

Ensuring Platform Readiness and Scalability of Digital Platforms: The Case of Dassault Systèmes and Cadland

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Digital Service Innovation

Consultants such as Bain & Company and BCG alike urge companies to build a strong digital strategy, reframe their business model, build customer-centric offerings, and create a sense of urgency for scaling digital solutions using transformation ‘enablers’ (Lancry, Anderson, Caimi, Colombani, Cummings & Morrissey, 2019; Close, Franke, Grebe Hrishikesh & Rogers, 2022). Studies emphasize the role of digital technologies as drivers of service innovation in manufacturing industries (Kohtamäki, Rabetino, Parida, Sjödin & Henneberg, 2022; Kowalkowski, Wirtz & Ehret, 2024; Vendrell-Herrero, Bustinza, Opazo-Basaez & Gomes, 2023).

Digital service innovation (DSI) is defined by Opazo-Basáez, Vendrell-Herrero, Bustinza and Raddats (2024: 131) as “the strategic use of digital technologies to (re)model service design, delivery, and individualization, leading to innovative offerings, improved operations, and enhanced service value creation”. DSI can be considered an extension of digital servitization, whereby manufacturing firms switch from a product to a service-dominant business model (see Shen Lei et al., 2023 for an overview). DSI represents a new source of technological innovation, in which digital interconnectivity and user data enable the development of new, dynamic and tailored services in multiple business contexts (Opazo-Basáez et al. (2024:129). In DSI, both the service offering and the technological infrastructure that support it can be adapted. Digital servitization and DSI imply a complex transformation process impacting the business model and managerial decision-making, necessitating learning, internal alignment and complexity management (Dmitrijeva, Schroeder, Ziaee Bigdeli & Baines, 2022; Coreynen, Matthyssens, Struyf & Banhaverbeke, 2024; Momeni, Rapaccini, Martinsuo, 2024; Friedl, Matthyssens & Van Bockhaven, 2025).

Kowalkowski et al. (2024:281) agree on the disruptive character of B2B digital services and stress that service markets have been revolutionized by three key complementary signature technologies: (1) the Internet-of-Things, (2) intelligent automation, and (3) digital platforms. The latter are providing “the technical and organizational architecture for integrating resources and stakeholders into service ecosystems for value co-creation” (Kowalkowski et al., 2024: 285). Recent literature emphasizes the *ecosystemic nature* of DSI. Kowalkowski et al. (2024: 291) put forward that an “ecosystem reconfiguration is often necessary for the successful implementation of new services”, whereby actors interact, integrate resources, and interpret ideas from their heterogeneous perspectives during DSI

generation and transformation. Vargo et al. (2024) suggest an enriched S-D Logic for (digital) service innovation, based on emergence, distributed governance ensuring high degrees of interoperability, and symbiotic design, requiring a collective effort, resource integration, and adequate training and support for participating stakeholders.

Developing and Scaling Digital Platform Ecosystems

Narvaiza, Campos, Martín-Peña and Díaz-Garrido (2024) argue that in order to realize the full potential of digital transformation, industrial firms need to adopt digital platforms. DSI in digital platforms encompasses multiple parties along a complex design and development process, with multiple multilateral interactions and iterations (Vendrell-Herrero, Vaillant & Bustinza, 2025; Jovanovic, Sjödin & Parida, 2022). Along a similar line, and (2025) focus on how digital platforms execute DSI by orchestrating diverse ecosystem actors' activities and resources, thereby enabling interoperability for innovation.

Scalability is critical for digital business models but industrial firms keep on struggling to achieve comparable scalability, as reaching a critical mass of service sales has proven to be key for financial performance (Vendrell-Herrero et al., 2025). However, experts agree that “[d]espite digital opportunities, especially those facilitated by IA and platforms, scalability is still a major challenge for service processes and many digital service offerings are developed very individually as firms struggle to mobilize the wider ecosystem (Kowalkowski et al., 2024: 294). Scaling might be difficult as it implies the co-evolution of services, infrastructure and governance (Jovanovic et al., 2022). Hendricks, Matthyssens and Kowalkowski (2025) demonstrate it also presupposes the co-evolution of collective engagement and value co-creation on digital platforms,

and identify different pathways for scaling platforms depending on the business model (freemium versus premium). Hein, Weking, Schrieck, Wiesche, Böhm and Krcmar (2019: 509) propose three value co-creating practices in platforms: (1) Integration of complementary assets (demand-side), (2) Ensuring platform readiness (supply-side), and (3) Servitization through application enablement (core practice).

