Serious Games in Online Corporate Training: Value Creation and Value Destruction: A Literature Review

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Abstract
The research examines the obstacles which organizations face when they try to implement digital Serious Games (SG) for their Online Corporate Training (OCT) programs. Organizations face obstacles when using Serious Games for employee learning, given that they need customized content and struggle with system integration, while their training expectations are not always firfilled. The research shows that inadequate SG implementation results in lost opportunities and increasing costs. The study establishes four essential value fluctuation dimensions which affect SG-based training success: destruction, reduction, reconfiguration and restoration. The research investigates B2B relationship tensions by using practice-based methods which include business organization interviews. The research results demonstrate that scientists cannot determine if SGs strengthen organizations because opposing elements continue to exist, exposing systemic vulnerabilities. The research establishes a conflict which motivates readers to study how the story affects educational approaches in business schools.

Keywords: Online Corporate Training, Organizational Learning, B2B Relationships, Practice-Based Approach, Innovation

1. Introduction

Organizations now focus on digital transformation of learning systems, because they need better methods to keep employees engaged and retain their knowledge. Serious Games (SG) have become popular training tools because they allow interactive design to create secure environments for running advanced workplace simulations. Past studies show SG boosting employee motivation while teaching teamwork skills and delivering new skills which makes them suitable for Online Corporate Training (OCT) (Larson, 2019; Mitsea,

Drigas, & Skianis, 2024). Nonetheless, the effectiveness of SG-based training depends on value fluctuation dimensions which include value destruction, reduction, reconfiguration and restoration (Pistono, Santos, & Baptista, 2021). The practice-based approach to SGs studies comprises organizational operational systems and business-to-business partnerships through organizational operational system analysis (Nguyen, 2021; Springer, 2016). The research investigates the factors which determine OCT value achievement through a literature review. The research results indicate that organizations remain uncertain about SG adoption effects on learning processes, yet there is no scientific evidence to determine if these tools enhance or disrupt learning activities. The deployment of SGs presents ongoing operational difficulties, such the need for customization, system integration, and management of employee expectations. Poorly executed SG initiatives can lead to wasted resources and eroded trust, ultimately creating more issues rather than delivering improved outcomes (Calza-Perez, Martínez-Climent, & Agulló-Marco, 2024).

The research contributes to the field of online corporate training (OCT) by studying the contradictory processes of value generation and elimination, which occur between Serious Game Developers (SGDs) and Client Organizations (COs). The existing body of research focuses on SG training adoption, leading to value creation (Grönroos & Voima, 2013; Helkkula et al.,2012) but this study demonstrates that value creation also exists alongside value reduction, reconfiguration and destruction, expanding our understanding of the service ecosystem failure theory.

2. Methodology

The research design of Saunders et al. (uses qualitative methods according to Saunders et al. (2009) describes an inductive approach with interpretive perspectives. The research investigates SG implementation in OCT through an inductive method, which generates insights about the complex process of adoption. The research method uses thematic synthesis to study existing knowledge about meanings and practices, and their related tensions to identify patterns.

2.1. Data Collection and Analysis

The research team performed a systematic review of peer-reviewed articles which included academic books and conference papers from organizational learning, digital training and game-based education fields. The research team retrieved all available results from Scopus, Web of Science and Google Scholar databases. The research included studies about SG adoption in corporate training environments which studied value creation and destruction and practice-based approaches. The research team excluded studies that used personal anecdotes, lacked scientific methods and focused only on entertainment gaming. The research team applied thematic coding to analyze selected studies through an inductive method, which allowed new categories to develop from the collected data. The research team identified four main themes which included customization problems, integration difficulties, expectation discrepancies and value stability changes. The research employed interpretive methods to analyze previous studies which produced conflicting results which, while generating theoretical knowledge and operational answers, failed to produce results that could be adequately replicated.

3. Theoretical Background

This exploratory study aims to introduce the concept of failure in the field of OCT in general, specifically regarding digital SGs, a growing global market offering positive cost-

benefits (AlliedMarket, 2020). Conversely, many organizations fail to fully adopt SGs. Several barriers may be identified, both in the corporate environmental setting and in SGs' requirements for customization, integration, and development (Hauge et al., 2014). However, little is explained about the actual reasons for failure to adopt SGs (Riedel et al., 2013). Turnbull et al. identify both the formal and informal organizational structures, making a distinction where resource allocation is actively integrated in the former, but less straightforward in the latter, being diffused at the macro and micro levels (where close, individual contacts are key) and bonding requires a personal commitment (reading investments) yielding satisfying outcomes; these relationships being restricted, however, do not guarantee benefits realization for the COs as a whole. (1996, p. 53,54). Failure is a concept explored by research, systematically focusing on the success-failure conundrum and often sidelining it under a negative perspective. Service failure in satisfying needs and meeting expectations, product failure creating unwarranted outcomes, failure mitigation and recovery management, and so forth (Hübner et al., 2018; Kjeldgaard et al., 2021; Talwar et al., 2020). Failure, as an isolated phenomenon, is also outlined in terms of time management and resource allocation, stressing the need to 'anticipate, observe, learn, recover and overcome failure'. Nonetheless, understanding the nature of failure remains a key element to conceptualizing challenges to digital SG adoption for OCT initiatives (Fombelle et al., 2020; Friend et al., 2019).

