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Knowledge Management in the 'New Economy' Transport Entreprises in Poland

Introduction

A change is taking place at the turn of the 20th century in the paradigm of economic space inspired by scientific and technical progress. The fundamental barrier for shaping all types of social and economic relationships – physical distance, expressed e.g. in metric units – has become subject to economic relativization. The so-called "death of distance" moves the accent in economic management towards the exchange of the widely understood information. The dimension of economic space is changing increasingly clearly - despite globalisation - from a macro level, into the individual microcosm of individual commercial entities. Similarly, our responsibility for functioning in social and commercial life is increasing. Transport, forwarding and logistics (TFL) companies are also attempting to adjust to this situation. Regardless of the type of organisation they represent (mechanistic, self-organising, cultural, learning) the key problem they face is becoming the skilful management of the potential of their own employees. Knowledge management facilitates competitiveness of the TFL services offered, as well as development. Polish TFL companies are at the beginning of the road towards building awareness of knowledge management, and the few success stories in this area only help confirm this theory.

Change in the paradigm of communications space

The paradigm methodologically means the generally acknowledged scientific achievement, which provides model solutions[1]. According to Th. S. Kuhn's theory[2], the development of individual scientific disciplines, which are often based on the concept of a paradigm, are of a cyclical nature moving through three fundamental periods:

- The emergence of the paradigm and its acceptance as the basis for scientific research (the so-called period of normal science),
- The discovery of facts questioning the paradigm (the so-called period of crisis),
- The appearance of new scientific achievements that become the basis of fundamental qualitative changes in a given science.

In recognising the difficulty of applying theories of paradigms in social sciences - due to even the subjectivism of the defined, prevailing social value systems - we wanted to take advantage of the discussion on the subject of the "New Economy" for the formulation of a brief, **theoretical reflection on the subject of the significant changes in the sciences related to man's conquest of space.** All the more so that the problems mentioned have recently been becoming the subject of lively discussions among theoreticians and historians of science and technology, in this case – of transport and communications. Since there is nothing as practical as a good theory, specific examples of particular companies from the sector of forwarding, transport and logistics companies will be used to illustrate the qualitative changes in the sciences related to the economics of overcoming space. So far, we have described the effects of research into the level of introduction of electronics into Polish companies in the TFL sector and the growing awareness of the challenges placed on them by the "New economy"[3]. It now seems as if the time has come to define the more general laws in the area of transportation studies, as well as a description of the revolutionary effects of changes in social and economic life inspired by scientific and technical progress in this area of economic activity.

[1] PWN General Encyclopaedia, Warsaw 1985, vol. III, pg 465.
[2] Th. S. Kuhn, The Structure of Scientific Revolutions. PWN, Warsaw 1968.
[3] J. Brdulak, "The New Economy" and information technologies being a factor of change in Polish transport (in:) "The New Economy" and its implications on long term growth in post-socialist countries, under scientific editor G. Kołodko, WSzPiZ, Warsaw 2001, pg. 265-276 and J. Brdulak, Old problems of introducing IT into Poland's "new transport economy" (in:) "The New Economy" and old problems, under scientific editor G. Kołodko and M. Piątkowski, WszPiZ, Warsaw 2002, pg. 241-248.

Space in economics materialises in the form of a series of research disciplines including:

- Commercial (economic) geography,
- Space management,
- Land planning,
- Planning policy,
- Regional economics,
- Urban economics,
- Infrastructure policy,
- Transport economics,
- Communication economics,
- Logistics,
- Proxemic behaviour.

Recent years have been bringing huge qualitative changes in each of the scientific disciplines mentioned above. Some of them are inspired by the most general, the most theoretic discussions on space. We find in them the familiar methodological dualism, which recalls the generally accepted approach to the modern problems of social and economic life. On the one hand, we consider space in the context of its relationships with time and field of gravity (time and space in A. Einstein's general theory of relativity), and on the other – in analysing the atom, the fundamental building blocks of time and space, we try to consolidate Einstein's geometrical world with quantum physics[4]. In economic sciences on space, we similarly refer on the one hand to the general laws and phenomena on a macro scale (e.g. globalisation with its consequences), while on the other - we reach out to the elementary issues on a micro scale, which are related to the behaviour of individual commercial entities and private individuals.