A variety of practices and capabilities have been suggested as being critical to services and start-up scaling and scalability (e.g., Nagy, Bläse, Filser, Appenzeller & Puumalainen, 2025; Lange, Tomini, Brinkmann, Kanbach & Kraus, 2023). The latter distinction has been clarified by Coviello, Autio, Nambisan, Patzelt and Thomas (2024). They argue that *scaling* refers to “a type of growth characterized by returns to scale...whereby managers transform the internal organization and leverage digital resources to rapidly expand a firm’s outputs without a corresponding ex-ante increase in inputs” (p. 14). They define *scalability* as an “ordinary organizational capability developed by managing and achieving coherence among a firm’s technological architecture, organizational architecture, and business model” (p.16).

More concrete models on platform scaling and platform-based companies have been offered by Schrieck, Wiesche and Krcmar (2021) and Vendrell-Herrero et al. (2025). With a case study DSI on SAP’s platform, Schrieck et al. (2021) illustrate how technology-related capabilities (cloud-based platformization and open IT landscape management) and relationship-driven capabilities (ecosystem orchestration, platform evangelism, and platform co-selling) help the platform owner to enable and balance value co-creation and value capture, and thereby the scaling. Vendrell-Herrero, Vaillant et al. (2025) explore how Nvidia over time fostered scalability. They propose a process model revealing how incumbent

firms can establish scalability conditions in three stages: value recognition, organizational adaptability, and strategic renewal.

Outlining the Research Gap and Research Method

So far, we highlighted the importance and complexity of DSI. We zoom in on DSI on digital platforms and learned that scaling is a strategic priority for such digital platforms. An overview of core frameworks for guiding researchers and managers on platform development and scaling has been given. However, in line with calls from several scholars, this study digs deeper into the scalability of platform offerings by mature players. We wonder *how a B2B multiplatform owner and its key partners can stimulate platform readiness and generate scalability over time*. In fact, Vendrell-Herrero, Kowalkowski, Wirtz and Gebauer (2025) argue that there has been limited exploration of how digitalization integrates with servitization to drive scalability. Also, a focus on less deliberate factors and emergence is welcomed (Vendrell-Herrero, Vaillant et al., 2025). Schrieck et al. (2021) stress the need for studying this phenomenon in more mature contexts.

During this discovery, we zoom in on platform readiness and applications growth as scaling will be impossible to reach without customer and stakeholder readiness for using the applications, share data and engage in intensified value co-creation. We extend the concept of *customer service readiness* (Vaittinen & Martinsuo, 2019; Vaittinen, Martinsuo & Ortt, 2018; Galvani & Bocconcelli, 2022) and Narvaiza et al.'s (2025) Digital Service Readiness Model, to study the *service platform readiness* through a wider “actor engagement perspective” in order to uncover how scaling is realized thorough “synchronized readiness for co-developing and co-delivering services” (Narvaiza et al., 2025: 3, citing Opazo-Basaez et al., 2024)

and dynamic exchange capabilities for value co-creation (Siaw & Sarpong, 2021) among diverse actors.

