From Academic Design Science Research to Start-up: Building a Digital Platform Ecosystem to Promote a Sustainable Knowledge Co-Creating Community

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Abstract: As the new digital era is accompanied by accelerating change, people as well as institutions need to adapt and transform. Crucial for their success is how well leaders can cultivate the absorption and sharing of knowledge as a resource and its integration into the organisational endeavours. Innovative system designs may prove vital to providing crucial support. Based on a prior academic design science research project and published outputs, a recently established start-up aims to create a digital community platform for knowledge co-creation to serve members with diverse ambitions and potentials in their personal and collaborative contexts. The digital platform ecosystem follows a novel knowledge management approach by favouring personalization, mobility, generativity, and entropy reduction. How to sustainably address the inherent system complexities and scaling needs in an entrepreneurial environment known for short iterative cycles of minimum viable developments have proven to be an expected challenge, closely followed by the limited power of academic detail and lingo to create enthusiasm in start-up spaces where attention slots are measured in pitch decks and elevator rides. This paper looks at this particular case and at the lessons learnt in the transition phase from academia to a business incubation space and, hence, aims to contribute to the discourse between scholars, practitioners, and clients on how digital entrepreneurship and innovation spaces may be best served for mutual benefit.

Keywords: Knowledge creation, Digital platform ecosystem, Digital transformation, Knowledge management system, Entrepreneurship, Innovation, Design science research, Sustainable Development, Tech for good

1. From Academic Entrepreneurship to Incubating Start-up

With the new generation of Sustainable Development Goals (SDG), the urgency for technological and educational interventions to combat opportunity divides has been further raised. As part of a broader goal on infrastructure, industrialization, and innovation, the SDGs commit to "significantly increase access to ICTs and strive to provide universal and affordable access to the internet." Given the advanced levels of mobile coverage, internet accessibility has been a logical focus. But "while digital technologies have been spreading, digital dividends have not. […] Technology can make workers more productive, but not when they lack the know-how to use it" (World Bank Group, 2016, p.2,4).

Over the last years, an academic project following design science research (DSR) methodologies (Hevner *et al.*, 2004; Baskerville *et al.*, 2018; Baskerville and Pries-Heje, 2019), conceptual analysis, and prototyping has been aiming for a novel and effective[1] decentralized Knowledge Management (KM) concept and application. It favours personalized, generative, negentropic and community-based KM approaches (to be referred to as Personal KM System (PKMS)) allowing for a fruitful co-evolution with traditional institutional solutions. The most recent publications focused on digital threats and sustainability, prospective affordances and ecosystems, generative capacities, sustainability, visioneering, and compliance with the ISO 30401:2018-KMS Standard (Schmitt, 2021a, 2022b). The 2022 transition from an academic DSR project to a Mauritian start-up business venture has, hence, just been a further logical step towards system realization (Schmitt, 2022a).

As academic entrepreneurship is a young research area with recently growing interest (Secundo, Rippa and Cerchione, 2020). With its focus on the transitional (academic to start-up) and incipient stage (leading to growth and maturity stages), this paper aims to contribute to the body of design knowledge on entrepreneurship and innovation management and to assist other researchers and practitioners facing similar circumstances and/or start-up opportunities.

The paper is structured as follows: After briefly presenting selected basic KM science notions and prior DSR work (2.1), the relevance as a Tech-for-Good solution in the context of the Sustainable Development Goals (2.2) as

[1] A design artefact is complete and effective (utility) when it satisfies the requirements and constraints (functionality) of the problem it was meant to solve (performance). Its quality and efficacy must be rigorously demonstrated via well-executed evaluation methods. Good designs embody a style that is aesthetically pleasing (elegance) to both the designer and the user (usability) and that fits with the technical infrastructure of its environment (consistency, accuracy, reliability). Design evaluation includes observational, analytical, experimental, and testing methods (Hevner *et al.*, 2004; Schmitt, 2016).

well as encountered synergies between scientific rigor, design science, and entrepreneurial practice are discussed (2.3). Section 3 focuses on the challenges faced which include 'informing gaps' of academic publications for start-up-stakeholders' consumption (3.1) and the need for harmonizing short-term start-up considerations with more holistic, scalable, and/or sustainable aspirations (3.2), to be followed by a look at the road ahead (4).

