

ISSN 2345-0479 / eISSN 2345-0487 2023 Volume 16 Issue 2: 762-783

https://doi.org/10.3846/cs.2023.15883

"THINGS AIN'T WHAT THEY USED TO BE": BUSINESS SUBFIELDS BENEFITTING FROM JAZZ TO FOSTER CREATIVITY

Arvi KUURA D 1*, Iñaki SANDOVAL D 2

¹Pärnu College, University of Tartu, Ringi 35, 80012 Pärnu, Estonia ²School of Music, Hong Kong Academy for Performing Arts, 1 Gloucester Rd, Wan Chai, Hong Kong, China

Received 3 November 2021; accepted 29 August 2022

Abstract. Tenors like "bring in the arts and get the creativity for free" have attracted business practitioners and researchers, and this "intersection" of business and arts has developed into a study field. Metaphorical learning from arts involves musical, also theatrical, and terpsichorean improvisation. Not surprisingly, several subfields in business – entrepreneurship, project, process, and service management – as well as other business and non-business fields – have been "jazzed". Another strengthening trend is linking different (sub)fields and fostering mutual learning. The paper seeks for novel possibilities to learn from jazz and to support further mutual learning and linking of disserted business, also non-business fields. Nowadays traditional business models and services are moving towards problem-solving and adaptation to change, implementing creativity and improvisation. Taking a fresh stock of relevant academic literature and discussion revealed the increasing importance of organizational improvisation. Jazz (music and arts) appeared to be a fruitful metaphor and source of learning. As differences appeared across the examined fields, possibilities for learning from jazz, as well as for mutual learning are not yet depleted. This paper provides insights to further learning from the jazz approach, as well as mutual learning and enrichment between the examined subfields.

Keywords: arts, business, creativity, jazz, metaphor, music, organizational improvisation.

Introduction

Arts and business appear quite opposite, yet ideas like "bring in the arts and get the creativity for free" (Styhre & Eriksson, 2008) have attracted both practitioners and researchers. This "intersection" has grown into a formal field (Meisiek & Barry, 2014), recognizing the arts as an inspiring knowledge field in the "new business age" (Carlucci & Schiuma, 2018) or "the new normal" – creative, playful, and entrepreneurial (Hjorth et al., 2018). Learning from arts, chiefly for fostering creativity, involves different kinds of improvisation: musical (Tran et al., 2018), theatrical (Nisula & Kianto, 2018), and dance (Ancelin-Bourguignon et al., 2020).

Copyright © 2023 The Author(s). Published by Vilnius Gediminas Technical University

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons. org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

^{*}Corresponding author. E-mail: arvi.kuura@ut.ee

The rationale of this paper is to scrutinize the possibilities for learning from jazz. Increasing liquidity in the modern world "<...> predisposes <...> to improvisation over heavy scripting as role prescriptions become more fluid and uncertain and events less predictable" (Clegg & Pina e Cunha, 2019, p. 15). As most organizations should forget about stability and innovate, the importance of organizational improvisation and learning from jazz is increasingly actual. Improvisational decision-making is important in crisis situations, especially in coping with unpredictable major-impact events like the COVID-19 pandemic (Buchanan & Denyer, 2013; Groenendaal & Helsloot, 2020; Tabesh & Vera, 2020; Bailey & Breslin, 2021).

Another predication proceeds from separation of research (sub)fields and concomitant inability to learn from each other (Davies et al., 2018). Similar fragmenting is also noticed in practice, yet lately, contrasting positive trends seem to strengthen – several business subfields, such as entrepreneurship, project and process management, and services, have been linked (c.f. Kuura & Lundin, 2019), first in practice and increasingly in theory.

By virtue of the rationale of this work, its underpinning methodical approach is integrative (critical) review, aimed at content analysis of claims, embracing elements (detecting themes, providing historical overview, *etc.*) of narrative approach (Snyder, 2019). Still, suggested steps (Snyder, 2019), representing a typical "waterfall" approach, were replaced by a more iterative and loosely structured model. We started with keyword searches in academic databases, then examined relevant publications and established initial categories. Then we applied a more inductive approach, following the references of examined articles, explored the contents of our findings and, using amended categories, re-examined all findings.

This paper seeks for novel possibilities to learn from jazz and to support further mutual learning and linking of various subfields of business. Learning form jazz (also other arts) in organizational theory and practice relies on using of metaphors, having both strengths and limitations (c.f. Morgan, 2011). Metaphors may help understanding complex concepts by "mapping" them onto accessible concepts (Haidet et al., 2017). This can be compared to translation where "lost in translation" may happen (Ancelin-Bourguignon et al., 2020). Thus, using jazz metaphors may be difficult but, on the other hand, arts and design can serve as translational mechanisms (Simeone et al., 2018).

This paper examines what business (general management and organization science) and subfields have learned from jazz, and what they can still learn from jazz and/or from each other. Analysing existent literature and comparing "jazzing" patterns will provide insights to further learning from jazz (music and arts), and to mutual learning and enrichment. The next section reviews the "jazzing" literature in general; the following subsections continue examination across selected subfields; and the last section compares and discusses the main findings and syntheses recommendations.

1. Learning from jazz in general organization science

The power of jazz metaphor derives from its main feature - improvisation (Crook, 2015).

The reason why the general organization theorists turned to improvisation and jazz, was the dominating emphasis on order and control, causing inability to understand creativity and innovation. Organizational improvisation manifests a possibility for coping with this shortage, and jazz as a source of orienting ideas (Weick, 1998). A depiction of jazz improvisation as "moments of rare beauty intermixed with technical mistakes and aimless passages" can indoctrinate organizational scientists that "that there is life beyond routines, formalization, and success" (Weick, 1998, p. 554).

The primary learnings from jazz are embraced in a comprehensive notion of organizational improvisation, subsuming two focal concepts – aesthetics of imperfection and minimal structures.

Aesthetics of imperfection is an intrinsic jazz(ing) concept. Several scholars (c.f. Hamilton, 1990) conceptualize the aesthetics of improvisation as aesthetic of imperfection. In such view, improvisation is imperfect because jazz players cope with unforeseeable incidents. If the ideal is perfection – compliance with structured order – the value of improvisation as art is seriously misunderstood. This is generally accepted in jazz and by Barrett (1998, p. 619) is recommended to adapt in business, creating "organizational climates that value errors as a source for learning". A popular example is a case when Herbie Hancock, a young but already renowned pianist in the second great quintet of Miles Davis, played a totally wrong chord in a live performance. Surprisingly, Miles responded (on trumpet) with some notes that made Herbie's wrong chord right. He did not judge, he just worked with that happened and took it as a challenge (Hancock & Dickey, 2015).

Mistakes are normal also in in other spontaneous acts, like talking; analysing mistakes is a good tool for improvement and self-awareness in learning by doing (Sandoval Campillo, 2013).

Minimal structures allow maximum flexibility and freedom to improvise, experiment and respond to intuitive impulses, hence fostering creativity and innovation (Barrett, 2012). The concept of minimal structures has been used and developed by several researchers. For example, Kamoche and Pina e Cunha (2001) collated the structures in new product development and jazz improvisation. Miner and O'Toole (2018) linked minimal structures to trial-and-error organizational learning, which leads back to aesthetics of imperfection. Pier Mannucci et al. (2021) claimed that depending on the types of improvisational skills (imitative, reactive, or generative) the structures are perceived differently. An important corollary (Mannucci et al., 2021) is that classic competency development models are not suitable for learning improvisation; this requires learning by doing and vicarious learning that apply in collective creative contexts. The latter accords with the views of Cole and Meyer (2020) about transformative learning for developing dynamic capabilities in individuals and organizations. Thus, organizational improvisation has links to organizational learning and learning organization (Pina e Cunha & Clegg, 2019; Pina e Cunha et al., 2019). Improvisation may be hidden (Macpherson et al., 2022) and it is rather infra-ordinary than extraordinary, thus improvisation has a role also in maintenance, not only in the development of systems. This means that minimalism in structures to allow improvisation is needed also in exploitation, not just in exploration.

2. Learning from jazz in selected subfields

2.1. Learning from jazz in entrepreneurship

Concerning entrepreneurship, some parallels appear with the general organization science. Pendergast (2003) saw the metaphor of jazz musician apt in capturing the characteristics

of entrepreneurs. Another early jazzing attempt (Baker et al., 2003) relied on classics of entrepreneurship and organizational improvisation, and forwarded several novelties, such as network bricolage and improvisational competences. A landmark is a workshop *The Jazz of Entrepreneurship: Effectuation in Action* at the 24th Research in Entrepreneurship and Small Business Conference¹ in 18–19 November, 2010, Maastricht, Netherlands, where probably happened something like what Barrett and Peplowski (1998) described.

