

Intuition and Entrepreneurship in Management Practice

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Abstract: Based on an analysis of the literature, it can be inferred that the features of an intuitive decision-maker are largely consistent with the features typical for entrepreneurship, understood as a set of characteristics relating to specific human behavior. Therefore, it seems reasonable to seek an answer to the question whether undertaking entrepreneurial activities translates into the use of an intuitive approach to decision making.

The aim of this paper is to demonstrate, on the basis of a critical analysis of the literature and empirical research, the existence of a relationship between entrepreneurship and intuitive decision making. The article consists of four parts. The first part presents the essence of an intuition-based approach in management, especially in decision making. Next, the concept of entrepreneurship is defined, understood as both a process and a set of entrepreneurial features. In the third part, an attempt is made to collate the characteristics of an intuitive manager and those of entrepreneurship in order to identify any convergence between these categories. In a final part the author presents the cognitive results of initial empirical research conducted in this area.

This paper contributes to expanding the knowledge relating to the existence of a relationship between intuition in decision making and entrepreneurship. Moreover, it can also provide inspiration for conducting further empirical research in this area.

Key words: intuition; entrepreneurship; intuitive manager; entrepreneur; decision-making process

JEL codes: M

1. Introduction

The environment in which today's enterprises operate is characterized by high volatility, unpredictability and intense competition. This means that managers are forced to make decisions under complex conditions, faced with too much or too little information, a high degree of uncertainty, along with time pressure. Decision-makers, especially at the strategic level, have to deal with problems which are unstructured, distinctive and unique. As a result, they increasingly refer to their intuitive potential in the decision-making process. Intuition makes it possible to analyze a large amount of information and identify that which is relevant to a given decision. On the other hand, if there is a shortage of information, intuition can help fill the information gap. Furthermore, intuition is used in management practice primarily in order to generate innovative and original decisions that solve individual problems.

The above-mentioned features of the business environment necessitate specific behavior on the part of managers. To ensure the survival and development of their organizations in a global market, they must undertake expansive and innovative actions. Moreover, the managers themselves should possess characteristics which will

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enable a quick identification and exploitation of market opportunities as well as an efficient adaptation to changes occurring in both the immediate and more distant environment. It can be seen that the desirable traits and competences of modern managers are connected with the need to undertake entrepreneurial activities.

Based on an analysis of the literature, it can be inferred that the features of an intuitive decision-maker are largely consistent with the features typical for entrepreneurship, understood as a set of characteristics relating to specific human behavior. Therefore, it seems reasonable to seek an answer to the question whether undertaking entrepreneurial activities translates into the use of an intuitive approach to decision making.

The aim of this paper is to demonstrate, on the basis of a critical analysis of the subject, the existence of a relationship between entrepreneurship and intuitive decision making. The article consists of four parts. The first part presents the essence of an intuition-based approach in management, especially in decision making. Next, the concept of entrepreneurship is defined, understood as both a process and a set of entrepreneurial features. In the third part, an attempt is made to collate the characteristics of an intuitive manager and those of entrepreneurship in order to identify any convergence between these categories. In a final part the author presents the cognitive results of initial empirical research conducted in this area.

2. Intuition in Decision Making

As managers work in an environment full of unpredictable phenomena and processes, intuition is increasingly recognized as desirable managerial competence. It plays a particularly important role in the process of making individual and unique decisions. Intuition is an essential part of the creative process. According to P. Goldberg, it enables the creation of innovative solutions that are neither continuation nor development of earlier decisions (Goldberg, 1998, p. 76). Intuition accompanies discoveries that appear as sudden brainwaves, masterstrokes, inspirations, premonitions and convictions about the rightness of certain ideas without conscious reasoning in that matter. Proponents of intuition encourage to use it in practice and claim it to be the most sensitive and reliable measure of feelings and emotions (Weisbach, Dachs, 2000, p. 22).

Intuition is a complex, ambiguous and, above all, interdisciplinary concept. Below are some definitions of intuition proposed by authors specializing in different disciplines (Table 1).

Literature on management and psychology provides no single, universal and generally accepted definition of intuition. The conceptualization and operationalization of intuition is a serious problem for management theorists. This is primarily due to the ambiguity of this notion, but also to the generally accepted assumption that knowledge is valuable as long as it is open and objective, exists in consciousness and can be subject to introspection (Hodgkinson, Sadler-Smith, 2003, pp. 243-268). Furthermore, the authors emphasize that intuition is a problematic concept due to its many interpretations, components and factors influencing an individual's ability to use it (environment, experience, training, the ability to acquire new information and to retrieve and restore those already possessed). The controversy over the definition of intuition concerns many aspects, such as its characteristics, its range, the homogeneity of the phenomenon, the mechanisms by which it occurs, its influence on the accuracy of choices and the relationship between intuition and experience. Despite considerable discrepancies in the definitions of intuition which are primarily related to the question of whether an intuitive process occurs in the consciousness or in the subconscious, it is possible to distinguish some common features that are identified by most authors. It can be seen that the definitions presented in the literature by H. Simon (1987), W. H. Agor (1998), R. M. Hogarth (2001), G. A. Klein (2003), E. Sadler-Smith (2008), T. Betsch (2008) the

following common features:

- intuition is an automatic process of thinking;
- this process is based on knowledge structures formulated through various types of learning (i.e., the ability to translate the acquired experience into an ongoing activity),
- the process runs, at least in part, beyond the consciousness,
- intuition may take the form of feelings, signals and interpretations.