We present a *longitudinal case study* of the development and growth of Dassault's the 3DEXPERIENCE® platform, a digital environment representing a series of innovative software solutions for 3D modeling, simulation, virtual twin, information intelligence, and collaboration, offered to and co-developed with industrial companies (application users) and third-party developers/system integrators. We zoom in on the creation of customer readiness by coordinated activities of the platform owner *Dassault Systèmes* (FR) and the third-party value solutions partner *Cadland* (IT). We follow different customer-readiness enhancing initiatives (the Academy, User advocacy communities, joint customer-centric software development projects, etc.) and engagement enhancing interactions with customers aimed at increasing their digital capabilities, performing joint innovation, resource sharing and value co-creation related to the cloud platform. We also observe feedback loops (Hendricks et al., 2025) from these interactions to the third-party developer and to the platform owner and between these partners, resulting in adaptive and explorative learning (Coreynen et al., 2024; Friedl et al., 2025) and upgrades and customization of the solutions offered. As such, we illustrate how a symbiotic business collaboration (Dalenogare, Le Dain, Ayala, Pezzotta & Frank, 2023) through a combination of original platform ecosystem capabilities (Schrieck, Wiesche & Krcmar, 2023) and marketing/sales initiatives can stimulate customer readiness and result in platform growth.

As contribution, we extend the model of Narvaiza (2025) on Customer Readiness to platform readiness as an important element of scaling. We link Schrieck et al.'s (2021) value co-creation and capture model to scaling of digital platforms. We fulfil the call for studies on DSI in multiplatform ecosystems (Ahmed & Kowalkowski, 2025), and extend the model of Vendrell-Herrero

(2025) through our focus on emergence and less visible scalability factors.

PS: The case is work in progress. A first round of interviews with Cadland managers and a major customer has been realized during 2023-2024. With a second wave of interviews during the Summer and Fall 2025, the case will be finalized.

References

- Ahmed, T., & Kowalkowski, C. (2025). The new industry playbook: digital service innovation in multi-platform ecosystems. *Journal of Enterprise Information Management*, Early Cite.
<https://doi.org/10.1108/JEIM-05-2024-0240>
- Close, K., Franke, M.R., Grebe, M., Hrishikesh, H., & Rogers, K (2022). *The Keys to Scaling Digital Value*. BCG, (February).
- Coad, A., Cowling, M., & Siepel, J. (2017). Growth processes of high-growth firms as a four-dimensional chicken and egg. *Industrial and Corporate Change*, 26, 537-54. <https://doi.org/10.1093/icc/dtw040>
- Coviello, N., Autio, E., Nambisan, S., Patzelt, H., & Thomas, L. D. (2024). Organizational scaling, scalability, and scale-up: Definitional harmonization and a research agenda. *Journal of Business Venturing*, 39(5), 106419. <https://doi.org/10.1016/j.jbusvent.2024.106419>
- Coreynen, W., Matthyssens, P., Struyf, B., & Vanhaverbeke, W. (2024). Spiraling between learning and alignment toward digital service innovation. *Journal of Service Management*, 35(2), 306-331.
<https://doi.org/10.1108/JOSM-12-2022-0400>

Dalenogare, L.S., Le Dain, M-A., Ayala, N.F., Pezzotta, G., & Frank, A.G. (2023). Building digital servitization ecosystems: An analysis of inter-firm collaboration types and social exchange mechanisms among actors. *Technovation*, 124, 102756.

<https://doi.org/10.1016/j.technovation.2023.102756>

Dmitrijeva, J., Schroeder, A., Ziaee Bigdeli, A., & Baines, T. (2022). Paradoxes in servitization: A processual perspective, *Industrial Marketing Management*, 101, 141-152.

<https://doi.org/10.1016/j.indmarman.2021.12.007>

Favoretto, C., Mendes, G.H.S., Oliveira, M.G., Cauchick-Miguel, P.A. & Coreynen, W. (2022). From servitization to digital servitization: How digitalization transforms companies' transition towards services. *Industrial Marketing Management*, 102, 104-121.

<https://doi.org/10.1016/j.indmarman.2022.01.003>

Friedl, C., Matthyssens, P., & Van Bockhaven, W. (2025). Unleashing Digital Servitization and Service Innovation: How decision-making logics and organizational learning enable coping with implementation process complexities. *Journal of Enterprise Information Management*, Forthcoming.

<https://doi.org/10.1108/JEIM-05-2024-0238>

Galvani, S., & Bocconcelli, R. (2022). Intra- and inter-organizational tensions of a digital servitization strategy. Evidence from the mechatronic sector in Italy. *Journal of Business & Industrial Marketing*, 37(13) 1-18.