2. From (P)KMS to Digital Platform for Knowledge Co-Creation

2.1 Organizational KMS Versus Personal KMS

Having diagnosed current Knowledge Management (KM) as too collectivized and balkanized among many competing ontologies and centralized services, Levy (Levy, 2011) envisages a 'decentralizing KM Revolution' that "gives more power and autonomy to individuals and self-organized groups" where autonomous Personal KM (PKM) capacities engaged in creative conversations are furnishing an emergent level of collective intelligence and social KM, which in turn feed them. Levy's scenario fits Wiig's (Wiig, 2011) assertion that the viability of enterprises and societies results from the organizational and departmental aggregation of innumerable small 'nano' actions by individuals.

Prioritizing this personal angle has been confirmed by a meta-study which identifies the strongest association between innovation and creativity at the individual (and not at the team) level. Larger firms might be better at leveraging their creativity investments (idea implementation and exploitation) assumed to be due to more resource endowments, experience, and better complementary capabilities, but the facilitating potential of knowledgeable entrepreneurs and leaders applies anywhere. Hence, organizations ought to "identify, nurture, and effectively deploy" talents able to equally exploit and explore ideas and to "consider them for participating in innovation teams" (Sarooghi, Libaers and Burkemper, 2015).

With a focus on small and medium enterprises (SMEs), a KM/KMS study surveyed the commercial KM market. The evaluation was based on fifteen feature classes[2] (derived from the 34 KM tools' scope and publications). The leading four tools merely covered between 53% and 60% of them, showing that "commercial KM tools just like most scientific findings unveil a certain concentration on search, data mining, filtering and collaboration features"; they "still seem to focus on rigid, more workflow or groupware-based interpretations of KM tooling". All tools reviewed, for example, neglect "a method or concept to build and establish a knowledge sharing culture" and – in terms of the needs of SMEs - are "far from being mature in terms of research as well as market offering." The authors concur that "today's KM tools seem to be understood as 'managerial overhead' instead of compelling today's knowledgeable workers to actively share their knowledge" and call for "a more design and action-oriented future research agenda that takes theories derived from larger enterprises as well as prior KM research into account but focuses more on the necessary capabilities of tools to foster and establish a knowledge sharing culture in SME" (Kramer *et al.*, 2017).

Using an interpretivist qualitative research paradigm based on over a hundred key reasons (based on 34 knowledge experts interviewed), the results show that cultural aspects also play a front role why larger organizations are also still struggling to implement knowledge and innovation management (Ribière and Calabrese, 2016). Utilizing Earl's 'Schools of KM' taxonomy (Earl, 2001) as the lens, the responses also contributed to map KM's future which foresees a technocratic KM approach dominating - not via automation - "but in a way where human and social interactions will be supported/empowered by KM technologies. Human will always remain at the centre of KM activities" (Girard and Ribière, 2016).

Not surprisingly, KM research has detected acceptance issues since the "KM discourse and practice is visibly oriented towards the appropriation of [the] individual" (referred to as KM tasks assigned to employees by management) for better organizational economic performance rather than towards his/her "participation" (referred to as "KM tasks determined jointly by individuals and management") (Rechberg and Syed, 2014, p.1).

Table 1 summarizes the aspects discussed and the further characteristics identified during the prior conducted and published DSR activities. The work carried out also includes the synthesis of twelve renowned traditional

[2]Share of application system class support (in%): Search (65); Groupware (59); Data mining (53); Filtering (44); Document Management (38+12); Virtual Teaming (26+3); Workflow Management (21); Wiki (6+15); Data Warehouse (15); Tagging (12); Chat (12); Weblog (12); Skill Management (3); (Video-)Conferencing (0+3); Telephony (0) (Kramer *et al.*, 2017).

models of knowledge creation and their visualization in a three-dimensional dynamic 'public-transport-like' map (Schmitt, 2019), an expanded version of Boisot's three-dimensional information or I-space (Boisot, 2004).