Further, Ucbasaran et al. (2011) examined empirically the practices of jazz groups and their leaders and revealed insights for leading entrepreneurial teams in dynamic environments, so regarding entrepreneurship rather teamwork than solo action. Duxbury (2014) discussed lessons from jazz (and improvisational theatre) for entrepreneurs in turbulent, uncertain environments, in time and/or resource deficiency. Valliere and Gegenhuber (2014) noted that innovative entrepreneurs do not just combine resources, using improvisation but also select resources eclectically using bricolage. Abu Bakar et al. (2015) demonstrated that strategic improvisation, in combination with entrepreneurial orientation, supports performance of small and medium enterprises. Hughes et al. (2018) confirmed the role of improvisation in the realization of entrepreneurial orientation into firm performance. Balachandra (2019) concerned improvisational competencies and suggested including improvisation into any entrepreneurship course. Fultz and Hmieleski (2021) affirmed the benefit of improvisation for start-ups in identifying (unexpected) opportunities. A recent contribution (Audretsch et al., 2023) stresses the collective nature of entrepreneurship and drawing parallels with jam sessions, stresses the role improvisation in innovation.

The influence of jazz (music) can be noticed even when not clearly mentioned. For one, Hunt and Lerner (2018) claimed that seeing all entrepreneurial actions based on intendedly rational judgment does not match the reality – a spectrum from impulse-driven a-rational to deeply deliberative rational action offers a more useful perspective. Their argumentation included improvisation, and reasonably, as this is also the "aesthetics of imperfection".

It is commonly recognized that nowadays entrepreneurship encompasses a wide spectrum, from charities to profit-oriented businesses and social entrepreneurship as something in between. Abreast entrepreneurship there are emerging intrapreneurship, what is generally understood as proactive, entrepreneurial initiatives of individual employees, and corporate entrepreneurship, what fosters initiatives from the employees top down. These (consisting entrepreneurship in existing organizations) are also jazzed: Grayson et al. (2014, p. 40) wrote:

"If the number of individuals involved is sufficiently large (i.e. the intrapreneurial project requires assembling a 'big band' with a diverse range of talents), the proportion of orchestral 'scoring' <...> may need to increase to grow a corporate project to a large scale".

Another important virtue of this book is urging the importance of creativity and innovation.

A related phenomenon is institutional entrepreneurship, targeted at institutional change (Micelotta et al., 2017). In addition, handiness of improvisation (and bricolage) is espied in

¹ Research in Entrepreneurship and Small Business Conference is a prestigious annual conference, organized under the aegis of European Council for Small Business and Entrepreneurship.

the start-up of an incubator (Nakara et al., 2018). Thusly, it may seem that jazzing of entrepreneurship is widening the range of issues but there is also an opposite trend – several latest jazzing publications treat the most "classical" subtopics. Xiang et al. (2020) examined the relationship of organisational improvisation and new opportunity identification. Gojny-Zbierowska and Zbierowski (2021) afforded the role of improvisation in responsible innovation in organizations, mainly because its potential to enable bottom-up initiative. A possible way to make existing organizations become more innovative and entrepreneurial is stimulation of intrapreneurship, that often occurs via (entrepreneurial) temporary teams (Kuura et al., 2014). So, this is also a link to the next examined field – project management.

2.2. Learning from jazz in project management

General organization theory tends to deal with "permanent" organizations - a construct, used to differentiate from project organizations that are temporary (Lundin & Söderholm, 1995). Notably, several works on improvisation in "permanent" organizations mention projects, chiefly because projects are more improvisation-friendly than well-regulated and institutionalized permanent settings (Hadida et al., 2015; Pina e Cunha et al., 2014). Yet, "jazzing" has attracted several project researchers. An early effort by Wikström and Rehn (2002) compared overall characteristics of projects and jazz and outlined five essential parallels: (1) plans are enabling, not constricting; (2) aberrations are normal; (3) work with what happens; (4) order is emergent, not pre-defined; and (5) disorder is not chaotic. Further, Lindgren and Packendorff (2007) regarded project work in theatres and denoted, how novel approaches in arts influenced the administration, turning projects into "organized chaos". Leybourne and Sadler-Smith (2006) afforded the role of intuition and improvisation in project management. Leybourne (2009b) compared improvisational working and agile project management and found several conformities. Leybourne et al. (2014) discussed project management more generally and related improvisation with several contemporary aspects, such as decline of organizational hierarchies, values of the Millennials, and effectuation. Leybourne and Kennedy (2015) scrutinized the links between knowledge management and improvisation and concluded that agile (or iterative) approach supports learning in projects and improves management in contemporary contexts. Learning from previous projects is continuously crucial as it influences the relations between knowledge management and organizational improvisation, thus ensuring the ability to generate novel ideas and respond to technological turbulence (Arias-Pérez & Cepeda-Cardona, 2022).

Leybourne and Cook (2015) involved different music genres, such as orchestral and rock. Leybourne (2017) took stock of existent developments and noted that the dominated so far approach "plan, then execute with minimum deviation" has utterly changed, as nowadays most projects are uncertain, complex, and ambiguous.

Developments in "jazzing" of project management accentuate a (already alluded) trend – proliferation of flexible, iterative methods, labelled agile (Salameh, 2014). Suscheck and Ford (2008) argued that just the jazz metaphor elucidates the organizational culture that is needed for supporting agile software development, especially *Scrum*. The improvisation metaphor alludes that a general plan is reasonable but dictating the details unreasonable. This leads to

wider discussion of formal and emergent planning practices (Bouncken et al., 2016). Overall, agile is expected to enhance individual initiative, including improvisation and collaboration, but as Annosi et al. (2020) warned, may influence negatively individual learning and ideation.

Improvisation appears also in "mainstream" project literature. Geraldi et al. (2010) noted the role of improvisation (and bricolage) in explaining the responses to unexpected events. Lenfle and Loch (2010) see the role of projects as "arenas for learning" via improvisation. Traditional project management tends to emphasize control over flexibility and novelty, relating to "the beauty and the beast" dilemma (Lundin, 2008) because the traditional - plan, then execute with minimum (or zero) deviation - approach tends to stifle creativity and innovativeness. This is very distinct in creative industries where achieving a proper balance is crucial for the viability of projects (Bérubé & Gauthier, 2023). Jerbrant and Karrbom Gustavsson (2013) stated that project (also portfolio) management needs "action spaces" allowing improvisation. Klein et al. (2015) proposed a framework, combining two aspects knowledge of instrument(s) and degree of improvisation, and discerned four types of project management: linear (or rigid), bricolage, pluralist, and pure improvisation. Biesenthal et al. (2015) stressed on the ability to improvise, as linear assumptions confront the complexities. As permanent organizations constitute environment for (temporary or project) teams, it is important for improvisational, proactive adaptation and performance of teams, especially in unpredictable environments (Abrantes et al., 2022).

Recently, Malucelli et al. (2021) reviewed (critically) the existent literature and combining bibliometric and content analysis, observed increasing interest in improvisation in project management, especially in its agile branch. Co-citation analysis attested that improvisation in project management is conceptually grounded on respective basis in organization theory. According to Kerekes and Heletya (2020, p. 84), improvisation is an important soft skill needed in contemporary project management. Also, it is worth to mention that project management is quite a "musical" discipline – a book *Making Projects Sing: A Musical Perspective of Project Management* (Sivaraman & Wilson, 2016) is evidence.

2.3. Learning from jazz in services

The usefulness of improvisation in the service field was realised already in the mid-1990s: "Creativity and innovation cannot only rely on planning and control. There must be some elements of improvisation <...>" (Edvardsson et al., 1995, p. 34). The eminent role belongs to John et al. (2006) who made an intriguing shift, regarding services as performances that often require flexibility and adaptability. They elaborated managerial guidelines, including how to determine when and where improvisation is appropriate or necessary, and signal to each other when to improvise or to follow the pre-written "scores" – service standards, *etc.* Service designers should note that both necessity and opportunity for improvisation arises in proportion with the need for customization and the breadth of customer expectations. As service encounters base on human interactions, improvisation is useful, even necessary (Baron et al., 2007), thus improvisational skills and relevant training for the frontline staff are necessary (Daly et al., 2009; Secchi et al., 2019).

Pina e Cunha et al. (2009) accentuated the importance of improvisation in service recovery, thusly disclaiming the (originating form manufacturing) "zero defect" approach. Noone et al. (2010) on examined application of (also manufacturing-originating) six sigma to customer-facing processes and found that improvisation is necessary because the exact needs and behavior of customers are not predictable:

"<...> like jazz musicians, service employees must have the freedom to improvise and accommodate uncertainties introduced into the process by value seeking consumers" (Noone et al., 2010, p. 279).

Examples are bank services: currency exchange may be standardized but investment counselling needs a more flexible and customizable approach, where is an organic place for improvisation. Bank services were used also for exploring the role of improvisation in the implementation of change (Leybourne, 2006) and cultural conditions for improvisational work (Leybourne, 2009a).

