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## Service Encounter Dimensions of Internet Voice Assistants: A Non-Human Centric Perspective

TREO Talk Paper

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### **Abstract**

Artificial intelligence (AI) applications, such as Internet Voice Assistants (IVAs), are set to transform the encounter between eService providers and consumers. Popular examples of IVAs (such as Siri, Alexa, Cortana and Google Assistant) have been incorporated into devices to receive and send information over the internet. Many firms are utilizing the humanistic functionalities of IVAs to automate service activities previously undertaken by human employees. For example, IVAs are used to provide consumers with quick answers to problems without a need for human intervention. While the traditional service encounter concept has been extensively studied (e.g. Tam 2019), further research is needed to improve the understanding of service encounter when employees are replaced by IVAs. We define IVA service encounter as the goal-oriented dyadic interaction between IVAs and consumers to access and consume relevant eServices (Larivière et al. 2017). In this study we explore answers to the following questions:

RQ1: What are the dimensions of consumer encounter with Intelligent Voice Assistants (IVA)?

RQ2: What is the relationship between the IVA encounter dimensions and IVA effective use leading to users' satisfaction with the IVA?

In prior literature, the service encounter concept has been described as a distinct interaction between consumers and service personnel for the purpose of providing relevant core services and other related support (Voorhees et al., 2017). Based on similar definitions, various dimensions of service encounter have been proposed and discussed in previous literature. For example, the service encounter construct has been measured using three dimensions of personnel behavior; concern, civility and congeniality (Tam 2019). Notably, Raajpoot (2004b) used SERVQUAL (Parasuraman et al. 1988) as a base model, to study service encounter. Based on literature review and focus group methods, Raajpoot (2004b) identified the following seven dimensions to measure service encounter: tangibility, reliability, assurance, sincerity, personalization, formality, and responsiveness. Keillor et al. (2004) also proposed service scope, service quality, physical product quality, service quality and behavioral intentions as dimensions of service encounter. Finally, Rhee and Rha (2009) measured the quality-of-service encounter based on the following attributes of frontline personnel; their listening skills, competence and efficacy.

As seen in the above-mentioned studies, prior literature focuses on the role of human actors in the service encounter process. This does not provide an adequate framework for studying IVA Encounter in a non-human centric context. We adopt a survey approach to complete our study. We further utilize Structural Equation Modelling (with AMOS) to analyze our survey data. Our findings will increase the understanding of the IVA encounter concept and the specific dimensions which relates to its effective use.

### References

Keillor, B. D., Hult, G. T. M., & Kandemir, D. (2004). A study of the service encounter in eight countries. Journal of International Marketing, 12(1), 9-35.

Larivière, B., Bowen, D., Andreassen, T. W., Kunz, W., Sirianni, N. J., Voss, C., ... & De Keyser, A. (2017). "Service Encounter 2.0": An investigation into the roles of technology, employees and customers. Journal of Business Research, 79, 238-246.

Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. 1988, 64(1), 12-40.

Raajpoot, N. 2004b. "Reconceptualizing Service Encounter Quality in a Non-Western Context," Journal of Service Research (7:2), pp. 181–201.

Rhee, S. K., & Rha, J. Y. (2009). Public service quality and customer satisfaction: exploring the attributes of service quality in the public sector. The service Industries journal, 29(11), 1491-1512.

Tam, J. L. M. 2019. "Examining the Role of Customer Self-Efficacy in Service Encounters," Services Marketing Quarterly (40:4), pp. 269–284.

Voorhees, C. M., Fombelle, P. W., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R., & Walkowiak, T. (2017). Service encounters, experiences and the customer journey: Defining the field and a call to expand our lens. Journal of Business Research, 79, 269-280.