Technological innovation has fundamentally altered how employees participate in corporate training, potentially affecting their needs and expectations. Digital SGs offer relatively more benefits to employees then passive systems, given the former's focus on experiential, situated problem-solving approaches that elicits deep learning, high engagement levels and impacts knowledge transference, centering on the experience exchanged between employees, trainers and training systems, allowing for greater interactivity, new information development (both through tacit and explicit knowledge) and promoting critical thinking processes (Karunathilake & Galdolage, 2021; Westera, 2019). Regardless, providing value through a 'fit-to-adopt' SG training offering to a given CO cannot be based on a standard formula alone, requiring a balance which will – in one hand, allows for the CO's adequate participation and engagement (taking into account the context in which the CO can adapt to new training approaches and co-create value). On the other hand, a feasible demobilization of SGD resources and capabilities (considering the market realities in which the CO is inserted and enabling value to the offering's beneficiary) exists throughout co-development (Ng & Ding, 2010). A clear gaming purpose encapsulates knowledge development frameworks, providing cognitive, logical reasoning, and skill development benefits (Backlund & Hendrix, 2013). While SGs potentially provide higher training engagement, enhance untransferable skills, potentially reinforce employee loyalty and increase market talent differentiation, the main barriers to adoption are that they require specialized outsourcing development, a high-level integration with the organization (as well as a readiness, fit for use from the actor networks), do not readily deliver intended benefits when leading through technology rather than strategic intent (not ideal for 'off the shelf", "quick fix' solutions) and have a relative high entry cost. Notwithstanding, when properly applied and managed, it can potentially generate superior competitiveness for the organization.

Quite often, these premises are misread, and value is not created, but destroyed, either by its erosion or absence, sometimes (paradoxically) simultaneously. The reasons why one actor network has a distinct perception of value-associated concepts towards the same

object as another group are not altogether clear, and these boundaries are not uncommonly blurred (Star, 2010). The paradoxical nature of value concerns how well integrated value-based strategies are within organizational systems, establishing a link between the continuum of outsourced servitization processes and the perceived outcomes of different actors. Adopting Baines et al. (2020) four-stage servitization model, we consider SGD-provided services, from a CO perspective, as an incremental innovation over existing solutions, potentially creating tensions between established actor expectations towards training (Dmitrijeva et al., 2022). Paradox Theory is contingent on contrasting short- and long-term objectives and on contextualizing competing, divergent demands from the viewpoints of internal and external actors, sometimes from opposite (and subjectively) valued perspectives (Smith & Lewis, 2011). Paradoxical demands and expectations regarding managerial processes and intended goals will create a certain level of tension across the organizational system (between internal actors – e.g., leadership, middle managers, and employees) and between interacting organizations (dyadic relationship represented by internal and external actors – e.g., service buyers and suppliers). Paradox relationships can be characterized as both adversarial and complementary (Lewis, 2000). Depending on the perspective taken, specific initiatives may or may not be seen as "of value", especially regarding services and, when perceived negatively, notably on service failure, in the context of service recovery (Hagai Shaham, 2018). Dieste et al. (2022) identified 23 organizational tensions most likely arising from 'Industry 4.0' or digitalization scenarios, and developed 18 resolution strategies, as intended to understand paradoxical tensions. Other scholars also explored the scaled-up organizational tension brought about by increased connectivity and digitalization of services while, out of the creative destruction that ensues after the implementation of new approaches to existing structures, have been focused on establishing and leveraging value-building outcomes (De Angelis, 2021; Wimelius et al., 2021).

Innovation presents challenges and enables 'current value' destruction (VD), a necessary step into digital transformation, meeting with hierarchical, cultural, and managerial issues beyond the technical barriers that need to be overcome (Bonamigo & Frech, 2020; Jones et al., 2021). The nature of service VD associated with paradoxical tensions is less understood, as its role may have been neglected (Gohary et al., 2016), although value creation (VC) and its absence (often associated with VD) are closely related through tension-intensive interactions (Echeverri & Skålén, 2011; Gohary et al., 2016). VC and VD are very closely connected, as both concern resource integration outcomes, taking place within and around inter (and intra) organizational relationships in service ecosystems, being enabled by technology and innovation (Aarikka-Stenroos & Jaakkola, 2012; Saarijärvi et al., 2013; Vargo & Lusch, 2016). VC theoretical concepts were initially grounded in a B2C research field (Vargo et al., 2004) and subsequently expanded to include B2B actor interactions (Vargo & Lusch, 2011), characterized by both transactional and relational dimensions (Lindgreen et al., 2012; Vargo, 2011). VD research is not altogether new; however, it has not been as thoroughly explored as its counterpart, to the extent that there is still room for further exploration of 'value reduction' drivers (Järvi et al., 2018; Vafeas et al., 2016). VD sources are based on actors' relationships and behavior in the B2B context, and more so when contextualized by situational conditions present in dyadic (and systemic) interactions, where real-world actor practices will put theoretical frameworks to the test (Cabiddu et al., 2019; Frau et al., 2017; Pathak et al., 2020). When technology becomes a significant asset, leveraging synchronous and asynchronous actor