Bardhan et al. (2010) pointed to the "services-as-art" perspective. Nixon (2013) asserted the importance of design thinking and its improvisational nature. Design (thinking) is an iterative, holistic problem-solving process and catalyst for creativity, comprising effectual rather than causal reasoning, in theory neat and linear steps but in practice often a mess. Brozovic et al. (2016) developed a conceptual model for better customer value creation. So, they supported an argument by John et al. (2006) recognizing that improvisation may be subsumed under several services phenomena, such as flexibility, adaptive behavior, empowerment of service employees, *etc.* Hultman et al. (2019) adverted how improvisation by salespersons associates with customer satisfaction. A specific improvisation-related aspect in services is aesthetics (Y. Lagrosen & S. Lagrosen, 2017). Hartog (2018) expanded improvisation approach to public services and administrative networks.

Recent empirical findings (Açıkgöz & Latham, 2022) revealed a positive relationship between improvisation and service performance in the gig economy. Distinctive attributes of jazzing of services seems to be aptness for metaphors and matter of sensemaking (Brozovic et al., 2015). Notably, services have something to offer or teach to jazz musicians – creating service experience in live performance (Kubacki, 2008). It was pleasant to end overviews on "jazzing" of entrepreneurship and project management and with mentioning comprehensive books on the topic. In services, analogue seems to be still missing, albeit the field seems to the most "jazzed" so far. Service is a diverse field and an economic sector, functioning as an arena for projects and entrepreneurship. Some works referred here could fit under other examined fields, particularly process management to be examined next.

2.4. Learning from jazz in process management

Process management is rather specific: as put by Tregear (2017), processes are everywhere, so it relates to all other fields. The field is very "musical", having terms as *notation* and *orchestration* in its professional vocabulary (Dumas et al., 2013). Albeit musical, it is not much jazzed yet, memes like "improvised tasks are signs of low maturity level" are still sounding (Fryt, 2019). Having roots in workflow management and information technology, this field tends to deal with predicted and well-managed processes (Dumas et al., 2013). Jazzing in this

field started with services, due to involvement of the client whose behavior is not predictable. Also, LeLoarne and Maalaoui (2015) noticed that changing of business process after a radical innovation looked more bricolage than following a defined plan.

Kirchmer (2008) dedicated a book chapter to jazzing and pointed to several possibilities for learning, yet the "mainstream" of the field got jazzed timidly. Staudt Lerner et al. (2010) discussed exceptions in modelling of process and recognized improvisation as a possible cause. Safrudin et al. (2011) reasoned preferring improvisation to rigid planning structures. Manfreda et al. (2015) scrutinized processes in public sector and discerned four models of knowledge work, whereat one, named collaboration, stipulates improvisational work. Diirr and Borges (2016) accented the role of improvisation in "on-the-fly" adaptation of medical procedures. Crick and Chew (2017) distinguished the process-as-designed and the process-as-practiced and explored the way to improvisation. König et al. (2019) analysed deviances in processes, that could be result of improvisation. Deviances may be negative, but some deviances (results of improvisation) may be positive (Mertens et al., 2016), or constructive (Mertens & Recker, 2020). This is related to rule-breaking behavior of employees (Ghosh & Shum, 2019). Improvised variations in recurrent processes may cause changes in organizational routines (van der Steen, 2011).

Process management deals with sequences of action in organizational work and so does another discipline - routine dynamics. These have been rather separated but within the past years we can observe a convergency (Wurm et al., 2022). This is significant because both processes and routines should be designed to balance predefined structures and freedom for adaptation, therefore accepting some level of improvisation (Mendling et al., 2020); and both constitute organizational practices that should be congeneric through the whole organization. Achieving this is not easy in large and multinational organizations where the needs of headquarters and local subsidiaries may contrast. Much to that purpose, recently Stendahl et al. (2022) conferred how improvisation and attendant emergence of lateral knowledge can support the development of desired innovative organizational practices. Antunes et al. (2018) forwarded an approach of people-driven dynamic processes that support improvisation, not prescribing almost everything via process models, business rules, etc. Antunes et al. (2019) see storytelling as a tool to analyse business processes in two dimensions: the model as predefined and the context as improvised behavior. Wurm et al. (2019) argue that technological developments enable scalable variant management and process individualization. Baiyere et al. (2020) see the role of improvisation also in enacting business processes. Considering the last and the fact that Kirchmer's (2008) book that includes jazzing of the field has already 3rd edition, is possible to claim that despite a relatively silent period, jazzing of process management is getting momentum.

2.5. Learning from jazz in other (non-business) fields

Examination of jazzing patterns in subfields of business revealed links to other, including non-business fields. A peculiar example is digitalization – necessary capabilities embrace both process management and improvisation (Annarelli et al., 2021). Another example is medicine where improvisation has proved useful chiefly in development of communication

skills (Haidet et al., 2017), but Fu (2019) involved also clinical aspects, such as symptoms and diagnoses. Wang et al. (2021) noted that therapy of SARS-CoV-2 is "<...> improvised by combination with broad-spectrum antivirals <...>". Messner (2018, p. 187) wrote that "Both law and jazz regard the unknown future as a resource for present decisions by 'inventing' new possibilities <...>", resuming that if we want our lives to be settled through our choices, rather than through enforced laws, we must improvise. Improvisational practices have been noted even in military history (Brady, 2011; Wagner, 2019; Tilman & Jacoby, 2020), and in emergency and disaster management. The last is notable also because it leads to the "dark side" of improvisation (Giustiniano et al., 2016b).

3. Comparison of learnings

Searching of literature revealed over 500 relevant publications that were examined but just 156 are referred, chiefly because of space limits. The criterion for inclusion is forwarding a new concept, notion, *etc.* Following comparison and discussion of learnings from jazz bases on qualitative estimates, rather than counting nominations in literature. Comparison of learnings are summarized in Table 1.

Improvisation, particularly its two focal concepts – the minimal structures and aesthetics of imperfection – seem to be almost equally important across all examined fields but with one remarkable exclusion – process management. This field has acquired form arts and music but not from jazz, the "mainstream" is still fond of rigid structures and the dominant approach is "orchestration" while "improvisation" is allowed only for the "composers" or "arrangers" (process engineers, designers, etc.). Minimalism in structures is still embryonic

Table 1. Comparison of learnings from jazz (source: created by authors)

Learnings from:	General organization/management	Entrepre- neurship	Project man- agement	Services	Process manage- ment
Arts and music in general	+++	++	++	+++	+
Improvisation (including strategic)	+++	+++	+++	+++	+
Minimal structures	+++	++	++	++	(+)
Aesthetics of imperfection	+++	++	(+)	+++	+++
Organized chaos/Agility	+++	+	+++	+	+
Bricolage/Effectuation	+	+++	++	++	++
Design (jazz) thinking	(+)	(+)	(+)	+	(-)
Individualizing, variations	+	(+)	(+)	(+)	+
Competences and capabilities	(-)	+++	(+)	+++	(-)
Empowerment and freedom	++	++	++	+	(-)
Teamwork and performance	++	++	++	+	+
Limitations of improvisation	(+)	(-)	(+)	(-)	(-)

Note: plusses indicate the extent of learning, (+) means implicitly, (-) means (rather) missing.

while imperfectionism gets ground, chiefly in form of accepting deviances. In services, the idea of minimal structures is recognized but the "as-art" perspective, and disavowal of the "zero defect" approach seems important. As pointed by Pina e Cunha et al. (2009) improvisation is especially importance if services fail and need recovering.

The best learners from jazz appear general management (also other, non-business fields). Among the targeted fields the leader is services, followed by entrepreneurship and project management; process management still lags behind. Concerning the sources of learning, the most fertile seems to be the aesthetics of imperfection.

An ecumenical notion seems to be agility. It emerged in project management, expressly in software development, contrasting the traditional plan-based "waterfall" approach. Despite of decades-long struggling, both are still used – agility does not suit everywhere, traditional approaches work better in some cases. The leading idea – balancing agility and discipline (plan-driven) – emerged already some time ago (Boehm & Turner, 2004). Agility suits when smaller teams of experienced members work on projects where changes are probable. If the requirements are fixed and clear, traditional approaches are better. Thus, the resultant vector is shifting towards hybrid methodologies, combining elements form both antipodes (Cooper & Sommer, 2016; Conforto & Amaral, 2016). Hybridizations are also labelled "cocktail" (Binder et al., 2014) and "disciplined agile" (Conforto & Amaral, 2016). Balancing discipline and flexibility allow suitable minimal structures. Not surprisingly, the idea was perfectly explained by live performance of a jazz combo and discussions with the musicians (Green, 2019).

Agility, also hybridity or "disciplined agility" are diffused into several fields, including services. Services are specific because of involvement of co-creators – the customers, who may be also agile (Sjödin et al., 2020). Application of hybridity or "disciplined" agility is related to various capabilities of actors, especially to act according to plan and to improvise (Gupta et al., 2010). To apply competences and capabilities to improvise, people must have enough freedom and be empowered to make decisions. Teamwork is increasingly needed, and this can be learned from jazz musicians. Smaller music groups do not have conductors but there is always a leader. In jazz, leadership is often shared and/or shifting – the soloing musician becomes the leader (Mainemelis et al., 2015).

