

Knowledge Management in SMEs

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Abstract: According to a dictionary definition, ‘paradigm’ means “the accepted way of viewing reality in a given field, doctrine, etc.”. The word comes from Greek παράδειγμα (parádeigma) and literally means “pattern, example”. The definition of ‘paradigm’ devised by the philosopher Thomas Kuhn in 1962 describes it as a collection of concepts and theories that form the basis of a given science. Knowledge management, on the other hand, is a complex process, which includes: (1) management of employees’ intellectual potential, (2) management of knowledge resources, and (3) IT support for knowledge management. In a knowledge-based economy, knowledge is a strategic resource – both for individuals and enterprises – as it determines development and economic growth owing to processes of acquiring, accumulating and processing of information. Can the problem of ‘knowledge management’ be, therefore, treated as paradigm, or is it an economic concept, or, rather, the resultant of experiences, which, by definition, are practical, and not theoretical, in nature? The article aims to analyse the perception of this issue – the relationship between theory and practice – among small and medium-sized enterprises operating in today’s volatile market environment.

Keywords: knowledge management, SME, small and medium-sized enterprises, intellectual capital, business information

1 Introduction

The issue of knowledge goes back to Aristotle and Plato, whose theories are the foundations of two main currents in epistemology, although certain reflections on this topic can already be found in the Ionian school, in the theories of Miletus philosophers: Parmenides – an advocate of reason and rationality, and Heraclitus – a proponent of ‘panta rhei’ and sensual perception. According to an encyclopedic definition, on the other hand, knowledge is “the totality of reliable information about reality and the ability to use it”. Therefore, knowledge management becomes an interdisciplinary and complex issue, with so-called knowledge hierarchy model. It assumes the coexistence of (1) data – raw facts and numbers, (2) information – processed data, which can be collected and processed via various electronic media, and (3) knowledge, which is a human domain and involves interpreting cause-effect relationships [19]. The top element in this hierarchy is wisdom, which is the maximum level of knowledge, and which may also exist in the context of a particular organisation, taking into account the specific nature of its activity. Wisdom would, in that case, mean the ability to put the knowledge resources at hand into practical use. Knowledge based on data and information is, after all, a much broader concept, closely related to a person or organization acting as its administrator. It is also an interlinked item, because the two basic links of the model, data and information, may be present on their own, in the form of independent sets, databases or documentation, and be stored in a computer or other electronic devices, but knowledge – which assumed the necessity of a human element – is not. It is a combination of both rationalism: the obtained data and information that is hard records, and empiricism: the experience, intuition and understanding of its owner who stores it in their own mind.

Knowledge in organisations is usually present in the form of documentation, procedures, processes, practices or applicable standards. The most common classification in the literature on the subject divides knowledge into: (1) explicit knowledge, and (2) tacit knowledge, or, in other words, public and private [17].

Explicit knowledge is organised and systematised – through signs, words, symbols or numbers – with an easily articulated set of processed data and information. It is stored in the form of (usually) public reports, and also constitutes

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the content of manuals or patents. It is normalised and systematic, which makes it easy to store, process and transmit via computers and other new technologies.

Tacit knowledge, on the other hand, is hidden in human minds. Hence, it is individual in nature, which prevents its formalisation, mass processing and distribution. Its components include intuition, the culture of an organisation which creates individual experiences, ideals, values, priorities, as well as the emotions of individuals. Assuming that in a knowledge-based economy it is the basic resource of an organisation, it should be perceived as the sum of intellectual assets of each employee, team and department which make up the organisation. Further complexity is added to the problem by the fact that the holder of such knowledge is often unaware of its value and the possibilities of using it, hence its formalisation and transmission becomes all the more difficult and limited.

According to A. Toffler, knowledge has four basic attributes:

- (1) dominance – it is the key resource of strategic importance,
- (2) inexhaustibility – its use does not deplete the resources, on the contrary, it adds further value,
- (3) simultaneity – it can be used at the same time by different people in different places in the organisation,
- (4) non-linearity – the amount of the resources possessed does not determine the possible effects [22].

Therefore, its unique character has a decisive impact on the creation of exceptional values which enterprises, in the very competitive economic environment, can use to find their identity to distinguish themselves from others [10].

2 Models of knowledge

Literature on the subject shows attempts to observe practices related to knowledge management and to systematise them, for purposes of efficiency, thus enabling the creation of certain patterns of organisational behaviour. There are, indeed, certain models for generating knowledge in an organisation:

(1) The Japanese model, also known as the theory of organisational knowledge creation, which considers the role of explicit knowledge as insufficient – being only a small part of knowledge available in organisations. An important element of this model is processing – conversion of tacit knowledge into explicit knowledge through a continuous process. The model was developed by two Japanese men, Nonaka and Takeuchi, in the early 90s in the form of a ‘knowledge spiral’. Explicit knowledge is, according to this model, part of tacit knowledge that can be systematised so that it is transferable. An important element is the repetitive cycle between the two types of knowledge, consisting of four knowledge conversion processes:

- socialization, or the conversion of tacit knowledge into tacit knowledge,
- externalization, or the conversion of tacit knowledge into explicit knowledge,
- combination, or the conversion of explicit knowledge into explicit knowledge,
- internalisation, or the conversion of explicit knowledge into tacit knowledge [17].