An example of the qualitative evolution of economic sciences related to space is the innovative paradigm of regional development formulated by Bohdan Gruchman[5]. The author

[4] A. Ashtekar, J. Lewandowski, Time and space - moving beyond Einstein's theory. Rzeczpospolita dated 16 April 2002.
[5] B. Gruchman, Genesis of the innovative paradigm of regional development (in:) Regional policy and its role in increasing the competitiveness of regions, under scientific editors M. Klamut and L. Cybulski, Publishing House of the Economic Academy in Wrocław, Wrocław 2000, pg. 115 and later.

emphasises in it the need to develop theories of location not just within the framework of economic geography, but also within the mainstream of economic and management thought, which, up to the modern times of P. Krugman, M. Porter and E. T. Hall, undervalued space in developing economic structures. It now appears that "...in a market economy, there are relationships with the local and regional environments from the initial stage of invention, through developing the prototype, up to the commercialisation of the product. If these relationships transform into synergistic cooperation, then there is a chance that an innovative environment will develop. In this environment, the leading role is played by the companies that absorb the technical progress, the appropriate educational and research institutions and the local and regional authorities supporting the processes of innovation..."[6]. The placement of every forwarding, transport and logistics company in a specific local space and making its development dependent on participation in the innovation environment is of particular significance to us.

This direction of thought is confirmed by the works of other authors. Grzegorz Węcławowicz writes in his study:[7] "...an effective regional policy is a policy that concentrates on the interests of the region, a policy, which through the creation of conditions for development and growth in competitiveness of the regions, leads to an increase in local potential...". Similarly, we are experiencing the subject matter of representatives of local societies on a micro scale, with development being dependent on our own innovativeness. Apart from the measurable, "hard" factors of local and regional development, difficult to measure, **"soft" factors appear, the basis of which is knowledge**, while others are of a psychological or sociological nature. Irena Fierla emphasises their significance to the deceleration and overcoming of the growth of spatial development disproportions in Poland, which is currently one of the key development problems of our country[8]. Development is dependent on the level of activity of its individual entities (legal entities and private individuals), while "...the degree of organisation of local societies is difficult to measure and develops under the influence of the coexistence of many factors. Factors of significance here include the history of a given area, the extent to which it is populated, the level of qualifications of the society, the structure of residence (distributed to a greater or lesser

[6] Op. cit., pg. 117.
[7] G. Węcławowicz, Space and society in modern Poland. PWN, Warsaw 2002, pg. 157.
[8] I. Fierla, Increasing spatial development disproportions in Poland (in:) The enterprise in the regional innovative environment of the 21st Century, under scientific editor J. Brdulak, PTE, Warsaw 2000, pg. 7 and later.

extent), the structure of the economy, as well as the current economic situation, the system of political powers (the role of parties) etc. (...) Regions with a low level of staff qualification in principle have the role of regions that absorb innovations originating from outside, rather than being their source. This puts them in a worse situation, delays progress and development, all the more so that the low level of qualification of labour resources also reduces the scale of absorption of innovations. The reduction in the educational backwardness of the populations in peripheral regions appears to be one of the most important directions of activity in order to prevent their further social and economic regression..."[9].

Ryszard Domański, however, is looking for a new paradigm of spatial management based on mathematical and statistical quantitative methods. He believes that such a modern paradigm should be based on the following guidelines:[10]

- The differentiation of space,
- The need for environmental protection and its maintenance for future generations,
- The subject matter of man, the quality of life and the significance of social factors in land planning,
- The rate of change and evolution of space and commercial systems,
- Deterministic and stochastic relationships,
- Continuous and non-continuous changes,
- The diffusion of innovations,
- Extra-economic objectives, conflicts between participants of the spatial economy and its entities,
- Society's system of values, including ecological and economic ethics,
- Spatial policy.

In this case, we are also observing significant qualitative progress to a more extensive degree, in the methodology, the level of detail and socialisation of land management. Their subjects are towns and villages, regions, migration of people, the flow of goods and information, as well as development. It is becoming necessary to delve into greater detail in the individual elements of the analysed objects and to analyse their microstructure. The objects analysed most frequently are households, companies, state institutions and their

[9] Op. cit, pg. 12-13.
[10] R. Domański, Space management. PWN, Warsaw 2002, pg. 11 and later.

analysed properties: location, the reach of their reaction, their structure and their interdependencies[11]. It is possible to add here that of essential significance among these are the interdependencies of a transport and communications nature.