Organizational improvisation is essentially related to bricolage and effectuation. Bricolage is an art-originated notion, having several tangencies with effectuation – a decision logic that emerged in entrepreneurship but currently is competing with the rational "causation" logic in other fields (Nguyen et al., 2018). These have touchpoints with design thinking – another arts-originated discipline, targeting on matching people's needs with technological feasibility to create customer value and market opportunity (Brown, 2008). The relations of design and jazz thinking still need elaboration, yet the linkage is manifested:

"<...> 'jazz thinking' is crucial if we are to move away from outdated modes of thinking to new ways of being and acting, which are responsive to the real needs of people, communities and ecosystems" (Seeley & Thornhill, 2014, p. 23).

Agility, bricolage, and effectuation are also interrelated – for one, in rapid prototyping (Mansoori & Lackéus, 2020) and are related to organizational ambidexterity (Pina e Cunha et al., 2019). Here it is good to note that Stelzl et al. (2020) developed a maturity model for ambidextrous organizations, probably the only maturity model that considers improvisation.

Design and jazz thinking appear clearly only in services, as variations and individualizing in process management, but are gaining ground in other fields. Improvisation-related matters concern the human side (labelled also subject-oriented) of process management (c.f. Antunes et al., 2018). This stream emerged greatly because of processes in services where the clients may behave unexpectedly – improvise. Thus, not surprisingly, the topic of competences and capabilities to improvise spring in the service field. The importance of such competences can be explained using music analogy. Classically trained musicians can perfectly perform sheet music but very few can improvise. Nowadays, music education is incorporating improvisation as an essential skill. A strong preparation with creativity and ability to adapt to situations are essential in today's music industry. Creativity or a creative mindset is essentially related to mindfulness and playfulness (Kamaleldin Hassan, 2019).

Another important lesson is the limitations of improvisation. According to Giustiniano et al. (2016a), organizational zemblanity has two causes: an excess of individual discretion and a lack of organizational controls – structures and routines) Thus, the organizational structures must determine who, when *etc.* can improvise or must "play by scores", follow the routines, business rules *etc.* Still, even proper rules do not predetermine everything and to allow improvisation, the structures should be rather minimal – thus, the individual aspect remains. So, as Bennett and Lemoine (2014) insisted, improvisation should be "intelligent", not just doing something (futile) but rely on experience, knowledge, *etc.* Also, this can be learned from jazz: in a widely quoted dictum Charles Mingus uttered *You can't improvise on nothing*; *you've gotta improvise on something*.

Spicer (2020) cautions that improvisation (especially if failed) may lead to bullshitting in organizations. Usually, it starts in smaller groups but if such practice works, it may expand and deluge the whole organization.

Strategic improvisation appeared in entrepreneurship, but it relates to all treated subfields. Hughes et al. (2020) developed a tool to diagnose strategic improvisation and to measure the readiness for this. Strategic improvisation became especially important in crises like the COVID-19 pandemic that caused serious problems in supply chains (Wieland, 2021). It is already possible to say that these developments have evoked of a novel subtopic – improvisation in crisis situations. For one, Janssen and van der Voort (2020) discussed agile and adaptive governance in crisis response in Netherlands during the first wave and noted "<...> impressive improvisation talent was exhibited by all those involved".

Emergency or disaster management appeared a suitable environment for improvisation. Geiger and Danner-Schröder (2022) scrutinized how improvisation is enacted as routine performance. Gerard (2020) expanded the routine theory, showing how improvisation may change formal work process. This relates even closer to process management, as the idea of positive changes emerging from disobedience matches the idea of positive or even constructive deviances, forwarded by Mertens and Recker (2020).

Characterizing metaphorically (Prouty, 2013) what the treated field have learned from jazz, the best "students" seem to be general management, entrepreneurship, and services; project management appears good, and process management falls behind. Yet, having good music pre-education (able to notate and orchestrate), process management may develop quickly. Like average "students" the compared fields have learned something pretty well, but the straggling fields need to develop (see Table 2).

Table 2. The state of jazzing across examined (sub)fields (source: created by authors)

	General organization (other fields)	Entrepreneurship	Project management	Services	Process management
learned from jazz, (music, arts).	Organizational improvisation; The notion; Aesthetics of imperfection; Minimal structures (organizing chaos), empowerment and freedom.	Organizational improvision combined with bricolage and effectuation; Aesthetics of imperfection – less rational judgement; Teamwork, and competence to improvise.	Plan to allow improvisation and aberrations are normal; Agility – flexible, iterative methods to organize the chaos; Empowerment of teams.	Aesthetics of imperfection or services-as-art – no "zero defect"; Competence to improvise; Design thinking (as jazz thinking).	Aesthetics of imperfection; Some adoptions from other fields, especially services (is "musical" discipline, able to notate, orchestrate and even dances).
Still to learn from jazz (from other fields	Competences and capabilities to improvise (services); Design (or jazz) thinking (service).	Organizing chaos and agility – extra in crisis (project management); Design (or jazz) thinking (services).	Aesthetics of imperfection (organization and/or services); Competences to improvise (services); Design (or jazz) thinking (services).	Organizing chaos and agility – extra when services fail; Empowerment of (frontline) staff, teamwork (project and/ or general organization).	Minimal structures; Organizing chaos and agility (project management/ organization) Design (or jazz) thinking (services), and more.

Not degrading jazz as the primary source of learning, looking at what a neighboring field has learned may help, also because of decreasing possible "translation" problems. This may facilitate mutual learning and enrichment between the fields.

For example, project management (an average "jazz student") wants to improvise and does this occasionally but does not deliberately develop pertinent competences. This is striking, as competence models and standards, both individual and organizational, are advanced in this field (Blomquist et al., 2018). As improvisational competences are most developed in services, project management could learn this from services; and services could learn about development of competence models. Also, project management could learn from services design (jazz) thinking and aesthetics of imperfection; and services could learn from project management agility and empowerment of (frontline) staff. Notably, project management has already turned to services (Burström et al., 2014), and to design thinking (Dijksterhuis & Silvius, 2016). As treating of design thinking - a diving-board to jazz thinking - is notable only in services, this field could become a "teacher" for all other fields. However, teaching can be beneficial only when the "students" really want to learn. To indicate still unlearned lessons, just one more metaphoric comparison. In music collectives, every player has unique and important role - for one, a bassist in a jazz band, who very seldom plays solos but supports the whole band, filling an essential part of the sound spectrum. In organising, this principle is often forgotten. A concern is limitations of improvisation, what business subfields should learn.

The organizational improvisation field is constantly evolving, seemingly even *accelerato*. An affirmative example is a recent book *Workplace Jazz: 9 Steps to Creating High-Performing Agile Project Teams* (Leonard, 2021), providing a framework for developing agile project teams. Based on the presented overview, it is possible to claim that this framework could be widened to whole organizations. The latest overview on the organizational improvisation scholarship within the past 25 years (Ciuchta et al., 2021) notes that understanding of this complex phenomenon has developed due to contributions from several fields and is still challenging.

Conclusions

Taking a fresh stock of existing research in jazzing of examined fields and discussion of the findings brought forward increasing importance of organizational improvisation as a powerful enabler of creativity and innovativeness. Jazz (music and arts) appeared fruitful, yet metaphorical source of learning. As differences appeared across the examined fields, it can be claimed that there are unused possibilities for mutual learning between the fields. Exploring and exploiting possibilities for further learning from jazz (music, arts) may lead to new developments in the fields in research, as well as in practice. Combining learning from jazz with learning from existent advancements in the neighboring (sub)fields may open new avenues for fostering research, particularly due to joint efforts of researchers in still "artificially or academically" separated fields that are intrinsically united by common grounds and nature. As Zitian Chen and Hitt (2021) recently claimed, fragmentation of academic knowledge is caused by craving for simplicity but solving complex problems calls for integration of knowledge. Synergic process of mutual learning may support breaking down the "silos" both in research and in practice, moving towards the "grand synthesis".

This study revealed several issues that need further research. For one, the linkage between design thinking and jazz thinking was pointed out but obviously needs further elaboration. The main limitation of this study comes from the qualitative approach, chiefly due to the metaphoric nature of the investigated matter. Applying a systematic and more quantitative approach could reveal something new but, on another hand, not discovering "hidden clues" in texts. This is because people in different (sub)fields tend to use different word(ing)s for treating the same or similar matters. Also, as mentioned, there could be serious "lost in translation" problems, especially when concerning metaphoric matters.