<https://doi.org/10.1108/JBIM-03-2021-0183>

Haile, N., & Altmann, J. (2016). Value creation in software service platforms. *Future Generation Computer Systems*, 55, 495-509.

<https://doi.org/10.1016/j.future.2015.09.029>

Hein, A., Weking, J., Schreieck, M., Wiesche, M., Böhm, M. & Krcmar, H. (2019). Value co-creation practices in business-to-business platform ecosystems. *Electronic Markets*, 29, 503-518.

<https://doi.org/10.1007/s12525-019-00337-y>

Hendricks, L., Matthyssens, P., & Kowalkowski, C. (2025). The co-evolution of actor engagement and value co-creation on digital platforms. *International Journal of Production Economics*. 279 (January) 109467. <https://doi.org/10.1016/j.ijpe.2024.109467>

Jovanovic, M., Sjödin, D., & Parida, V. (2022). Co-evolution of platform architecture, platform services, and platform governance: Expanding the platform value of industrial digital platforms. *Technovation*, 118, 102218. <https://doi.org/10.1016/j.technovation.2020.102218>

Kapoor, K., Bigdeli, A.Z., Dwivedi, Y., Schroeder, A., Beltagui, A., & Baines, T. (2021). A socio-technical view of platform ecosystems: Systematic review and research agenda, (May), 94-108. <https://doi.org/10.1016/j.jbusres.2021.01.060>

Kohtamäki, M., Rabetino, R., Parida, V., Sjödin, D., & Henneberg, S. (2022). Managing digital servitization toward smart solutions: Framing the connections between technologies, business models, and ecosystems. *Industrial Marketing Management*, 105, 253-267. <https://doi.org/10.1016/j.indmarman.2022.06.010>

Kowalkowski, C., Wirtz, J., & Ehret, M. (2024). Digital service innovation in B2B markets. *Journal of Service Management*. 35(2), 280-305. <https://doi.org/10.1108/JOSM-12-2022-0403>

Lancry, O., Anderson, N., Caimi, G., Colombani, L., Cummings L. & Morrissey, R. (2019). *Scaling Your Digital Transformation*, Bain & Company, Brief.

Lange, F., Tomini, N., Brinkmann, F., Kanbach, D.K., & Kraus, S. (2023). Demystifying massive and rapid business scaling – An explorative study on driving factors in digital start-ups, *Technological Forecasting & Social Change*, 196, 122841. <https://doi.org/10.1016/j.techfore.2023.122841>

Momeni, B., Rapaccini, M., & Martinsuo, M. (2024). Manufacturers managing complexity during the digital servitization journey. *Journal of Manufacturing Technology Management*, 35(9), 51-72. <https://doi.org/10.1108/JMTM-07-2023-0275>

Nagy, N., Bläse, R., Filser, M., Appenzeller, J., & Puumalainen, K. (2025). Platform dynamics and rapid scaling: an empirical examination of growth drivers in platform-based start-ups, *Review of Managerial Science*. <https://doi.org/10.1007/s11846-025-00918-6>

Narvaiza, L., Campos, J. A., Martín-Peña, M. L., & Díaz-Garrido, E. (2024). Characterizing digital service innovation: phases, actors, functions and interactions in the context of a digital service platform. *Journal of Service Management*, 35(2), 253-279. <https://doi.org/10.1108/JOSM-12-2022-0401>

Narvaiza, L., Campos, J. A., Martín-Peña, M. L., & Díaz-Garrido, E. (2025). Unveiling digital service readiness: exploring customer and manufacturer organizational perspectives in digital service innovation. Early Cite. <https://doi.org/10.1108/JEIM-04-2024-0210>

Opazo-Basáez, M., Vendrell-Herrero, F., Bustinza, O.F. & Raddats, C. (2024). Guest editorial: digital service innovation: Ontology, context and theory, *Journal of Service Management*, 35(2), 129-140. <https://doi.org/10.1108/JOSM-03-2024-498>