The potential fruitful co-evolution alluded to between the OKMS and PKMS approaches is not only based on the complementing features shown, but also supported by the benchmarking of the PKMS concepts and affordances (Schmitt, 2022b) against the maiden ISO 30401:2018-KMS Standard (ISO.org, 2018).

Table 1: Organizational (OKMS) versus Personal KMS (PKMS) Features and Paradigms

Conventional Organizational KMS	versus Cloud-based Personal KMS
Monolithic. Centralized. Top-Down.	Distributed. Decentralized. Bottom-Up.
High Investment. High Maintenance.	Affordable.
Document-centric. Organizational Focus	Knowledge-Worker-Centric Approach: Personalization, Mobility, Generativity, Entropy Reduction.
Fairly homogeneous User Base with similar Competencies, Objectives, and Environments.	Serving Community with highly diverse Skills (Gifts), Ambitions (Ends), Potential (Means), Settings (Contexts).
Failures related to Acceptance due to cultural and Appropriation Issues.	Focus on Participation in Platform Community among Peers/Equals.
Not well integrated KM Schools.	Social and Knowledge Connectedness.

2.2 Tech-for-Good to Support the Inner and Sustainable Development Goals

The United Nations' seventeen interlinked Global Goals for Sustainable Development (SDGs) define a shared holistic blueprint for peace and prosperity. Its three goals of education, work, and equality are closely related to the field of educational technology, which - as a cross-cutting key enabler - also affects all other SDG areas. As education is at the forefront of tackling widening opportunity divides, many SDG-linked initiatives support its advancement towards more successful frameworks and interventions. The most prominent Inner Development Goals (IDGs), for example, emphasize the relevance of connectedness, complexity awareness, communication and co-creation skills (IDG Initiative, no date) (Figure 1, bottom left).

By adding further detail, the recently introduced IEEE standard for digital intelligence ensures that efforts directed at personal and community development become more holistic, coordinated, and forceful. The standard's twenty-four 'Digital Intelligences' are grounded in universal moral values and enable individuals to face the challenges of digital life and adapt to its demands. They comprise the eight areas of security, safety, communication, rights, literacy, identity, emotional intelligence, and use, across three levels of citizenship, creativity, and competitiveness. The twenty-four intelligence perspectives are further subdivided into a total of 97 micro badges (IEEE, 2021; *DQ Institute*, 2022) (Figure 1, top left).

Figure 1: Sustainable/Inner Development Goals, DQ Standard, and PKMS Platform

As an innovative Tech-4-Good start-up and digital platform, the digital platform under development (named Knowcations®) aims to serve platform community members with diverse skills, ambitions and means in their distinct contexts. This diversity is reflected by six personas or progressing career roles (student, researcher, author, educator, project initiator, and change maker) which are currently utilized in the minimal viable prototype development stages (to be discussed further in section 3) (Figure 1, right).

Figure 1 shows how these frameworks, criteria, and technologies are related. The matching colour scheme applied in the upper sections highlights the relevance between the role-specific platform features and the twenty-four digital intelligences. The plan is to undergo the DQ accreditation process (DQ institute, no date) once the platform implementation has sufficiently progressed.

2.3 From Academic DSR Project Space to up Incubation Space

To innovate, enterprises need to know what potential clients desire and what may affect their choices. They gain the needed insights to improve on their initial ideation propositions by consulting and empathizing with relevant stakeholders (e.g., current and potential buyers, users, agents, and competitors).

Lean start-up methodologies differentiate this approach further by continuously incorporating "early adopters' feedback as soon as possible" in entrepreneurs' research and development processes via iterative "Learn-Build-Measure" cycles (Lenarduzzi and Taibi, 2016). Key objective is the creation of a Minimal Viable Product (MVP) defined as "a version of a new product, which allows a team to collect the maximum amount of validated learning about customers with the least effort" (Ries, 2011). A systematic mapping study on the MVP definitions proposed shows that the 'minimal' attribute has been associated with, for example, efforts, requirements, feature sets, functionalities, value organization, smallest possible implementation as well as low quality early prototype; the aim of maximizing refers to customer-originating validated learning and feedback/evaluation (Lenarduzzi and Taibi, 2016).