References

- Abrantes, A. C. M., Passos, A. M., Pina e Cunha, M., & Marques Santos, C. (2022). Getting the knack for team-improvised adaptation: The role of reflexivity and team mental model similarity. *The Journal of Applied Behavioral Science*, 58(2), 281–315. https://doi.org/10.1177/00218863211009344
- Abu Bakar, H., Mahmood, R., & Nik Ismail, N. N. H. (2015). Fostering small and medium enterprises through entrepreneurial orientation and strategic improvisation. *Mediterranean Journal of Social Sciences*, 6(4), 481–487. https://doi.org/10.5901/mjss.2015.v6n4p481
- Açıkgöz, A., & Latham, G. P. (2022). Self-set learning goals and service performance in a gig economy: A moderated-mediation role of improvisation and mindful metacognition. *Journal of Business Research*, 139, 1553–1563. https://doi.org/10.1016/j.jbusres.2021.10.074

- Annarelli, A., Battistella, C., Nonino, F., Parida, V., & Pessot, E. (2021). Literature review on digitalization capabilities: Co-citation analysis of antecedents, conceptualization and consequences. *Technological Forecasting and Social Change*, 166. https://doi.org/10.1016/j.techfore.2021.120635
- Ancelin-Bourguignon, A., Dorsett, Ch., & Azambuja, R. (2020). Lost in translation? Transferring creativity insights from arts into management. *Organization*, 27(5), 717–741. https://doi.org/10.1177/1350508419855716
- Annosi, M. C., Foss, N., & Martini, A. (2020). When agile harms learning and innovation (and what can be done about it). *California Management Review*, 63(1), 61–80. https://doi.org/10.1177/0008125620948265
- Antunes, P., Baloian, N., Zurita, G., & Pino, J. A. (2018, 5–6 April). Supporting people-driven, dynamic and geo-located work processes. In Ch. Stary (Ed), S-BPM One '18: Proceedings of the 10th International Conference on Subject-Oriented Business Process Management (pp. 1–10). Linz, Austria. Association for Computing Machinery. https://doi.org/10.1145/3178248.3178260
- Antunes, P., Pino, J. A., & Tate, M. (2019, 8–11 January). Method for eliciting and analyzing business processes based on storytelling theory. In T. Bui (Ed.), *Proceedings of the 52nd Hawaii International Conference on System Sciences* (pp. 5558–5567). Maui, Hawaii, United States. Hawaii International Conference on System Sciences. https://doi.org/10.24251/HICSS.2019.669
- Arias-Pérez, J., & Cepeda-Cardona, J. (2022). Knowledge management strategies and organizational improvisation: What changed after the emergence of technological turbulence caused by artificial intelligence? *Baltic Journal of Management*, 17(2), 250–265. https://doi.org/10.1108/BJM-01-2021-0027
- Audretsch, D. B., Belitski, M., Bui, H. T. M., & Herzig, M. (2023). Improvisation and innovation in teams: The jazz effect. *British Journal of Management*, 34(1), 150–170. https://doi.org/10.1111/1467-8551.12588
- Bailey, K., & Breslin, D. (2021). The COVID-19 pandemic: What can we learn from past research in organizations and management? *International Journal of Management Reviews*, 23(1), 3–6. https://doi.org/10.1111/ijmr.12237
- Baiyere, A., Salmela, H., & Tapanainen, T. (2020). Digital transformation and the new logics of business process management. *European Journal of Information Systems*, 29(3), 238–259. https://doi.org/10.1080/0960085X.2020.1718007
- Baker, T., Miner, A. S., & Eesley, D. T. (2003). Improvising firms: Bricolage, account giving and improvisational competencies in the founding process. *Research Policy*, 32(2), 255–276. https://doi.org/10.1016/S0048-7333(02)00099-9
- Balachandra, L. (2019). The improvisational entrepreneur: Improvisation training in entrepreneurship education. *Journal of Small Business Management*, 57(1), 60–77. https://doi.org/10.1111/jsbm.12486
- Bardhan, I. R., Demirkan, H., Kannan, P. K., Kauffman, R. J., & Sougstad, R. (2010). An interdisciplinary perspective on IT services management and service science. *Journal of Management Information Systems*, 26(4), 13–64. https://doi.org/10.2753/MIS0742-1222260402
- Baron, S., Patterson, A., Harris, K., & Hodgson, J. (2007). Strangers in the night: Speeddating, CCI and service businesses. *Service Business*, 1, 211–232. https://doi.org/10.1007/s11628-007-0031-1
- Barrett, F. J. (1998). Creativity and improvisation in jazz and organizations: Implications for organizational learning. *Organization Science*, 9(5), 605–622. https://doi.org/10.1287/orsc.9.5.605
- Barrett, F. J. (2012). Yes to the mess: Surprising leadership lessons from jazz. Harvard Business Review Press. https://doi.org/10.1287/orsc.9.5.558
- Barrett, F. J., & Peplowski, K. (1998). Minimal structures within a song: An analysis of "All of Me". Organization Science, 9(5), 558–560. https://doi.org/10.1287/orsc.9.5.558
- Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, 57(3), 311–317. https://doi.org/10.1016/j.bushor.2014.01.001

- Bérubé, J., & Gauthier, J.-B. (2023). Managing projects in creative industries: A compromise between artistic and project management values. *Creative Industries Journal*, 16(1), 76–95. https://doi.org/10.1080/17510694.2021.1979278
- Biesenthal, Ch., Sankaran, Sh., Pitsis, T., & Clegg, S. (2015). Temporality in organization studies: Implications for strategic project management. *Open Economics and Management Journal*, 2(1), 45–52. https://doi.org/10.2174/2352630001502010045
- Binder, J., Aillaud IV, L., & Schilli, L. (2014). The project management cocktail model: An approach for balancing agile and ISO 21500. *Procedia Social and Behavioral Sciences*, 119, 182–191. https://doi.org/10.1016/j.sbspro.2014.03.022
- Blomquist, T., Farashah, A. D., & Thomas, J. (2018). Feeling good, being good and looking good: Motivations for, and benefits from, project management certification. *International Journal of Project Management*, 36(3), 498–511. https://doi.org/10.1016/j.ijproman.2017.11.006
- Boehm, B., & Turner, R. (2004, 28 May). Balancing agility and discipline: Evaluating and integrating agile and plan-driven methods. In *ICSE '04: Proceedings of the 26th International Conference on Software Engineering* (pp. 718–719). Edinburgh, United Kingdom. Institute of Electrical and Electronics Engineers.
- Bouncken, R. B., Fredrich, V., & Pesch, R. (2016). Configurational answer to the ongoing riddle of formal and/or emergent planning practices. *Journal of Business Research*, 69(9), 3609–3615. https://doi.org/10.1016/j.jbusres.2015.12.064
- Brady, M. (2011). Improvisation versus rigid command and control at Stalingrad. Journal of Management History, 17(1), 27–49. https://doi.org/10.1108/17511341111099565
- Brown, T. (2008). Design thinking. Harvard Business Review, 86, 84-92.
- Brozovic, D., Nordin, F., & Kindström, D. (2016). Service flexibility: Conceptualizing value creation in service. *Journal of Service Theory and Practice*, 26(6), 868–888. https://doi.org/10.1108/JSTP-09-2014-0219
- Brozovic, D., Ravald, A., & Nordin, F. (2015). Making sense of service dynamics: The honeybee metaphor. *Journal of Services Marketing*, 29(6–7), 634–644. https://doi.org/10.1108/JSM-01-2015-0046
- Buchanan, D. A., & Denyer, D. (2013). Researching tomorrow's crisis: Methodological innovations and wider implications. *International Journal of Management Reviews*, 15(2), 205–224. https://doi.org/10.1111/ijmr.12002
- Burström, Th. A., Jacobsson, M., & Wilson, T. L. (2014). Integrating service practice into project management: A matter of "Do Or Die"? *International Journal of Managing Projects in Business*, 7(1), 5–22. https://doi.org/10.1108/IJMPB-12-2011-0078
- Carlucci, D., & Schiuma, G. (2018). The power of the arts in business. *Journal of Business Research*, 85, 342–347. https://doi.org/10.1016/j.jbusres.2017.10.012
- Ciuchta, M. P., O'Toole, J., & Miner, A. S. (2021). The organizational improvisation landscape: Taking stock and looking forward. *Journal of Management*, 47(1), 288–316. https://doi.org/10.1177/0149206320966987
- Clegg, S., & Pina e Cunha, M. (Eds.). (2019). Management, organizations and contemporary social theory. Routledge. https://doi.org/10.4324/9780429279591
- Cole, S., & Meyer, L. M. (2020). Perspective transformation and the jazz mindset: A model for post-crisis organizations. *Organization Development Review*, 52(2), 29–34.
- Conforto, E. C., & Amaral, D. C. (2016). Agile project management and stage-gate model a hybrid framework for technology-based companies. *Journal of Engineering and Technology Management*, 40, 1–14. https://doi.org/10.1016/j.jengtecman.2016.02.003
- Cooper, R. G., & Sommer, A. F. (2016). The agile–stage-gate hybrid model: a promising new approach and a new research opportunity. *Journal of Product Innovation Management*, 33(5), 513–526. https://doi.org/10.1111/jpim.12314