(2) The resource model, in which knowledge is treated as a strategic resource and a source of competitive advantage, the precursor of which is D. Leonard-Barton from Harvard Business School. The basis of this model are core competences and core capabilities which concern both internal conditions and the business environment, embedded in the present and in the future, clustered around key skills of all employees and in each area of the organisation’s activity:

- common problem solving,
- experimenting,
- implementation and integration of new tools and technologies,
- Importing of knowledge [8].

(3) The process model, in which the process of creating knowledge is of utmost importance to an organisation, has been devised by P. Murray and A. Myers and assumes that a knowledge management process is the totality of the processes of creating, disseminating and using knowledge to achieve the organisation’s goals through a three-stage learning process:

- Knowledge acquisition (creating and developing of new qualifications, technologies, and methods, or purchasing them from outside, acquiring of specialists and experts),
- Knowledge dissemination (locating of knowledge in the organisation, sharing it and replicating ready-made solutions),
- Use of knowledge (integration of learning and application in new conditions) [16].

There are numerous publications by proponents of the process approach, such as T. Davenport and L. Prusak, who also distinguish three stages:

- Knowledge expansion,
- Knowledge codification,
- Knowledge transfer [3, 4; see also 2].

The theory proposed by W.R. Bukowitz and R.L. Williams is also worth mentioning. It suggests a five-stage model:

- knowledge acquisition from the environment,

- use of knowledge in the organisation,
- estimation of knowledge assets in the organisation,
- maintenance of knowledge assets,
- sale of knowledge in the form of new products, services or technologies [1].

Furthermore, G. Probst, S. Raub and K. Romhardt distinguished six stages in their process model as being key to knowledge management:

- knowledge location,
- knowledge acquisition,
- knowledge development,
- knowledge sharing and dissemination,
- use of knowledge ,
- knowledge retention [19].

It is important to note that each model can be implemented in enterprises at the same time, which, depending on the specific nature of the industry, the area and scope of the company's operations, and, in particular, its size, may generate much higher efficiency. The positions presented above have led to the creation of a diagram representing the shared features of all the models described, being key components of a mixed model of knowledge management (Figure 1).

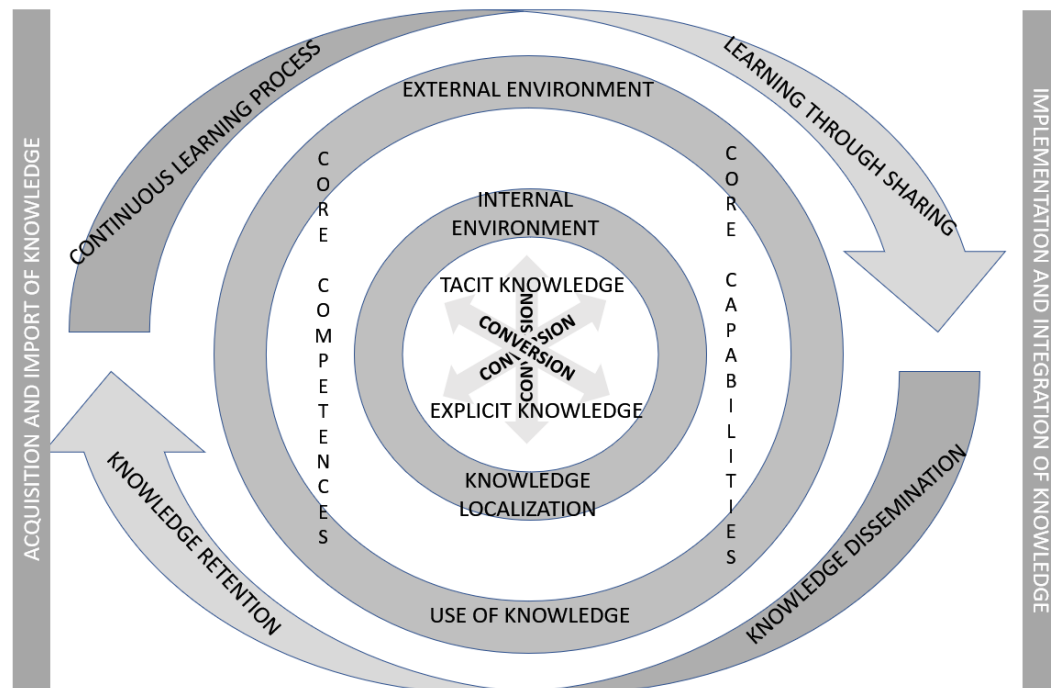


Fig.1: Mixed model of knowledge management.

