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Without clear plans, making up reasons as they proceed, discovering new routes once action is initiated, proposing multiple interpretations, navigating through discrepancies, combining disparate and incomplete materials and then discovering what their original purpose was. To pretend that improvisation is not happening in organizations is to not understand the nature of improvisation.

Frank J. Barrett (1998a) Professor of Management and Organizational Behaviour

Improvisation is reviewed in the context of mainstream routines that modern startups use to adapt to changing environments. The increasing interest in flexible methodologies such as lean startup is one indication that organizations need to consider alternatives when the rate of change exceeds the ability to plan for it. Empirical studies indicate that improvisation is an important, yet understudied part of organizational life in new ventures. It is argued that entrepreneurs improvise not just out of necessity, but because they have chosen an occupation that is congruent with the practice and likely have a disposition towards the behaviour. Lessons from contexts in jazz and theatre are provided for entrepreneurs, and it is recommended that evidence of past success with improvisation be used to select candidates for improvisational work.

Introduction

Improvisation, considered to be as prevalent in organizational life as theatre, has been celebrated both for lifesaving creativity, and denounced as a last-ditch failure to plan properly (Cunha et al., 1999; Weick, 1993). In organizations, improvisation is the spontaneous convergence of design and execution while producing something novel (Moorman & Miner, 1998). Improvised behaviours are often observed in entrepreneurial settings, where rapid change and uncertainty in the environment combine with little time or resources for planning alternatives. Improvisation should not be considered the antithesis of planning; rather, it is a coping alternative for situations when change and turbulence exceeds the capacity to plan and adapt. Much anecdotal evidence suggests that improvisation is a trainable skill, and although startups differ in many aspects from jazz combos, lessons about improvisation may be drawn from that context. This article begins with an overview of organizational processes for adapting to uncertain and changing environments today. These processes differ from improvisations, which are described next. The article concludes with an elaboration on three essential cues for improvising entrepreneurs: embracing the process, setting the organizational climate, and selecting team members for the task based upon behaviours.

From Adaptation to Improvisation

There has been much recent attention paid to processes that help startups adapt to changing and uncertain environments, particularly in the field of technology entrepreneurship. A long-standing stream of strategy literature has recognized the need for "deliberately emergent" approaches that adapt to turbulence by embracing cycles of change (e.g., Mintzberg, 1987; Brown & Eisenhardt, 1997). Although the traditional focus of this literature has centered on strategic competitiveness, routines for adaptively achieving product-market fit in new ventures have emerged as well (Blank & Dorf,

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2012). Eric Ries' (2011) lean startup methodology, for example, emphasizes systematic customer experimentation in search of functional business models with minimal misdirected effort. Making strategic adjustments by "pivoting" and retesting business models is integral to the process. Agile software methodologies are based on precepts of adapting to change over following a plan, customer collaboration, and individual interactions over processes and tools (Fowler, 2001). Saras-(2001)studied behaviours entrepreneurs and concluded that they followed effectual, rather than the type of conventional causal logic taught in many business schools. By being adaptable and open to surprises, expert entrepreneurs used resources at hand (i.e., bricolage) to achieve ends that were unknowable in advance.

What these routines share is not a rejection of planning, but an acknowledgement that the environment is often changing faster, and with less information visibility, than can be accommodated by traditional analytic regimes. These methodologies, which some might view as ad hoc, trial and error, or experimental, also share these tenets: promotion of effort and rapid learning rather than preventing and punishing failure; developing creative responses that are implemented and validated quickly; and a bias towards action rather than a predilection for analysis. What happens when the need for fast, creative action in businesses surpasses even these adaptive processes is discussed next.

Improvisation: When and Why

For the past 30 years, researchers have been intrigued by the notion of applying to organizations the metaphor of jazz combos, because they embrace creative uncertainty within structured regimes (Cunha et al., 1999). In organizations, improvisation occurs when action and design converge spontaneously to produce something new (Moorman & Miner, 1998). It is the impromptu act of deliberately deviating from a referent, creating a novel production to solve a problem or exploit an opportunity. Referents are pre-planned or implicit courses of action for reacting to the environment; they represent expected norms or the status quo. Unlike processes for adaptation, improvisations are spontaneous responses to events that are both unexpected and unplanned-for and, contrary to their metaphorical counterparts in jazz, are not ordinarily considered deliberate undertakings in organizations.

