

An Exploration of Intuition among Senior Leaders

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Abstract

An exploration of the experiences and meanings assigned to the use of intuitive judgment by senior corporate leaders. While intuition is acknowledged as a useful cognitive function in senior leader contexts, little practical study has been undertaken to assess reliance on intuition by actual senior-level practitioners qualitatively. Conclusions were drawn determining that emergent descriptions of intuition as an experientially based, nonrational mode of decision making and problem solving relying on pattern recognition are credible and sound. An exhaustive review of the literature revealed consistency in both the use of intuitive judgment and senior leader's confidence in its accuracy and utility. In the ambiguous, rapidly changing context of strategic level leadership, leaders perceived intuition as a reliable cognitive tool, in some cases preferable to evidence-based, rational approaches to decision making and problem solving.

Keywords: Cognitive function, Cognitive tool, Decision making, Intuition, Intuitive Judgment, Leadership, Problem solving

The study of intuition remains a frustrating and imprecise enterprise. The nonconscious, unobservable nature of intuition seems inseparable from its very existence, so what is called intuition in settings of everyday conversation may not really exist in positivist social science. Intuition is increasingly defined as a knowable cognitive process based largely on unobservable, nonconscious modes of dealing with reality, applying learned experience, tacit knowledge, and pattern recognition (Duggan, 2007; Mitchell, Friga, & Mitchell, 2005; Sinclair & Ashkanasy, 2005). Intuition is experientially built, situationally applied, and individually executed in particular contexts, so difficulties arise in operationalizing its use in ways that are predictive of behavior. Intuition always seems something that *has been* used effectively, but it cannot be said that it *will* be used effectively. Clarifying how intuition is perceived and employed in decision making and problem solving, at least in a limited context of senior corporate leadership, makes pragmatic sense.

Applying intuition in problem solving by senior corporate leaders may serve real-life functions in other environments as well. Research studies for the 21st. century revealed the use of places using intuition in a framework of complex decision making and problem solving as a form of tacit knowledge that is accreted over a considerable period of time (Dane & Pratt, 2007; Mitchell, Friga, & Mitchell, 2005). Current views on using intuition by senior corporate leaders remain, theoretical in nature and unsupported by a body of research (Duggan, 2005). As a practical consideration, if better understood, using intuition by senior corporate leaders may be generalizable to other environments by similarly situated decision makers (Allen, n.d.).

Exploring the perspectives of senior leaders, operating at the top levels of large hierarchies, on the role intuition plays in decision-making and problem solving may solidify

acceptance of intuitive judgment as a desired attribute of senior executives. Senior executive leaders typically play a fundamental role in making the decisions necessary to implement change (Kotter, 1995; Nadler & Tushman, 1990).

Stratified systems, such as hierarchies, appear essential to large organizations, for not only purposes of command and control, but importantly for learning and managerial training (Jaques, 1986). As early as 1955, researchers derived a model of leadership that consisted of three broad bands of activities within hierarchical architecture, each requiring different mixes of leadership skills (Katz, 1955). Katz described supervisory leadership as concerned with immediate production efforts (getting things done), while middle management is focused on efficient operation of the organization (functioning smoothly). Top leadership, in contrast, is conceptual in nature and operates to provide vision, strategic direction, and cross-boundary relationships with external agencies and institutions. Later studies of large organizational structures also confirmed applicability, of this model, conceptualizing the three bands of leadership as differing requirements for cognitive power (Jaques, 1986; Jacobs & Jaques, 1990). Studies that are more recent continue to corroborate this assessment (Hinterhuber & Krauthammer, 1998; Jaques, Bygrave, & Lee, 2001; Olson, Parayitam, & Bao, 2007; Raes, Glunk, Heijltjes, & Roe, 2007).

Management of large, stratified organizations is qualitatively different at senior level, calling for the primary use of different leadership skills, in a band of activity associated with providing purpose and vision to the organization, as well as tapping into external resources not available to lower level managers. Strategic decision making by senior leaders has far-reaching impact on organizational performance and long-term sustainability (Rahman & de Feis, 2009; Safi & Burrell, 2007). Top-echelon leaders must have far wider time horizons than subordinate leaders, orient on value creation from sources external to the organization, and use persuasion far more than authority (Jacobs & Lewis, 1992). Senior leaders add value to their organizations in these critical areas. These elements are key essentials; a senior executive who has not mastered these skills is unlikely to be able to add real value to the organization.