The directions of change in the research of commercial space presented above are of particular significance to the evolution of the economics of transport (communications) that is of interest to us. It is also possible to summarise through analogy down to the proposal of a new paradigm for communications space.

We are currently witnesses to increasingly clear processes of **humanising the modern business**, which is coincidental with the understanding of the commercial space in which we all function. Space, alongside time, remains the fundamental form of existence. The placement of human activities in space leads to the development of historically formed and physiographically, as well as naturally conditioned social and economic systems of a defined spatial structure. Distance has played a major role among these interdependencies and relationships. It is even believed with some exaggeration that – historically – distance was always the enemy of humanity[12]. It is sufficient to move 100 - 200 metres away from another person to lose the ability of having verbal contact. Another few hundred metres – and we lose him from sight. We start to worry as to whether he will return from work, from a trip or from a meeting with other people. The institution of the messenger, which in time was transformed into post of the industrial age, only improved the situation of communications to a slight extent[13].

The nineteenth century invention by Alexander Graham Bell revolutionised the spatial references of humanity. The telephone was the first fully interactive device, which took on an effective battle against distance expressed in kilometres, miles, or even versts. It allowed for interaction in real time even between very distant people. Today, practically every inhabitant of a relatively developed nation has access to means of communication that allow for connectivity to any part of the world. Together with the development of intelligent telecommunications networks, the geographical address increasingly begins to lose its meaning. In the digital world, physical space, together with distance, is increasingly

[11] Op. cit, pg. 14.
[12] E. Bendyk, Man in a digital world. Comnet, Warsaw 1998, pg. 6.

becoming a secondary attribute of our real functioning in social and economic life. "Death of distance" (title of the book by the journalist Frances Cairncross) is therefore becoming the basis of the phenomenon that summarises our times – the phenomenon of globalisation, together with the simultaneous breakdown into the subject matter and atomisation of human activity.

As a result of two superimposed trends – the globalisation of economic processes and the increase in the role of the people participating in them – we obtain a new quality in defining the economic space of interpersonal references. People are starting to treat work as their business, meaning all of their activities, and not just those of an economic nature[14]. Economic space is being subject to micronisation and is beginning to mix with the cultural space of individual people and social groups. The regional environment of every employee is taking on new significance along with all the conditions of his life.

The concept of human capital is becoming embedded in economic sciences, as a result of which, the human being, together with all his skills has stopped appearing in analyses dedicated to capital in an incidental, mechanistic manner. Many years of research have facilitated the analysis of human behaviour in social and economic life. This confirms that the most effective investments are related to the development of general and specialist employees, while people are prepared to spend large amounts of money on themselves if they are convinced that this will come to fruition in the future in the form of cash and non-cash income. Fundamental laws governing growth are being formulated, according to which a surplus rate of growth of investment in human capital beyond the investments in tangible capital is necessary in order to enter onto the path of stable, balanced growth. New scientific disciplines are developing spontaneously, such as even - **knowledge management**.