interactions, the potential for failure becomes an even more complex and contextualized proposition (Galdolage, 2021).

Plé and Cáceres (2010) defined VD as a failed resource integration exchange between two "service systems", generated by inadequate stakeholder relationships, either intentional or incidental. In an interactive context, Value Destruction (VD) – enabling interactions from the supplier side - entails failure to render services as expected or to comply with the planned design. In contrast, on the client side, it could produce an adverse reaction or even be initiated by other reasons outside of the purview of the B2B relationship, such as economic pressure, marketing myopia, self-preservation priorities, etc., resulting in the well-being loss of at least one of those systems and potentially increasing value-related costs (Prior and Marcos-Cuevas, 2016). Nonetheless, VD must occur over preexisting value, through the same integration processes. Actors will behave with the expectancy of specific conditions and events, whether value is present (or just the expectation of value is), following a hypothetical script deemed appropriate in context to the service (to be) rendered (Bateson, 2002).

As applied resources either co-create new or expected value, or amplify a preexisting one, their misallocation denotes failure. Successful or unsuccessful resource allocation can occur at any point during an ongoing actor interaction, and value thus becomes a transactional form of capital, combining economic, social, cultural, and symbolic forms (Frau et al., 2017; Lombardo & Cabiddu, 2017). When relationships generate costs greater than they create value, actors become opportunistic and prioritize short-term, one-sided gains over long-term mutual benefits, limiting market growth and development, and ultimately failing to achieve systemic sustainability (Pathak et al., 2020). Our definition of VD comprises not only the actor's decline in resource access due to misuse, misbehavior, and the erosion of poorly structured (or governed) processes, but also residual client value-negative experiences. As SGD-CO dyadic value output fluctuates over time and is contextualized by an actor's multilevel, situated relationships, it cannot be conceptualized as an absolute. VC should perhaps consider a 'direction' in value variation, where 'mutually developed gains' (towards VC) counterweight 'mutually eroded losses' (towards VD), increasing and decreasing the total amount of value contained in each dyadic or systemic relationship. SGD-CO interplay must ensure that working together enables all stakeholders to be integrated at multiple levels, maintaining acceptable value levels.

By adopting an interactive approach, SGs improve content retention and enable greater flexibility in training adoption, relative to passive models such as in-person classes and Massive Open Online Courses (MOOCs) (Zhang et al., 2017). OCT outcome realization, however, in line with Human Resources Management (HRM) strategy goals, requires a more complex integration. In contrast, the anecdotal 'magic pill' or 'self-contained solution' - SGDs being expected to provide solutions without the proper contextualization, will more likely erode value rather than create it. Throughout co-development, a certain degree of adaptability is needed to maintain acceptable value levels, where 'change is the only constant'. Value gains require that SGD and CO actors be proactive in value-building relationships, encapsulating social, symbolic, and cultural forms of capital and involving employees, middle- and lower-level managers. Coupled with the firm's strategic objectives enveloping economic capital, involving top-level managers and leadership support (Bourdieu, 1986, 1992; Gergs, 2003; Lombardo & Cabiddu, 2017). Some changes

are planned (and tested), others require replanning and corrective actions, and finally, some may cause value erosion, outweighing forecasted gains (Díaz-Méndez et al., 2017). COs outsourcing SG-based training might not account for external conditions, thereby failing to provide the leadership support necessary for long-term systemic stability (Lusch et al., 2016). This research aims to offer novel insights, from an SGD's perspective, into the value fluctuations achieved with their COs, and the drivers that enable (or fail) the latter's SG training adoption. From this perspective, we ask: 'What are the drivers that may explain potential failure to adopt SG training in a B2B setting?' By adopting a practice-based lens (Bourdieu, 2005; Schatzki, 1996), we intend to expand our understanding of the root causes of training service failure. A practice view is adequate, as it captures the situated, routine processes institutionalized by interacting organizations and identifies potential causes of failure as drivers rather than failure as a compartmentalized phenomenon.

