

8-10-2022

## Learning Satisfaction and Perceived Performance with Platform-based Ecosystems

Aydin Farrokhi  
*McMaster University*, [aydin.farrokhi@mcmaster.ca](mailto:aydin.farrokhi@mcmaster.ca)

Milena Head  
*McMaster University*, [headm@mcmaster.ca](mailto:headm@mcmaster.ca)

Follow this and additional works at: [https://aisel.aisnet.org/treos\\_amcis2022](https://aisel.aisnet.org/treos_amcis2022)

---

### Recommended Citation

Farrokhi, Aydin and Head, Milena, "Learning Satisfaction and Perceived Performance with Platform-based Ecosystems" (2022). *AMCIS 2022 TREOs*. 56.  
[https://aisel.aisnet.org/treos\\_amcis2022/56](https://aisel.aisnet.org/treos_amcis2022/56)

This material is brought to you by the TREO Papers at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2022 TREOs by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# **Learning Satisfaction and Perceived Performance with Platform-based Ecosystems**

*TREO Talk Paper*

**Aydin Farrokhi**  
McMaster University  
aydin.farrokhi@mcmaster.ca

**Milena Head**  
McMaster University  
headm@mcmaster.ca

## **Abstract**

Largely instigated by the pandemic, many higher education institutions (HEIs) have invested in virtual learning projects out of necessity. However, post-pandemic, it is not clear whether HEIs will continue using virtual learning systems. The education business model remains largely the same, and digital tools are often only used to continue traditional teaching methods in virtual environments. One way to address this shortcoming is to look at current developments in platform-based ecosystems. Platform-based ecosystems provide numerous benefits to both institutions and learners. In an ecosystem, multiple higher education institutions offer similar products and services. Previous studies show partnering with a platform-based ecosystem boosts capabilities and redefines business operations (Dhar & Sundararajan, 2007), increases net benefit to platform users (Ceccagnoli et al., 2012), improves business processes (i.e., accessibility, availability, and efficiency) (Ozalp et al., 2018), and enhances customer experiences and satisfaction (Clemons et al., 2017).

Building on the theory of value co-creation (Grover et al., 2018) and the existing literature in information systems (Agarwal & Selen, 2009; Bharadwaj et al., 2007; Bunce et al., 2017; Engert et al., 2022; Goh et al., 2013; Hein et al., 2020; Helfat & Raubitschek, 2018), this research aims to investigate the value partnering with a platform-based learning ecosystem brings to higher education and to determine some of the key constructs affected by co-created values. Specifically, we seek to answer RQ1) what are the factors that influence user perception of a higher education institution's (HEI) performance in a platform-based ecosystem, and RQ2) how does partnering with a platform-based learning ecosystem affect the relationships between a higher education institution's perceived performance and satisfaction, and their antecedents? To answer these questions, we will employ a quantitative approach to test the proposed research model. A survey will measure students' perceptions about the extent to which a platform-based system satisfies learning tasks. For platform-related data, the edX online learning platform has been chosen for several reasons. In comparison with Udacity and Coursera, it is designed to allow for traditional residential equivalent programs. However, it is an open-source platform that allows partners to develop and enrich the platform.

It is expected that joining a platform-based ecosystem will significantly benefit an HEI. Participating in a platform can add to learners' satisfaction and create higher perception of performance for the HEI that can translate into an increase in perceived value. HEIs with better IS integration capability and information quality are expected to perform better in platform-based learning systems. From the user's perspective, the heterogeneity of products and services offered through the platform promotes further flexibility that can satisfy a broader range of learning needs.

Like most empirical studies, one potential issue is the emergent nature of this study. The study is time-sensitive, meaning participants from local universities are often trying platform-based learning for the first time and may not have sufficient time to utilize the new capabilities fully and thus, satisfaction from new learning methods may not have been effectively measured. The first potential theoretical contribution of this study is to the IS domain. This study focuses on learner satisfaction issues from the perspective of availability and abundance of learning materials, content, and services offered through partnership with platform-based learning systems. This study can contribute to practice by offering a model for decision-makers to realize the diffused perceived value when joining a platform-based system.

## References

- Agarwal, R., & Selen, W. (2009). Dynamic Capability Building in Service Value Networks for Achieving Service Innovation. *Decision Sciences*, 40(3), 431–475.
- Bharadwaj, S., Bharadwaj, A., & Bendoly, E. (2007). The Performance Effects of Complementarities Between Information Systems, Marketing, Manufacturing, and Supply Chain Processes. *Information Systems Research*, 18(4), 437–453.
- Bunce, L., Baird, A., & Jones, S. E. (2017). The student-as-consumer approach in higher education and its effects on academic performance. *Studies in Higher Education*, 42(11), 1958–1978.
- Ceccagnoli, M., Forman, C., Huang, P., & Wu, D. J. (2012). Cocreation of Value in a Platform Ecosystem : The Case of Enterprise Software. *MIS Quarterly*, 36(1), 263–290.
- Clemons, E. K., Dewan, R. M., Kauffman, R. J., & Weber, T. A. (2017). Understanding the Information-Based Transformation of Strategy and Society. *Journal of Management Information Systems*, 34(2), 425–456.
- Dhar, V., & Sundararajan, A. (2007). Issues and Opinions: Information Technologies in Business: A Blueprint for Education and Research. *Information Systems Research*, 18(2), 125–141.
- Engert, M., Evers, J., Hein, A., & Krcmar, H. (2022). The Engagement of Complementors and the Role of Platform Boundary Resources in e-Commerce Platform Ecosystems. *Information Systems Frontiers*, online.
- Goh, K.-Y., Heng, C.-S., & Lin, Z. (2013). Social Media Brand Community and Consumer Behavior: Quantifying the Relative Impact of User-and Marketer-Generated Content. *Information Systems Research*, 24(1), 88–107.
- Grover, V., Chiang, R. H. L., Liang, T. P., & Zhang, D. (2018). Creating Strategic Business Value from Big Data Analytics: A Research Framework. *Journal of Management Information Systems*, 35(2), 388–423.
- Hein, A., Schreieck, M., Riasanow, T., Setzke, D. S., Wiesche, M., Bohm, M., & Krcmar, H. (2020). Digital platform ecosystems. *Electronic Markets*, 30(1), 87.
- Helfat, C. E., & Raubitschek, R. S. (2018). Dynamic and integrative capabilities for profiting from innovation in digital platform-based ecosystems. *Research Policy*, 47(8), 1391–1399.