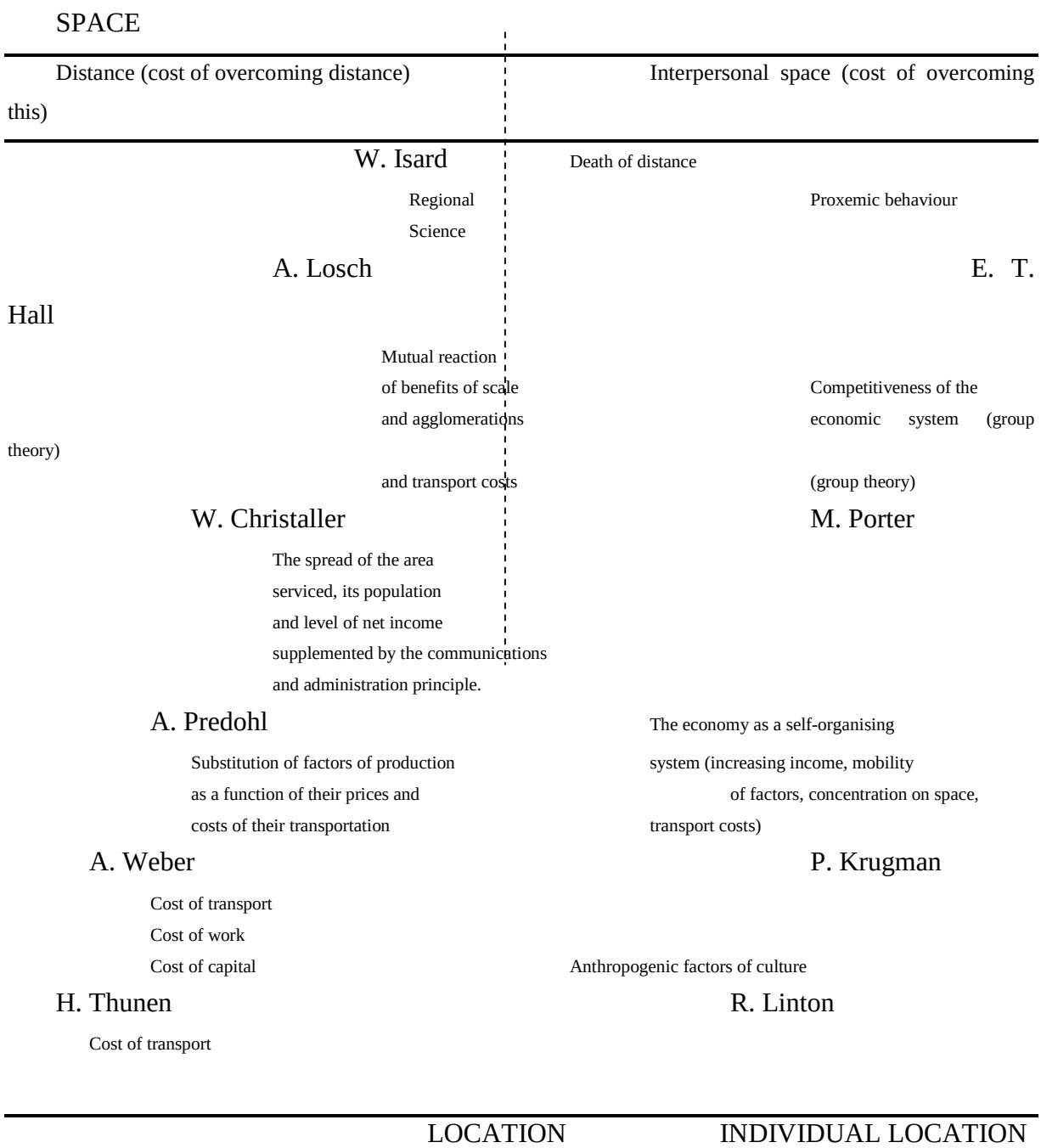
The trends mentioned above find their expression in the evolution of the scientific approach to the cost of overcoming distance, and therefore space, as well as the location of human activity in it. The first theories of location from J. H. Thuenen and A. Weber only took into account the cost of transport with some supplementary factors. Current economic theoreticians consider the economy to be a self-regulating system (P. Krugman) or a cultural expression of space for the social and economic development of people (E. T. Hall). We have

[13] J. Brdulak, New communications space in business. "Nowe Życie Gospodarcze" no. 9/2000, pg. 28-29.
[14] "Busy" means being occupied, actively committed to some task or activity.

presented a graphic illustration of the change in the paradigm of location studies, in which the role to date of the economics of transport starts to become a problem area in interpersonal communications in fig 1.

Figure 1

Change in the paradigm of research into space



Source: J. Brdulak's own analysis

Management of knowledge in TFL companies

The practical verification of the generalisations formulated above requires extensive scientific research. Such research is being carried out in the sector of transport, forwarding and logistics companies (TFL) in terms of implementing knowledge management systems[15]. It appears that the concept of "knowledge" allows for common names to be found for all practical appearances of the trends mentioned in the change in the paradigm of spatial studies, the costs of overcoming space and the entities involved in TFL activities. In the opinion of the authors, increased interest in the widely understood "knowledge" also represents the inherent feature of the phenomena commonly known as the "New economy".