Organisations which continue to learn, by skilfully combining the experience of their employees and external cues, implement new processes and projects at a much speedier rate, thus both maximising and benefiting from the intellectual potential of their resources. To create such an environment, trust is required – both in the general human sense and in relation to collecting whole sets of knowledge to be processed – in each aspect of business activity. Knowledge management is not only one of the implementable and practicable suggestions of how to solve problems in enterprises, but it primarily is an open-minded way of thinking, arriving at constructive conclusions from one's experiences and managing the intellectual potential of human resources. In their development, small and medium-sized enterprises face many obstacles. They have, for example, always faced credit discrimination, defined by J.K. Galbraith in 1957, which significantly affects their ability to grow and operate on a global scale, especially when it comes to tools which support their management and failure to see the intellectual potential of their employees [6,7, 9, 11].

2 Management Strategies in SME

Every organisation – regardless of its size or profile of activity – is different. This is due, in particular, to having different resources, operating in different areas and economic environment, and, above all, satisfying different needs and pursuing other goals. The literature on the subject assumes that any organised activity should serve four basic functions:

- (1) Provide direction for action to all participants in the organization.
- (2) Enable and facilitate planning and coordination in the organization.
- (3) Enable focusing the attention of employees from all levels of the organisation on its main goal of activity by indicating a certain pattern of behavior.
- (4) Formulate standards for measuring performance on the basis of goals.

Therefore, goals should be clearly and precisely stated, they should be specific and moderate in difficulty, should be measurable, and should motivate and support work efficiency, effectively assisting the management process [18].

As for the management process itself, it should be noted that it is an activity whose subject is always a person, or a team of people, and the object is a person, or a team of people, and the things that they use in the course of deciding on the type and size of goals. Therefore, organisation management can be analysed on two levels: functional and procedural.

The functional approach addresses the interaction of management functions – activities that ensure the achievement of the organisation's goals. The first classification, which consists of five functions, was developed by H. Fayol (1916), who distinguished: (1) anticipating – analysis of the future and making determinations regarding appropriate action plans, (2) organising – taking into account the material and the social organism, (3) ordering – causing “the personnel to function”, (4) coordinating – combining and, simultaneously, harmonising all activities and efforts in the enterprise, (5) controlling – ensuring correctness and compliance with established regulations and issuing orders [5, 21]. As those concepts evolved, the current form of this approach has emerged, composed of four functions of management, which is defined as formulating the goal of action and the manner of its implementation by coordinating and motivating:

- (1) planning – setting goals and deciding on the directions of organisational activities, and defining strategies and plans to support their achievement,
- (2) organising – activities aimed at integrating team activities and organising individual work stations, so that the goals set by the organisation can be worked towards and achieved as part of the work process owing to the coordination of tasks,
- (3) motivating – promoting an approach among the team which will enable them to implement the tasks and goals set by the organisation – both for individuals and for the team,
- (4) controlling – making temporal comparisons of the state achieved with that desired.

The process approach describes information/decision feedback between the managing entity and the object of management, with three levels of organisation: (1) low-level, (2) mid-level, and (3) high-level, represented by three subgroups of managers with specific roles: interpersonal, (2) information, and (3) decision-making [12, 13, 20, see also: 14,15]. From this point of view, the dependencies that exist between management functions are important, where:

- (1) as the management level goes up, the importance of the control functions decreases, and the importance of planning functions increases,
- (2) as the management level goes up, the role of technical skills decreases and the role of conceptual skills increases.

Planning is the most important management function. In order to be able to organise, control and motivate employees, it first needs to be determined what, by whom, when and where has to be done through main and auxiliary objectives, hence the literature on the subject often refers to planning as the primary management function. Its essence is the development of the organisation's response to changes taking place in the economic environment and to accurately identify future directions of development, while taking into account the organisation's capabilities and resources. Special attention should be paid here to the fundamentals of the knowledge-based management theory, which involves a division into four categories: (1) know-what – knowledge of facts and specific data that can be expressed in words and numbers, stored and transmitted; it is synonymous with information; (2) know-why – knowledge of the laws, principles, and cause-and-effect relationships occurring in nature, the human mind, and the society; (3) know-how – knowledge of skills and experiences which are the basis for practical operation, expressing itself through the qualifications and skills possessed; (4) know-who – knowledge of who knows what and to what extent they specialise in it.

One of the most important elements which permits organisations to achieve their goals is their structure and organisational form, ensuring an internal flow of information and enabling employees to gain correct understanding of and verify their tasks. Conflicts in enterprises usually arise at the interface of internal departments, however, they are also frequently found across both vertical and horizontal structures. Contemporary models of learning organisations are based on coordination and horizontal structures which enable demonstration of engagement and impact on business management. H. Mintzberg has identified five organisational forms:

- (1) Simple Structure – informal ties are dominant, management power lies in a single person's hands (owner, general manager), there is lack of formalisation, flat hierarchy, quick reaction to changes and flexibility of decisions; the success of the organisation depends on the competences of one man;

(2) Machine Bureaucracy – functions in a steady environment, is characterised by a high degree of work stability, decision-making powers depend on the hierarchy in the organisation, its formalised nature limits the autonomy of members in the organisation;

(3) Professional Bureaucracy – members of the organisation have very high qualifications, it is formalised and imposes organisational behaviour (hospitals, universities, libraries, consulting companies);

(4) Divisionalized Form – many independent units are responsible for the entire manufacturing process, operational management belongs to middle management, there is a risk of duplication of functions in the organisation;

(5) Adhocracy – informal, organic structure in which specialists work in teams as part of specific projects, and structures adopt changes and innovations quickly [12,13].