Defining failure as a phenomenon in online corporate training

Grönroos and Voima (2013) provided a clear understanding of value as structured from a producer (or developer) perspective, with integrated resources under their control (to the extent of their capabilities). They are made available for customers to experience, thereby enacting co-producing practices (value-in-exchange) that are resource-dependent (Ehret & Wirtz, 2018). In this study, concerning dyadic exchanges, while the customer, when accumulating experiences over time and independently of resources made available (value-in-use), is enthralled in a "social, physical, temporal, and/or spatial" manner, as the "customer integrates resources and processes from a firm with the resources and processes from other organizations and/or actors, depending on his or her individual, relational, and collective goals" (Grönroos & Voima, 2013, pp. 136–137; Helkkula et al., 2012). Frau et al. (2017) conceptualized variation usage factors which we can adopt to analyze how technology-enabled value impacts OCT offerings: "capital accessibility, attrition and exploitation", where that usage is found to be "a longitudinal, dynamic, experiential process that may include both construction and destruction (...) in different social and physical as well as temporal and spatial settings" (Grönroos & Voima, 2013, p. 138). The degree of capital accessed by one actor before other(s), how the choice to prioritize that access to resource integrating, and the degree of benefits realized from these choices are directly related to SGD's position facing COs in situated markets, which we found to be relevant – in terms of knowledge transformation and competitive advantaged, related to employee training (Ehret & Wirtz, 2018; Jardon & Martos, 2012; Paananen & Seppänen, 2013; Perrey et al., 2004; Whysall et al., 2019; Wirtz & Ehret, 2017). Furthermore, the literature also suggests that value, being all-encompassing, enables co-creation by which mutual value is expanded together, because value is at the same time exchanged between parties and experienced in the continuum, where customers bring past experiences, shaping their future value perceptions. Being explored in a global scale, knowledge-based value can be internalized from an economic perspective ('value-in-exchange') and a resource integration perspective ('value-in-use'), the latter branched out in two subcategories (Loon, 2019; Plé, 2017): VC and VD, denoting a variation in the amount of value retained by each party during multilateral interactions, and how that value increases or decreases along a given timeframe (Buhalis et al., 2020). As actors can access one or more forms of value and transform them into new capital through an exploitative approach, it is noted that, by not contributing to value, there is evidence of failure to achieve desired results. This impacts several dimensions about B2B relationships at simultaneous levels – a complex proposition in itself, such as quality or knowhow shortcoming on services

rendered, inappropriate resource allocation, misinterpreting the other party's expectations, etc., overall generating a 'negative influence' that may propagate further than the original locus of value loss (Andriopoulos & Lewis, 2009; Eze et al., 2019; Zhu & Zolkiewski, 2015). OCT is noted to deal with complex configurations, which may lead to success or failure, relative to the type of training (content and format), the recipients of that training, the managerial oversight of training initiatives, and the pertinence of training results (Bernardino & Curado, 2020; Sitzmann & Weinhardt, 2018). Training failure from an economic and managerial perspective may seem a priority in evaluating results (Miller & Mattick, n.d.); however, deeper concerns should be addressed, including organizational culture and the organization's own institutional makeup, as root causes of failure (Bunch, 2007; Hald et al., 2020). Additional complexity is perceived when considering training delivery systems based on technological innovation and the organization's readiness for adoption (Heldal et al., 2018).

.4. Institutional Theory

Strongly related to Practice Theory as depicting corporate actors' behavior, through intentions, artifacts used and activities and processes performed, contextualizing their valence perceptions towards value (Cabiddu et al., 2019), the Interactive Value Formation (IVF) framework becomes a relevant frame of reference, based on Echeverri and Skålén's work (2021). Extant research traditionally places VC and VD as diametrically opposed absolutes, rather than a relative positioning along a spectrum, in what may be constructed as a 'zero-sum' model (Cambridge University Press, 2021). Interactive Value Formation (IVF) Theory proposes an intermediary space between these two opposites, where multilayered degrees in value may fluctuate (Echeverri and Skålén, 2021; Luyen et al., 2022). VC and VD can be placed in a 'IVF space' as both inside existing practices (processes and other practice components which are perceived and effectively constitute an alignment or misalignment with existing goals and objectives) and between clustered practices (where higher or lower degree of correlation between bundled practices).

As value alternates along a continuum, this 'variation space' can be observed as a constant flux - where IVF consists in a function of value alignment or misalignment, enabled and constrained by mutually exchanged resource configuration (Baker and Kim, 2019; Plé and Cáceres, 2010; Vafeas et al., 2016). As resources are inserted into practices, they come back to the concept of practice (mis)alignment with intended outcomes, alternating VC and VD states (Kustrak Korper et al., 2021). Quite notably in digital goods markets, such as software services where innovation is a key success factor, knowledge exchange transforms knowledge and creates new knowledge enabling value creation, in a B2B relationship, when the proper conditions are present (i.e., trust, communication, transparency, skilled human capital and adequate resources, common objectives towards problem-solving, etc.). Conversely, when they become absent or lacking, there is potential for VD (Barrett et al., 2015; Järvi et al., 2018; Österberg, 2004; Randhawa et al., 2017). VC and VC may either occur alternately along a continuum - or simultaneously between different actor exchanges, when coherent or divergent actor interactions occur (S. Vargo and Lusch, 2016), thus inserting IVF within and across service ecosystems (Caridà et al., 2019).