The examples below were prepared for the purposes of statutory audit contracted to J. J. Brdulak by the Institute of the Functioning of the National Economy in the Warsaw School of Economics[16].

To a large extent, knowledge management is related to the management of information. However, because of the fact that knowledge significantly differs from information, it became necessary to distinguish a separate discipline in economic sciences - knowledge management[17]. A theoretical description of the concept can be found in different literature – books and articles, which fortunately, increasingly frequently are also available on the Polish market[18].

[15] J. J. Brdulak, Knowledge management strategies in the innovation process. Warsaw School of Economics statutory audit, Warsaw 2002, (duplicated typescript).
[16] Cf. also: J. J. Brdulak, "Knowledge management in logistics companies", in: Gospodarka Materiałowa i Logistyka, no. 12/2002, pg. 10-15.
[17] See e.g.: "Knowledge Management in the Learning Society", OECD 2000; R. Rothwell, "The characteristics of successful innovators and technically progressive firms", R. D. Management 1977, No. 3, Vol. 7, pg. 191 – 206; E. Hippel, "The Sources of Innovation, Oxford University Press, New York and Oxford 1988; B. Lundvall, "Innovation as an interactive process – from user-producer interaction to the national system of innovation", in: G. Dsi (ed.), "Technical Change and Economics Theory", Printer Publishers, London 1988; A. Brookin, "Introduction to Intellectual Capital", The Knowledge Broke Ltd. Cambridge, England 1996; P. Myers (ed.), "Knowledge Management and Organizational Design" Butterworth-Heinemann 1996; D. Tobin, "Transformational Learning: Renewing Your Company through Knowledge Skills", John Wiley & Sons;; T. Davenport, L. Prusak, "Working Knowledge: How Organizations Manage What They Know" Harvard Business School Press. 1998.
[18] For example in: I. Nonaka, H. Takeuchi, "The knowledge-creating company", Poltext, Warsaw 2000; A. Kukliński (ed.), "An economy based on knowledge - a challenge for 21st Century Poland", KBN, Warsaw 2001; J. J. Brdulak, "Knowledge management", in: Gospodarka Materiałowa i Logistyka", no. 12/2001; J. J. Brdulak, "Knowledge on demand", in: CXO, September 2002.

Knowledge management in Hellmann Moritz International Forwarders Sp. z o.o.[19]

Hellmann Moritz is an international logistics operator. 60% of the company's shares are held by the German company, Hellmann Worldwide Logistics Ltd, while 40% remains in the hands of the company founder and president of the Management Board, Mr. Robert Jacek Moritz. The company is a member of the global forwarding organisation, Hellmann Worldwide Logistics. This is a partnership network, having representative offices in 341 cities in 134 countries, employing a staff of 15,000[20]. In Poland, Hellmann Moritz employs a staff of 289 people and has 6 branches, with its registered office in Raszyn, near Warsaw. The level of Hellmann Moritz's turnover in 2000 was a little greater than PLN 67 million.[21] The company is among the top five logistics companies in Poland in terms of the all-round nature of its offering. The company is organised into a matrix management structure.

Knowledge management in Hellmann Moritz is a subject of interest to management, although it is not the subject of specific implementation work. Currently, the company's management is rather looking for responses to basic questions on knowledge management – whether this concept represents some sort of value to the company, instead of thinking about how to put this concept into practice. Knowledge management is associated mainly with the collection, storage and distribution of information. Two IT systems are currently operating within Hellmann Moritz – the accounting system, which is also used for the economic analysis of the company and the management reporting system is based on this. The operating system, as the name implies, is used to carry out operations – it is related to the transfer of goods. It provides the possibility for a customer to monitor his parcel. A personnel system is currently being introduced, the objective of which is to create an information base on the company's employees. The information in the system will be accessible by the person responsible for human resource management in the company. The information system in the company also includes the internal gazette, which refers to sea and air freight. Gazettes or bulletins related to the company's everyday activities are not published systematically. The motivation system in the company consists of two main motivators. The first is the bonus. The level of the bonus is determined by three main components: discipline, technical quality of the work fulfilled and the company's quantifiable