- Crick, Ch., & Chew, E. K. (2017). Business processes in the Agile organisation: A sociotechnical perspective. *Software and Systems Modeling*, 16(3), 631–648. https://doi.org/10.1007/s10270-015-0506-9
- Crook, H. (2015). How to improvise: An approach to practicing improvisation. Alfred Music.
- Daly, A., Grove, S. J., Dorsch, M. J., & Fisk, R. P. (2009). The impact of improvisation training on service employees in a European airline: A case study. *European Journal of Marketing*, 43(3–4), 459–472. https://doi.org/10.1108/03090560910935532
- Davies, A., Manning, S., & Söderlund, J. (2018). When neighboring disciplines fail to learn from each other: The case of innovation and project management research. *Research Policy*, 47(5), 965–979. https://doi.org/10.1016/j.respol.2018.03.002
- Diirr, B., & Borges, M. R. S. (2016, 9–12 October). Shaping procedures to deal with complex situations. In Proceedings of the 2016 Institute of Electrical and Electronics Engineers International Conference on Systems, Man, and Cybernetics (pp. 51–56). Budapest, Hungary. Institute of Electrical and Electronics Engineers. https://doi.org/10.1109/SMC.2016.7844557
- Dijksterhuis, E., & Silvius, G. (2016). The design thinking approach to projects. *PM World Journal*, 5(6). https://pmworldlibrary.net/wp-content/uploads/2016/06/pmwj47-Jun2016-Dijksterhuis-Silvius-design-thinking-approach-second-edition.pdf
- Dumas, M., Rosa, la M., Mendling, J., & Reijers, H. A. (2013). Fundamentals of business process management. Springer-Verlag. https://doi.org/10.1007/978-3-642-33143-5
- Duxbury, T. (2014). Improvising entrepreneurship. *Technology Innovation Management Review*, 4(7), 22–26. https://doi.org/10.22215/timreview/809
- Edvardsson, B., Haglund, L., & Mattsson, J. (1995). Analysis, planning, improvisation and control in the development of new services. *International Journal of Service Industry Management*, 6(2), 24–35. https://doi.org/10.1108/09564239510084923
- Fryt, M. (2019). Process maturity models applicability and usability review. World Scientific News, 129, 51–71.
- Fu, B. (2019). Common ground: Frameworks for teaching improvisational ability in medical education. Teaching and Learning in Medicine: An International Journal, 31(3), 342–355. https://doi.org/10.1080/10401334.2018.1537880
- Fultz, A. E. F., & Hmieleski, K. M. (2021). The art of discovering and exploiting unexpected opportunities: The roles of organizational improvisation and serendipity in new venture performance. *Journal of Business Venturing*, 36(4). https://doi.org/10.1016/j.jbusvent.2021.106121
- Geiger, D., & Danner-Schröder, A. (2022). Unexpected events and routine dynamics. In M. S. Feldman, B. T. Pentland, L. D'Adderio, K. Dittrich, C. Rerup, & D. Seidl (Eds.), Cambridge handbook of routine dynamics (pp. 434–442). Cambridge University Press. https://doi.org/10.1017/9781108993340.036
- Geraldi, J. G., Lee-Kelley, L., & Kutsch, E. (2010). The Titanic sunk, so what? Project manager response to unexpected events. *International Journal of Project Management*, 28(6), 547–558. https://doi.org/10.1016/j.ijproman.2009.10.008
- Gerard, J. A. (2020). Improvised routines driving best practices: Investing in disobedience. *Qualitative Research in Accounting and Management*, 17(4), 525–551. https://doi.org/10.1108/QRAM-07-2018-0048
- Giustiniano, L., Pina e Cunha, M., & Clegg, S. (2016a). Organizational zemblanity. European Management Journal, 34(1), 7–21. https://doi.org/10.1016/j.emj.2015.12.001
- Giustiniano, L., Pina e Cunha, M., & Clegg, S. (2016b). The dark side of organizational improvisation: Lessons from the sinking of *Costa Concordia*. *Business Horizons*, 59(2), 223–232. https://doi.org/10.1016/j.bushor.2015.11.007
- Ghosh, A., & Shum, C. (2019). Why do employees break rules? Understanding organizational rule-breaking behaviors in hospitality. *International Journal of Hospitality Management*, 81, 1–10. https://doi.org/10.1016/j.ijhm.2019.02.003

- Gojny-Zbierowska, M., & Zbierowski, P. (2021). Improvisation as responsible innovation in organizations. *Sustainability*, 13(4). https://doi.org/10.3390/su13041597
- Grayson, D., McLaren, M., & Spitzeck, H. (2014). Social intrapreneurism and all that jazz: How business innovators are helping to build a more sustainable world. Routledge.
- Green, P. (2019). PMXPO 2019: The surprising links between agile and jazz. Webinar at PMXPO 2019. *Project Management.com*. https://www.projectmanagement.com/videos/557751/pmxpo-2019--the-surprising-links-between-agile-and-jazz#_=_
- Groenendaal, J., & Helsloot, I. (2020). Organisational resilience: Shifting from planning-driven business continuity management to anticipated improvisation. *Journal of Business Continuity and Emergency Planning*, 14(2), 102–109.
- Gupta, J., Termeer, C., Klostermann, J., Meijerink, S., Brink, van den M., Jong, P., Nooteboom, S., & Bergsma, E. (2010). The adaptive capacity wheel: A method to assess the inherent characteristics of institutions to enable the adaptive capacity of society. *Environmental Science and Policy*, 13(6), 459–471. https://doi.org/10.1016/j.envsci.2010.05.006
- Hadida, A. L., Tarvainen, W., & Rose, J. (2015). Organizational improvisation: A consolidating review and framework. *International Journal of Management Reviews*, 17(4), 437–459. https://doi.org/10.1111/ijmr.12047
- Haidet, P., Jarecke, J., Yang, Ch., Teal, C. R., Street, R. L., & Stuckey, H. (2017). Using jazz as a metaphor to teach improvisational communication skills. *Healthcare*, 5(3). https://doi.org/10.3390/healthcare5030041
- Hamilton, A. (1990). The aesthetics of imperfection. *Philosophy*, 65(253), 323–340. https://doi.org/10.1017/S0031819100057636
- Hancock, H., & Dickey, L. (2015). Possibilities. Penguin Books.
- Hartog, M. (2018). *Jazz improvisation and performance arrangements of craftsmanship for civil servants*. https://www.academia.edu/37652206/Hartog_M_2018_Jazz_improvisation_and_performance_arrangements_of_craftsmanship_for_civil_servants
- Hjorth, D., Strati, A., Drakopoulou Dodd, S., & Weik, E. (2018). Organizational creativity, play and entrepreneurship: Introduction and framing. *Organization Studies*, 39(2–3), 155–168. https://doi.org/10.1177/0170840617752748
- Hughes, P., Hodgkinson, I. R., Hughes, M., & Arshad, D. (2018). Explaining the entrepreneurial orientation–performance relationship in emerging economies: The intermediate roles of absorptive capacity and improvisation. *Asia Pacific Journal of Management*, 35, 1025–1053. https://doi.org/10.1007/s10490-017-9539-7
- Hughes, P., Morgan, R. E., Hodgkinson, I. R., Kouropalatis, Y., & Lindgreen, A. (2020). A diagnostic tool to determine a strategic improvisation readiness index score (IRIS) to survive, adapt, and thrive in a crisis. *Industrial Marketing Management*, 88, 485–499. https://doi.org/10.1016/j.indmarman.2020.05.020
- Hultman, M., Yeboah-Banin, A. A., & Boso, N. (2019). Linking improvisational behavior to customer satisfaction: The relational dynamics. *Journal of Business and Industrial Marketing*, 34(6), 1183– 1193. https://doi.org/10.1108/JBIM-11-2017-0298
- Hunt, R. A., & Lerner, D. A. (2018). Entrepreneurial action as human action: Sometimes judgment-driven, sometimes not. *Journal of Business Venturing Insights*, 10. https://doi.org/10.1016/j.jbvi.2018.e00102
- Janssen, M., & Voort, van der H. (2020). Agile and adaptive governance in crisis response: Lessons from the COVID-19 pandemic. *International Journal of Information Management*, 55. https://doi.org/10.1016/j.ijinfomgt.2020.102180
- Jerbrant, A., & Karrbom Gustavsson, T. (2013). Managing project portfolios: Balancing flexibility and structure by improvising. *International Journal of Managing Projects in Business*, 6(1), 152–172. https://doi.org/10.1108/17538371311291071