Table 1 Selected Definitions of Intuition

Author	Discipline	Definition of intuition
C. Clausewitz	-	Intuition means a quick understanding of truth that is not seen at first glance or can be identified only after prolonged analysis (Clausewitz, 1995, p. 48).
H. Bergson	Philosophy	Intuition is a kind of instinct (it has nothing to do with the intellect). It makes it possible to learn things and events directly. Intuitive learning is more real and superior than intellectual learning (Słownik filozofii, 2009, p. 255).
F. Copleston	Philosophy	Intuition means an intellectual activity, a view or a vision. An intuitive belief is so unequivocal that it leaves no room for doubt (Copleston, 1995, p. 75).
C. S. Nosal	Psychology	Intuition is a relatively independent human cognitive function used in situations requiring rapid assessment and decision making under conditions of uncertainty and lack of information (Nosal, 2002, p. 39).
W.H. Agor	Management	Intuition is a rational and logical brain capacity that can be used to support decision making. The author assumes that intuition is the result of many data collected in the early stages of the decision-making process, taking the form of both facts and feelings (Agor, 1998).
S. Galata	Management	Intuition is a blend of intellectual abilities, acquired and available knowledge, psychophysical features, environmental factors and other factors known as happiness (Galata, 2004, p. 87).
R.M. Hogarth	Management	Knowledge arising from the experience of intuition is not accurate and often takes the form of feelings (not words). This process is fast and manifests itself with the decision-maker's conviction about the rightness of the solution. Intuitive solution is obtained with little effort and usually without consciousness. It arises as a result of an automatic and unconscious mental process (we know something, but we do not know why) (Hogarth, 2001, pp. 9-21).

Source: Own study.

As mentioned before, intuition now plays a special role in decision making. Its growing popularity is due to the features of intuitive decision making that perfectly match the complex environment. Namely, decision problems are holistic and synthesized, the ideas created are innovative and unique, the decision-making process is shorter (due to a rapid emotional evaluation of alternative solutions, elimination of those considered insufficient, avoidance of the existing procedures and rules and the lack of documentation of the whole decision-making process) (Bolesta-Kukułka, 2000, p. 212). These features of intuitive decision making enable rapid response to changes in the environment and to offer solutions that allow the organization to stand out from its competitors. Intuitive decisions generally do not require going through the traditional stages of rational decision-making. Intuitive managers often ignore the rules and guidelines in a rational decision model jumping from one stage to another. It should be emphasized that despite the apparent chaos in the implementation of the intuitive decision-making process and the fact that intuitive solutions appear unexpectedly and spontaneously, they are always generated at the right moment. Furthermore, decision-makers are deeply convinced that they have made the right decisions.

The turbulent and dynamic environment forces managers to use intuition in decision making and to implement certain behaviors that respond to ongoing changes. These behaviors involve adopting offensive and active approaches by creating, searching and exploiting opportunities and chances occurring in the environment. They can be described as entrepreneurial behaviors.

3. The Essence of Entrepreneurship

Entrepreneurship is an important research subject today. This is due to the theoretical complexity of the phenomenon and its great practical significance. Entrepreneurship is a multi-faceted and ambiguous term and is therefore difficult to define. When analyzing the literature, one can find several trends in defining this concept.

