Business Intuition: The Mortar among the Bricks of Analysis

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Intuition is a genuine phenomenon that involves understandings and processes that are non-hierarchical, not based on formal education or years of experience, non-analytic, unpredictable, is quick and easy, and is made without extended conscious deliberation. Managers frequently use their business intuition to direct some part of their decision making and, hence, competitive impact. However, they do not ignore available information or their experiences. Rather, they use both analysis and intuition in their decision making. That is, systematic analysis and intuition are complementary rather than exclusionary, based on what the situation needs to get the best result at the time. This paper defines what is meant by the term intuition and discusses its use and importance in business. Thereafter, the attributes of intuition and of the intuitive manager are presented as well as a discussion of how intuition works. This is followed by ideas regarding how to develop intuition and how to increase the success of business intuition.

INTRODUCTION

"Intuition is a function by which you see around corners." – Carl Jung

Creative thinking involves more intuition or knowing something instinctively. Intuition is a genuine phenomenon, even demonstrated by nonhuman primates (Murai, Tanaka, & Sakagami, 2011) and dogs (Gardner, 2011; Novicevic, Hench, & Wren, 2002). It is easy to see that intuition is part of our biological survival underpinnings going back thousands of years (Nadel, 2011). Intuition plays an important role generally in experts' decision making and thinking (Chassey & Gobet, 2011; Faber, 1999). "There is little doubt that in strategic interaction most parties scrutinize others' behavior carefully and use whatever pieces of evidence they can acquire that seem to signal (validly or not) others' intentions. Yet in many cases, especially in the early stages of an interaction, evidence is slim. This does not halt the wheels of mind-reading, however; in such cases, perceivers arguably reach for a different set of inferential tools." (Ames, Weber, & Zou, 2012) Mikels, et al. (2011) acknowledge that deliberative decision strategies have been considered historically the surest form of sound decisions, however, recent evidence and theory suggest that affective strategies or feelings may be more effective to deliberative strategies for certain complex decisions. While quantitative decision making typically is viewed as being preferable, it can and it does get overridden by intuition. That is, even though intuition is not fully understood, it is an acceptable and commonly used decision-making tool. (Glass, 2008) At the very least, intuition can help every business person with the estimated 170 interactions with others that occur every business day (Wanless, 2002). Business professionals do use intuition. For example, approximately 89% of marketing professionals frequently use their intuition to direct some part of their decision making and, hence, competitive impact. (Keen, 1996) Intuition is an inductive skill, seeing the big picture, and looking at the

whole problem rather than its discrete parts. It can be very useful when data is inadequate or unavailable. At the very least, intuitive thinking is effortless and unaffected by memory and attentional resources. On the opposite side, analytic thinking is more demanding and rapidly degrades with dwindling memory and attentional resources (Gozzi, et al., 2011). But there are negative intuitional biases, too. For example, one bias is that people who use intuition are intellectually lazy and undisciplined in their thinking, relying on gut feelings. On the other hand, intuition can lead to game-changing decision making via a slower and deeper process that requires deliberative reasoning. In general, however, the best thinking in an organization involves the combination of creative and analytic thinking. (*The Business Journal*, 2012) "Confident decision makers blend logic and intuition (of thought and feeling), the so-called two wings that allow leaders to soar (Patton, 2003, 995).

This paper defines what is meant by the term intuition and discusses its use and importance in business. Thereafter, the attributes of intuition and of the intuitive manager are presented as well as a discussion of how intuition works. This is followed by ideas regarding how to develop intuition and how to increase the success of business intuition. All-in-all, intuition and analysis are complementary rather than exclusionary.

INTUITION DEFINED

"It is through science that we prove, but through intuition that we discover."

- Henri Poincare

"Intuition is multifaceted" (Gore & Sadler-Smith, 2011, 304). More specifically, intuition is subconscious, complex, quick, not emotion, not biased, and not part of all decisions (Khatri & Ng, 2000). While many have tried, no one has explained "intuition" satisfactorily. Since intuition has been relatively immune to scientific study and is elusive to define and too difficult to measure, there is a lack of agreement about what intuition is (Sinclair and Ashkanasy, 2005). However, it has been argued that good management practice by business executives should rely more on intuition and less on systematic analysis. This is complicated, however, because intuition has been viewed in different ways: 1) as a paranormal power, sixth sense, or parapsychology; 2) as a personality trait more than likely that is acquired early on and remains relatively unchanged throughout life; 3) as an unconscious process while analysis occurs consciously; 4) as a set of actions that consist of some simple and fairly obvious means of getting and using information; 5) as a distilled experience wherein the manager has previously practiced and chunked various aspects of the decision-making process; and 6) as a residual category or intuition is what is left over after systematic analysis has taken place. Dramatic differences in the conclusions about the advantages and disadvantages of intuition depend upon which of these six conceptualizations is being used as well as speed, information requirements, or quality of choices. (The Academy of Management Perspectives, 1991) In general, though, these definitions of intuition seem to fall primarily along two lines: experience-based phenomenon and sensory and affective elements (Sinclair & Ashkanasy, 2005). Here are some additional definitions or aspects of intuition:

- Intuition is "nearly always the surfacing of a submerged memory, a barely noticed event, or some combination of the two. The 'feeling' doesn't come to us over the cosmic ether, but drifts up from our own subconscious." (Dimitrius & Mazzarella, 2008, 227)
- "The situation has provided a cue. This cue has given the expert access to information stored in memory, and the information provides the answer. Intuition is nothing more and nothing less than recognition" (Kahneman & Klein, 2009, 520), that is, "unconscious pattern recognition" (Millett, 2011, 56).
- Intuition is "an unconscious process of making decisions on the basis of experience and accumulated judgment. Making decisions on the basis of 'gut feeling' doesn't necessarily happen independently of rational analysis; rather, the two complement each other." (Robbins, 1999, 192)

- Intuition is a "non-sequential information processing mode which comprises both cognitive and affective elements and results in direct knowing without any use of conscious reasoning" (Sinclair & Ashkanasy, 2005).
- Intuition is sudden awareness of knowledge (Kakkonen, 2005).
- Intuition is one's ability to recognize patterns at lightning speed and this often happens unconsciously (Matzler, Bailom, & Mooradian, 2007).
- Intuition is a "question of seeing through things, getting down to what is implicit, uncovering the layer that lies beneath the surface, the things that cannot be expressed directly, in linear language" (Korthagen, 2005).
- Intuition is "(1) quick and ready insight, (2a) immediate apprehension or cognition, (2b) knowledge or conviction gained by intuition, (2c) the power or faculty of attaining direct knowledge or cognition without evident rational thought and inference." (Merriam-Webster, 1999)
- According to Lynn Robinson, author of five books on intuition, intuition is "something we're all hardwired with. I think of it as a compass of our soul, that we really have this information from our divine intuition and that once we pay attention to it, it leads us in the right direction." (Sheehan, 2010, 1)
- Intuition is "heart knowledge." (Neal, 1997, 123) "People who do the most heart work are often behind the scenes" (Glassman, et al., 2003, 364).
- "Intuition is the life force itself, made conscious to us through a feeling that arises from within. Intuition is our human version of animal instinct. Through our intuition we tap the ultimate resource of all – the very source of life." (*Women in Business*, 2002)
- Intuition is soul-sense or spiritual sense that reveals whatever constitutes and perpetuates harmony, enabling one to do good, but not evil (*Christian Science Monitor*, 2008).
- "All good things come from living intuitively. To follow that feeling inside of us we call our intuition is really the only way to fulfill our highest aspirations and deepest needs. Indeed, the intuitive impulse helps us soar...Intuition is the life force itself, made conscious to us through a feeling that arises from within. Intuition is our human version of animal instinct. Through our intuition we tap the ultimate resource of all –the very source of life." (Wanless, 2002, 44)
- The use of intuition is often integrated into decision making. Intuitive thinking is reflexive, heuristic, associative, holistic, experiential in nature, automatic, relatively effortless, tends to be inaccessible to consciousness, rapid, affectively charged, subconscious, and complex. (Shenhav, Rand, & Greene, 2011; Simmons & Nelson, 2006; Dane, et al., 2011; Bower, 2004; Khatri & Ng, 2000)
- Intuition is "a kind of matching game based on experience. There are times when trusting your gut is the smartest move and times you'd better think twice." (Flora, 2007, 69) Think of intuition as an unconscious associative process. "The brain takes in a situation, does a very quick search of its files, and then finds its best analogue among the stored sprawl of memories and knowledge. Based on that analogy, you ascribe meaning to the situation in front of you...When a new experience calls up a similar pattern, it doesn't unleash just stored knowledge but also an emotional state of mind and a predisposition to respond in a certain way. Imagine meeting a date who reminds you of loved ones and also of the emotions you've felt toward those people. Suddenly you begin to fall for him or her. 'Intuition,' says Linhares, 'can be described as 'almost immediate situation understanding' as opposed to 'immediate knowledge.' Understanding is filled with emotion. We don't obtain knowledge of love, danger, or joy; we feel them in a meaningful way." Flora, 2007, 70)
- "Intuition actually means, 'in-tuition,' or learning and being educated from inside ourselves. Only when we are following the wisdom of our inner feelings, which may be expressed in a vision, thought, voice or hunch, are we authentic. Then we are a genuinely self-led person." (Wanless, 2002, 46)

In general, there seem to be three commonalities surrounding the use of intuition, i.e., it originates beyond consciousness, information is processed holistically, and intuitive perceptions are frequently accompanied by emotion (Sinclair & Ashkanasy, 2005). As such, it appears that intuition is an inner, direct knowing or focus. In fact, it seems that intuition is an aspect of conscious awareness. More specifically, intuition is the self-awareness of direct knowledge. That is, intuition says "I feel or see or experience this in me directly...I am directly aware of this in me...it belongs to me." The key is awareness, awareness of what something inside oneself is saying to oneself. As such, intuition is self-reading of one's own truth or understanding. This capacity is very compatible with the idea that managers typically are viewed as having a high degree of empathy. Intuition requires that one master one's own direct and often subtle knowing or experience, both seeing it and understanding it. In order to master intuition, one must first master direct knowing.