With such requirements, the influences on upper echelon decision making are many and varied and not given to quick inventory. They include information processing from environments both external and internal to the organization, the capacity to collect and apply resources to address organizational needs, and the ability to apply personal judgment and personal relations skills to specific situations (Mintzberg, 1973, 1989). A most important factor for senior leaders is probably the ability to span hierarchical boundaries to influence and motivate people to get the job done across many layers of supervision. Senior leaders must also be able to span across organizational boundaries to access resources, influence, and support from organizations outside their immediate command and control.

For leaders at the pinnacle of such stratified organizations, common impediments to good decision making stem from inability to deal effectively with the varied influences resident in large, complex organizations. They include not assessing the nature of the problem from the onset (Tushman, Newman, & Romanelli, 1985), not recognizing the urgency for change (Kotter, 1996), not setting clear objectives (Nutt, 1999), jumping to conclusions and failing to consider alternative solutions (Albrecht, 2002; Nadler & Tushman, 1990), trying to do too much, too fast (Dörner, 1996; Zeira, 1974), and failing to hold people accountable for results (Jaques, 1990). Top-level decision making and problem solving must allow for unfettered thought patterns (Albrecht, 2002). In such a complex decision making environment, intuitive thinking may provide key executive advantages.

Despite its apparent practical utility, the term *intuition* is poorly defined, understood in different ways, and connected tenuously to other concepts. What is intuition? Where does one get it? Can it be imparted through organizational processes? Does it serve an effective purpose in the problem solving or decision making process? How might the literature inform the development of corporate doctrine?

Answering these questions remains difficult. Lieberman (2000) pointed out intuition, as a decision making and problem solving tool, has long been undervalued: "In our culture, the legacy of intuition is less than inspiring. Intuition is seen as mysterious and unexplainable at best and as something inaccurate, hokey, or epiphenomenal at worst" (p. 109). In 1991, Behling and Eckel lamented that making sense of intuition as a management practice was hampered by its incongruities, despite its long consideration as an adjunct to leadership and decision making, those who wrote about it still had not reached consensus as to what intuition really represented. Their analysis largely assumed these conceptualizations were distinct, largely mutually exclusive, and therefore contradictory. They concluded, "Intuition cannot be tested and evaluated until the confusion created by the differing conceptualizations is eliminated. Only then can intuition's role in improving the competitiveness of American business be determined" (1991, p. 53).

The Practitioner's Perspective

At the dawn of the 21st century, the impacts of globalization, information proliferation, and accelerated communication technologies were felt to be indicative of a major paradigm shift for businesses. Accumulating data and information and the rapidity of data electronic transmission created needs for a consistent inclusion of knowledge management as part of any organizational strategy. Knowledge became a core technology necessary for proficiency in the workplace and competitiveness in the marketplace (Sonntag & Schmidt-Brasse, 1998).

Chester Barnard, a discerning practitioner-scholar, spent four decades working as an executive within the American Telegraph & Telephone Company (AT&T). Based on his AT&T experiences, Barnard (1938/1968) conceptualized the nature of organizations in a humanistic way that moved management considerations away from the classical, positivist, scientific management approach of Frederick W. Taylor (1911/2008). While recognizing the role of conscious analytical thought in management, Barnard also championed the role of unconscious, synthesizing thought, advocating nonlinear processes in executive decision making. Barnard, as a pragmatist and practitioner, emphasized that time pressures and resource constraints may overwhelm evidence-based approaches that rely on accurate, detailed information. Based on his AT&T experiences, Barnard advocated intuitive thinking in executive decision making. His experiences as a corporate executive led him to believe that evidence-based approaches might actually impede the development of visionary strategy. Rather than reliance on empiricism in analysis and evidentiary knowledge in judgment, Barnard advocated a holistic, systemic assessment of the operational environment and the application of intuitive judgment in decision making and problem solving.