In these iterations, the MVP's thinking, problem definition, and ideated solution is continually modified/refined [learn], and its feasibility of redrafted technical and organizational functionalities/features is piloted [build] while its viability of cost-benefit-value-considerations is evaluated [measure]. The associated learning and evaluation processes are repeated until the MVP reaches an acceptable product-market-fit (PMF) which affords a sustainable innovation and business model (which may also depend on the successful conclusion of several recurring funding rounds).

A recent case study demonstrated how the original MVP approach was extended and utilized in an established larger organization (Figure 2, col.1). Here, a "'Synchronize Step' was included to recognize the need for changes in the parent organization in order to take advantage of the opportunities offered by the Lean Start-up approach" (Dennehy *et al.*, 2019).

This iterative MVP process is remarkably like the DSR approach without, of course, its focus on academic relevance, rigor, and publishability in Information Systems research outlets. It very much resembles the manner in which Design-Knowledge (DK) Base advocators are trying to promote the quantitative and qualitative cumulative development and evolution of DSR knowledge (Figure 2, col.2) (Vom Brocke *et al.*, 2020). Together with the two methodologies (Suh, 1995; Schmitt, 2021b) applied at the earlier academic stage (Figure 2, col.3,4), these problem-solving and design-supporting approaches all fit a more general iterative pattern which applies to both academic and entrepreneurial innovations.

Usher's Cumulative Synthesis Loop (CS) (Usher, 2013) provides a convincing account of the real-time iterative innovation activities of knowledge workers (Figure 2, col.5), Usher presents the emergence of novelty "as an accumulation of many individual items over a relatively long period of time. The magnitude of the individual item is small, but through [processes of] 'Cumulative Synthesis' the product becomes important" (Usher, 2013, p.61). Not every individual knowledge item, idea or 'meme[3]' captured might be of immediate utility, but, what

[3]To address the escalating predicaments of accelerating information abundance and overload, the platform applies the memetic concept introduced by Dawkins (Dawkins, 1976). A meme represents an atomic cognitive unit of cultural transmission captured in a standardized format. Inter-related memes combine for any story or knowledge asset by providing a much higher granularity than the current document-centric paradigm. Memes are stored in a knowledge graph allowing to consolidate their social and informational connectedness, to reduce their needless replication, to curate their content, and safeguard their associative integrity. The approach resembles modern manufacturing, where the materials, labour, processes, and logistical resources needed for producing products or services are digitally combined for managing, tracing, and innovating extensive supply chains and value systems.

might be considered to be irrelevant or misguided at a given time may turn out to be valuable later, and vice versa (Garud *et al.*, 2016).