Improvisation is most often characterized along the two dimensions of speed and novelty (Cunha et al.,

1999). "Full scale" improvisations are therefore considered to be those that highly deviate from referents and are very spontaneous, regardless of whether they work out successfully or not. As Chelariu, Johnston, and Young (2002) point out in their typology of improvisations, such highly capable instances are rare and difficult to achieve in practice. Everyday improvisations are commonly minor variances in degrees of novelty, speed, and unscripted actions, depending on the situation (Moorman & Miner, 1998). Improvisations are considered neither positive nor negative in performance; just as in executing pre-planned routines, both outcomes are possible. Successful outcomes from improvisation, however, often require more skill and application of intuitive knowledge than other routines. In Karl Wieck's (1993) description of the Mann Gulch disaster, for example, an unexpected turn of events fatally trapped 13 firefighters after a lightning storm. In a novel improvisation based upon experience, the lone survivor escaped by starting his own fire that consumed the available fuel in that area before the main fire arrived - an action that none of the others considered. In organizational contexts, improvisations are rarely as dramatic or consequential as the Mann Gulch example. The contextual backdrop for improvisation is considered to be anywhere an emergent demand is placed upon an organization for which they have no referent course of action, and little time to formulate a response. Time pressure is implicit in all improvisations, and is related to perceived task importance. Cunha and colleagues (2003) observed that task importance increases the likelihood of improvisation over alternative courses of action. There is ample empirical and anecdotal evidence to suggest that improvisations are frequent occurrences in startups (Baker et al., 2003), new product development (Moorman & Miner, 1998), technology development (Akgun & Lynn, 2002), and even municipal work (Vera & Crossan, 2005).

Why do entrepreneurs improvise? Working with scarce resources under conditions of uncertainty and with little time, expertise, or even inclination for contingency planning, it is not surprising that entrepreneurs are commonly placed in improvisational situations (Baker et al., 2003; Hmieleski et al., 2013). Often lacking organizational memory, human capital, and deep industry experience, many novice entrepreneurs operate without knowledge of existing referent routines for starting businesses. Thus, while others may follow traditional routes to achieving financing, building teams, and engaging customers, for example, novice entrepreneurs are more likely to be improvisational in their decision making and methods (Cunha, 2007). In accord

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with Holland's (1997) theory of career choice, it is also likely that entrepreneurs improvise because they have self-selected an occupation that is congruent with the practice. Improvisation is an action-oriented behaviour conducted under conditions of uncertainty, time pressure, and task demands. It draws upon intuitive and innovative capabilities, requiring confidence, motivation, and tolerance of ambiguity. All of these traits have been associated with entrepreneurship (Brandstätter, 2011; Shaver & Scott, 1991), and studies have established a link between proclivity for improvisation and entrepreneurial intentions (Hmieleski & Corbett, 2006). Hmieleski and Corbett (2008) also found that repeat entrepreneurs rated higher in measures of improvisational behaviour than novice entrepreneurs, indicating that confidence with improvisation likely improves with experience. Baker, Miner, and Eesley (2003) found that problem-driven improvisational behaviours and competencies in entrepreneurs were key to the process of founding new ventures. Dispositions are a tendency to behave in certain ways (Buss & Craik, 1980), and it is likely that improvisational dispositions result from repeated experience with successful outcomes. Although it remains a subject for further research, these findings suggest that entrepreneurs engage in improvisation not just by circumstance, but because they share traits and dispositions that are suited to the behaviour.

Effective Improvisations

If entrepreneurs are routinely called upon to "think on their feet" by necessity or choice, it seems evident that entrepreneurship training programs should include improvisation. Improvisation is a competency that is trainable (Vera & Crossan, 2005; Weick, 1998), and in the author's own experience, helps to prepare student entrepreneurs for the unexpected contingencies that are part of daily life. It also raises confidence that tasks may be accomplished even when plans fall short, boosting self-efficacy associated with entrepreneurial actions (Zhao et al., 2005). It is not necessary to become a jazz musician or join a theatrical group to learn improvisation; these contexts differ from organizations in many ways, such as goals, leadership, and member participation. Although a significant body of literature has explored the imperfections of such metaphors (e.g., Barrett, 1998b), they nevertheless offers lessons to organizational practitioners, which will be summarized here.