Logical and linear reasoning may impede senior executives required to adapt vision and strategy based on rapidly changing environmental scanning, circumstances which have only become more salient in the 21st century age of digitized information and global communications (Novicevic, Hench, & Wren, 2002; Sadler-Smith & Shefy, 2004). Barnard wrote, "What I have tried to emphasise [sic] is the insufficiency of logical processes for many purposes and

conditions and the desirability of the development in intelligent coordination with the on-logical [sic], the intuitional, even inspirational processes, which manifest mental energy and enthusiasm. This is by no means easy" (Barnard, 1938/1968, p. 322).

The difficulty, as Barnard explained, is linearly rationalized conclusions and meticulous data analysis takes too long to accumulate and assess to be actionable in a fast-moving, complex corporate setting. A holistic, intuitive grasp of the situation, based on a wide range of experiences, may enable senior leaders to derive and apply solutions that may not have visibly logical antecedents, but are effective and timely.

Polyani (1962, 1966) conceived tacit knowledge as something unable to be overtly articulated and used without conscious perception. Polyani emphasized the experiential nature of tacit knowledge, positing that it was gained through active, practical engagement in the environment and was skills-related in nature. His theory of tacit knowledge supported Barnard's understanding of management intuition as unconscious, synthesizing thought. He also placed it in an organizational and social context, in that any sharing of tacit knowledge demanded close interaction and a reservoir of mutual trust. While explicit knowledge could be learned through formal education and training processes, tacit or implicit knowledge required immersion in a relevant context, it had to accumulate by active, experience, that is, *learning by doing*.

Burke and Miller (1999) followed Barnard's emphasis on pragmatic application of intuitive thinking to managerial decision making and problem solving strategies. Their oft-cited report is seminal, not only for the clarity of its presentation but also for the simplicity and accessible qualitative methodology used in the research. Burke and Miller laid down a new baseline, echoing the practitioner perspective of Barnard in a qualitative assessment of experienced managers and executives. Subjects were queried through interviews and asked to provide their own perceptions and apply their own meanings to the definition, development, and application of intuition, which the authors accepted as accurate on their face. The researchers took great care to be as objective and empirical as possible, applying descriptive statistical analysis to the sample (p. 96) within the constraints imposed by the method used to gather the data. To allow for cross-referencing and external validity, Burke and Miller chose respondents from various fields: the aerospace industry, public administration, manufacturing, the service industry, and communications. The two researchers worked independently, so distinct observations across the dual research could be compared for character and reliability.

The significant outcome of the Burke and Miller (1999) study was not so much a uniform definition of what intuition *was* but a consistent affirmation of what intuition *was not*. Practitioners described intuition as experiential, emotive, cognitive, subconscious, and value-based, but never as supernatural or instinctive. "No one in our group of professionals viewed intuition as a paranormal process or a personality trait," the authors pointed out (p. 92). Burke and Miller embraced intuition as conceived by Barnard, expressing doubt in intuitive decision making as a mystical, primitive, and uncontrollable means of dealing with the real world. Burke and Miller's salient conclusion set the tone for most subsequent studies of intuition: "Thus, intuition can be thought of as a cognitive conclusion based on a decision maker's previous experiences and emotional inputs" (p. 92).

Intuition: An Evolving Definition

Despite a legacy of mistrust, two decades of more recent studies have established a commonality of vision that suggested Behling and Eckel's 1991 challenge has been met and

Barnard's seminal insight was sound. The underlying philosophical assumptions largely remain consistent between foundational as well as 21st century authors.

While research into intuition and its apparent constituent characteristics is performed largely qualitative (Cao, 2007; Guba & Lincoln, 2005), the philosophical underpinnings of many researchers is more likely to be postpositivist or even positivist than constructivist or subjectivist (Creswell, 2009; Crotty, 2003). The range of worldviews may be a continuum (Arbnor & Bjerke, 1997, p. 27) on which researchers into intuition and intuitive decision making might well appear anywhere.

Experts differ from novices in their use of intuition. In practice, intuitive judgment is often credited to expertise, which often separates the master from the tyro. Chess analyst de Groot stated, "A master does not search for a good move, he sees it" (Didierjean & Gobet, 2008, p. 121). Current studies and writings bear out connecting intuition to expertise (Barnett and Koslowski, 2002; Hogarth, 2001; Kim & Hasher, 2005; Klein, 1997, 2004; McCall & Hollenbeck, 2008; Russo, 2006; Sinclair & Ashkanasy, 2005; Sonnentag & Schmidt-Brasse, 1998; Sternberg et al., 1999). Using expert knowledge appears heavily reliant on pattern recognition, experience, and tacit knowledge, which seem instrumental to intuitive judgment (Klein, 1997, 2004; Sinclair & Ashkanasy, 2005; Sternberg et al., 1999).