In the context of conducting research on SMEs, it should be noted that the first and the fifth model are organizational forms which most accurately reflect their structure in market economies. SMEs dominate today's global economy. They account for more than 99% of all businesses in the market and have direct influence on key macroeconomic indicators, such as GDP or the number of people they employ (in Poland: 50% and 75% respectively). Therefore, the knowledge management competence among those who manage three-quarters of all Polish population capable of work should be an especially weighty and economically justified subject. Although they are smart and agile, showing flexibility and ability to react in flat management structures despite the shortages they face virtually every step of the way and the limited access to capital, it is their fundamental strategy, “first and foremost – survive”, that determines the behaviours and models of operation of enterprises of this size, thus affecting the strategies they employ. Managing a knowledge-based organisation is, however, a distinctive feature because it makes the enterprise unique, which, in a world of striving for continuous improvement of quality, becomes an added value given of any business. The activities of SMEs are primarily accompanied by seven strategies, which can be further diversified for micro and small enterprises, on the one hand, and for medium-sized enterprises, on the other, where management begins to adopt models similar to those found in large enterprises. The order in which they are listed reflects how frequently they are used (figure 2):

(1) specialisation, or entering a niche: a) market niche – e.g. a single type of customer, b) product niche – e.g. product versions with extra features, custom-made products, or a single distribution channel, or c) geographical niche – e.g. presence in a single region

(2) cooperation – non-contractual, contractual, coordinated, e.g. shared information platforms, loose concentration, e.g. appointment of a single representative, compact concentration – formation of business associations

(3) gradual diversification – switching to other markets/products/industries

(4) differentiation – requires constant innovative activities, enables production of limited series and attracting the consumer with customised goods and services (e.g. being the first business on the market recognisable in a certain area, appropriating attributes such as reliability, referring to tradition, being based on specialisation)

(5) evasion – avoiding confrontation by finding market segments with low market attractiveness or building a unique image in the eyes of customers.

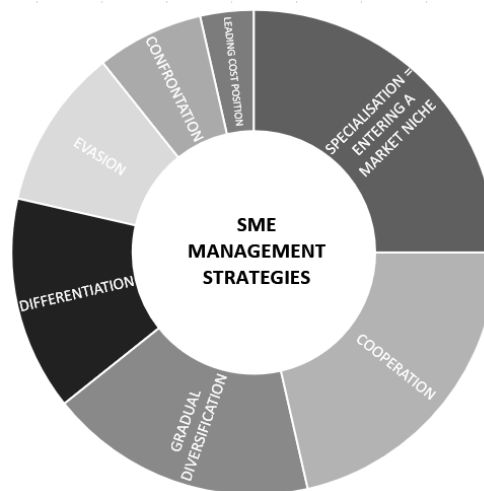


Fig. 2: SME management strategies.

(6) confrontation – conducive to innovative, bold activities that promote dynamic development;

(7) leading cost position – seeking markets in which cost minimisation maximises margins (not applicable to the luxury goods market) and acting fast to exploit perceived market opportunities.

An important aspect – from the point of view of management strategies for micro, small and medium-sized enterprises – are the characteristic features of management in enterprises of this size, models of which differ significantly between the

smallest enterprises (with 0 to 9 employees), small enterprises (with 10 to 49 employees), and medium-sized enterprises (with 50 to 249 employees) (Table 1).

Table 1: Characteristic features of management in SMEs.

FEATURE	SIZE OF ENTERPRISE		
	MICRO	SMALL	MEDIUM-SIZED
Strategy statement	“First and foremost – survive”	Intuitive	Procedures
Form of strategy	Informal, imprecise	Informal, imprecise	Strategic plan is more often in place
Use of strategic analysis techniques	None, frequent referencing to the environment	None, strategy based on experience	Typical qualitative techniques, seldom quantitative techniques
Timeframe	From 1 to 5 months	Short, from 6 to 12 months	From 1 to 3 years
Cost of strategy development	Low	Low	Higher
Strategy implementation	Immediate	Possibly fast (low resistance to changes)	Over a longer period of time (higher resistance to changes)
Strategy performance monitoring	Direct	Direct	Indirect
Possibility of modifying the strategy	Within a short period of time	Within a short period of time	Usually over a longer period of time - depends on the specific nature of the enterprise

It is also worth noting that SME activities are focused on using mainly money market solutions, and they often forget, and even are not aware of, the solutions that the capital market offers. And yet, the functioning and rules of the financial market, as well as the access to it, are now global.