4.1. Failure as a Phenomenon

Failure in employee adoption - OCT offering's success measurements are based on an ideally high adoption combined with manageable 'turnover' rates among participating

employees, and can be are dependent of the convergence of many factors, amongst which a balanced composition between the system's characteristics and the trainee's personal learning traits (Malureanu et al., 2021). OCT adoption is legitimized when trainees recognize them as being pertinent to their realities ('perceived usefulness'), which is partly dependent on a good internal communication strategy supported by management (Davis, 1989; Karunarathne and Abeyratne, 2020; T. Nguyen et al., 2015). Such perception is trifold: their adequacy and relevancy to pedagogical content balanced with delivery processes and formats; participation, albeit structured on a one-on-one mode (the user and the system), is immersed in a socially contextualized environment, and subjected to normative dynamics (during and between gameplay sessions), therefore participation must be a socially acceptable activity; training thus establishes clear and well communicated short term benefits and long term goals (that will impact actors and organizations in several levels), adequately inserted in a preexisting "lifelong learning" organizational culture trait.

Rooted on behavioristic and constructivist precepts, modern OCT design also builds upon preexisting employee knowledge through real-life situational processes (supported by pedagogical content), where outcomes would ideally be relatable to their work reality (Berns and Erickson, 2001). A contextualized training design should thus consider subjective and objective layers, highlighted from – in the corporate setting, the employee and organizational perspective (before, during and after training amid an existing work environment, structured with a given hierarchy, employee self-identities, group identities, their interactions, etc.), as well as through a technology perspective which pertains to how, where and by which resource requirements data will flow to support a given training system (Glahn and Gruber, 2020). Each layer must be juxtaposed in a manner where the training system allows for an optimum fit for the trainee's individual, subjective and objective learning requirements towards a given pedagogical strategy, supported by a preset of learning processes captured by a specific medium (Madhubala and Akila, 2017). The more integrated each layer is between the training setting (a planned occurrence) and the corporate setting (an ongoing environment), the fewer the chances for failure. Nonetheless, failure can be embedded within both the OCT settings - where a SG is inserted, as well as the way SGs' didactic content and learning process are structured themselves. Faced with a SG-based training program, on one end, some employees may fully capture value from digital SG training experiences, while others may refuse to play (or are compelled to). Some still might perform at several distinct levels, as well as realize distinct benefits which may or may not be identifiable or systematized. The more subjective the SGs' value to the employee and, subsequently, the SGs' placement in the training program is, the greater the potential for failure.

Workplace realities entail several potential barriers to training adoption: competing priorities or poor balance between proper effort allocation concerning work responsibilities and additional training effort, as well as impacting the employee's work-life balance, generating low engagement (Loerzel, 2019; Susomrith and Coetzer, 2015); restricted time availability - made evident by routine demands and the state of each employee's workload (Trevor and McCracken, 2009); unclear training objectives or benefits, contextualizing the training program vis-à-vis the employee's own goals (Jurburg et al., 2019); unclear knowledge transfer feasibility, i.e., Expected Transfer Success (ETS); inadequate pedagogical and training content and processes generated by poorly designed SGs or inadequate formats based on the existing strategy (Ryburn et al., 2007); lack of leadership support of direction and orientation (McCracken, 2005); lack of peer support through legitimization and normative impact (Ruiz-Pérez et al., 2020); poor availability

and accessibility to training (more common aspect of in-person formats), pertaining to self-directed appreciation and perception of organizational relevance – being recognized by the organization as a valued member, i.e., Training Visibility (TV) (Dhir and Shukla, 2019). Low employee involvement/access during inception phases, poor feedback processes, no planning for clear incentives (intrinsic and extrinsic) to adopt and maintain training, low investment in setting the stage for training approach institutionalization in the organization's culture, low management involvement throughout development and deployment phases, no provision for adjustments during co-development, lack of workforce skill requirements assessment prior to OCT development, notably top management misguided expectations for a "quick fix" solution without long term commitment.