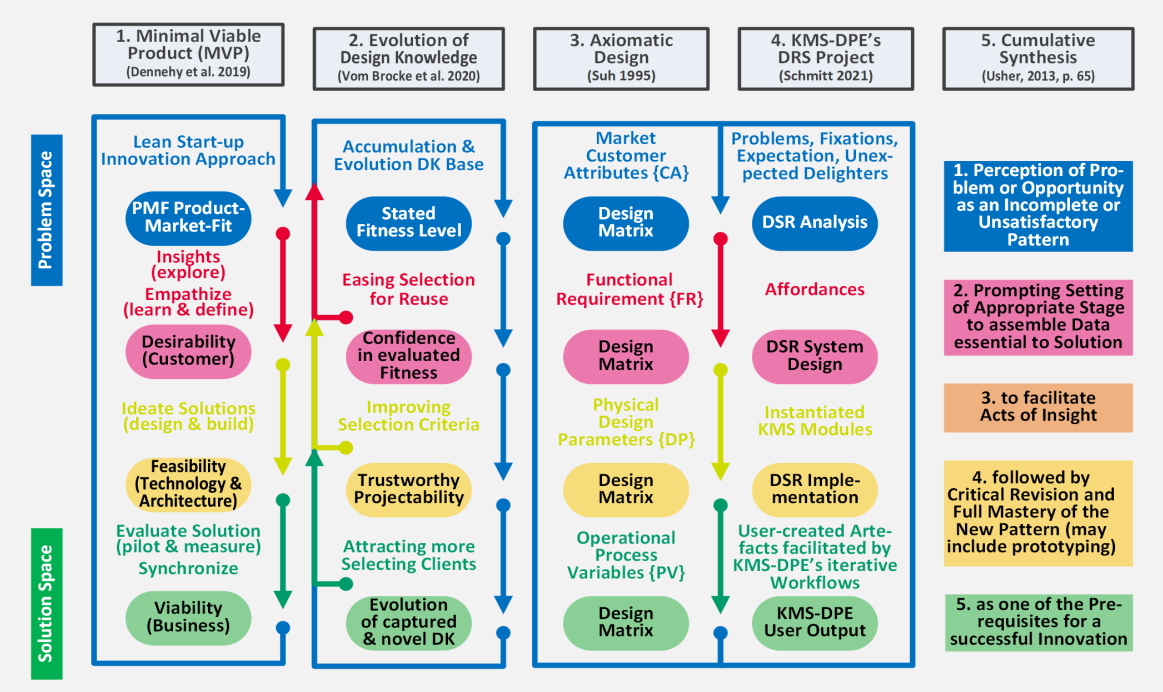

Figure 2: Alignment of Design and Problem-Solving Methodologies referred to (based on Dennehy et al., 2019; Vom Brocke et al., 2020; Suh, 1995; Schmitt, 2021b; Usher, 2013)

The knowledge co-creation platform allows the CS notion to fan out from the personal concern and absorptive capacity of an individual member to the networked problem-solving and design capabilities of the multi-disciplinary 'Knowcations' community.

3. From Academic DSR Space to Start-up Incubation Space

Figure 2 exemplifies how design knowledge "emerges through iterative design and evaluation processes" as a relational concept "at the intersection of a problem space and a solution space" from basic to design science and practice (Seckler, Mauer and vom Brocke, 2021, p.4). As a complex longitudinal DSR project, the PKMS outputs represented novel artefacts (constructs, models, methods, and instantiations (March and Smith, 1995)) and theories (section 3.2) contributing to the collaborative construction of the academic knowledge base.

The purpose of the platform, however, is to build a meta-artefact (Iivari, 2003) for facilitating the formation of and interaction with their elementary counterparts (knowledge assets and community membership). Its viability and ultimate market success depends on 'Theory Effectiveness', a DSR paradigm which expects designs to be purposeful - both in terms of utility (a matter of content/function) and communication (a question of presentation) to an audience (O'Raghallaigh, Sammon and Murphy, 2011a).

Although presented as a complementing concept and system, the novel PKMS design and platform feature radical shifts compared to traditional OKMS configurations. However, the socio-techno-cultural contexts in which stakeholders are immersed tend to limit their problem awareness and interpretations (incl. perceptions of complexity and entropy) to just those states and prospects within their actual familiar perspectives (trapped in current paradigms). Radical "design driven innovation is therefore pushed by an [entrepreneurial] firm's vision" and innovative thought leadership as a "proposal of possible breakthrough meanings" and "by looking at long-term phenomena with a broader perspective" (Verganti, 2008, p.5). Taking a longer-term view especially applies to creating a novel digital platform as its future scalability must be considered with every iterative developmental step.

The construct of lean start-ups is, in contrast, based on a classic design funnel approach where initial larger sets of aspiring entrepreneurs' ideas are undergoing short-cycle adaptations, screenings, and rejections to allocate resources to ever smaller sets of the promising business models left standing.

The idea of the 'Synchronize Step' added in the MVP cycle to coordinate with a parent organization (Dennehy *et al.*, 2019) (Figure 2, col.1) provides a potency to be repurposed for consulting with a more holistically positioned conceptualized authority (e.g., overarching longer-term vision or constraint) in order to 'harmonize' ideations emanating from the start-up-oriented agenda and stakeholder environment.

In the author's view, this focus on different time horizons coupled with the (academic versus start-up) expectations of the author's outputs represents the most pressing challenge between academic DSR and start-up space. The sub-sections will further exemplify this issue.