3 Knowledge Management in SMEs

Essentially, the use of concepts associated with the idea of paradigm seems unquestionably prevalent in any area. They are created in the form of scientific theories recognised by most researchers. Why, then, can one so often see a dogmatic approach to scientific issues in the literature regarding the theory of the subject matter in question? Knowledge management is about intellectual resources and, for that reason alone, is not only a complex but also an interdisciplinary issue, as it touches upon social capital and human resources – thus sociology and psychology – and as regards the behaviour and attitudes of both managers and their people – also philosophy and ethics. Nowadays, business information has become an academic subject, the various aspects of which, whether economic, technical, psychological, sociological, linguistic, legal or ethical, are discussed in detail, with topics ranging from economic benefits of information, its usefulness, costs and profitability, to the use of psychological effects of information in marketing and building market position. The concept of information is gaining increasingly spectacular definitions, and the processes associated with it are being referred to as the most important factors of success in the modern, highly competitive market.

Skilful acquisition and use of available knowledge resources can be a factor in increasing the efficiency of management processes, and thus directly affecting the level and effectiveness of one’s business goals. T. Khun claimed that “the man who makes an attempt to solve a problem defined by the existing knowledge and technology has no broader horizons. They know what they want to achieve and, in compliance with this, they design their tools and they are driven by their own thoughts”. Thus, he paints a picture of scientists as biased and conservative thinkers who seek to confirm in reality what they have been taught and what has been applied in existing theory as an authoritative way to solve problems.

The building of learning organisations is not easy – neither in theory nor in practice. Introducing new solutions is always accompanied by changes. Usually, these are not perceived positively by employee teams, especially when they are accompanied by an element of innovation – to eliminate human error. The promoter of a knowledge-based society, P. Druker, at the end of the last century defined the changes that must take place for such a society to come into existence. Knowledge has become widely available and its absence does not justify incompetence or ineffectiveness. He predicted that poverty is experienced by countries, organisations or people who are backward and ignorant. A knowledge-based enterprise is, therefore, no longer an innovation. In the face of ubiquitous globalization, it is a necessity in order to “first and foremost – survive”. Therefore, the answer to the knowledge management question should be sought among aspects

of internationalization, because there should be no “whether”, but “how and when” to start going global. The relevant literature discusses the issue of knowledge management primarily in relation to large enterprises, ignoring the specific nature and possibility of adapting solutions to the opportunities and alternatives offered by micro scale. Any attempt which illustrates the implementation of solutions related to knowledge management among SMEs is, therefore, a valuable sample showing the perspectives and variants possible for this sector.

3.1. Methodology

The article presents, against the background of a literature review, the results of own research conducted in the years 2016-2018 on a group of over N=300 Polish entrepreneurs representing the SME sector. Those results were analysed in terms of: (1) nominal variables, (2) qualitative characteristics, (3) continuous quantitative traits, (4) discrete traits. The results have been compiled into summaries in order to better illustrate the differences occurring in SMEs conducting various types of economic activity, which had been divided by source of financing to fund their business (I – entrepreneurs who use capital market solutions; II – entrepreneurs who do not use capital market solutions).

The results indicate certain differences, gaps and threats occurring between the perception of the issue of knowledge management in Poland in terms of the place and legal status of the business, as well as the socio-economic impacts observed by SME owners in terms of behaviour, expectations and choices made by those who manage enterprises of this size. The issue of perception of the role of information in business and the specific nature of some areas of its tasks and functions against the background of empirical research is presented. To obtain the results, mathematical analysis tools and elements were used, and the responses and trends elicited from the respondents were demonstrated using tables and graphs, based on a group administered questionnaire containing open and closed questions based on a 5- and 7-point Likert scale, and a chi-square test. The enterprises were examined in order to compare the level of involvement and implementation of knowledge management processes among SMEs operating in the Polish market.

3.2 Knowledge Management in SMEs in the Light of Empirical Research

The results of research conducted among SMEs operating actively in the region of Wielkopolska showed that willingness to improve knowledge about the capital market decreases as the size of the enterprise increases among those who have used capital market instruments (enterprises I: micro – 94.4%, small – 90.3%, medium-sized – 87.5%, respectively). However, the same does not seem to be true for enterprises which have not used any capital market solutions (enterprises II: micro – 84.8%, small – 95.1%, medium-sized – 94.6%, respectively).

Due to the multifaceted nature of the concept of knowledge, as regards both qualifications and competences indicated by the owners in relation to barriers – among which the barrier associated with finding qualified employees came in second place – this issue was analysed in terms of using capital market instruments by micro, small and medium-sized enterprises. Among the respondents from both surveyed groups, there was not a single area of training found which would not require the improvement of knowledge on sources of financing (Table 2).

Table 2: Structure of entrepreneurs declaring the need to raise the level of knowledge in the field of sources of financing [%].