IMPORTANCE AND USE OF INTUITION

"Often you have to rely on intuition." – Bill Gates

Managers make challenging and important decisions every day. Approximately 32% of managers are intuitive, and intuition is positively related to organizational effectiveness (Andersen, 2000). Six in 10 or 62% of CEOs indicated that gut feelings are highly influential in guiding their business strategies, while only four in 10 indicated that internal metrics and financial information (44%) or competitor analyses (41%) are highly influential (Business Wire, 2006). That is, intuition seems to be a characteristic of many managers in general, and more specifically, the combination of intuition as dominant and thinking as the auxiliary function is quite often found in managers (Andersen, 2000). In addition, entrepreneurs have a greater propensity for intuitive decision making (La Pira, 2011). However, they do not ignore available information or their experiences. Rather, they use both analysis and intuition in their decision making. That is, entrepreneurs tend towards self-sufficiency, trusting their own judgment (self-efficacy), living with ambiguities and uncertainties, and being willing to make decisions even though they do not have all the information they need at hand. "When outcomes are difficult to predict through rational means and they need to make a decision, they respond in a pragmatic way by utilizing their intuitive judgment and making a decision." (La Pira, 2011, 11) While rational analysis is useful, it is not a panacea for decisionmaking. Rather, it is like the bricks of a wall with intuition being the mortar. That is, systematic analysis and intuition are complementary rather than exclusionary, based on what the situation needs to get the best result. (Vasconcelos, 2009) "Intuition enhances thoughtful decision-making, it doesn't replace it" (Smart, 2009). In fact, intuition even can play an important role in determining how to perceive, approach, and respond to a business situation or problem. Even managers who stress analytical processes actually mix intuition into most decisions (Kutschera & Ryan, 2009).

"Intuition is a brain skill that can be particularly useful as a tool in decision-making when a manager is faced with a crisis or emergency situation, where new trends are emerging differently from past patterns, and where data is inadequate, unavailable, or inappropriate for the particular situation at hand. Many leading executives readily admit to relying on intuition to make some of their most successful decisions, and recent research has indicated that the ability to use intuition is positively correlated with a higher profit record when chief executive officers performance in the private sector is compared." (Agor, 1985, 16)

In addition, intuition or understanding without apparent effort works well in some realms while still needing some restraint and checks in others (Mundy 2011). Intuition tends to be used in non-routine decisions or when faced with conflicting facts or inadequate information, e.g., future projections, crises, pulling discordant facts together, and problem solving (Agor, 1985; Jennings, 1999). However, for routine decisions, business leaders are five times more likely to apply analytics rather than intuition across

the widest possible range of business decisions; and, two times more likely to shape future business strategies and guide day-to-day operations based on analytics (Meinert, 2011). Intuition also tends to be used when the perceived importance and potential impact of a decision is high, i.e., life or game altering decisions or high-stakes decision making. (Sinclair and Ashkanasy, 2005; Flora, 2007; Kutschera & Ryan, 2009) It has been used "to identify problems, to streamline routine jobs, to pull isolated facts together, to balance purely logical analysis, and to solve problems faster." (Jennings, 1999, 44) Intuition also can help one to be calm in the midst of change and chaos, it can give insight into the people around us, and it can help make successful decisions in all areas of life (Sheehan, 2010). Intuition allows us to speed-sort information and to make connections before reason can assemble the data (Oliver, 2007). For example, "The only way to evaluate character is free and takes hardly any time at all. The method is the informal skill known as (intuition). Executives all possess this skill to some degree or other and use it constantly in other contexts." (Thompson, 2005, 37) In general, executives found intuition to be most helpful and most frequently used under condition of: uncertainty, no previous precedent, when variables are not scientifically predictable, when facts are limited, when facts do not clearly point the way to go, when analytic data is not useful, when several good and supportable alternatives exist, and when there is time pressure to come up with the right decision (Agor, 1990). Additionally, it has been applied successfully to job interviewing, employee selection, social exchange, investing and loan decisions, healthcare decisions, the athlete selection process, new product development, and drug discovery research (Forsyth & Bradbury, 2011; Blume & Covin, 2011; Sundgren & Styhre, 2004; Lodato, 2008; Luo & Cheng, 2006). Also, "Jazz encodes the paradox of intuition: The ability to improvise is born from a lifetime of discipline, including copying solos from favorite musicians to internalize the natural flow of music" (Flora, 2007, 73). It is interesting that even though intuition is so valuable, executives often try to keep it a secret and hide it, afraid that their colleagues would not understand (Agor, 1990).