[19] Own analysis based on an interview held by J. J. Brdulak with the Finance Director of Hellmann Moritz, Piotr Ruszecki, 05 April 2002.
[20] http://www.hellmann.pol.pl/content_firma/struktura_organizacyjna.html, 02 April 2002.

results. The employee is evaluated by his direct supervisor, who then proposes the level of the bonus to his supervisor. According to Mr. Ruszecki, this two-tiered system of approving the bonus provides a greater degree of objectivity to its awarding. The second motivator is the participation in expeditions and events organised annually by the company. The organisational culture in the company is heavily directed towards sports. For example, the company sponsors eight different events, of which seven are purely sports events[22]. Each year, the company organises an expedition having the nature of extreme sports (mountaineering, mountain biking etc.), in various interesting regions of the world (e.g. Central Asia or South America). Participation in such an event is prestigious for the employee and is simultaneously an effective motivator. Mr. Ruszecki said: "Work with a person who saved your life is completely different, irrespective of the position held in the company." From the point of view of the concept of knowledge management – this type of expedition supports the freeing up of communications channels within the company and in effect facilitates the more efficient circulation of knowledge in the organisation, since I would be more willing to share information with a friend than with a person who is completely unknown to me. Despite this, it can be said that Hellmann Moritz has a knowledge management system.

Knowledge management in FM Logistic Sp. z o.o. [23]

FM Logistic provides a series of very modern services such as co-packing[24] or co-manufacturing[25]. The main service in which the company specialises is warehousing. Apart from this, it provides a series of services that are typical of logistical companies: transport, crossdocking and supply chain management.

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[21] H. Brdulak, "Ranking of TFL companies in 2000", Rzeczpospolita, June 2001.
[22] http://www.hellmann.pol.pl/content_sponsorujemy/index.html, 02 April 2002.
[23] Own analysis based on an interview held by J. J. Brdulak with Artur Ciuchta, Training Specialist in Poland in FM Logistic, 26 April 2002.
[24] Co-packing – a service based on the logistical operator packing products supplied by its customers. For example, FM Logistic packs Snickers chocolate bars in collective packages, if promotions are announced of the type that an additional gift is received together with the Snickers bar.
[25] Co-manufacturing – a service based on storage or manufacturing of the product by the logistics operator for which the components have been supplied by the customer. For example, FM Logistic in France provides this type of service to Hewlett Packard. Within this service, FM Logistic transports components manufactured by producers located in various regions of France or Europe. It then assembles these components in its terminal into the final product– the printer, which it then supplies to shops and wholesalers.

FM Logistic is a French company with 25 logistics centres in Europe. In Poland, it has 5 logistical centres: Warsaw - Mszczonów, Tomaszów, Topolcany, Piotrków Trybunalski and Wolbórz. The company's registered head office in Poland is in Mszczonów near Warsaw. The level of turnover in 2000 was almost PLN 100 million.[26] Profit was more than PLN 10 million. As a result, FM Logistic achieved a high level of profitability for the sector (average of approximately 3%) – 10%. The company employs 900 people in Poland, and 6000 throughout Europe. FM Logistic's organisation structure is reasonably characteristic for logistics companies. The structure can be described as a matrix structure.

Knowledge management in the company is of interest to senior management staff. The company's management encountered the concept of "knowledge management" two years ago. Knowledge management is mainly defined for the company's current needs, as the "organised and higher form of training". The company sees benefits in the concept of knowledge management though the creation of better and hence more effective training projects. According to the Training Specialist, Artur Ciuchta, knowledge management places a great deal of emphasis on training of a soft nature, one of the main objectives of which is to enable employees to develop. Work is currently under way to measure the effects of this type of training. A training project is currently under way in FM Logistic entitled "FM Training". FM Training has the nature of an internal logistical academy, which operates on the basis of the competence of the internal trainers. Seminars are also organised for the company's management on various aspects of knowledge related to the company's activities. This type of seminar is held at least once a year in each branch. The company's management staff also participates in external seminars and conferences. A great deal of importance is attached to the search for various sources of knowledge – both internally and externally to the company.