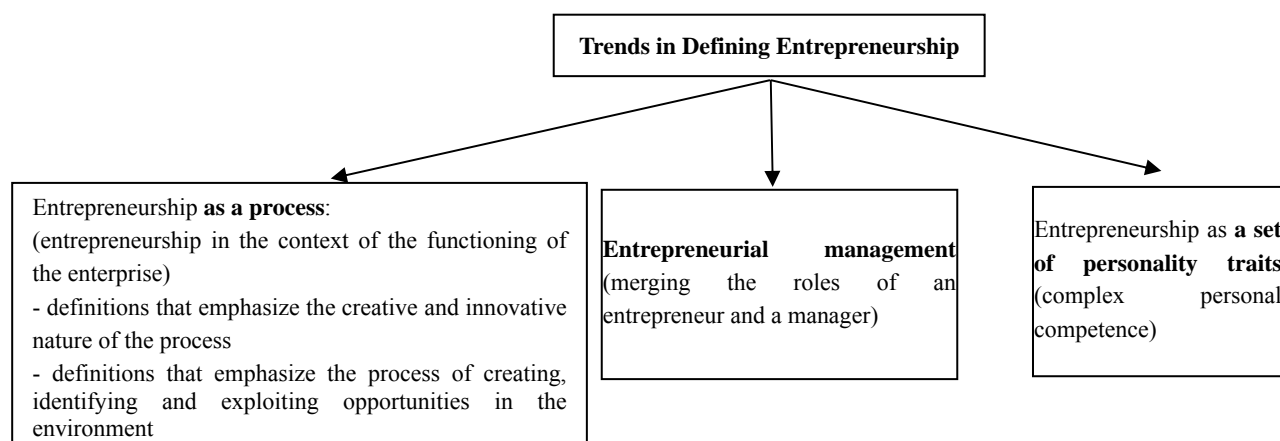


Figure 1 Trends in Defining Entrepreneurship

Source: Own study

One of the leading trends in defining entrepreneurship assumes that this is a process of taking comprehensive action in adapting to market economy rules. R.W. Griffin proposes a relatively general definition of entrepreneurship, suggesting that it is a process of organizing and running a business and taking associated risks (Griffin, 2002, p. 730). H. H. Stevenson and J. C. Jarillo treat entrepreneurship as a key element of strategic management and argue that it should motivate individuals to create additional values (Stevenson, Jarillo, 1990). Assuming that processes run in time and space, it can be said that entrepreneurship is anticipatory. This means that its specific potential needs to be cumulated beforehand to produce the desired effects in the future. Human capital — the potential of entrepreneurial members of the organization — is recognized as the potential cumulated beforehand.

Some proponents of the above-mentioned trend, such as J. Schumpeter and W. Gartner, draw attention to the creative and innovative nature of entrepreneurship. The first author defines entrepreneurship as “the ‘perennial gale of creative destruction’, whereby new products and processes displace old ones” (Schumpeter, 2012, p. 37). The other author defines it as “an act of creation, innovation, creating a new being” (Gartner, 1992).

In turn, J. Timmons and H. Stevenson recognize the importance of creating, identifying and exploiting opportunities in the environment. They define entrepreneurship as a way of thinking and acting focused on seeking opportunities (Glinka, 2008, p. 15). It is considered to be a dynamic activity associated with initiating and developing business (Timmons, 1999, p. 218).

A slightly different and less popular trend in defining entrepreneurship described in the literature assumes that entrepreneurship is a response to social and economic needs. This approach reduces this notion by emphasizing its passive character (Mesch, Chamanski, 1997, pp. 597-610; Douglas, Shepherd, 2000, pp. 231-251). Anyway, the most important asset of entrepreneurship is the ability to actively create needs and new conditions for the functioning of the economy.

When summarizing the definitions outlined above, it can be said that entrepreneurship is a particular type of

individual or organizational activity, which involves identifying and exploiting opportunities and creating innovative solutions (Drucker, 1992, p. 29). Most of the definitions indicate that entrepreneurship is about creating something new and different and that it involves developing or transforming values (Ogrzyńska, 2012, p. 163).

According to Drucker entrepreneurship can be identified with entrepreneurial management. The author claims that entrepreneurial personality traits are not sufficient to achieve the desired business goals. Entrepreneurship management practices are essential. If an organization is not managed in an entrepreneurial way, it adopts a passive approach (Drucker, 1992, p. 185). Drucker also claims that entrepreneurship is not innate and can be learned. Every business can be entrepreneurial and innovative. However, this requires effort and purposeful actions (Drucker, 2002, pp. 480-482). In conclusion, it can be said that entrepreneurial management is focused in a special way on customers. It involves rapid recognition of and innovative response to their needs. In this approach, attention is drawn to the importance of two features: flexibility and maneuverability (Merllor, 2011). Entrepreneurial management can be defined as a combination of two categories: management and entrepreneurship, where management is understood primarily as searching for advantages and entrepreneurship involves seeking opportunities.

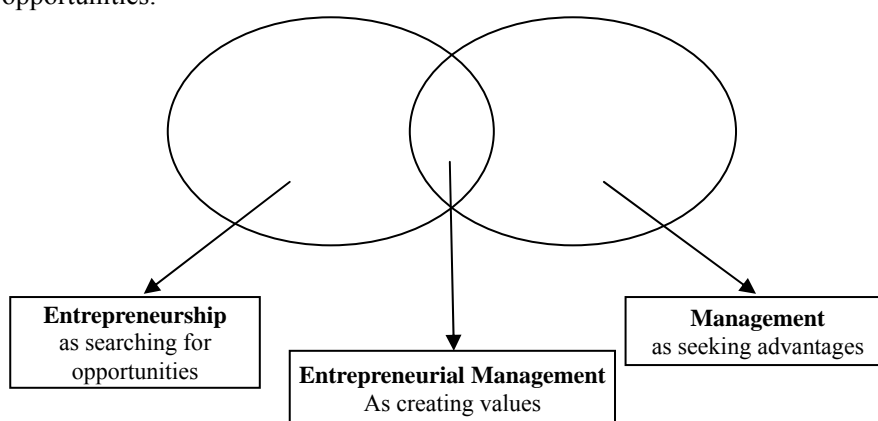


Figure 2 Entrepreneurial management (Venn Diagram)

Source: R.B. Mellor, G. Coulton, A. Chick, A. Bifulco, N. Mellor, A. Fisher, *Przedsiębiorczość*, PWE, Warszawa, 2011, p. 19

Entrepreneurship is often identified with specific personality traits or treated as a complex personal competence. In this trend, entrepreneurship refers primarily to individuals. Although it is still recognized as a response to external stimuli (coming from the environment), it takes the personal dimension.