In summarizing the use of business intuition, Glass (2008, 95) states the following:

- "Quantitative decision making, when it really works, is usually preferable to its alternatives, but it doesn't work as often as we would like.
- "Rational decision making is a good second choice, but it often gets overridden in practice by something else.
- "That something else is intuition, and even though we don't understand it, it's an acceptable, commonly used decision-making approach."

Additionally, Kutschera and Ryan (2009) suggest that intuition be added into a systematic decision process, e.g., 1) define criteria for success or failure, 2) remain focused on the problem at hand, 3) remember that good information is gathered from many different sources, 4) balance calculated risks with intuitive judgment, and 5) change the question to test an analysis.

THE ATTRIBUTES OF INTUITION AND THE INTUITIVE PERSON

"I rely far more on gut instinct than researching huge amounts of statistics."

-Richard Branson

The attributes of intuition can be described as follows: non-hierarchical, not based on formal education or years of experience, non-analytic, <u>what</u> to do is known before <u>why</u> we are doing it, unpredictable, does not conform to rules and regulations, does not rely on senses, is quick and easy, made without extended conscious deliberations, may reflect automated expertise, random inconsistency may occur, systematic distortion may occur, works alone and beyond ambiguities, is not limited to time and space, synthesizing seems to occur, based on one complete picture, not arbitrary, not irrational, goal directed, simply responds to questions, can be based on some form of impressions or symbols, may have great heuristic value, and may come in the form of a series of questions or a dialog with the world, i.e., one impression may suggest others. (Day, 1996; Beh, 1993; Schoemaker & Russo, 1993; Rosanoff, 1998; Earlenbaugh & Molyneux, 2009; Bolte & Goschke, 2005) Cappon (1993) offers that skills needed for

intuition to occur include: perceptual closure on insufficient time, perceptual closure on insufficient definition, perceptual recognition, positive perceptual discrimination, negative perceptual discrimination or what was not there in the intuition, synthesis or Gestalt insight, time flow estimation, retrieving of memory or quick memory, passive imagination, psycho-osmosis or knowing the unknown, active imagination, anticipation or foresight, optimal timing of intervention, hunch or seeing the solution to a problem before you have it, choice of best method, choice of best application of a discovery, hindsight that uses empathy and identification in order to divine the cause of things, associative and dissociative matching, and seeing the meaning of things.

The intuitive is crucial to the process and quality of intuition. Intuitives tend to find and use information that is beyond their senses, i.e., imagination, inspirations, and subtle impressions. They look at the big picture to grasp essential patterns, asking "why not" rather than "why" (Millett, 2011). They are experts at unconscious pattern recognition, seeing new possibilities and new ways of doing things. They often see the possibility and works backwards to assess the resources, investments, and actions needed to implement the dream (Odom and Pourjalali, 1994; Millett, 2011). Additionally, the intuitive places high value on ideas, innovation, concepts, theory, and long-range thinking. This individual is a knowledgeable, future-oriented person who likes to abstract principles from a mass of material. The intuitive can usually be described as original, creative, broad-ranged, charismatic, idealistic, intellectual, tenacious, ideological, and involved. On the other hand, he or she may be unrealistic, far-out, fantasy-bound, scattered, devious, out-of-touch, impractical, and a poor listener. So, the specific choice of intuitive is very important. (Futtrell, 2011)

"What is so special about intuitive talent? Extensive research on brain skills indicates that those who score as highly intuitive on such test instruments as the Myers-Briggs Type Indicator tend to be the most innovative in strategic planning and decision making. They tend to be more insightful and better at finding new ways of doing things. In business, they are the people who can sense whether a new product idea will 'fly' in the marketplace. They are the people who will generate ingenious new solutions to old problems that may have festered for years. These are the executives that all organizations would love to find." (Agor, 1989, 21)

Mavor, Sadler-Smith, and Gray (2010) add that the intuitive is self-confident, client-centered, gives him/herself permission to access and use intuition, listens to his/her body, is mentally and physically prepared, is disciplined, focused, and organized, is responsive to challenges in the moment, seeks permission from the client to use intuition, establishes and maintains rapport with the client, is unattached to his/her intuitions, is objective about his/her intuition, and is courageous in his/her engagement with intuition.

