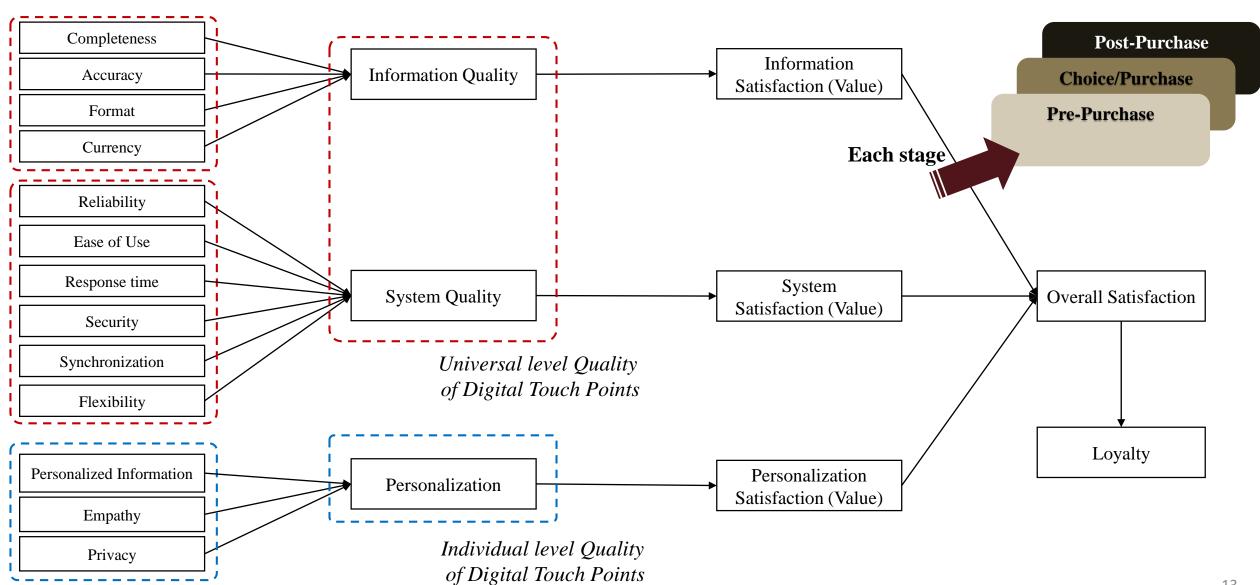
• Consumers evaluate multiple alternatives to select a product, compare offers across available channels, and make a final purchase decision (e.g., membership, coupons, discounts, availability of payment, and so on).

#### **Post-Purchase**

• The organization's digital response to warranty service requests (e.g., consumer education and maintenance), once the product has been delivered and is in use.

### Research Model within each decision journey phase

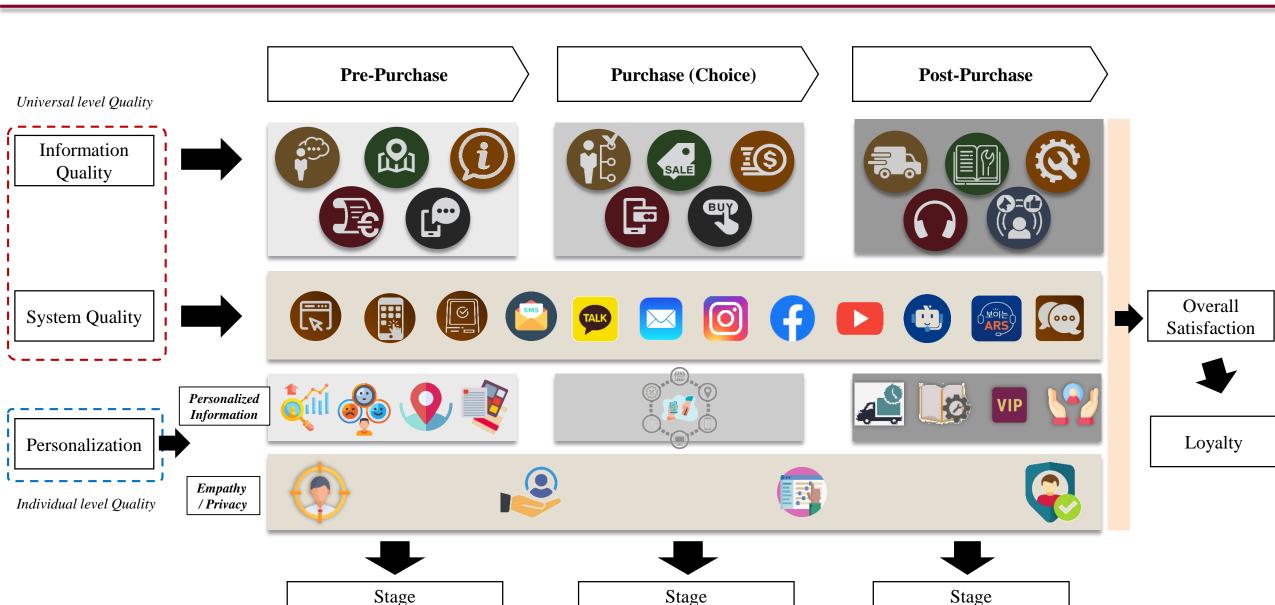




### Research Model Key behavioral concept for universal model

Satisfaction





Satisfaction

Satisfaction

# Research Model Operational definition of variables



Construct	Variable	Operational Definition		
Information Quality	Completeness	The degree to which digital touchpoints provide all necessary information.		
	Accuracy	The user's perception that the information is correct on each digital touchpoint.		
	Format	The user's perception of how well the information is presented on each digital touchpoint.		
	Currency	The user's perception of the degree to which the information is up to date on each digital touchpoint.		
Systems Quality	Reliability	The degree to which a system operates reliably with digital touchpoints.		
	Ease of Use	The degree to which a system's interface, documentation, and other materials are clear and comprehensible to users		
	Response Time	The degree of response time it takes for a system to respond to a user's request or input.		
	Security	The degree to which a system protects its users' data and transactions from unauthorized access, use, or disclosure.		
	Synchronization	A seamless integration of all channels in a way that allows customers to switch between them effortlessly.		
	Flexibility	The degree to which a system adapts to the changing demands of users on digital touchpoints.		
Personalization	Empathy	The degree of caring and individual attention a company displayed by its digital touchpoints.		
	Privacy	The degree to which an individual is concerned about the collection, improper access, errors, and secondary u their personal information on digital touchpoints.		
	Personalized Information	Personalization, in general, means matching one object's nature with one subject's needs.		

# **Research Methodology**



- Method: Structural Equation Modeling (each stage) or Hierarchical Model
- Items : Reflective scale (System Quality, Information Quality, Personalization)

  Formative scale (Personalized Information)
- Data Sources: Consumers who have previously experienced products and services from focal companies or brands
- Number of Survey Items : approximately 140 items



# **Expected Results**



• Through digital transformation, consumers are expected to value not only the quality of information (i.e., contents) and systems (i.e., infrastructure), but also the personal characteristics of connectivity and personalization.

• Each latent variable will show different results for each stage of the consumer purchase journey (expected crucial contribution).

• The more personalized and connected the digital nature, the more effective consumers expect to have a good experience at digital touchpoints (to availability of using moderating effects on universal level constructs).





# Thank you for listening

경청해 주셔서 감사합니다.