4. Entrepreneurship as a Set of Personality Traits

According to the New Dictionary of the Polish Language entrepreneurial persons are considered to be capable of solving all problems, are full of initiative and energy, ingenious, resourceful and active (Nowy Słownik Języka Polskiego, 2002, p. 746). J. Schumpeter describes entrepreneurs as being full of ideas, initiatives and persistence in overcoming barriers, breaking stereotypes and being resistant to stress and failure. According to the author, there are three basic factors that motivate entrepreneurs to act. These are (Schumpeter, 1990, p. 105):

- the dream of establishing a superpower;
- the need to succeed, compete and prove that they are better;
- the joy of creating (being creative).

The author considers entrepreneurs to be the initiators of progress and development. I. Kirzner emphasizes

that entrepreneurs must be open, sensible and sensitive to new information in order to act effectively (capture and use market opportunities) (Kirzner, 2001, p. 74). It can be noted that the authors' opinions about entrepreneurs' characteristics are similar. Only their assessments of entrepreneurial activities are different. While J. Schumpeter believes that entrepreneurs' actions unbalance the economy, I. Kirzner claims that they rebalance the market. This difference, however, is related to the place of emphasis, yet the fundamental assumptions remain the same (Ogrzyńska, 2012, p. 164).

It should be emphasized that entrepreneurs have the most important functions in organizations. On the one hand, by holding the entire power, they set the basic goals and make strategic decisions; on the other hand, they are involved in the companies' current activities. Entrepreneurs are the main initiators of ventures whose success depends on their ability to effectively identify and exploit opportunities.

Entrepreneurship, understood as complex personal competence, is a collection of both innate features and traits that have been developed through education and experience. According to T. Oleksyn, entrepreneurship includes (Oleksy, 2012, p. 90):

- passion for action;
- business orientation, primarily client and profit orientations;
- the ability to identify opportunities in the environment (mindfulness, different perception of the external environment);
- ingenuity, creativity, imagination;
- the ability to integrate innovative and practical approaches;
- the ability to identify and meet clients' needs;
- a good sense of time, the ability to take the right action at the right time;
- dynamism of action (energy);
- willingness to take risks while simultaneously assessing the level of risk;
- effectiveness;
- flexibility (acceptance of ambiguity);
- the ability to identify priority issues;
- the ability to establish relevant business relationships;
- courage in action, persistence and tenacity.

This does not mean that only those individuals who have all of these characteristics can be considered entrepreneurial. In practice, it is sufficient to possess only some of them.

The above-mentioned list of characteristics and competences creates a profile of entrepreneurs. Effective entrepreneurs are characterized by passion in action. They are truly interested in organizational issues and are actively involved in their business. They are able to devote a lot of time and energy to ensure success to their organizations. They treat failures as a new experience on the way to achieving their goals. Their motivation is so strong that it outweighs the fear of taking on a new challenge. Another important feature is mindfulness, which involves the ability to identify phenomena and processes relevant to the functioning of business. Entrepreneurs can recognize and use opportunities and chances that appear in their environment. Attention should also be paid to creativity. This does not mean, however, that entrepreneurs must be inventors or innovators. They should, however, understand and appreciate the importance of other inventions for the smooth functioning of their organizations. Creativity is particularly important when generating business ideas and then introducing new products. However, this feature plays an important role throughout the organization's life, manifesting itself in the correct definition of

mission, vision, selection of co-workers or business partners. A key feature in the entrepreneurial activity seems to be the ability to assess and take risks, as it is an intrinsic part of any business activity. Entrepreneurs should also have considerable social skills which are crucial for establishing relations with stakeholders and persuading them to accept their plans. These stakeholders may be co-workers, business partners, bankers and financiers. This ability to make the right contacts, communicate, negotiate, argue and influence others seems to be one of the key characteristics of effective entrepreneurs. It is also worth noting that a good sense of time is important in running a business. It is timing, i.e. taking the right action at the right time that often determines the dominance of a company in a competitive market. Persistence, tenacity and mental resilience are also crucial characteristics of entrepreneurship. The path to success can be very complex and full of failures. The belief in the rightness of the actions taken and the courage to implement them may determine the success of a given business venture. One of the important traits of entrepreneurs is also their ability to adapt to changes. Entrepreneurs should be flexible when formulating goals and plans, and when choosing ways to implement them. Some authors claim that entrepreneurs' success depends primarily on the manner in which they acquire information and process the acquired knowledge. This is determined by individual cognitive mechanisms. Entrepreneurs are able to analyze and scan through a significant amount of information and identify that which is significant from the business point of view (Baron, 1998, pp. 275-294).

To summarize the reflections on the traits and competences of entrepreneurs, a twofold approach to this issue should be emphasized. On the one hand, it is assumed that being an entrepreneur is elitist, which means that there are only a few percent of people in the world who can operate commercially. On the other hand, it is suggested that, depending on external conditions (economic system, cultural norms, availability of external resources), managers may manifest and develop their innate skills through specific, also non-economic activities. The second approach is more dynamic because it assumes that entrepreneurship can be learned by activating resources inherent in each individual. This activation is a consequence of the use of certain economic, cultural or psychological stimuli (Sikiorska-Wolak, 2000, p. 25; Kłodziński, Rosner, 2000, p. 284).