A great deal of importance is attached by the company to information systems, although this is not treated as a constituent part of the concept of knowledge management. The company has an Intranet network in which it is possible to find all types of information on the company, and on the logistics sector in general. Each month, a press service is published in electronic form containing between 10 and 15 articles on logistics management and economics. The press service only reaches those people having access to a computer. A quarterly press service containing approximately 4 articles is published for those employees

[26] H. Brdulak, "Ranking of TFL companies…", op.cit.

who do not have daily access to a computer. This gazette is distributed to all employees. In addition, internet access is available to all employees in the branches, through which it is possible to review the current information on the company, as well as entering the Internet. Despite this possibility, the company's management does not want to withdraw from the publication of the paper gazette for the employees, since they believe that the gazette is more willingly read on paper than on the computer monitor.

Knowledge management in Spedpol Sp. z o.o.[27]

Spedpol is a logistics company with national coverage. It is a part of the German logistics corporation, Stinnes Logistic. There is another company on Poland belonging to this corporation – Schenker, which is involved in international logistics. Spedpol specialises in the logistical support of large customers e.g. one of Spedpol's customers is Metro, which owns such stores as: Media Markt and Makro. Spedpol provides the following services: delivery of parcels, groupage consignments and part loads, it offers logistical solutions to companies and comprehensive servicing of companies. The level of turnover in 2000 was more than PLN 250 million, while profit was almost PLN 30 million. Spedpol employs a staff of 910. it has 18 branches throughout Poland.

Spedpol was transformed from the state owned enterprise – Polski Spedytor Krajowy [Polish National Forwarder], which before the transformation, had a monopoly on transport services in Poland. The commencement of the competitive battle required the introduction of many changes within the company itself. The company was heavily restructured over the last 10 years and is currently a modern company, which is continuously consolidating its market position[28].

Knowledge management in Spedpol is currently the subject of the management's work. Knowledge management for Spedpol's managerial staff is understood in two ways: narrowly and widely. In the narrower aspect, knowledge management has the purpose of establishing such a system within the company that knowledge resources (knowledge of

[27] Own analysis based on an interview held by J. J. Brdulaka with Spedpol's Personnel Manager, Stefan Bulaszewski, 25 April 2002 and with the President of Spedpol, Janusz Górski, November 2000.
[28] For example, in 2000, Spedpol was in 424th position in the ranking of the largest companies in Poland, as published each year in Rzeczpospolita, while in 2001 it improved its position by more than

employees, training materials, product knowledge, management knowledge etc.) diffuse throughout the whole of the company. In the wider aspect, knowledge management is identified with the management of competence.

A new Intranet is currently in the process of being installed, which will have the possibility of establishing the so-called Community of Practice – Teams of Practitioners. The company's management initially intends to create only one team within the framework of the pilot project – around the issue of innovation. If it transpires that the team works effectively, then other groups will also be established. Of significance in the new Intranet will be the fact that the base under which it is formed is not the organisation structure, but the processes taking place in the company.

Employees may also share their ideas or knowledge directly with the company's management. There is a formal communications channel, which enables ideas or questions to be sent by every employee to the managerial group that is subordinated directly to the president. The information can be sent in two forms: e-mail and in paper form – A sheet containing the idea should be placed into the appropriate box. The management has the duty, which it generally observes, to respond to a given idea or question within two weeks, irrespective of the quality of the idea. As a result, the employee is aware that the company's management staff has paid appropriate attention to his initiative or problem.

Teamwork plays a very important role in Spedpol. Teams are appointed very frequently and this is the only form of introducing innovations or resolving problems in the company. The teams have the possibility of making decisions, because every team contains a person with the authority of a decision-maker (in general, this is a person from the company's top management). The teams contain employees from various levels, who are interested in the problem or innovation. Participation in the team is voluntary, although there is no problem with attracting people to the teams, since being a part of a team is treated as a certain distinction.

An important role in knowledge management is played by the organisational culture. Of particular importance is the motivation system, which must be designed in such a way that

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20 places (in 2001 it took 403rd place) despite the difficult market situation, which the logistics sector is experiencing strongly.