3.1 Minimal Viable Platform in Need of Maximal Verifiable Proposals

Entrepreneurs cultivate identity stories or proposals "that position their ventures in specific institutional fields" aiming for "audience perceptions of optimal distinctiveness" which "may enhance the perceived legitimacy of a novel venture and facilitate access to resources." Constructing a coherent story that rationalizes the purpose and functioning of a new venture, thus, creates target-specific artefacts (the same iterative MVP approach depicted in Figure 2, col.1 may be applied) able to establish organizational identities which are comprehensible, meaningful, and appealing to relevant audiences (Glaser and Lounsbury, 2021, p.1).

Although the PKMS's longitudinal DSR streams and publications motivated and rationalized the continually evolving artefacts and design theories to a primarily academic audience following the obligatory editorial and peer review processes, the terminology and detail applied do not fit well with the start-up scene where the pitches are rather restricted to slide decks or elevator rides. Reinforcing this 'informing gap' is the fact that knowledge and knowledge management are rather abstract concepts with no 'real world' referents where structure and comprehensibility need to be provided by applying more familiar 'real world' things in the form of metaphors and analogies (Andriessen, 2006, 2011).

Finding appropriate expressions, models, and rationales to bridge this communication barrier has required considerable time-consuming efforts. As "stories need to be credible, commensurable, and have narrative fidelity" (Glaser and Lounsbury, 2021, p.8), an appreciation model has been devised which uniquely addresses the six personas/roles depicted in Figure 1. A paper-in-progress will present it as a matrix where six persona-related value propositions (absorptive capacity, generative, functional, psychological, economic, and learning/network value) are cross-referenced with eight levels of attractive quality). The resulting forty-eight segments are explained and configured for the concerned audiences, supported by animated videos and web presentations, and linked to the 'academic' prior publications and external sources to provide further verifiability.

3.2 Theorizing and Framing to Synchronize Short-&-Long-Term Aspirations

Further 'Synchronizing Steps' are, hence, being triggered by taking on board new ideas and requests (like setting up the aforementioned appreciation model) and require what has been referred to as theorizing (advancing theories to describe/explain practices) and framing (advancing theories for generating these practices) (Romme and Dimov, 2021).

Initially, the motivational triggers of the DSR project have been the opportunity divides caused by an accelerating information abundance and the lack of adequate tools and applications to support our finite cognitive attention capabilities. This subsection exemplifies the subsequent theorizing-framing-iterations (Table 2) by reflecting on major academic and start-up twists and turns encountered.

Table 2: Iterative Theorizing and Framing Approach (based on Romme and Dimov, 2021)

Steps	Selected Iterative Steps taken in the Design/Development Stages with References
Theorizing	Integrating: Nonaka's Theory of Organizational Dynamic Knowledge Creation (Nonaka, Von Krogh and Voelpel, 2006) (Figure 3, col.1) and other KM Models with Popper's Three Worlds Theory (Popper, 1978) (Figure 3, col.2).
	Reflection: Popper's thought world:3 not represented in these KM notions.
	Conclusion: Current KM models blindsided (blue area) with respect to the emerging and rapidly growing entropy-proliferating sustainability gaps of today's web and cloud technologies.
	Effect: Current KM systems are not accessible to the wider public, entrepreneurs, or SMEs due to lacking significant features (Table 1).