While it seemed likely, based on the literature, that experiential knowledge is key to the development of intuition, the use of intuition has not been determined to be a matter of reliance on accumulated experience alone. The experiential basis of intuition may be tacit in operation, domain specific in application, and is tentatively measureable (Durrance, 1998; Janson & McQueen, 2007; Nonaka, 1994). The literature revealed that tacit knowledge was implicitly learned (Horvath, Williams et al., 1994; Sternberg et al., 1999) whom further described tacit knowledge as implicit memory, a notion linked to intuition (Horvath, Sternberg et al., 1996). Tacit knowledge, particularly concerning the use of intuition, appeared heavily dependent on a wide range of experiences. Kim and Hasher (2005) and Russo (2006) suggested that accumulated experience may result in more adept decision making, however, not by drawing on specific referenceable experiences, but by applying heuristics based on tacit knowledge implicitly learned over years of growth.

McCall and Hollenbeck (2008) conducted a literature review to uncover salient characteristics of expert leaders, grounded on their own interviews of executives. They summarized expertise is learned, however, expertise may be greater than can be explained by mere learned knowledge. They cited researchers who suggested expertise is quite intuitive and experiential in nature, and that "no one, no matter how talented, becomes an expert without a long period of learning and practice" (p. 25). They emphasized the social aspects of expert learning (coaching and mentoring) but acknowledged limitations in the field, in that while experiential learning is accepted as key to the development of expertise, the nature, sequencing, mentoring, and selection of these experiences has not yet been adequately determined by the extant research.

Russo (2006) researched the relationship between experience and expert behaviors during performance of field tasks. He detailed an experimental methodology that empirically evaluated the performance of auditing tasks, testing a number of clearly stated hypotheses. In consonance with McCall and Hollenbeck's (2008) questioning, and acknowledging the process was not entirely free from potential coding biases, Russo's highly quantified approach produced a descriptive model that provided insight into "the process of expert development and limitations on the rate at which expertise can be acquired" (p. 261). Similarly, Kim and Hasher (2005) also

conducted experiments that operationalized the decision making of older adults compared to younger ones in a quantitative study of decision making. They analyzed the experience of 689 undergraduate students (age 17 to 27 years) and 384 senior citizens (age 60 to 79 years) from widespread areas in solving a decision making problem devised by Tentori, Osherson, Hasher, and May (2001). Kim and Hasher suggested the accumulated experience of older adults might result in more adept decision making processes across a range of domains, independent of interest level. The results moved them to postulate experience contributed to expertise by allowing older adults to apply solutions based on feelings and intuitions formulated over years of application.

Research on adaptive expertise by Barnett and Koslowski (2002) also confirmed efforts to provide an empirical basis for assertions like those made by McCall and Hollenbeck. This extensive, highly quantified study measured expertise in differing work groups within a similar domain to determine the adaptability of expertise. Barnett and Koslowski established that expert knowledge transferred across topical domains. For the study, several samples of 12 participants each were interviewed, and the interview results were coded for each group: generalists, specialists, and a neutral, control group. Detailed statistical analysis of the coded responses used a mixed-model ANOVA to assess the overall significance of group results. Their analysis indicated differences were attributable to work experience rather than other potential factors.

Barnett and Koslowski (2002) acknowledged further study might be necessary to determine definitive causality. Thus, tacit experiential learning appeared in the literature (Polyani, 1962, 1966) as a dominant factor in developing intuition, and intuitive judgment implies specific connections between reliance on intuition and the accumulation of years of experience. The practitioner in action, however, does not appear to draw on particular experiences as an overt act of memory (Polyani, 1962, 1966). Rather, implicit memories are formulated as nonconscious models that are accessed without awareness, that is, the knowledge is accessed without specific reference to any particular experience (Klien, 1997, 2004; Sinclair & Ashkanasy, 2005).