- John, J., Grove, S. J., & Fisk, R. P. (2006). Improvisation in service performances: Lessons from jazz. Managing Service Quality, 16(3), 247–268. https://doi.org/10.1108/09604520610663480
- Kamaleldin Hassan, D. (2019). Creativity trilateral dynamics: Playfulness, mindfulness, and improvisation. *Creativity Studies*, 12(1), 1–14. https://doi.org/10.3846/cs.2019.4313
- Kamoche, K., & Pina e Cunha, M. (2001). Minimal structures: From jazz improvisation to product innovation. *Organization Studies*, 22(5), 733–764. https://doi.org/10.1177/0170840601225001
- Kerekes, K., & Heletya, D. (2020). The importance of project managers' soft skills. In B. Blaskovics, C. Deák, & A. K. Varga (Eds.), *Chapters from the academic aspect of project management: Research and teaching methodologies (Vol.* 4, pp. 84–94). International Network for Professional Education and Research in Process and Project Management.
- Kirchmer, M. (2008). High performance through process excellence: From strategy to operations. Springer.
- Klein, L., Biesenthal, Ch., & Dehlin, E. (2015). Improvisation in project management: A praxeology. International Journal of Project Management, 33(2), 267–277. https://doi.org/10.1016/j.ijproman.2014.01.011
- König, U. M., Linhart, A., & Röglinger, M. (2019). Why do business processes deviate? Results from a Delphi study. *Business Research*, 12, 425–453. https://doi.org/10.1007/s40685-018-0076-0
- Kubacki, K. (2008). Jazz musicians: Creating service experience in live performance. *International Journal of Contemporary Hospitality Management*, 20(4), 303–313. https://doi.org/10.1108/09596110810873516
- Kuura, A., Blackburn, R. A., & Lundin, R. A. (2014). Entrepreneurship and projects linking segregated communities. *Scandinavian Journal of Management*, 30(2), 214–230. https://doi.org/10.1016/j.scaman.2013.10.002
- Kuura, A., & Lundin, R. A. (2019). Process perspectives on entrepreneurship and projects. *International Journal of Managing Projects in Business*, 12(1), 25–47. https://doi.org/10.1108/IJMPB-12-2017-0165
- Lagrosen, Y., & Lagrosen, S. (2017). Aesthetic service quality a study of a symphony orchestra. *Total Quality Management and Business Excellence*, 28(3–4), 318–330. https://doi.org/10.1080/14783363.2015.1082419
- LeLoarne, S., & Maalaoui, A. (2015). How high-tech entrepreneurs bricole the evolution of business process management for their activities. *Business Process Management Journal*, 21(1), 152–171. https://doi.org/10.1108/BPMJ-03-2014-0024
- Lenfle, S., & Loch, Ch. (2010). Lost roots: How project management came to emphasize control over flexibility and novelty. *California Management Review*, 53(1), 32–55. https://doi.org/10.1525/cmr.2010.53.1.32
- Leonard, G. J. (2021). Workplace jazz: 9 steps to creating high-performing agile project teams. Business Expert Press.
- Leybourne, S. A. (2009a). Culture and organizational improvisation in UK financial services. *Journal of Service Science and Management*, 2(4), 237–254. https://doi.org/10.4236/jssm.2009.24029
- Leybourne, S. A. (2009b). Improvisation and Agile project management: A comparative consideration. International Journal of Managing Projects in Business, 2(4), 519–535. https://doi.org/10.1108/17538370910991124
- Leybourne, S. A. (2017). "It's All Up Here": Adaptation and improvisation within the modern project. International Journal of Project Organisation and Management, 9(3), 217–229. https://doi.org/10.1504/IJPOM.2017.087575
- Leybourne, S. A. (2006). Managing improvisation within change management: Lessons from UK financial services. *The Service Industries Journal*, 26(1), 73–95. https://doi.org/10.1080/02642060500358886
- Leybourne, S. A., & Cook, P. (2015). "Rockin' all over the world": Organisational improvisation lessons from the music-based practitioner. *International Journal of Management Concepts and Philosophy*, 9(1), 1–19. https://doi.org/10.1504/IJMCP.2015.075102

- Leybourne, S., & Kennedy, M. (2015). Learning to improvise, or improvising to learn: Knowledge generation and "Innovative Practice" in project environments. *Knowledge and Process Management: The Journal of Corporate Transformation*, 22(1), 1–10. https://doi.org/10.1002/kpm.1457
- Leybourne, S., & Sadler-Smith, E. (2006). The role of intuition and improvisation in project management. *International Journal of Project Management*, 24(6), 483–492. https://doi.org/10.1016/j.ijproman.2006.03.007
- Leybourne, S. A., Warburton, R. D. H., & Kanabar, V. (2014). Is project management the new management 2.0? Organisational Project Management, 1(1), 16–36. https://doi.org/10.5130/opm.v1i1.3959
- Lindgren, M., & Packendorff, J. (2007). Performing arts and the art of performing on co-construction of project work and professional identities in theatres. *International Journal of Project Management*, 25(4), 354–364. https://doi.org/10.1016/j.ijproman.2007.01.005
- Lundin, R. A. (2008). The beauty and the beast on the creativity/project management encounter. International Journal of Managing Projects in Business, 1(2), 206–215. https://doi.org/10.1108/17538370810866331
- Lundin, R. A., & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of Management*, 11(4), 437–455. https://doi.org/10.1016/0956-5221(95)00036-U
- Macpherson, A., Breslin, D., & Akinci, C. (2022). Organizational learning from hidden improvisation. *Organization Studies*, 43(6), 861–883. https://doi.org/10.1177/01708406211035509
- Mainemelis, Ch., Kark, R., & Epitropaki, O. (2015). Creative leadership: A multi-context conceptualization. The Academy of Management Annals, 9(1), 393–482. https://doi.org/10.5465/19416520.2015.1024502
- Malucelli, G., Barbosa, M. T. J., & Monteiro de Carvalho, M. (2021). Facing the challenge of improvisation in project management: A critical review. *International Journal of Managing Projects in Business*, 14(2), 369–389. https://doi.org/10.1108/IJMPB-02-2019-0038
- Manfreda, A., Buh, B., & Štemberger, M. I. (2015). Knowledge-intensive process management: A case study from the public sector. *Baltic Journal of Management*, 10(4), 456–477. https://doi.org/10.1108/BJM-10-2014-0170
- Mannucci, P. V., Orazi, D. C., & Valck, de K. (2021). Developing improvisation skills: The influence of individual orientations. *Administrative Science Quarterly*, 66(3), 612–658. https://doi.org/10.1177/0001839220975697
- Mansoori, Y., & Lackéus, M. (2020). Comparing effectuation to discovery-driven planning, prescriptive entrepreneurship, business planning, lean startup, and design thinking. *Small Business Economics*, 54, 791–818. https://doi.org/10.1007/s11187-019-00153-w
- Meisiek, S., & Barry, D. (2014). Theorizing the field of arts and management. *Scandinavian Journal of Management*, 30(1), 83–85. https://doi.org/10.1016/j.scaman.2014.01.003
- Mendling, J., Pentland, B. T., & Recker, J. (2020). Building a complementary agenda for business process management and digital innovation. *European Journal of Information Systems*, 29(3), 208–219. https://doi.org/10.1080/0960085X.2020.1755207
- Mertens, W., & Recker, J. (2020). Can constructive deviance be empowered? A multi-level field study in Australian Supermarkets. *Journal of Retailing and Consumer Services*, 54. https://doi.org/10.1016/j.jretconser.2020.102036
- Mertens, W., Recker, J., Kohlborn, Th., & Kummer, T.-F. (2016). A framework for the study of positive deviance in organizations. *Deviant Behavior*, *37*(11), 1288–1307. https://doi.org/10.1080/01639625.2016.1174519
- Messner, C. (2018). Now This: On the gradual production of justice whilst doing law and music. International Journal for the Semiotics of Law, 31, 187–214. https://doi.org/10.1007/s11196-017-9518-9