Steps	Selected Iterative Steps taken in the Design/Development Stages with References
	Further Evidence: Big-T and small-t notions detail why and how information and knowledge entropy emerges at an individual level before it may rapidly replicate, fragment, or depreciate (O'Raghallaigh, Sammon and Murphy, 2011b).
Framing	Initial Design Solution: Briscoe's Theoretical Framework for Digital Ecosystems (Briscoe, 2010) and Gibson's Theory of Affordances (Gibson, 1977) offer descriptive theories to rigorously ground the PKMS research.
	Impact: Differentiating Nonaka's SECI model (socializing, externalizing, combining, internalizing) into eight distinct digital ecosystems with two further unique ecosystems to cater for Popper's world:3 gap (Figure 3, col.3). Emerging of SICEE model (seizing, imbedding, collating, encompassing, and effectuating) as an expanded pendant to Nonaka's SECI cycle but with workflows following a reverse direction (Figure 3, col.4).
Theorizing	Verification: The SICEE model's knowledge stock and flows shown to integrate with other descriptive theories like Pirolli & Card's Notional Model of Sensemaking Loop for Intelligence Analysis (Pirolli and Card, 2005), Carvajal-Pérez's C-K Design Theory Representation of four Types of Generativity, and Elia et al's Theory of Digital Entrepreneurship (Elia, Margherita and Passiante, 2020) (Figure 3, col.5,6).
Framing	Communication: Usher's Cumulative Synthesis (Usher, 2013) (Figure 2, col.5) and Bush's still unfulfilled vison of the 'Memex' together with Dawkins' Theory of Culture-as-Memes and Memes as Living Organisms (Dawkins, 1976) and Koch's Theory of Business Genes (Koch, 2001) further inform design solution and prototyping (Figure 2, col.3,4) and assist in rationalizing the proposed shift from a document-centric to a meme-and-knowledge-graph-based paradigm.
Theorizing	Positioning: Applying cluster-model of current digital platform ecosystems according to their underlying processes, key market attributes, and value propositions (Murthy, 2021) to establish PKMS as the envisaged platform community for knowledge creation and its need for platform sponsor scope considerations (Schmitt, 2022a).
Framing	Projecting: PKMS/DSR academic contributions reinterpreted according to a projectability and worldmaking logic (Baskerville and Pries-Heje, 2019; Schmitt, 2021a). Incipient, growth, and maturity stages of a scalable platform and community defined (Schmitt, 2022a).
	Communication: As the above intricate background overloads any effort to inform an audience outside academia purposefully and understandably (theory effectiveness criteria, section 3), new models, terms, and reasonings have been devised (see example below).

The last row addresses a start-up-adequate communication strategy and entails, for example:

- The six personas introduced as progressing career roles (student, researcher, author, educator, project initiator, and change maker, Figure 1, top right). They align to the digital ecosystems depicted (Figure 3, col.3,7) and are used to also illustrate the start-up's MVP roadmap and its business plan.
- The alignment of the PKMS to the SDGs, IDGs, and Digital Intelligences (section 2.2, Figure 1) to further rationalize its scope as a Tech4Good solution.
- The focusing on four types sources (embrained [minds], encapsulated [objects], encoded [records], and explorable [voids]) for taking account of our knowledge and ignorance. Any knowledge creation process (including the platform workflows) involves iterative sensemaking and sense-giving to cumulatively synthesize any memetic representations of these types as input and output (Figure 3, col.8).
- The rationalizing of 'Documents[4]' as an outdated 'book-age' paradigm and technology:
  As publishing unvetted digital content in our digital times only requires simple clicks, the levels of replications and noise are constantly rising. Digital containers (from web components to files) partially include identical content and are cloned across web sites, folders, and directories, often without indicating their sources or versioning history. Digitally stated facts or ideas may also not stay unchanged, or even accessible. Increasingly unstable and ambiguous settings compromise our web

[4]As the habitual choice for representing and memorializing our thoughts across minds, space, and time, documents are meant to contain sufficient information to avoid the need for immediate further investigations within their main topics. By design, they contain prior knowledge in the form of copied-and-pasted, already-published material. Verification provided by scholarly or publishing authorities is used to ensure finality and lasting accessibility.

searches and deplete our limited attention, memory, and time resources. Instead of supporting progressing knowledge economies, opportunity divides across the world are widening.