Eugene Sadler-Smith (2010), author of *The Intuitive Mind* explains the two minds model with regard to the integration of intuition and the intuitive:

"The two minds model is widely used in psychology (where it goes under the name of dualprocess theory) – and it means precisely what it says: we have one brain but "two minds," an analytical mind and an intuitive mind. They co-evolved in the human species in order to fulfill particular functions, and without both of them we would be unable to function effectively in the real world. The analytical mind is a "narrow band-width" processor – it's the cognitive heavyweight of the two, able to solve problems in a logical step by step manner using all the available data. However, one of the drawbacks is that in many real world situations there may not be sufficient data available (or there may be too much data) to make sense of and there may not be the luxury of time to weigh up all the pros and cons of a situation. In this situation, experienced decision makers are often able to cut through a mass of detail or interpolate quickly and effortlessly and come to quick and often, but not always, accurate decisions. One of the distinctive attributes of the intuitive mind is that, although it can do very complex parallel processing, it cannot 'talk' to us in words in the same way that the analytical mind can. So the intuitive mind has evolved a different method to communicate to our conscious mind what it 'thinks' we should do – its voice is the language of feeling (by the way not the same thing as emotions – intuitive feelings are different to emotional feelings). Experienced intuitive experts have learned to trust what their gut is telling them, it may not always be right but for many people its right more often than it's wrong." (Norton, 2010, 39)

HOW INTUITION WORKS

"I believe in intuitions and inspirations...I sometimes FEEL that I am right. I do not KNOW that I am." – Albert Einstein

Determining the linkages between intuition and its outcomes is ambiguous and hard to measure. Hence, determining how intuition works is even harder. It is known that individuals are more confident in their final decisions when they choose the intuitive option as opposed to the non-intuitive alternative. Also, individuals often choose to follow their intuition even when other information undermines their intuition's validity (Simmons & Nelson, 2006). This is probably because unconscious processing involves the rapid detection and assessment of survival patterns in the environment that may be threatening to survival or provide an opportunity to enhance survival (Hayes, Allinson, & Armstrong, 2004). While it is not clearly known how intuition works, Day (1996, 174-175) offers:

"Like your other senses, your intuition is first and foremost a survival tool. It's geared to give you data instantaneously. When our day-to-day survival was more precarious, an individual's life or death depended very much on how tuned in he or she was to the surrounding environment. Those who were most intuitive had a far better chance to survive.

"Most of your life questions related in some way to the future, and intuition, being foremost a survival skill, is especially adept at addressing the future. Most likely it's the sense (or collection of senses) specifically geared to gathering information that is not available in your immediate environment."

Prietula and Simon (1989, 122) view intuition as being based on cognitive functioning: "How does intuition work? Long experience leads to chunking, so that familiar patterns emerging in a situation immediately suggest a possible move, a possible condition (medical diagnosis), or a possible risk (finance)...intuition...is a sophisticated form of reasoning based on chunking that an expert hones over years of job-specific experience."

Horstmann, Ahlgrimm, and Glockner (2009, 350) have found that

"Instruction to deliberate does not induce qualitatively different information processing compared to instructions to decide intuitively...our findings suggest a very similar basic process underlying intuitive and deliberate decisions, namely an automatic process of information integration...automatic information integration plays a crucial role in decision making, independent of whether people decide intuitively or deliberately."

Another description of the workings of intuition is offered by Tesolin (2000). Beyond emotional intelligence lies the possibility of intuitive intelligence which is closely aligned with common sense. Intuition involves a deep level of self-knowing. "A deeper level of self-knowledge creates an energy reservoir that is capable of producing a desired outcome almost instantly by directing one's desire and intention." (Tesolin, 2000, 76)

Sauter (1999) acknowledges six forms of intuition wherein each works and displays differently:

1. Illumination: A sudden awareness of information.

- 2. Detection: Usually occurs when the mind is focused toward something other than problem solving.
- 3. Evaluation: Facilitates choice among alternatives, i.e., that option feels right or does not feel right.
- 4. Prediction: Involves developing hypotheses without first analyzing data.
- 5. Operative intuition: Guides and provides a sense of direction or pinpoints events.
- 6. Creative intuition: Supplements detection by generating ideas.

Sinclair and Ashkanasy (2005, 354) view intuition as "an integrated model of analytical and intuitive decision making where both approaches are used in a complementary and iterative fashion; and the dominance of either approach is determined by dispositional and contextual factors." That is, decision makers tend to use intuition in conjunction with rational analysis, but it is personalized by individual and situational factors.

Inbar, Cone, and Gilovich (2010, 232) describe the inner workings of intuition as follows: "People are cued by the features of the decision problem to follow intuition or reason when making their choice. That is, when features of the choice resemble features commonly associated with rational processing, people tend to decide on the basis of reason: when features of the choice match those associated with intuitive processing, people tend to decide on the basis of intuition." However, Dane, et al.'s (2011) research seems to contradict this idea by acknowledging that the problem-solving approach and individual differences in thinking style interact in a way that creativity is highest when individuals use a non-typical problem-solving approach. For example, they contend that individuals who typically think rationally may benefit from an intuitive or nonstandard cognitive problem-solving approach and from an environment where natural tendencies are left behind.