5. Intuitive Decision-Makers vs. Entrepreneurs

On the basis of the literature and the above considerations concerning intuition in decision making and entrepreneurship understood as a set of individual personality traits, certain similarities can be noted. It seems appropriate to answer the question of whether being an entrepreneur translates into an intuitive approach to decision making. The features of intuitive managers and the traits of entrepreneurs are compared in order to identify similarities between the concepts analyzed.

In conclusion, it can be stated that far-reaching similarities can be noted between the characteristics listed in the table above. The features of intuitive managers have their counterparts among the typical characteristics of effective entrepreneurs. Therefore, it can be argued that the profile of an intuitive decision-maker coincides with that of an entrepreneur. Assuming that personality traits, competencies and abilities determine specific attitudes and behaviors, it can be concluded that individuals with the above-mentioned characteristics are more likely to engage in entrepreneurial activity and be intuitive in decision making compared to other people. This means that individuals with these qualities will have significant intuitive potential and at the same time considerable entrepreneurial potential. Whether they use this potential depends on many, both internal and external, actors.

Table 2 Characteristics of Intuitive Managers and Entrepreneurs

The characteristics of intuitive managers	The characteristics of entrepreneurs (Oleksyn 2012, p. 90)
- “masters of change” and “creative thinkers” (creating new methods and techniques that increase effectiveness, creating new products, solving complex problems, solving problems in the absence of information) (Agor, 1987, p. 163)	- initiators of progress and development (they break stereotypes and rejoice in being creative) (Schumpeter, 1990, p. 105)
- the ability to identify new trends, customer needs and opportunities emerging in the environment (Bieniok, Halama, Ingram, 2006, p. 92)	- the ability to identify opportunities that appear in the environment (this feature can be defined as mindfulness, i.e., different perceptions of the external environment) - the ability to identify and meet clients’ needs
- courage and self-confidence in action (Bieniok, Halama, Ingram, 2006, p. 92)	- courage in action, perseverance and tenacity
- the ability to generate innovative, original solutions (a unique approach to problems) (Agor, 1987, p. 163)	- ingenuity, creativity, imagination (entrepreneurs are full of ideas and initiatives) (Schumpeter, 1990, p. 105)
- the ability to analyze and synthesize large amounts of information and to identify those that are necessary for decision making (Agor, 1987, p. 163)	- openness, receptivity and sensitivity to new information (the effectiveness of entrepreneurs depends on the way in which they acquire information and process the knowledge acquired). - the ability to analyze and scan through a significant amount of information and to identify that which is relevant from a business point of view (Baron, 1998, pp. 275-294)
- strong motivation to seek the optimum solution (Woiceshyn 2009, p. 311)	- strong motivation for action (overcoming the fear of taking on a new challenge)
- willingness to take risks (Harper 1998, p. 145)	- acceptance of risk and the ability to take and estimate the level of risk
- staying ready for decision making (adopting an active and dynamic approach, i.e., being capable of solving a decision problem even in the absence of information by filling in the information gap with intuition) (Malewska, 2010, pp. 334-351)	- dynamism of action (energy) — active creation of needs and new conditions for the functioning of the economy
- the ability to make quick decisions (a sense of time in making decisions) (Shaw 2010, pp. 77-79)	- adequate timing, the ability to take the right action at the right moment
- emotional intelligence, the ability to recognize one’s own and other people’s emotions, the ability to effectively cope with emotions and consequently to build good relationships with people and make good decisions (Shaw, 2010, pp. 77-79).	- the ability to establish appropriate business relationships - the ability to influence stakeholders and persuade them to accept one’s plans

Source: Own study.

It needs to be highlighted that in the case of entrepreneurship and intuition internal determinants resulting from character traits, abilities and predispositions play a key role. One should not forget about external factors. With regard to entrepreneurship friendly conditions of the environment will strengthen the entrepreneurial behavior. Social determinants (such as: demand for education, the dominant types of social advancement, openness to the outside, social satisfaction, hierarchy of prestige), economic and institutional conditions (such as: level of savings, access to the credit and capital, protection of competition, market openness, legal system, development of the knowledge and education sector) are also important. External entrepreneurship stimulators form the framework for entrepreneurship development. However, personality determinants supported by social factors seem to be crucial. It's above all personality traits motivate individuals to act and take risks.

Analyzing the problem of intuition, it can be noted that apart from personality determinants, external factors determining the use of intuition in the decision-making process can also be identified. These factors can be divided into two groups of determinants: these related to the decision problem (type and structure of the problem) and those related to the environment (decision making conditions, organizational culture of the company).