Automatic thinking, based on individual schemas, can be inserted in the workplace habitus as a collection of inherited, institutionalized practices (Bourdieu, 1992). It is brought on by education, the household and early institutions, being considered adequate to adopt as a cognitive behavior in familiar situations, while a 'gear switching' to conscious thinking likely occurs from environmental cues, such as specific necessity, unfamiliarity and novelty or disruptive failure perceptions (Sutton and Louis, 1991). Collectively, employees similarly adopt organizational culture traits – the shared assumptions and beliefs shaped within the organizational environment, to support a set of belief structures over which they balance shared schemas, and automatic thinking remains the default interactive quality in absence of novelty, disruption or direct requirements, such as the introduction of new training methodologies. The latter, not unusually, can be seen as a threat to the *status quo*, igniting potential resistance to adopt and, at certain levels, numbing those targeted for change with the necessary conscientiousness or the conditions leading to it (Gibson and Earley, 2007). That could explain those cases when the decision to adopt change would make the most logical sense as – in theory, more benefits would be gained, yet adoption fails or those targeted to adopt change make the emotional decision to resist, maintaining cognitive behaviors seeking the familiar in a changing environment, where individual and social motivational drivers may be at play. Even when value loss continues to be generated as a consequence, a certain cognitive myopia envelope those who are determined to maintaining 'business as usual' positions (Fiedler et al., 2019).

The potential benefits from generating a competitive edge out of human capital training - as resource development strategies, are well documented in extant research, notably regarding 21st century realities (Jardon and Martos, 2012; Park and Ungson, 2019; Porter et al., 2009). Several authors outlined key aspects of organizational sources of strategic competitive advantage, chiefly those focused on capabilities' development, such as labor and capital, in order to generate either products and services at low cost or differentiated positionings, outlining the 'Resource-Based View' approach to organizational competitiveness (Mintzberg et al., 1999; Porter, 1991). As such, human capital becomes the nexus of competitive advantage-seeking strategies, and human resources training a key practice which, mediated by innovation management, optimizes the benefits realization potential based on an interplay between the interfirm employee and management networks, and sustainable organizational performance, investing regularly in a long-term perspective for return on investments (Garavan et al., 2020; Hatch and Dyer, 2004; C. H. Liu et al., 2020; McKinsey, 2021). But what happens when OCTs fail to realize their intended benefits, why does it happen, and is it possible to atomize the phenomenon to better understand its origins and outcomes?

Talent retention has become a worldwide challenge for many organizations in most industries, particularly so in high-turnover countries and emerging economies such as Brazil (ManpowerGroup, 2021). Mentioned as a market that has not been largely explored regarding turnover dynamics linked to Talent Management Strategies (TMS), Brazil still has a relevant role to play in the Latin American region as one of its largest economies. It remains a necessity to explore why COs continue to fail in retaining talent as well as managing turnover levels which generate high costs in retraining and skill deficits across their workforce, affecting the organization's overall competitiveness. Marketing myopia as a concept has evolved from the need to concentrate on customer needs, established on a dyadic relationship assumption, to an overconvergence on customers that blinds marketers to other important issues and actors in an ever more dynamic environment (Craig Smith et al., 2010; Levitt, 1975). By looking at a wider scope of actor's role in an organizational network, theirs could be perceived as relevant components to the firm's strategic resources, by means of capability contributions to its competitiveness. Johnston (2009) suggests that the same core competences that help an organization position itself apart from the competition might, in a dynamic environment, become the same factors that will hinder its competitiveness, if the nexus that makes up a logic arrangement of competencies is not in itself capable of being reconfigured logically, capability myopia is onset. Organizational capabilities count when they remain adherent to current market trends, therefore the company must remain capable of adapting and evolving to said trends as well, supported by its learning potential (Senge et al., 2015). Johnston (2009) also mentions 'boundary myopia', specifically relevant when the organization depends on 'value constellations' as source of resource integration, where companies extend their access to new 'emergent capabilities' outside the organizational limits and into the realm of a 'super-system' – conversely, myopia occurs when managers overvalue their social capital bonds and do not maintain social capital bridging through trust and fostering cooperation. (Ackoff, 1971; Agger and Jensen, 2015; Cohen and Prusak, 2001; Flood and Jackson, 1991; Normann and Ramírez, 1993)

5. Service Recovery Paradox in Digital SG training solutions

Intangible assets, be those products or services, are at the nexus of our global economy, essentially encompassing knowledge-based exchanges and providing competitive advantages, being a key driver for organizational value (Săcui and Sala, 2012). COs are ever more compelled to innovate regularly, be that on intangible products as well as aggregated services, increasingly allocating resources. Among key success factors for innovation management within the firm, HR training may be one of the most impactful compared to other investments - involving other tangible expenses, both being sources for economic benefits realization. Paradox Theory serves as a starting point into understanding tension as an outcome of VC and VD, relating factors leading to service recovery. More specifically, knowledge intensive frameworks at the interorganizational level (co-creation exchanges) enabling organizational value capture (Capaldo and Messeni Petruzzelli, 2011; Hazan et al., 2021; Khalid and Larimo, 2012; Wyatt, 2001). In a dyadic system, there is a need to develop value creating practices and, at the same time, capture value in order to remain competitive in their respective markets (Schad et al., 2016). Niesten et al. (2019) mention there being a lack of investigations dealing with value exploitation, or more specific with 'vicious cycles' (when the focus of benefits realization for one party in detriment of the other, or focusing on VC strategies that enhances unilaterality). In services management, such vicious cycles may be depicted as one organization extracting benefits out of joint collaboration in a relatively disproportionate