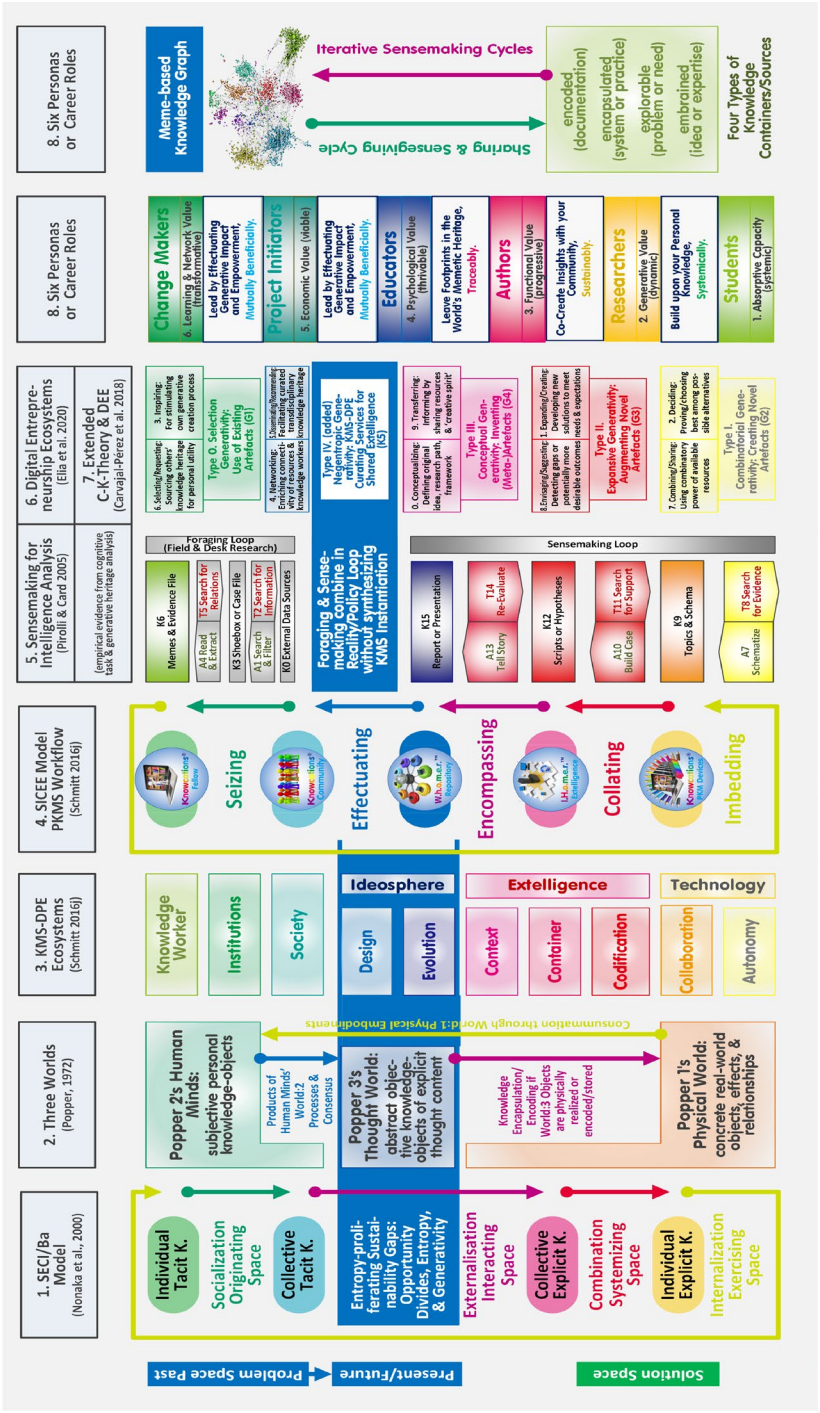

Figure 3: Framing and Reframing based on existing descriptive and novel design theories

4. The Road Ahead

The examples provided are only highlighting some of the major aspects of the DSR's theorizing and framing history as close to six hundred unique external sources have been referenced in the prior publications. Their meme-based representations are providing one of the knowledge repositories for testing the prototype platform. It is envisaged to repurpose them as learning assets to serve the platform's educational KM agenda.

The academic DSR publications will commence to inform about testing results and platform sponsor scope considerations, including trust and promise engineering. Reporting on how and why the novel digital platform artefact performs to achieve the anticipated benefits in unison with a committed community is planned to also

contribute to the prescriptive 'Five interrelated Types of Theory' (for design and action) (Gregor, 2006) as well as the interior and external mode in the design-centric framework (Baskerville *et al.*, 2018).

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