Despite these many descriptions of how intuition works, there seem to be two main categories of theories about how intuition works: the mechanistic and the nonmechanistic theories. The mechanistic theory or Simon's Theory attributes intuition mostly to pattern recognition and the acquisition of chunks associated with relevant knowledge about the decision area. The nonmechanistic theory or Dreyfus and Dreyfus Theory emphasizes the holistic nature of experts' cognitive processing and acknowledges five stages moving from novice to expert, i.e., "from conscious, analytic, and deliberate behavior that depends heavily on instruction to intuitive and fluid behavior that naturally fits the requirements of the environment." (Chassy & Gobet, 2011, 200)

So, there has been some disagreement about how intuition works...maybe akin to blind men describing an elephant, i.e., one "sees" a bottle brush, another a tree trunk, another a hose, another a spike, etc., depending upon one's perspective. "By saying 'yes' to intuition we open up a lot of doors for greater success and creativity. By learning how intuition occurs for us we gain command of our abilities to recognize it as more than a fleeting experience. Then, once we understand what it's telling us, we can move on to even greater things." (Tesolin, 2007, 78)

HOW TO DEVELOP THE INTUITION

"At times you have to leave the city of your comfort and go into the wilderness of your intuition. What you'll discover will be wonderful. What you'll discover is yourself." - Alan Alda

"Intuition can be refined over time" (Smart, 2009). Additionally, intuition is economical and well worth developing (Tesolin, 2007). However, even though intuition is used widely, it can have a reputation of being unscientific, of having mixed results. "Even among highly intuitive executives, considerable opportunity exists for honing and developing their skills" (Agor, 1990, 169). In general, educational institutions give little attention to how to develop intuition implying that it is not highly valued. Rather the opposite, effort has been given to showing that intuitions systematically ignore important information and that judgments can be improved when individuals are pressed to reason more carefully. (Lieberman,

2000; Sadler-Smith & Burke, 2009) However, "Most employees and managers today are accustomed to an environment that does not encourage intuition. Becoming intuitive takes practice. Include developing intuition capabilities in your competency plans. Decide how and where you want your staff to be intuitive, and develop learning and training plans from there. Make sure you consult and exchange ideas with your staff about this initiative." (Tesolin, 2007, 77) "Analytics can never trump the intuition of a thoughtful executive, wrought by years of experience and accumulated knowledge, tempered by emotional intelligence" (Matzler, Bailom, & Mooradian, 2007, 15). Additionally, Matzler, Bailom, and Mooradian (2007) reveal that the development of intuition requires: experience, networks for sharing experience, emotional intelligence which works faster than intellectual intelligence, tolerance for both positive and negative experiences, curiosity for discovering new opportunities, and limits so that intuition is not taken to extremes. Kerfoot (2003) offers four guidelines to help leaders continue to develop their intuitive skills: practice, practice; learn to listen by crafting the fine art of focusing; tell stories to free up your imagination and do postmortems to learn from experience; and breed gut thinkers in your organization by eliminating barriers and providing opportunities.

Jennings (1999) offers the following suggestions for developing intuition:

- Use wordplay with metaphors and analogies.
- Use clay, pipe cleaners, or some other kind of representational material to build models.
- Find new approaches to a problem by carefully studying pictures that may seem at first glance to have no logical connection to it.
- Involve the body in vigorous physical exercise that makes analytical thinking harder, but promotes awareness and sensitivity.
- Listen to certain kinds of music like Mozart to enlarge neural pathways that stimulate learning and creativity.
- Incubate your dreams to help solve complex problems. That is, concentrate on the key problem before you go to sleep, then write down your dreams and use these clues to solve the problem.
- Use relaxation, breathing, and meditation techniques (Wise, 2000). "Executive meditators reported using their intuition in the preponderance of their decisions...They reported their intuition is more accurate following meditation." (McNaughton, 2003, 1)
- Ask your intuition open-ended questions such as "How do I...," "What do I need to know and understand about this problem," etc. Pay attention to any images, feelings, sensations, impressions, etc., that you get.
- Brainstorm. At the end of 10 minutes, pay attention to what choices feel best. Notice what you get excited about. Act on the information you get, take small steps first. (Sheehan, 2010)

Is it worth developing intuitive skills? As stated by Agor (1989, 23),

"The management climate of the future will place an increasing premium on intuitive skills in the strategic-planning and decision-making process. Furthermore, we will probably learn more in the next decade through ongoing brain research about how to use and expand intuitive skills than we have thus far in the history of mankind. These factors together suggest that devoting organizational time and resources today to develop intuitive brain skills will likely offer dramatic payoffs in the future in terms of increased productivity and better strategic planning and decision making."

