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# Preface

“An investment in knowledge always pays the best interest”

Benjamin Franklin,  
*The Way to Wealth: Ben Franklin on Money and Success*

The purpose of this monograph is to initiate an academic discussion on knowledge generation process for controlling purposes and the role of controlling in information support for contemporary enterprises. This book also elaborates on the impact of the information flow from the macro environment on business organizations. In order to meet the objective the monograph was divided into three parts.

The first part of the monograph consists of four sections which stress the importance of the knowledge generation process in various areas of research and business, and raise questions about the challenges that management information systems are facing at present.

The discussion on knowledge generation process in business organizations implies questions of how knowledge should be defined and how its possession contributes to the enhancement of business potential. Traditional approaches differentiate between data, information and knowledge. Data comprises raw numbers and facts, information represents processed or analyzed data which gains in importance, whereas knowledge embodies applied information supported by experience [Flanagin, Bator, 2011]. Knowledge which is generated, transferred and sustained within an organization emerges due to numerous situated social interactions [Lyon, Chesebro, 2011]. Hayes and Walsham [2003] claim that knowledge is socially implanted and cannot be perceived in isolation from practice. Flanagin and Bator [2011] add that knowledge has a fundamentally communicative nature, since it is both situated in practice and based on problem-solving and thinking. Therefore it cannot be considered as a commodity which is exchanged between individuals. Knowledge sharing is caring about the receivers of messages.

The first chapter introduces the problem of developing management information systems (MISs) in an organization of the so-called Third Sector. Contemporary non-governmental organizations (NGOs) are compelled to develop internal mechanisms directed at monitoring the effects of social activities and presenting them in a transparent way. This is so since these organizations depend on a broad range of individual as well as institutional stakeholders, who support their operations with donations, social work or sponsorship. The author describes that problem referring to the three-lateral relations between NGOs, stakeholders and beneficiaries.

Developing MISs in NGOs is more challenging than in commercial companies. **T. Dyczkowski** notes that many inputs and outputs related to non-governmental activities have qualitative character. Consequently, the contributions and effects related to non-governmental activities are less prone to valuation, which raises two questions. (1) “Which of the contributions and effects should be included in MISs and in periodical performance reports?”; (2) “How to measure these inputs and outputs and what methodology should be applied in order to guarantee credible information for social managers?”

In this context, **T. Dyczkowski** analyzes whether NGOs are capable of pooling the data which is necessary to evaluate the effectiveness and efficiency of their operations and to enhance their potential. The author scrutinizes the information needs of NGOs and their reflection in the obligatory reporting systems in Poland. He designs a procedure of developing MIS and visualizes the integrated structure of the system. The stakeholders’ impact on the focus of MISs is also considered. Finally, the author investigates the attitudes of Polish NGOs towards performance management in accomplishing social objectives.

The second chapter refers to a controversial discussion on the deployment of quantitative and qualitative methods in the economic theory. **G.H. Hertel** and **D. Lotter** claim that the world has the nature of a complex system as thus cannot be depicted or modelled using a quantitative approach only. Due to inherent non-linear phenomena appearing in the socio-technical world and the independency of human actors, which results in the uncertainty of their actions and impact-effect relations, the knowledge obtained may be distorted. The authors maintain that knowledge generation based on research studies should consider the diverse environment and unpredictability of events. Consequently, not only quantitative but also qualitative approaches need to be adopted. However, the latter is sometimes perceived as inexact or even identified with a non-scientific relativism.

**G.H. Hertel** and **D. Lotter** propose a new concept of the ‘advanced triangular method’ which is more than a combination of quantitative and qualitative approach. It covers nine steps: (1) theoretical background, (2) quantitative surveys, (3) qualitative studies, (4) explorative case studies, (5) the mutual validation of results, (6) a comparison of empirical results with theories existing in the literature and other empirical studies, (7) the transfer of key findings into theoretical and practical recommendations, (8) a critical assessment of the empirical approach and (9) a consideration of further research development. The authors applied their concept to investigating corporate social responsibility in small and medium-sized family enterprises in Austria and developed the model procedure for that case.

The third section refers to the informational aspects of controlling. The chapter delineates the essence of controlling and indicates its diverse comprehension in the literature. The author presents the controlling functions and in particular underlines its supportive role to management by improving the quality of the decision-making

processes through the provision of the required information, coordination and rationality assurance. The process of information supply depends on information needs which imply the selection of relevant data and its aggregation respecting its further utilization in the decision-making process.