The first lesson is to embrace the process for what it is: creatively "making do" with resources at hand. Uncertainty and time pressure are givens in improvisation,

and errors are part of the process. Accepting compromises is often difficult in business settings where performance is normally measured in terms of goal achievement, minimizing errors, and following scripts. If errors are intolerable, then improvised actions are likely inappropriate. If creativity is desired, however, it is useful to adopt what Weick (2002) terms an "aesthetic of imperfection" in recognizing outcomes that are "good enough under the circumstances". Products of improvisations cannot be objectively measured against other types, and arguably a large part of the success of an improvisation is that it was undertaken at all.

The second transferable lesson from jazz and theatre contexts involves designing organizational climates that permit unscripted actions to thrive within boundaries. Minimal structures are those that incorporate nominal leadership, personal autonomy, information sharing, and orientation around simple goals (Kamoche & Cunha, 2001). In line with other findings, Brown and Eisenhardt (1997) noted that such "semistructures", with few explicit rules over means of achieving goals, favoured improvisation. Control systems that reward initiative, effort, and risk taking without penalizing failed attempts are as essential to improvisation as they are to creative and innovative activities (Zhou & Shalley, 2007; Duxbury, 2012). Anecdotally, many entrepreneurs will recognize creativityfostering minimal structures during their "founding days"; the challenge is to maintain such structures during subsequent growth stages.

The third lesson for entrepreneurs is to recognize that the spontaneous performance of improvisation is not suited to everyone. Just as in jazz or theatre settings, improvisation in organizations is a potentially stressful activity requiring intuitive expertise. Not everyone who engages in improvisation will achieve success or job satisfaction in doing so. Improvisational situations arise in new ventures in a variety of roles including sales, finance, new product development, operations, marketing, and customer service. When building teams and determining who is to perform improvisational work in entrepreneurial contexts, it follows that improvisational competence be part of the selection criteria. Although some traits (e.g., openness to experience) may indicate a proclivity to improvise, actual behaviours depend on situational factors as well (Chatman, 1989). Although the literature on measuring improvisational dispositions remains underdeveloped, entrepreneurs building teams for improvisational work are advised to seek out past examples of the behaviour when interviewing candidates.

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It appears that improvisation is not an uncommon occurrence in startup contexts due to the unscripted nature of the work. One explanation may be that novice entrepreneurs simply have no referent courses of action; therefore many activities are perceived to be improvisational to the inexperienced observer. It is also possible that organizational settings that embrace flexible, adaptive processes in establishing product-market fit are more likely to engage in improvisations when planning regimes fall short in other areas of the business. Lastly, it has been argued that entrepreneurs likely improvise because they have self-selected a role that is suited to that disposition. All of these explanations remain to be tested empirically, and they represent intriguing opportunities for future research. If startups improvise often to navigate unfamiliar waters and take action (Baker et al., 2003), there appears to be a gap in how we select and prepare entrepreneurs. Future research into a behaviour-based measure of improvisation would help entrepreneurs and researchers quantify an individual's capacity for improvisation when roles demand it.

Conclusion

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This article examined how improvisation is used by entrepreneurs to adapt to changing environments. Improvisations occur when there is an emergent, unplanned need for timely and novel departures from existing routines. Improvisations happen because tasks are important, time is short, and organizations support it to some degree. As argued here, improvisations may appear more often in startups due to overlapping dispositions with entrepreneurial behaviour and lack of familiarity with referents. Simply put, many entrepreneurs are improvisers. Lessons for entrepreneurs drawn from jazz and theatre contexts include: i) focusing on the process while adopting an "aesthetic of imperfection" in the outcome, ii) maintaining a supportive climate based upon minimal structures, and iii) ensuring that only people suited to improvisation are selected for such tasks. Many startup roles include situational demands for improvisation that may be considered stressful, demanding, and risky - and unavoidable. It is suggested that a behaviour-based measure be developed to assist entrepreneurs and researchers in assessing dispositions for improvisational work, building new theory, and developing practical training regimes.

Recommended Reading

- "Managing and Improvising: Lessons from Jazz" (Barrett, 1998b; tinyurl.com/lssozxj)
- "Improvisation in Action" (Crossan, 1998; tinyurl.com/mpmxyco)
- Organizational Improvisation (Cunha & Kamoche, 2001; tinyurl.com/k3adxza)

About the Author

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