Rabetino, R., Kohtamäki, M., & Huikkola, T. (2024). Digital service innovation (DSI): a multidisciplinary (re)view of its origins and progress using bibliometric and text mining methods. *Journal of Service Management*, 35(2), 176-201. <https://doi.org/10.1108/JOSM-12-2022-0375>

Raddats C., Naik P., & Bigdeli A. Z. (2022). Creating value in servitization through digital service innovations. *Industrial Marketing Management*, 104, 1-13. <https://doi.org/10.1016/j.indmarman.2022.04.002>

- Rodríguez, M. A., Lepratte, L., Yoguel, G., & Rabetino, R. (2025). Digital Service Innovation as a co-production of socio-technical assemblages oriented toward servitization. *Journal of Enterprise Information Management*. Early Cite. <https://doi.org/10.1108/JEIM-04-2024-0216>
- Schreieck, M., Wiesche, M. & Krcmar, H. (2021). Capabilities for value co-creation and value capture in emergent platform ecosystems: A longitudinal case study of SAP's cloud platform. *Journal of Information Technology*, 36(4), 365–390. <https://doi.org/10.1177/02683962211023780>
- Shen, L., Sun, W., & Parida, V. (2023). Consolidating digital servitization research: A systematic review, integrative framework, and future research directions. *Technological Forecasting and Social Change*, 191, 122478. <https://doi.org/10.1016/j.techfore.2023.122478>
- Siaw, C.A., & Sarpong, D. (2021). Dynamic exchange capabilities for value co-creation in ecosystems. *Journal of Business Research*, 134, 493-506. <https://doi.org/10.1016/j.jbusres.2021.05.060>
- Sjödin, D., Parida, V., & Kohtamäki, M. (2019). Relational governance strategies for advanced service provision: Multiple paths to superior financial performance in servitization. *Journal of Business Research*, 101, 906-915. <https://doi.org/10.1016/j.jbusres.2019.02.042>
- Vaittinen, E., Martinsuo, M., & Ortt, R. (2018). Business customers' readiness to adopt manufacturer's new services. *Journal of Service Theory and Practice*, 28(1), 52-78. <https://doi.org/10.1108/JSTP-03-2017-0053>
- Vaittinen, E., & Martinsuo, M. (2019). Industrial customers' organizational readiness for new advanced services. *Journal of Manufacturing Technology Management*, 30(7), 1073-1096. <https://doi.org/10.1108/JMTM-07-2018-0194>
- Vargo, S. L., Fehrer, J. A., Wieland, H., & Nariswari, A. (2024). The Nature and Fundamental Elements of Digital Service Innovation. *Journal of Service Management*, 35(2), 227-252. <https://doi.org/10.1108/JOSM-02-2023-0052>

Vendrell-Herrero, F., Bustinza, O. F., Opazo-Basaez, M., & Gomes, E. (2023). Treble innovation firms: antecedents, outcomes, and enhancing factors. *International Journal of Production Economics*, 255, 108682. <https://doi.org/10.1016/j.ijpe.2022.108682>

Vendrell-Herrero, F., Bustinza, O.F., Parry, G., & Georgantzis, N. (2017). Servitization, digitization and supply chain interdependency. *Industrial Marketing Management*, 60, 69-81. <https://doi.org/10.1016/j.indmarman.2016.06.013>

Vendrell-Herrero, F., Kowalkowski, C., Wirtz, J., Gebauer, H. (2025). Call for Papers Servitization, Digitalization and Scalability, *Technological Forecasting and Social Change*. <https://www.sciencedirect.com/special-issue/324974/servitization-digitalization-and-scalability>

Vendrell-Herrero, F., Vaillant, Y., & Bustinza, O. (2025). Scalability in incumbent firms: The case of Nvidia. *Long Range Planning* 58, 102540. <https://doi.org/10.1016/j.lrp.2025.102540>

Wirtz, J., & Kowalkowski, C. (2023). Putting the ‘service’ into B2B marketing: key developments in service research and their relevance for B2B. *Journal of Business and Industrial Marketing*, 38(2), 272-289. <https://doi.org/10.1108/JBIM-02-2022-0085>