Intuitive Decision Making and Problem Solving as Senior Leader Activities

Many well-regarded researchers often mix decision making and problem solving concepts, by addressing one while not specifically mentioning the other, or simply subsume them as elements so intrinsically essential to leadership studies as to not need separate mention at all (Bass, 1990; Daft, 2010; Hickman, 2010; Northouse, 2010; Yukl, 1996). This inclusive perspective may be quite germane; making decisions and solving problems is simply what leaders at all levels *do*. In fact, decades ago, Henry Mintzberg delineated managerial roles based on direct observation of senior executives in action (1973). He categorized managerial activity in terms of three main roles: interpersonal roles, information processing roles, and importantly, decision making roles. The functions of decision making roles included problem solving, guiding deliberate changes to take advantage of emergent opportunities, and crisis management, such as handling sudden disruptions that cannot be ignored. A way of bounding the issue may be to look at decision making as leader choices between alternatives and alternative courses of action (Albrecht, 2004), and problem solving as a connected series of decisions made toward to the accomplishment of objectives, goals, and envisioned end states (Rudolph, Morrison, & Carroll, 2009). Considered in this way, decision making and problem solving are also closely linked to risk assessment and strategy formulation.

Making decisions to solve problems is at the heart of most strategic leader activities. The nature of living in a volatile, ambiguous, and changing world generates an unavoidable consequence of problematic challenges; either the leader finds the problem, or as seems more often the case, the problem finds the leader. Strategic leadership takes place in an environment of uncertainty and flux, and decisions must be made in relation to that complexity, instability, and munificence, including the resources, which can be brought to bear on the problem (Finkelstein, Hambrick, & Cannella, 2010; Prescott, 1986). These dynamic conditions create situations within which decision making is not a simplistic, sedate process but one marked by a hectic pace of action, fragmentation of content, and furious reactive activity. In these situations, decision making is seldom neat and objectively rational; it is more often disorderly and political (Beinecke, 2009; McCall & Kaplan, 1985; Valle, 2006).

The role of intuitive decision making and problem solving takes on added importance at senior leader levels, where the focus of cognition is far-reaching and operational problems are complex and systemically ill-structured (Bertalanffy, 1972, 2008). Regardless of the organizational approach employed, success depends on clarity throughout the value chain and the exercise of sound oversight and coordination of operations and functions, which are no longer neatly self-contained (Anand & Daft, 2007; Jaques, 2006).

Conclusion

Strategic decision making is not typically a matter of routine. In formulating overarching strategy, decision making rarely entails matters of efficient management and narrow focus but rather demands intuitive leader activities within a complex adaptive system (Bovaird, 2008; Desai, 2005). The complexity of the environment does not dampen the urgency of actions to solve problems, which require establishing a controlling vision of a desired end state, developing strategies to achieve goals and objectives, and satisfying stakeholders inside and outside the organization. These adaptive situations demand what Ronald A. Heifetz referred to as *adaptive work*, wherein senior, strategic-level leaders must still consider the framework of the problem, evaluate alternative courses of action, and determine decisions about what specific actions the organization will take, all within an ethical context (Heifetz, 1994).

This implication is especially salient for corporate leaders, whose occupational context is nearly always one of ambiguity and turmoil. A report by executive recruiting firm Korn/Ferry International (2006, p. 111) provided detailed evidence that former military service enhances leadership in the corporate world, supporting this implication that intuitive judgment, commonly used by senior military leaders in decision making and problem solving (Duggan, 2005, 2007), has potential utility beyond the military domain, insofar as strategic level leaders are concerned. Dynamic, rapidly moving career fields would seem likely to profit from hiring of senior-level leaders schooled and confident in the use of intuition over decades of experience. They are not likely to confuse unfounded emotional hunches with sound intuitive judgment, a problem Mitchell, Friga, and Mitchell (2005) found in young and talented but inexperienced entrepreneurs.

Intuitive judgment should be deemed a key indicator of the ability to lead at the senior corporate level. This emphasis should be explicit, reflected in senior-level supervisor actions and established as standard personnel policy. As an executive rises through the organizational hierarchy, her supervisory leaders must facilitate implicit learning based on encounters with both

success and failure to build the tacit experiential base for intuitive decision making and problem solving.

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