people share their knowledge, instead of keeping it to themselves. Motivation of subordinate staff is decentralised as much as possible – in the hands of the direct supervisor. Spedpol is moving away from the bonus system. The company's management believes that rewarding with money does not have a good influence on teamwork, because money differentiates the team and can lead to competition between the employees, which is unhealthy for the company as a whole (e.g. poaching customers by other employees). Professor Andrzej Blikle, president of A. Blikle in Poland[29] has a similar opinion on the bonus system. The basis for resolving conflicts between employees and between teams is healthy communication. For this reason, the company's management puts a great deal of effort into training on the soft elements of management (communication, negotiations, assertiveness etc.). Every manager undergoes this type of training once a year. Hard training – product and tool training represents less than 50% of training courses. The remainder of training is typically soft or is training on hard and soft competence. The effects of the training are measured at the behavioural level every 3 months. Spedpol also has an evaluation tool named the "Leader's Index". It is based on the voluntary evaluation of managers by their subordinates using special and anonymous questionnaires. The results of the questionnaires are received by the managers and their direct supervisors. Other people do not receive the results (even the president). This type of solution allows managers to obtain feedback on themselves. The president is also evaluated by his direct reports. Another important constituent component of the corporate culture is leadership. The style of leadership that is represented by the company president is important at this moment, since in general, model behaviour of other people is based on the behavioural style of the top management – the president. The president of Spedpol is a strong personality with a large amount of charisma. He places emphasis in management primarily on the person, which means that the level of difficulty of tasks is adjusted to the capabilities of the specific individual. The leadership style that is directed at people primarily gives employees a sense of security. It is clear who is accountable and that the evaluation will be most fair. In difficult situations, the company's management always helps individual employees.

[29] The seminar "Practices of managing knowledge in Poland", the Warsaw School of Economics, 10 June 2002

The main benefit arising from the implementation of knowledge management systems is the integration of the company, which consists of the following elements:

- Freeing up both bottom-up and top-down, as well as sideways communications within the company,
- Efficient and effective introduction of change – as a result of which the company is to be "agile on the market" and
- Efficient and effective project management.

Knowledge management in the Raben Group[30]

The Raben Group is a partner to both small companies and large multinational corporations. It provides such logistics services as warehousing, distribution, logistics, domestic and international forwarding, all-round logistics support of fresh products, customs agencies and parcel deliveries[31]. It has been operating on the Polish market for 11 years basing its activities on 70 years of experience of its parent company from Holland.

In 2000, the level of turnover was almost PLN 300 million (precisely PLN 279 million). The number of employees during this period was 1250. Raben has 16 branches in Poland. Just as with other logistical companies, Raben has a matrix structure of management. The company is among the strongest logistics companies on the Polish market. The head office is located in Gądki, near Poznan.

Raben is not currently implementing the concept of knowledge management. The company's management is familiar with this concept, but so far, no decision has been made to put it into practice. The lack of decision was caused by the fact that it is currently difficult to define the quantifiable benefits of using knowledge management systems in practice. It is naturally possible to distinguish certain elements of knowledge management that appear in the company, such as teamwork, information systems or developing opportunities for employees to have informal meetings (just as in the case of Hellmann Moritz, the company very strongly oriented towards sports and active leisure). Raben organises seminars e.g. in 2001 a seminar entitled "Forwarding in my company" was held. Just as FM Logistic and Spedpol, it publishes a gazette called "Autoportret" [Self-portrait] every three months addressed to the

[30] Own analysis based on a questionnaire survey held by J. J. Brdulak in Raben, 12 April 2002.

company's employees. Even so, despite such activities, it cannot be said that Raben has a knowledge management system. Simultaneously, despite the fact that Raben is not implementing knowledge management solutions, it is intensively developing its IT system – in recent months, the company purchased a CRM7 system for managing customer relationships.

Summary

The practices of several leading Polish companies in the TFL sector confirm the growth in the significance in the human factor in the functioning of companies. This is related to the change in the importance of the spatial difference expressed parametrically in kilometres and other units of measuring distance. Transport costs are declining relatively as a proportion of the unit costs of the final products manufactured. However, the costs of managing information and knowledge are increasing. Our proposed change in the paradigm of thought on social and economic space similarly finds its practical expression. The paradigm is becoming an element of the so-called "New economy". The awareness of this fact in TFL companies, even the best, the most efficiently managed, is still very preliminary. The leading companies in the TFL sector in Poland are devoting a significant amount of attention to this issue and attach due care to it. Everything that is happening around knowledge management or the management of information systems confirms the hypotheses formulated by the authors.

[31] http://www.raben.com.pl, dated 31 July 2002.

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