**W. Wasilewski** points out that while controlling-oriented literature focuses on the role of controlling in acquiring and processing information with the help of ERPs, practical problems and outcomes related to ERPs are discussed in an inconsistent manner. According to the author, controlling is designed and implemented in order to fill the gap between accounting and production management.

The last chapter of the first part develops two research problems. Firstly, it investigates how would-be controllers evaluate the utility of various information sources on job offers. Secondly, it analyses whether the perception of the usefulness of the sources has changed over time. The empirical results are based on a longitudinal study covering a period of seven years. **M. Nowak** analyzes the opinions of students of accounting, controlling and other related majors, and identifies five information sources about job offers. The author establishes a hierarchy of these sources with reference to the average indications in 2005-2012, and states that the Internet is assessed as the most effective source of information on job offers, ahead of the press, acquaintances and family, the university, and television or radio.

The second part of the monograph consists of three sections. They discourse on controlling instruments and their roles in fostering the potential of business organizations. Each chapter presents the experiences and opinions of the people who deal with controlling on a daily basis, and thus compares certain theories with the business practice.

Controlling is a term used mostly in German speaking countries and those where German companies locate their foreign direct investments. It may also be applied in France, Spain or Italy, but in the rest of the world, dominated by American or British management cultures, the word 'controlling' would not be used in the said context. Consequently, in order to understand what 'controlling' actually means, it is advisable to look at various instruments which are developed in order to make boards of directors or chief executive officers able to plan, control, steer or coordinate business operations in the complex environment of today. The majority of organizations – whether they are commercial or non-profit oriented, larger or smaller, global or local – analyze production or service delivery processes, calculate the direct or indirect costs incurred by an organization, estimate the cost of capital, and take care of relations with external and internal stakeholders. But it is 'controlling' which offers the most complex and uniform methodology aimed at providing appropriate information on business performance at any place and at any time.

The fifth chapter discusses the divergences induced by the simultaneous application of different cost accounting systems. According to the authors, enterprises apply cost accounting systems which differ in time horizons and in scopes, due to

the different information needs of particular stakeholders. Therefore, there appears the research question of whether there exists a procedure of closing the reporting periods which considers the different information needs of stakeholder groups. **D. Kuźdowicz** and **P. Kuźdowicz** elaborate on two alternative approaches: the single and the double chain of cost accounts. The first approach, which is characteristic for stand-alone software architecture, is based on recording and reconciling data between financial and managerial accounting in a general ledger, whereas changes in cost centers and cost or income objects are skipped. All this leads to divergences between the general ledger and cost accounts. The second approach, which is supported by ERP systems, consists in the separation of financial and managerial accounting, using a table format. The authors claim that the double chain of cost accounts allowed for the simultaneous recording of business operations in the general ledger, as well as for cost centers and cost or income objects.

The next chapter addresses the problem of applying operational and strategic controlling instruments in property management. Nowadays, property management requires a strategic approach which implies the utilization of such controlling instruments as: SWOT/TOWS analysis, BCG matrix, Arthur D. Little matrix, VRIO framework, value chain analysis or the Balanced Scorecard. A property manager should be also familiar with operational controlling instruments, including: target/actual comparisons, budgeting, cash flow analysis, break-even point as well as ABC or XYZ analyses. **S. Kłosowski** claims that property managers need a broad knowledge covering not only economics, accounting and finance but also law and engineering. The author presented the said topics as potential research areas. In that context he determined system-related, methodological and cognitive objectives and developed two hypotheses which could be validated in future research.

In the seventh chapter, **P. Kuźdowicz** presents a method of determining the expected costs in an enterprise, embedded in the integrated enterprise resource planning system proALPHA®. The method is based on the concept of modeling quantity and value stream flows in logistics processes. The chapter focuses on purchasing processes in projects. Starting with establishing the expected value of costs, this comes down to identifying the obligation and comparing it with the current value of costs. The obligation reflects the current liabilities leading to incurring current direct costs in the future. Information on the obligation, compared to “regular” planned or postulated values, enables the user to identify any budget overspending, assess risks, or specify provisions for future liabilities.

The last part of the monograph discovers the information potential rooted in a business macro environment. Environmental scanning, which is part of the broader external analysis aims at the systematic identification of changes and trends with regard to the political, economic, social, technological, legal and environmental issues which may impact substantially on the business life cycle [Coates, 1985]. Consequently, environmental scanning which is a kind of “a radar”, enables managers to detect

threats and recognize opportunities, as well as to reduce the adverse consequences of possible crises. However, not only is knowledge of the external environment crucial, but also the comprehension of the interdependencies between its various elements and the capability to translate that understanding into the organizational planning and decision-making processes [Morrison, 1992].