Intuition is an innate skill available to everyone who chooses to listen to their intuitive messages. It is easily developed and definitely improves with use. (Mara, 2003) "It is possible for individuals to develop high levels of intuitive knowledge, and to develop the ability to apply intuitive decision policies consistently" (Trailer & Morgan, 2004).

INCREASING THE SUCCESSFUL USE OF INTUITION

"It is always with excitement that I wake up in the morning wondering what my intuition will toss up to me, like gifts from the sea. I work with it and rely on it. It's my partner." – Dr. Jonas Salk

If intuition is based on reasoning experience and astuteness, then it follows that intuition can be learned and improved. Dimitrius and Mazzarella (2008) offer a simple approach for amping up one's intuition:

- Recognize and respect your intuition, not following it blindly or rejecting it outright.
- Identify what your intuition is telling you. Follow the hunch, asking what is it?
- Review the evidence by playing back the events in order to become more conscious of the signs.
- Prove or disprove your theory. Gather additional information to consciously test your theory.

The following suggestions for successfully using intuition are added (Dimitrius & Mazzarella, 2008; Tesolin, 2007; Smart, 2009; Sauter, 1999; Raskin, 1988):

- Trust yourself. Work to diminish the fear of using intuition. (Cartwright, 2004)
- Train yourself. Start small and work up. Use external feedback in training. "Managers need tools to assist in generating intuitive thoughts and to verify the intuition once it occurs" (Sauter, 1999, 115).
- Ask the right question(s). Ask many questions to cover the possibilities.
- Make sure it is intuition and not just make believe. Keep a connection with reality. Keep your ego and personal filter out of the process. As noted by De Neys (2012, 28), "...although intuitive heuristics can sometimes be useful, they often cue responses that conflict with traditional logical or probabilistic normative principles and bias our decisions."
- Add it to good decision making -- not to replace it. "People make different decisions depending on whether they adopt systematic processing or rely on intuitive, heuristic processing" (Alter, et al., 2007). Use both analysis and intuition. "Experience is encoded in our brains as a web of fact and feeling" (Flora, 2007, 70). For example, individuals thinking rationally may benefit from using an intuitive problem-solving approach when generating creative ideas. It should be noted, however, that individuals often choose to follow their intuitions even when other information undermines their intuition's validity. In addition, intuitive choices increase when intuitive confidence increases. (Dane, et al., 2011; Simmons & Nelson, 2006; Smart, 2009; Inbar, Cone, & Gilovich, 2010)
- For successful intuition, a certain acceptance is needed that one cannot adequately or completely control situations or rationally understand them (Korthagen, 2005).
- Intuition is more likely to be flawed in unknown, uncertain territory and in conditions of high stress. However, uncharted territory often lacks the stepping stones of analysis and requires the gut tactic of intuition. Using an intuitive system is fast but there may be more errors and biases. So, what may be needed is intuition guided by critical thinking. (*The Business Journal*, 2012)
- Add intuition to team work. However, honor others' intuitive abilities or lack thereof. For example, custom build a team of intuitives and analytics to manage future projections, crises, and problem-solving (Agor, 1985; Dayan & Benedetto, 2010; Dayan & Elbanna, 2011).
- If something does not work, keep trying. Intuition may be better in some areas than others. Remember, like building muscles, intuition can be greatly developed through practice (Wanless, 2002). (Millett, 2011)
- Cultivate intuition by reading books about intuition, interacting with intuitives, and keeping an open mind. Self-reflect on its use and grow from your self-reflection. For example, keep an intuition journal where you record experiences, insights, and ideas (Tesolin, 2000).