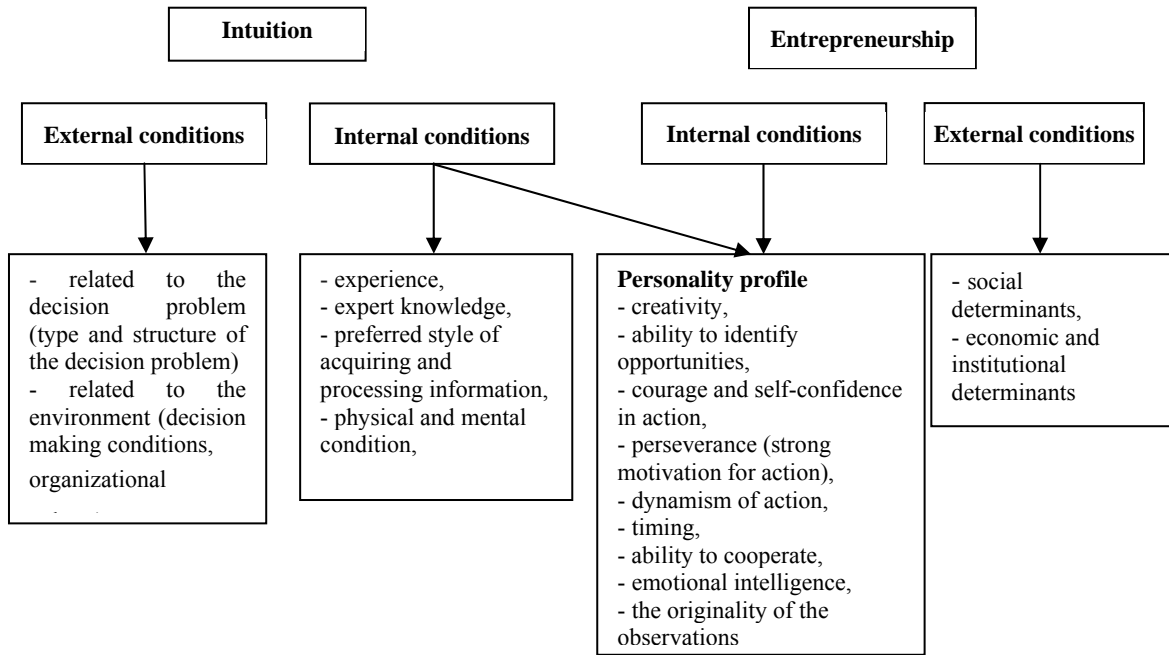


Figure 3 Determinants of Entrepreneurship and the Use of Intuition in Decision Making

Source: Own study

6. The Results of the Empirical Study

Based on the reference literature, it can be stated that the personality traits, predispositions and competences of intuitive managers are consistent with the traits and abilities of entrepreneurs. It can thus be concluded that individuals with these characteristics tend to undertake entrepreneurial activities and use intuition in decision making more often than others. In order to verify this theoretical assumption, a preliminary empirical study was carried out.

The study involved 30 senior managers. Only managers with significant intuitive and entrepreneurial potential were selected as the research sample (potential respondents were asked to assess whether or not they possessed certain predispositions and personality traits). Ultimately, the study was attended by managers characterized by the majority of the aforementioned features and capabilities typical of entrepreneurs and intuitive decision-makers.

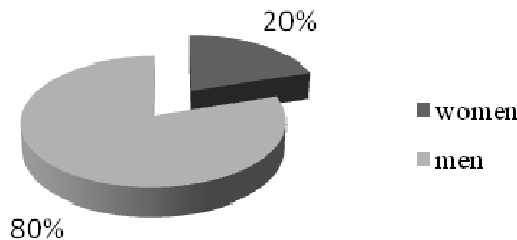


Figure 4 Characteristics of the Research Sample by the Gender of Respondents

Source: own study based on the survey conducted.

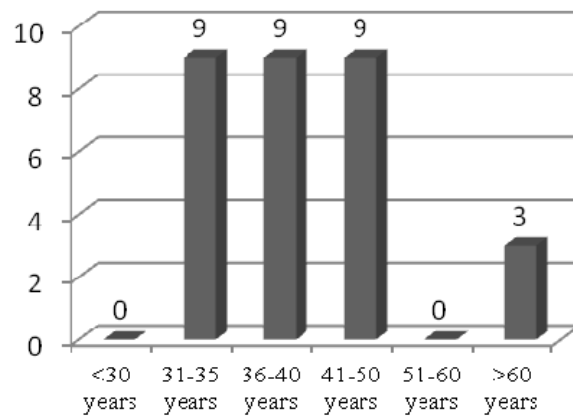


Figure 5 Characteristics of the Research Sample by the Age of Respondents

Source: own study based on the survey conducted.

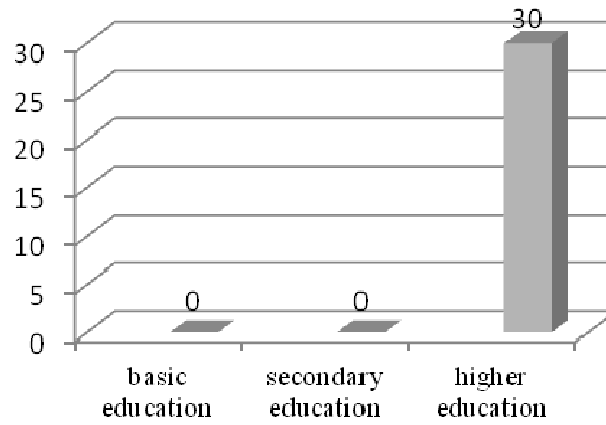


Figure 6 Characteristics of the Research Sample by Respondents' Education

Source: own study based on the survey conducted.