The eighth chapter opens a discussion on the causes of business failures on the stock market at the time of the economic slowdown which impacted the Polish economy in 2012 and 2013. The text refers in particular to the situation in the construction and trade sectors which were characterized by the highest number of bankruptcies. Statistics showed that 211 companies failed in the first quarter of 2013, which exceeded the level in the same period of the previous year by nearly 10% and was double the level for the first quarter of 2008. The said situation implied the question about the reasons for the wave of bankruptcies and demonstrated the importance of recognizing the symptoms and causes of the economic crises.

J. Dyczkowska maintains that, on the one hand, the quick and correct recognition of the defects which affect the processes, behavior or events may contribute to a reduction of the risk of failure. On the other hand, the incorrect determination of the origins of the crisis implies an additional waste of time, money and effort. Therefore, both the crisis leader who is accountable for the overall recovery process, as well as the controller who plays a crucial role in stabilizing the crisis, are expected to recognize and understand the causes of the crisis and adopt the learning mentality in an organization. Moreover, it is worth noticing that such a causal analysis is a pillar of risk management aimed at identification, evaluation and monitoring factors which threaten the business continuity.

It cannot be passed over that the multitude of problems which companies have to face each day make it very difficult to determine the exact reasons for a crisis, particularly if the process of generating knowledge on early warning signals is hindered due to confusion which arises as a result of the unfavorable situation itself. The *ex post* analyses of particular cases of corporate crises contribute to the knowledge about the nature of business failures. On that basis, controllers should compile a catalogue of warning signals and develop contingency scenarios for a possible plight. In this respect, in reference to selected entities and specific conditions of the construction and trade sectors, the author identifies and singles out the internal and external factors fomenting a crisis in business entities.

The author of the next chapter reports on the effects of the globalization processes which are observed in shared service centers (SSC) providing services for large and international companies. As indicated by Gartner Inc., at least half of the outsourcing contracts brought results below expectations, what implied the need for developing instruments aiming at the enhancement of the quality of services provided by SSCs. M. Kawa presents examples of the said instruments, which include: process documentation, the allocation of roles and responsibilities, service level agreement,

management by objectives, a permanent improvement policy or Kaizen philosophy. The author notes that the abovementioned instruments are dedicated to learning organizations, eager to change themselves and benefit from the feedback and experience of people who share knowledge with one another.

The last chapter examines the relations between the sovereign ratings published by well-known rating agencies and the ratings introduced by the author of the study, which were based on credit default swap (CDS) prices. CDS is a measure which reflects credit risk changes on a daily basis. Higher CDS prices mean more risky bonds and an increased default probability. The paper analyses the sovereign ratings of 57 selected countries which are categorized into five classes, AAA, AA, A, BBB and S. The first four classes represent investment grades, whereas class S exemplifies a speculative one. P. Budinský presents the results of the research and states that the rating based on CDS prices may be perceived as a revision of the ratings produced by well-known rating agencies such as Standard and Poor's, Moody's or Fitch. The main advantage of this approach is that the default probability is analyzed on the basis of market instruments.

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*by Joanna Dyczkowska and Paweł Kuźdowicz*

## References

- Coates J.F., *Issues identification and management: the state of the art of methods and techniques*, Research Project 2345-28, Electric Power Research Institute, Palo Alto, CA., 1985.
- Flanagin A.J., Bator M., *The utility of information and communication technologies in organizational knowledge management*, [in:] Canary H.E., McPhee R.D. (eds.), *Communication and Organizational Knowledge: Contemporary Issues for Theory and Practice*, Taylor & Francis, Florence, KY, 2011, pp. 173-190.
- Hayes M., Walsham G., *Knowledge sharing and ICTs: A relational perspective*, [in:] Easterby-Smith M., Lyles M.A. (eds.), *The Blackwell Handbook of Organizational Learning and Knowledge Management*, Blackwell, Malden, MA, 2003, pp. 54-77.
- Lyon A., Chesebro J.L., *The politics of knowledge: A critical perspective on organizational knowledge*, [in:] Canary H.E., McPhee R.D. (eds.), *Communication and organizational knowledge: Contemporary issues for theory and practice*, Taylor & Francis, Florence, KY, 2011, pp. 69-86.
- Morrison J.L., *Environmental scanning*, [in:] Whitely M.A., Porter J.D., Fenske R.H. (eds.), *A primer for new institutional researchers*, Tallahassee, Florida, The Association for Institutional Research 1992, pp. 86-99.