ENTREPRENEURS I							
YEARS	2016-2018						
SME	0	1-4	5-9	10-24	25-49	50-249	Total
Stock exchange	57.9	37.5	44.4	42.9	58.8	54.2	51.6
Private equity	57.9	12.5	22.2	35.7	52.9	29.2	38.5
EU schemes	73.7	87.5	77.8	78.6	82.4	70.8	76.9
Public funds	47.4	75.0	66.7	57.1	64.7	50.0	57.1
Banks	26.3	50.0	22.2	21.4	35.3	33.3	30.8
No answer	10.5	0.0	0.0	7.1	11.8	12.5	8.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ENTREPRENEURS II							
YEARS	2016-2018						
SME	0	1-4	5-9	10-24	25-49	50-249	Total
Stock exchange	65.4	52.0	46.3	57.7	60.0	62.5	57.4
Private equity	38.5	28.0	17.1	30.8	37.1	33.9	30.6
EU schemes	50.0	60.0	58.5	69.2	80.0	62.5	63.6

Public funds	30.8	44.0	34.1	61.5	57.1	50.0	46.4
Banks	23.1	36.0	26.8	34.6	45.7	35.7	34.0
No answer	19.2	16.0	12.2	7.7	2.9	5.4	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Analysis of the shares of data obtained in 2016-2018 indicated interest in both training on the stock exchange and private equity funds. Among entrepreneurs I, self-employed individuals (57.9%) and small companies employing more than 25 people (58.8%) are interested in the stock exchange. Similar figures were obtained for private equity funds (57.9% and 52.9%, respectively). Among entrepreneurs II, the highest interest in expanding knowledge on the opportunities offered by the stock exchange was expressed by self-employed individuals (65.4%), followed by small enterprises employing more than 25 people (60%) and medium-sized companies (62.5%). They are, however, definitely less interested in private equity than entrepreneurs I, and, at the same time, declare a high level of willingness to broaden their knowledge about the opportunities offered by EU programmes and public funds (Charts 1 and 2).

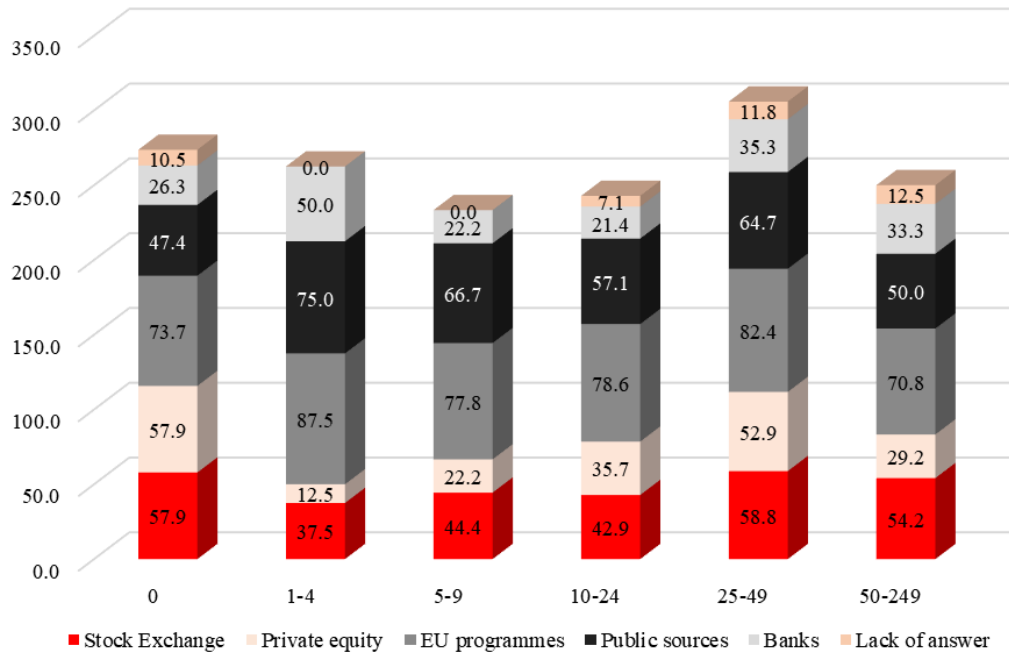


Chart 1: Structure of enterprises I willing to gain more knowledge [%].

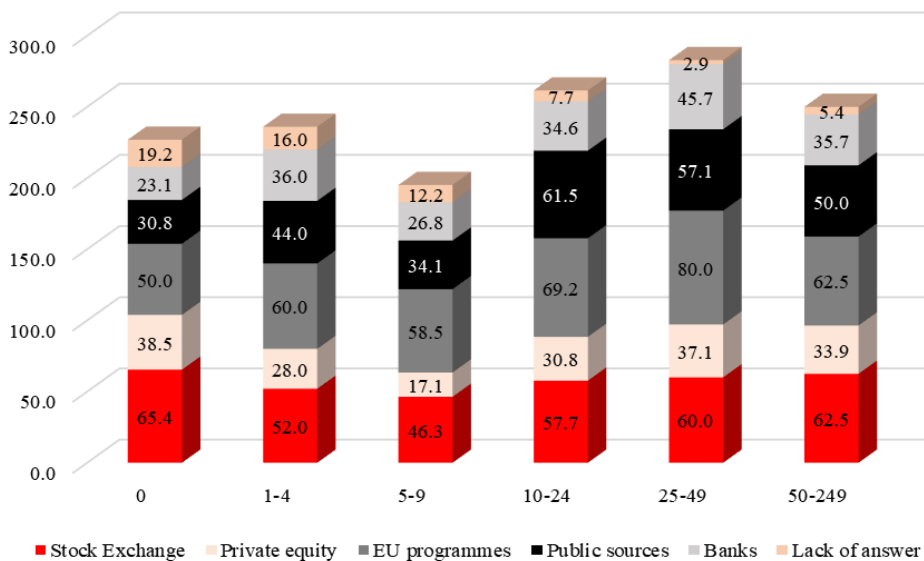


Chart 2: Structure of enterprises II willing to gain more knowledge [%].