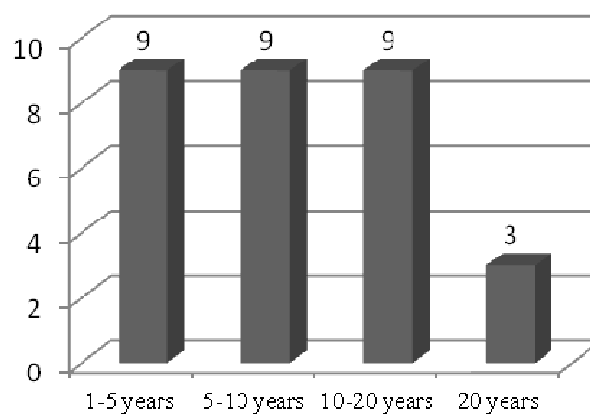


Figure 7 Characteristics of the Research Sample by Respondents' Managerial Experience

Source: own study based on the survey conducted.

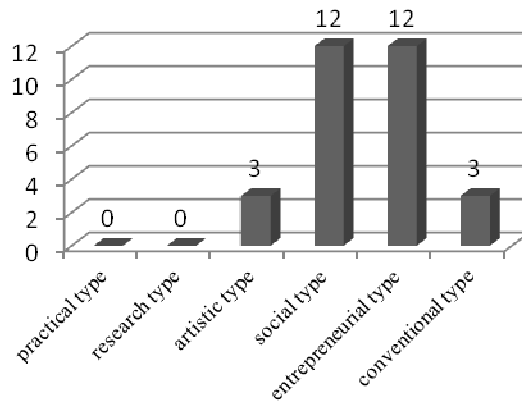


Figure 8 Characteristics of the Research Sample by the Personality Types of Respondents

Source: own study based on the survey conducted.

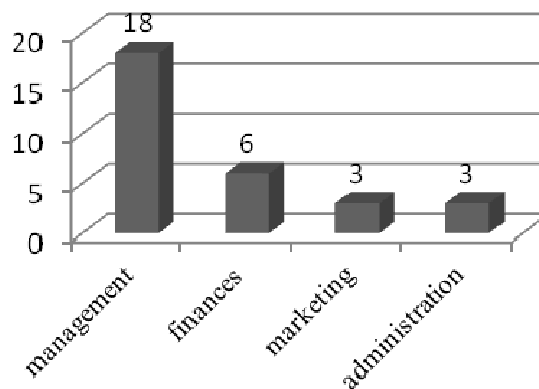


Figure 9 Characteristics of the Research Sample by the Functional Areas Represented by Respondents

Source: own study based on the survey conducted

As far as the gender of respondents is concerned, it can be seen that 80% of the managers surveyed were male and only 20% were female. Three age groups were dominant (30% of respondents aged 31-35, 36-40 and 41-50 years). Only 10% of the managers belonged to the age group over 60 years. All respondents had higher education. When considering professional experience in management positions, the managers represented all suggested time intervals (1-5 years: 30%, 5-10 years: 30%, 10-20 years: 30%, and over 20 years: 10%). The majority of respondents (61%) represented the functional area of management, followed by the area of finance (20% of respondents). The study showed that 10% of respondents worked in marketing and 10% of respondents were employed in administration. Personality type was another criterion characterizing respondents. It should be emphasized that this was a self-image of the individuals surveyed rather than an actual personality type, as the managers could assess themselves and choose the personality type best suited to their character. Ultimately, 40% of respondents declared the social type and 40% represented the entrepreneurial type. Artistic and conventional types were declared less often (each one was chosen as representative by 10% of respondents). Two personality types: practical and exploratory were not indicated by any of the managers surveyed.

The survey method was used in the study. The survey questionnaire consisted of three parts: respondent's particulars (where the decision-maker was characterized) and the diagnostic part, which included a section

identifying to what extent intuition was used in decision-making processes and a section defining the level of individual entrepreneurship. The section identifying to what extent intuition was used was developed by the author and referred to many aspects of decision making, such as: locating decision problems; sources of data and information; information processing; decision analysis; problem solving; evaluation of alternatives; risk and uncertainty management; documentation of the decision-making process; stages of the decision-making process; involvement of the decision-maker; presentation of the decision-making process and the decision made; and the logic of thinking. This part of the questionnaire consisted of 13 cafeteria questions. Just like in the AIM questionnaire developed by W. H. Agor, respondents had the opportunity to choose one of two possible responses to each questions. While one of them demonstrated the use of the intuitive approach to decision making, the other reflected analytical thinking. This solution enabled identification of the dominant approach and was based on the assumption that intuition is not a process that takes place independently of analysis. Both these processes are the key complementary elements of effective decision-making processes (Simon, 2007, p. 162). It would be hard to find two effective decision-makers, one of whom would only use intuition and the other would only use analysis techniques. It seems reasonable to propose a continuum containing various combinations of both approaches to decision making. The extreme points would be ‘pure’ forms of intuition and analysis rarely found in the practice of decision making (Tokarski, 2017).

In the other section of the questionnaire, the level of individual entrepreneurship was measured using a tool developed by W. Dyduch (Dyduch, 2003, p. 91). This part of the questionnaire consisted of ten questions. Each respondent could choose one of three possible responses.