- Intuitive signals are clearest when stress, overburden, fear, pain, boredom, and fear of failure are minimized; and, silence and relaxation are maximized. Do nothing for five minutes every day, use this to slow down and become more self-aware and joyful. (Tesolin, 2007; Glaser, 1995) For example, Tesolin (2000) suggests that 5-10 minutes a day of meditative or self-awareness training can make a substantive difference. He also acknowledges that good intuitive practices fill you with energy and a sense of power while bad practices raise doubt and other negative feelings.
- If an individual is getting mixed intuitions, then step back from the situation. Take a time out and just be still and in a receptive mode until the intuition is clear. (Smart, 2009)
- Right-brain skills such as intuition can be practiced and successfully used to empower managerial decision making (Agor, 1985). But, integrate them with left-brain skills in order get the whole picture.
- Avoid a gut reaction based on minimal facts. Rather, make a gut decision once facts are collected and interpreted. Do not allow yourself to be forced to make a decision when fact-finding is insufficient. On the other hand, pay attention to ideas, insights, and impressions that seem to come out of nowhere or out of the blue. The balance of these two aspects leads to superior decision making. (Nadel, 2011)
- Give yourself some time. Reserve a few minutes to think through your intuition. Review what your gut is telling you. Say it out loud and see how it sounds. (Stettner, 1998)
- Bad decisions often can follow from not following intuition. Failure to be honest and to remain detached can lead to poor decisions. In addition, projection can distort reality and lead to ineffective decisions. (Agor, 1990)
- Individual differences in intuitive processing style do exist and play an important part in intuitive decision making. For example, mistakes are likely to be made when the decision maker overuses heuristics or a solution that works for one situation but not for others. (Hicks, et al., 2010)
- Intuition requires a great degree of self-knowledge, deep listening, and stepping outside one's conditioning. "Geniuses, shamans, mystics, and visionaries throughout the ages have been able to access non-ordinary states of consciousness for direction, power, and wisdom...The 21st-century mind needs to operate on a multidimensional front." (Tesolin, 2000, 76)
- "Not every intuitive decision you make will be the right choice from an outside point of view. Being 100 percent right does not happen, but 100 percent correct does if your choice comes from your heart of hearts. And if you follow the feelings that give you the greatest positive charge of energy, then, at the very least, you are utilizing all of your inner resources with utmost conviction and, therefore, giving yourself the greatest chance to succeed. When following your intuition, you are in your own place of power. Intuition is personal, and that is why it works for you. But remember, what is correct for you, may not be for another." (*Women in Business*, 2002)
- Be careful to not dismiss early warning signs, feelings, or gaps. One must learn to work with intuition so as not to regret in hindsight. That is, listen to what is said and not said, to when things do not fit, to missing or conflicting information, and to the whole story. (Tesolin, 2000) It is ok to listen to the gut feeling at the beginning, rather than at the end of the process (Oliver, 2007). However, be careful that you are not misreading an emotional impulse (Stettner, 1998).
- The trustworthiness of intuition also is contingent upon the environment in which the judgment is made and of the opportunity to learn regularities of that environment. For example, a high validity environment is needed for the development of skilled intuition, i.e., there are stable relationships between objectively identifiable cues and subsequent events or outcomes of possible actions. It is best to be relaxed and confident about one's intuition and choices. (Kahneman & Klein, 2009; Agor, 1990)

The successful use of intuition is important to the manager and the organization. As businesses increasingly become continuously learning organizations (CLOs), successful intuition will grow in importance and be consciously developed within the organization.

"There is no denying that rationality, analysis and linearity will continue to be vital contributors to decision making, problem solving and organizational development. However, given the evolution of the business environment, we believe that CLOs are the form of organization best adapted to producing efficiency, effectiveness and profits. We have argued that the use of right-brain skills such as intuition must be recognized and developed in order to create a CLO successfully. Corporations which are able to tap the full range of human capability are bound to have a sustainable competitive advantage." (Lank & Lank, 1995)

CONCLUSION

"Intuition and concepts constitute...the elements of all our knowledge, so that neither concepts without an intuition in some way corresponding to them, nor intuition without concepts, can yield knowledge." - Immanuel Kant

Individuals, decision makers, and managers engage in analytical thinking and intuition virtually all the time (Kutschera & Ryan, 2009). That is, intuition is a valuable skill for any manager. In fact, it seems that the "leader needs both skills, and more information is pointing to the ability to utilize intuition as the defining separation between great and average leaders" (Kerfoot, 2003, 253). In particular, intuition is useful in crisis or emergency decision making situations, when dealing with new trends, and when data is inadequate, unavailable, or inappropriate for the problem at hand. In general, the best thinking in an organization involves the combination of creative and analytic thinking. "Good leaders have a humble confidence and surround themselves with both a creative and analytic think team. They trust their gut but follow a rigorous and deeper analytic process to get to clearer and better decision-making" (The Business Journal, 2012, 5). That is, "Successful strategic planning requires the effective integration of analysis and intuition" (McGinnis, 1984). This paper has defined what is meant by the term intuition and has discussed its use and importance in business. Thereafter, the attributes of intuition and of the intuitive manager were presented as well as a discussion of how intuition works. This has been followed by understandings and suggestions about how to develop intuition and how to increase the success of business intuition. "Intuition is bigger than we realize. It feeds our expertise, creativity, love and spirituality. It is a wonder. But it's also perilous. Today's cognitive science aims not to destroy intuition but to fortify it, to sharpen our thinking and deepen our wisdom. Scientists who expose intuition's flaws note that it works well in some areas, but needs restraints and checks in others. In realms from sports to business to spirituality, we now understand how perilous intuitions often go before a fall, and how we can therefore think smarter, even while listening to the creative whispers of our unseen mind." (Myers, 2002, 52)

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