The surveyed entrepreneurs pointed to issues that they would like to learn about more by participating in training courses. In both groups (I + II), their share was in excess of one-third, with entrepreneurs I being more interested in private equity solutions, and entrepreneurs II – in the stock exchange (38.5% and 32.5%, respectively) (Charts 2 and 3).

When comparing trends between the analysed enterprises, it should be noted that they are not homogeneous, either in the case of the stock exchange or private equity funds. Over three successive years the figures described below were obtained.

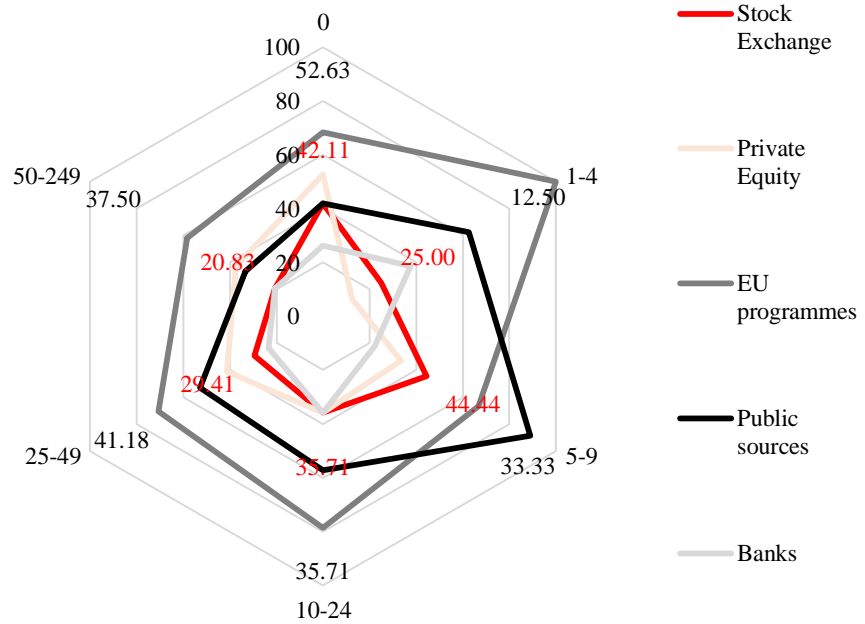


Chart 3: Share of entrepreneurs I willing to participate in training courses [%].

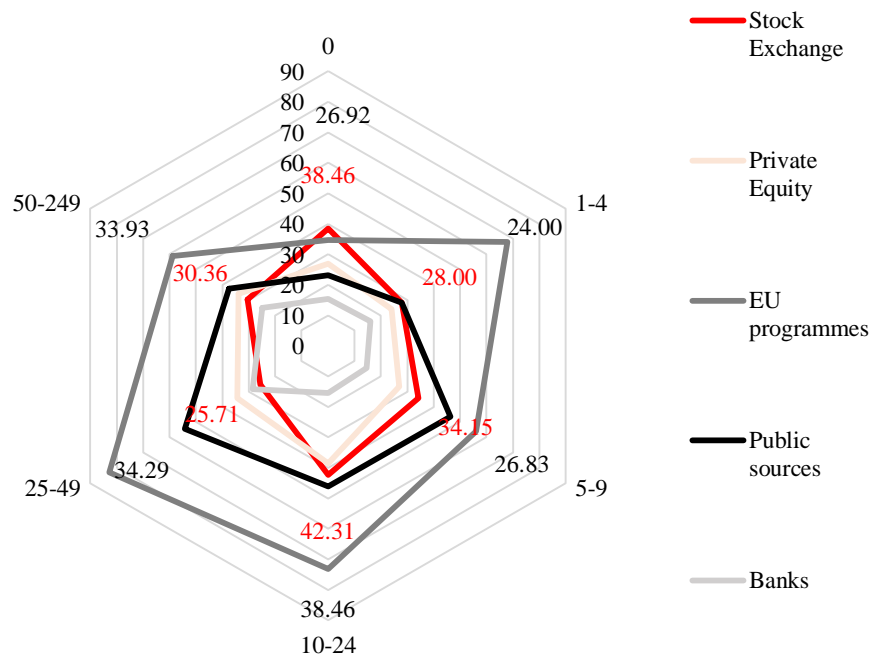


Chart 4: Share of entrepreneurs II willing to participate in training courses [%].