As the research sample included managers with specific personality traits, predispositions and abilities indicating significant intuitive and entrepreneurial potential, it could be assumed that respondents should use intuition in decision-making processes and take entrepreneurial action in their management practice. The cognitive results indicate, however, that the majority of respondents were classified as rational decision-makers (60%) despite having a significant intuitive potential. Only 40% of them represented the intuitive approach to decision making. This means that having intuitive potential is not the same as using intuition in decision making. It can be assumed that the discrepancy between the level of intuitive potential and the extent to which it is used in practice results from a number of the aforementioned determinants. These determinants are both external (they are related to the environment in which the decision-maker works and the nature of the decision-making problem) and internal (they directly affect the decision-maker).

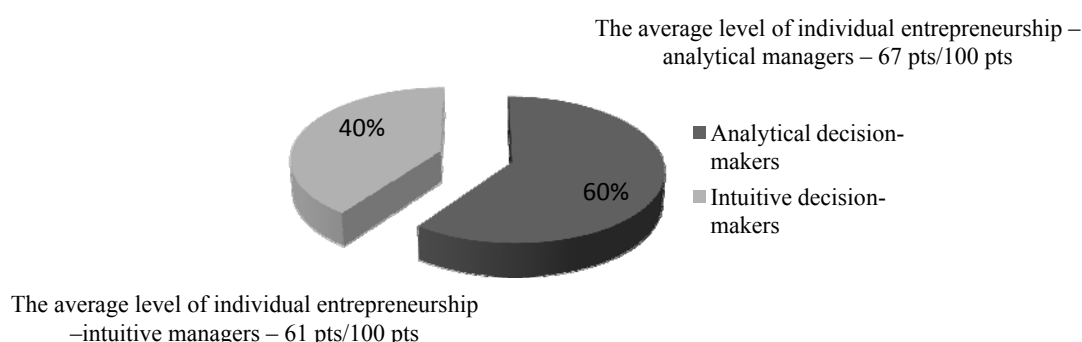


Figure 10 Use of Intuition in Decision-Making Processes

Source: own study based on the survey conducted

The analysis of the part of the questionnaire measuring individual entrepreneurship shows that the average level was 65 points out of 100 possible and was higher in the case of analytical decision-makers than in the case of intuitive decision-makers amounting to 67 and 61 points, respectively. Referring to the above results of the study on the level of individual entrepreneurship, it is difficult to explain discrepancies between the levels of entrepreneurship represented by intuitive and analytical decision-makers having considerable intuitive and entrepreneurial potential. Therefore, further in-depth empirical research is needed. It seems appropriate to analyze both the respondents who possess the traits typical of entrepreneurs and intuitive decision-makers and those who do not. The aim of this study would be to search for potential relationships between the level of entrepreneurial potential (possessing specific traits and predispositions typical of entrepreneurs and intuitive managers) and the extent to which it is used.

7. Summary

The art of decision making is one of the most interesting, yet open and complex areas of management. Why do managers so often make wrong decisions, and why do they rarely take right decisions? Statistical surveys conducted in the United States indicate that only 5% of companies have a chance of surviving for more than ten years. Although decision-makers have access to new technologies, free exchange of information, knowledge exchange communities, information banks and sophisticated decision-support systems, modern managers increasingly refer to their intuition in decision making, especially at the strategic level. This is due to the conditions in which managers are forced to operate. These conditions are characterized by high dynamics of change, pressure of time, a lack or excess of information and strong competition. As a result, managers are forced to appeal to their intuition and take the so-called entrepreneurial action. It can therefore be stated that both intuition and entrepreneurship are the answer to the specific conditions under which modern enterprises operate.

Based on these considerations contained in this paper, it can be stated that the characteristics of intuitive managers (their personality traits, abilities and skills) are to a large extent coincident with the characteristics of entrepreneurs. It is therefore possible that managers with these characteristics will be more inclined to use their intuition, take entrepreneurial action and adopt entrepreneurial attitudes than those who do not have these features. By referring to theoretical considerations, it can be said that entrepreneurial behaviors will go hand in hand with intuitive decision making. The personality traits, abilities and predispositions, described in this paper, typical for an intuitive decision-maker and entrepreneur will be translated into possessing considerable potential both intuitive and entrepreneurial. The use of this potential in practice will depend on the external determinants identified earlier. But the question of whether entrepreneur is always an intuitive decision-maker remains open and demands empirical verification. The preliminary empirical study in this area shows that having a high intuitive potential is not the same as using intuition in decision making. The actual extent to which intuition is used in decision-making practice depends on the internal and external determinants outlined in the article. It is difficult to conclude based on the study whether entrepreneurial potential (having specific characteristics, abilities and predispositions typical of entrepreneurs) translates into a high level of the manager's entrepreneurial individuality, since the respondents were exclusively managers characterized by a high level of entrepreneurial and intuitive potential. Therefore, it is not possible to formulate conclusions in this area. It seems reasonable to conduct research on a group of respondents characterized by high and low levels of intuitive and entrepreneurial potential. This approach will make it possible to answer the question of whether a low level of specific traits

typical of intuitive decision-makers and entrepreneurs translates into a low level of intuition used and a low level of individual entrepreneurship and vice versa, or whether there is no such dependence. It should be emphasized that these considerations are undoubtedly an interesting and forward-looking subject for empirical research. These research problems will be the subject of subsequent publications by the author.

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