amount (value misappropriation), causing what Kashyap et al. (2017) defines as value erosion (VE), generally affecting the 'other party' through exploitative practices (Jiang et al., 2013). Factors such as misguided trust in a collaborator, potentially lead to VE when opportunities for misappropriation erupt and the ties that bonded the partnership begin to subside, as well as extramural investments on outsourced knowledge from organizations with low / medium R&D levels (Wadhwa et al., 2017). In long term-relationships, tensions for maintaining positive relationships are higher than in short term relationships, especially when one of the parties (the supplier) has greater control over resource integration and shared knowledge. SG offerings are by nature paradoxical (concerning the hedonic interplay proposed by the word 'games and the didactic proposition behind the word 'serious'), however that has more to do with a taxonomical generalization and has little impact in most situated cases, since the terms 'serious games', gamification and other variants are used interchangeably (Abt, 1987). Nonetheless, it stresses the tension created in SG co-development, particularly in digital systems, where an equilibrium (or paradox resolution) is intended between the educational and entertainment aspects of such services (Michael and Chen, 2005; Roth, 2017). Rather, digital SG platforms - viewed as 'training-as-a-service' (TaaS) can relate to the instances where playful and educational / learning states are unbalanced, leading to service VD.

6. Discussion

This study shows that SG adoption encounter obstacles when organizations attempt to use them for OCTinitiatives. Research shows that SGs and gamification generate better results for student engagement and experiential learning and knowledge transfer than traditional training methods which include classroom learning and Massive Open Online Courses (MOOCs [Massive Open Online Courses]) (Zhang, Zhao, & Kumar, 2017). The process of implementing SGs into organizational systems encounters various obstacles which affect their implementation. SGs function as tools which achieve success only when organizations implement them based on their strategic plans and leaders provide backing and all involved actors demonstrate readiness (Bourdieu, 1986, 1992; Gergs, 2003; Lombardo & Cabiddu, 2017).

The research shows that SGDs and COs maintain different value levels which tend to shift throughout time. Value exists as a dynamic concept which depends on specific practices and resource management and how social capital,cultural capital and symbolic capital interact with economic capital (Bourdieu, 1986, 1992; Bourdieu, 2005). The process shows that value creation and destruction exist together as parallel forces which operate at the same time. While SGs build employee loyalty and talent differentiation, can also reduce organizational value when they fail to support strategic objectives or when organizations implement standardized solutions without proper customization (Díaz-Méndez, Gummesson, & Ballantyne, 2017; Lusch, Vargo, & Gustafsson, 2016).

The research employed practice-based methods (by reflecting critically on extant knowledge) to show how organizational routines with workplace interactions produce final results (Bourdieu, 2005; Schatzki, 1996). The system includes failure as an integrated component which operates through its pre-defined operational procedures. The combination of wrong value assessments, short-term management choices and poor resource coordination creates destructive patterns which start from their initial point (Frau, Cabiddu, & Lui, 2017; Zhu & Zolkiewski, 2015). The implementation of adaptive practices, including co-development and corrective actions and strategic alignment, enables organizations to transform their failures into valuable learning experiences (Ehret

& Wirtz, 2018; Jardon & Martos, 2012; Paananen & Seppänen, 2013; Whysall, Owtram, & Brittain, 2019; Wirtz & Ehret, 2017). Research indicates that OCT programs achieve success or failure through different organizational elements, which depend on training approaches and supervisory intensity and work environments and staff preparedness for technological advancements (Bernardino & Curado, 2020; Sitzmann & Weinhardt, 2018; Bunch, 2007; Hald, Cordón, & Vollmann, 2020; Heldal, Wæraas, & Jacobsen, 2018). Current academic research investigates value creation (VC) more than value destruction (VD because it focuses on how users experience the positive outcomes of adopting new technologies (Grönroos & Voima, 2013; Helkkula, Kelleher, & Pihlström, 2012; Plé, 2017; Buhalis, Leung, & Law, 2020; Loon, 2019). The research establishes a better comprehension of organizational failure through its analysis of alternate VC and VD development stages. The implementation of SG in OCT requires a dynamic equilibrium system which handles ongoing conflicts between creative and destructive forces and short-term and long-term goals and internal and external stakeholder requirements (Smith & Lewis, 2011; Lewis, 2000; Andriopoulos & Lewis, 2009; Dieste, Panizzon, & Bustinza, 2022; De Angelis, 2021; Wimelius et al.,2021). Recognizing failure, as an integral part of this process, allows organizations to move beyond simplistic success/failure dichotomies towards a more sophisticated appreciation of value fluctuation in digital training ecosystems.