For the stock exchange: 2016 – 35%; 2017 – 38.7%; 2018 – 25%, and for private equity: 2016 – 30%; 2017 – 45.2%; 2018 – 37.5%. Similar dependencies are found among entrepreneurs II: training courses on the stock exchange: 2016 – 31.3%; 2017 – 40.6%; 2018 – 25%, and on private equity: 2016 – 27.5%; 2017 – 34.8%; 2018 – 31.7%. Top interest was generated by EU programmes: 70.3% for entrepreneurs I and 62.2% for entrepreneurs II. Interesting conclusions are also revealed by statistics on the number of enterprises which are committed and willing to participate in training courses: 100% among entrepreneurs I and 67% among entrepreneurs II (Charts 3 and 4).

The research results lead to the conclusion that, quite clearly, the owners of enterprises who had become involved with the capital market are willing to constantly improve their qualifications and knowledge about solutions that provide effective sources of financing. This aspect is important because issues related to knowledge management in knowledge-based economies are becoming increasingly significant. The human role – after all the enthusiasm associated with maximisation of processes, their optimisation and propagation onto all areas of management – returns to important issues of effective management, becoming a continuous process in shaping the knowledge element, and to the importance of business information and building lasting relationships on every possible relationship platform. Once again, know-whom positioned itself beside know-how, both in the literature on the subject and in economic practice.

In view of this picture of knowledge on capital market instruments as well as the willingness to implement continuous training processes in the surveyed companies, entrepreneurs indicated the amounts that they would be willing to spend on training. Although in each of the years under examination business owners were willing to spend the most on stock exchange and private equity training, the price of which should, in their opinion, average between PLN 309 and PLN 679 (about EUR 74-162), with the stock market being valued the highest, those figures remain definitely insufficient to organise any training. Therefore, it can be concluded that either acquiring professional knowledge continues to be perceived by SMEs in terms of cost rather than investment – and the lower it is, the better the efficiency of the enterprise – or their knowledge of market prices for improving qualifications is extremely scarce, making them unaware of market conditions in that area. The latter possibility implies another conclusion – entrepreneurs do not use external training to improve their own qualifications and those of employee teams in the area of obtaining effective sources of financing.

The results of research on training courses were elaborated on through additional analyses regarding the occurrence of dependencies resulting from a possible correlation between having previously used external financing and the amounts allocated by entrepreneurs for training (Table 3).

Table 3. Willingness to pay for training on the stock exchange and private equity among entrepreneurs I and II

TOPIC OF TRAINING	Entrepreneurs I						Entrepreneurs II					
	N	Levene's test for homogeneity of variance				Two-tailed significance	N	Levene's test for homogeneity of variance				Two-tailed significance
		F	Signific.	t	df			F	Signific.	t	df	
STOCK EXCHANGE	65	7.133	0.01	1.745	63	0.086	152	20.584	0	2.853	150	0.005
PRIVATE EQUITY	65	22.052	0	3.062	63	0.003	146	9.343	0.003	2.102	144	0.037

I – entrepreneurs who use capital market solutions; II – entrepreneurs who do not use capital market solutions

Source: Own research

Having adopted the significance level commonly used in social sciences, $\alpha = 0.005$, chi-square stochastic tests and Levene's test for homogeneity of variance were carried out, which revealed the existence of a stochastic relationship, therefore it can be concluded that entrepreneurs who have used external financing are willing to pay more for training on both the stock exchange and private equity funds. No similar correlation in the area of public funds and banking was found.

4 Conclusions

Small and medium-sized enterprises have always been accompanied by one goal: “first and foremost – survive”. Knowledge management involves possession of knowledge. This, in turn, is a collection of information that is not necessarily sufficiently appreciated by the managers in the SME sector due to the very large share held by the business owners themselves and their often patriarchal system of doing business. The results of the research indicate certain diversity both in the way of managing knowledge and the possibilities of acquiring it. This concerns both the ability to

choose the necessary training which will improve qualifications among managers and employees, but, above all, to see the needs in order to enable progress of the surveyed enterprises. Own research has shown that small and medium-sized enterprises are knowledge-oriented and aware of its importance for the development of the company, especially those that use alternative sources of financing from the capital market for their development. At the same time, the use of processes related to the management of knowledge categories and the willingness to improve qualifications in the surveyed areas was discovered. The main differences, however, are due to the legal status of the businesses, which determines the ability to use capital market instruments, therefore the perception of the need resulting from the possibilities offered by knowledge management processes seems definitely limited.

Social sciences, by definition, enable interdisciplinarity. The results of the research indicated this component, namely practitioners who, while struggling with the day-to-day management of the company and being unable to name the processes taking place using terminology defined in the literature on the subject, do use tools indicated by renowned scientists in their academic publications. The strength and consistency of combining theory with practice, in this case – the competences and education of SME managers, is a key indicator that requires continuous improvement in enterprises of this size. Knowledge management in SMEs is, therefore, consistent with the strategies they employ and, depending on the size of the enterprise, it is both theory and practice – paradigm and experience.

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