- Micelotta, E., Lounsbury, M., & Greenwood, R. (2017). Pathways of institutional change: An integrative review and research agenda. *Journal of Management*, 43(6), 1885–1910. https://doi.org/10.1177/0149206317699522
- Miner, A. S., & O'Toole, J. (2018). Organizational learning and organizational improvisation. In L. Argote & J. M. Levine (Eds.), *Oxford library of psychology. The Oxford handbook of group and organizational learning* (pp. 57–78). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190263362.013.31
- Morgan, G. (2011). Reflections on *Images of Organization* and its implications for organization and environment. *Organization and Environment*, 24(4), 459–478. https://doi.org/10.1177/1086026611434274
- Nakara, W. A., Jaouen, A., Vedel, B., Gabarret, I., & d'Andria, A. (2018). Examining the startup phase of an incubator from a bricolage perspective. *Revue de l'Entrepreneuriat*, 17(3–4), 103–137. https://doi.org/10.3917/entre.173.0103
- Nguyen, N. M., Killen, C. P., Kock, A., & Gemünden, H. G. (2018). The use of effectuation in projects: The influence of business case control, portfolio monitoring intensity and project innovativeness. *International Journal of Project Management*, 36(8), 1054–1067. https://doi.org/10.1016/j.ijproman.2018.08.005
- Nisula, A.-M., & Kianto, A. (2018). Stimulating organisational creativity with theatrical improvisation. *Journal of Business Research*, 85, 484–493. https://doi.org/10.1016/j.jbusres.2017.10.027
- Nixon, N. W. (2013). Viewing ascension health from a design thinking perspective. *Journal of Organization Design*, 2(3), 23–28. https://doi.org/10.7146/jod.15575
- Noone, B. M., Namasivayam, K., & Spitler Tomlinson, H. (2010). Examining the application of six sigma in the service exchange. *Managing Service Quality: An International Journal*, 20(3), 273–293. https://doi.org/10.1108/09604521011041989
- Pendergast, W. R. (2003, 12–16 January). Entrepreneurial contexts and traits of entrepreneurs. In E. Baum & C. McHargue (Eds.), Proceedings of the Conference of Teaching Entrepreneurship to Engineering Students. Monterey, California, United States. https://dc.engconfintl.org/cgi/viewcontent. cgi?article=1007&context=teaching
- Pina e Cunha, M., Bednarek, R., & Smith, W. (2019). Integrative ambidexterity: One paradoxical mode of learning. *The Learning Organization*, 26(4), 425–437. https://doi.org/10.1108/TLO-02-2019-0038
- Pina e Cunha, M., & Clegg, S. (2019). Improvisation in the learning organization: A defense of the infraordinary. *The Learning Organization*, 26(3), 238–251. https://doi.org/10.1108/TLO-07-2018-0126
- Pina e Cunha, M., Clegg, S., Rego, A., & Neves, P. (2014). Organizational improvisation: From the constraint of strict tempo to the power of the Avant-Garde. *Creativity and Innovation Management*, 23(4), 359–373. https://doi.org/10.1111/caim.12076
- Pina e Cunha, M., Rego, A., & Kamoche, K. (2009). Improvisation in service recovery. *Managing Service Quality: An International Journal*, 19(6), 657–669. https://doi.org/10.1108/09604520911005053
- Prouty, K. (2013). Finding jazz in the jazz-as-business metaphor. *Jazz Perspectives*, 7(1), 31–55. https://doi.org/10.1080/17494060.2013.825986
- Safrudin, N., Recker, J., Rosemann, M., & Garson Flower, T. (2011, 29 November-2 December). Towards an orchestration theory in business transformation management (research in progress). In D. Bunker, L. Dawson, M. Indulska, & P. Seltsikas (Eds.), Proceedings of the 22nd Australasian Conference on Information Systems (ACIS) 2011: Identifying the Information Systems Discipline. Sydney, Australia. http://eprints.qut.edu.au/47883/1/Safrudin,_Recker,_Rosemann_&_Flower_(2011)_Towards_an_Orchestration_Theory_in_BTM.pdf
- Salameh, H. (2014). What, when, why, and how? A comparison between agile project management and traditional project management methods. *International Journal of Business and Management Review*, 2(5), 52–74.

- Sandoval Campillo, I. (2013). In your own sweet way: A study of effective habits of practice for jazz pianists with application to all musicians [Doctoral/PhD Dissertation, Autonomous University of Barcelona]. Cerdanyola del Vallès, Spain. https://www.tdx.cat/bitstream/handle/10803/129393/isc1de1.pdf
- Secchi, E., Roth, A., & Verma, R. (2019). The impact of service improvisation competence on customer satisfaction: Evidence from the hospitality industry. *Production and Operations Management*, 28(6), 1329–1346. https://doi.org/10.1111/poms.12969
- Seeley, Ch., & Thornhill, E. (2014). Artful organisation. Ashridge Business School.
- Simeone, L., Secundo, G., & Schiuma, G. (2018). Arts and design as translational mechanisms for academic entrepreneurship: The MetaLAB at Harvard case study. *Journal of Business Research*, 85, 434–443. https://doi.org/10.1016/j.jbusres.2017.10.021
- Sivaraman, R., & Wilson, Ch. (2016). Portfolio and project management collection. Making projects sing: A musical perspective of project management. T. Kloppenborg (Ed.). Business Expert Press.
- Sjödin, D., Parida, V., Kohtamäki, M., & Wincent, J. (2020). An agile co-creation process for digital servitization: A micro-service innovation approach. *Journal of Business Research*, 112, 478–491. https://doi.org/10.1016/j.jbusres.2020.01.009
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039
- Spicer, A. (2020). Playing the bullshit game: How empty and misleading communication takes over organizations. *Organization Theory*, 1(2), 1–26. https://doi.org/10.1177/2631787720929704
- Staudt Lerner, B., Christov, S., Osterweil, L. J., Bendraou, R., Kannengiesser, U., & Wise, A. (2010). Exception handling patterns for process modeling. *Institute of Electrical and Electronics Engineers Transactions on Software Engineering*, 36(2), 162–183. https://doi.org/10.1109/TSE.2010.1
- Steen, van der M. (2011). The emergence and change of management accounting routines. *Accounting, Auditing and Accountability Journal*, 24(4), 502–547. https://doi.org/10.1108/09513571111133072
- Stelzl, K., Röglinger, M., & Wyrtki, K. (2020). Building an ambidextrous organization: A maturity model for organizational ambidexterity. *Business Research*, 13, 1203–1230. https://doi.org/10.1007/s40685-020-00117-x
- Stendahl, E., Tippmann, E., & Yakhlef, A. (2022). Practice creation in multinational corporations: Improvisation and the emergence of lateral knowledge. *Journal of World Business*, 57(3). https://doi.org/10.1016/j.jwb.2021.101287
- Styhre, A., & Eriksson, M. (2008). Bring in the arts and get the creativity for free: A study of the *Artists in Residence* project. *Creativity and Innovation Management*, 17(1), 47–57. https://doi.org/10.1111/j.1467-8691.2007.00458.x
- Suscheck, Ch. A., & Ford, R. (2008). Jazz improvisation as a learning metaphor for the *Scrum* software development methodology. *Software Process: Improvement and Practice*, 13(5), 439–450. https://doi.org/10.1002/spip.385
- Tabesh, P., & Vera, D. M. (2020). Top managers' improvisational decision-making in crisis: A paradox perspective. *Management Decision*, 58(10), 2235–2256. https://doi.org/10.1108/MD-08-2020-1060
- Tilman, L. M., & Jacoby, Ch. (2020). The most agile day: What the allied invasion of normandy has to teach us about the power and utility of organizational agility. *Strategy + Business*. https://www.strategy-business.com/article/The-most-agile-day
- Tran, M. K., Goulding, Ch., & Shiu, E. (2018). The orchestra of ideas: using music to enhance the "Fuzzy Front End" phase of product innovation. *Journal of Business Research*, 85, 504–513. https://doi.org/10.1016/j.jbusres.2017.10.029
- Tregear, R. (2017). Reimagining management: Putting process at the center of business management. Blurb.

- Ucbasaran, D., Lockett, A., & Humphreys, M. (2011). Leading entrepreneurial teams: Insights from jazz. http://www.volusiagig.com/music/bandleadership.pdf
- Valliere, D., & Gegenhuber, Th. (2014). Entrepreneurial remixing: Bricolage and postmodern resources. *The International Journal of Entrepreneurship and Innovation*, 15(1), 5–15. https://doi.org/10.5367/ijei.2014.0141
- Wagner, R. (2019). Agility and self-organisation success factors for the Prussian army in 19th Century. *Ipma*. https://ipma.world/agility-and-self-organisation-success-factors-for-the-prussian-army-in-19th-century/
- Wang, R., Luo, X., Liu, F., & Luo, Sh. (2021). Confronting the threat of SARS-CoV-2: Realities, challenges and therapeutic strategies. *Experimental and Therapeutic Medicine*, 21(2). https://doi.org/10.3892/etm.2020.9587
- Weick, K. E. (1998). Improvisation as a mindset for organizational analysis. *Organization Science*, 9(5), 543–555. https://doi.org/10.1287/orsc.9.5.543
- Wieland, A. (2021). Dancing the supply chain: Toward transformative supply chain management. *Journal of Supply Chain Management*, 57(1), 58–73. https://doi.org/10.1111/jscm.12248
- Wikström, K., & Rehn, A. (2002). *Playing the live jazz of project management*. Project Jazz LLC. https://www.academia.edu/26441183/Playing_the_Live_Jazz_of_Project_Management
- Wurm, B., Goel, K., Bandara, W., & Rosemann, M. (2019). Design patterns for business process individualization. In Th. Hildebrandt, B. F. van Dongen, M. Röglinger, & J. Mendling (Eds.), *Business Process Management: 17th International Conference BPM 2019. Proceedings* (pp. 370–385). *Vienna, Austria, September 1–6, 2019.* Springer. https://doi.org/10.1007/978-3-030-26619-6_24
- Wurm, B., Grisold, Th., Mendling, J., & Brocke, vom J. (2022). Business process management and routine dynamics. In M. S. Feldman, B. T. Pentland, L. D'Adderio, K. Dittrich, C. Rerup, & D. Seidl (Eds.), *Cambridge handbook of routine dynamics* (pp. 513–524). Cambridge University Press. https://doi.org/10.1017/9781108993340.042
- Xiang, Q., Zhang, J., & Liu, H. (2020). Organisational improvisation as a path to new opportunity identification for incumbent firms: An organisational learning view. *Innovation: Organization and Management*, 22(4), 422–446. https://doi.org/10.1080/14479338.2020.1713001
- Zitian Chen, V., & Hitt, M. A. (2021). Knowledge synthesis for scientific management: Practical integration for complexity *versus* scientific fragmentation for simplicity. *Journal of Management Inquiry*, 30(2), 177–192. https://doi.org/10.1177/1056492619862051