7. Managerial Implications

The implementation of SGs in OCT needs a strategic approach which unites technological progress with organizational preparedness. Leaders need to understand that SGs function as integrated tools which need to be incorporated into existing HRM and learning systems (Bourdieu, 1986; Lusch et al., 2016). This process requires organizations to: (a) Ensure that leadership demonstrates full support for SG initiatives, which should align with organizational strategic plans (Gergs, 2003; Lombardo & Cabiddu, 2017). (b) Enable organizations to dedicate internal resources to work with SGDs for developing customized solutions, which minimize the potential loss of value (Ehret & Wirtz, 2018; Frau et al., 2017). (c) Allow organizations to develop their ability to handle failures through training processes, which include built-in correction systems (Díaz-Méndez et al., 2017; Zhu & Zolkiewski, 2015). (d) Make sure that the organization removes (or mitigates) cultural and institutional obstacles to adoption through training support that reaches all managerial levels and employee groups (Bernardino & Curado, 2020; Bunch, 2007). (e) Understand how organizations that implement these practices can protect their value from destruction while making their OCT initiatives sustainable, thus turning SGs into competitive strategic assets. The business dispute contains multiple components which need research evaluation because they impact how buyers and sellers negotiate with each other (Dias, Waltz, & Oliveira, 2021; Dias, Duzert, & Lopes, 2021; Sartori et al.,2020). Research studies can apply this case to create trainings applied for negotiation and conflict management strategies in various commercial settings (Dias, 2020; Dias, Lopes, Cavalcanti, & Golfetto, 2020; Dias & Silva, 2021; Dias, Netto, Oliveira, et al.,2021; Dias, Andrade, Sotoriva, et al.,2021; Dias & Lopes, 2021). Scientists use business relationship research to find the best methods for managing complex disputes which produce positive outcomes for everyone involved. The business dispute resolution process requires a high degree of pragmatism. By examining the dynamics of business relationships, researchers can identify best practices for navigating complex disputes and achieving mutually beneficial outcomes. By prioritizing business continuity and acquiring new equipment, the

Customer can minimize losses (Dias, 2020a, 2020b, 2020c). In such cases the implications also highlight the importance of implementing robust procedures for purchasing equipment (Dias, Lopes, & Teles, 2020; Dias, Lopes, & Duzert, 2020).

8. Research Limitations

The research contains restrictions which need recognition during the evaluation of its results. As the research provides a deeper deep understanding of SGDs and CO interactions through secondary data, it creates potential biases because a first-had knowledge source would help unpack market perspectives and interpretation methods to the study. The research results about training implementation depend on organizational culture and managerial priorities and contextual elements which differ between the studied cases (Dias, Lopes, Cavalcanti, & Golfetto, 2020; Dias & Silva, 2021).

9. Contributions

The research investigates how SGDs and COs create and destroy value during their OCT interactions. The research opposes current value creation studies because it shows that value reduction and destruction occur at the same time which makes service ecosystem failure essential for understanding. The research provides three main contributions to knowledge: 1) Theoretical development through the combination of paradox theory with service-dominant logic which shows failure drives organizational learning; 2) The research provides organizations with anovel understanding of VC and VD dynamics whoch may help them to convert their SG adoption challenges into value restoration opportunities, through better resource management and avoiding managerial blind spots. The research indicates new research path opportunities to study value systems which enable organizations to become more adaptable.

10. Conclusion

In conclusion, the research enables SGs to enter OCT through dual value creation and value destruction assessment methods. The research shows organizations use harmful operational methods yet their value creation systems continue to operate simultaneously. The research shows that SG adoption success depends on more than technological progress by arguing that adoption results stem from routines and leadership support and cultural alignment. The research discusses the concept of value development in through SG training based on paradox theory and service-dominant logic integration, proposing that failure drives organizations to learn and adapt through systemic processes.

11. Future Research Directions

Future research needs will be addressed through data collection studies, which may also combine qualitative data with quantitative measurements to enhance both validity and reliability. As this research aimed at understanding that value creation and destruction operate as dynamic systems which evolve through time, further approaches may help researchers detect conflicts and contradictions and unpack the complexity of service ecosystem multilevel relationships, as the value changes between dyadic partners will develop through time because organizations learn new things and markets shift and technology progresses (Sartori et al.,2020). Furthermore, the research should investigate SG adoption patterns between different business sectors and geographical areas using various research methods to track how training breakdowns and recovery methods affect business sustainability. The research includes multiple sections which require additional

study. Future research needs to explore expand empirical data collection from COs to achieve cultural and institutional diversity in its findings. Research studies that evaluate SG implementation in various environmental settings will improve the ability to apply study findings (Dias, Waltz, & Oliveira, 2021; Sartori et al.,2020). Future research needs to use longitudinal studies which track value creation and destruction patterns throughout different time periods, to demonstrate how business performance transforms because of initial experiences with adoption difficulties (Dias, et al.,2021; Dias, Netto, Oliveira, et al.,2021).

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