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ABSTRACT

In this paper, we examine the effect of business competence of Information Technology (IT) professionals on their job satisfaction in Poland, a transition economy. The necessary data is collected by a survey conducted among IT professionals working in various companies located in Lower Silesia region, Poland. The preliminary results of this survey indicate that business competency, in general, positively affect job satisfaction of IT professionals in transition economies. However, they feel that possessing business competency does not have any substantial effect on their salary level and professional promotions.

Keywords

Business competence, business knowledge, information technology management, IT professionals, job competency, job satisfaction, Poland, transition economies.

INTRODUCTION

In the current digital, global economy, knowledge workers, such as programmers, system analysts, software engineers, and other Information Technology (IT) professionals play an increasingly important role. The demand for highly skilled IT professionals is especially strong and on the rise in fast growing emerging economies. These economies benefit from numerous outsourcing initiatives as global companies seeking cost advantages increasingly move their IT operations to the so-called low cost locations. Moreover, companies in emerging economies invest heavily in IT to protect and expand the competitive advantage.

Although, many IT investments are conducted in emerging countries like Central and Eastern Europe, limited research is reported from this region about exactly which job competency assures stable employment and professional carrier combined with job satisfaction. The majority of studies on job satisfaction was conducted in Western Europe and the USA, while not much is known about job satisfaction in countries in Central and Eastern Europe (Lange 2009). In particular little is reported on which non technical or business skills IT professionals in Central and Eastern Europe need to have in order to progress in their carrier and be satisfied with their current job. In the context of this paper, we define job competency as a set of abilities and attitudes "that might directly or indirectly affect job performance" (Woodruffe 1993). Job satisfaction can be defined as affective or attitudinal reaction to a job (Spector 1985). Several aspects, such as pay, promotion, co-workers, supervisors, and work itself, may constitute the overall satisfaction with the job (Vitell and Davis 1990)

In this research, we attempt to close the gap by investigating the relationship between business competency and job satisfaction in Poland, a transition economy located Central and Eastern Europe. Thus, the main research question guiding our research is formulated as follows: Does business competency lead to job satisfaction among IT professionals working in companies in Central and Eastern Europe? And what is the most and least important business competency leading to job satisfaction among IT professionals working in companies in Central and Eastern Europe?

The rest of the paper is structured as follows. In the proceeding section, we review literature related to business environment in transition economies, business competency, and job satisfaction. The results of literature review are then used in establishing a set of hypotheses. These hypotheses are tested using data from a structured survey conducted among IT professionals working for companies located in the Lower Silesia region in Poland. Next, the results of this survey are presented and implications are discussed. After outlying our contribution, we conclude the paper with presenting some ideas for future research.

BACKGROUND AND LITERATURE REVIEW

To establish a solid foundation for our research, we conducted a literature review focusing on topics related to IT use in business environment of transition economies, job competency of IT professionals, and job satisfaction.

Business Environment and the IT Use in Transition Economies

Many countries located in Central and Eastern Europe can be classified as transition economies. Transition economies are economies that are in a long-term process of transition from a centrally planed economic system to a market driven system (Roztocki and Weistroffer 2011a). Although the transformation started more than two decades ago, many transition economies still suffer from communist past in form of lingering government bureaucracy and managerial attitudes not fully attuned to free market economy (Roztocki and Weistroffer 2009). In addition, often unclear legislation present in many transition economies, also a relic of the past times of a centrally planed economy (Soja 2008), complicates business operations.

Existing reports point to differences in management style. For example, managers in transition economies seem generally rely less on hard data in comparison to their colleagues in developed, mature economies. This may be explained in absence of historical data and need for managerial flexibility in fast changing regulatory environment (Kozminski 2008). Moreover, as compared to the developed countries, in transition economies many managers identify themselves less with their company and often tend to look at the firm only with their own interest in mind (Soja 2008). This could be another relic within the history of a centrally planned economy as one the main objectives of the companies was to provide work and income for populace (Roztocki and Weistroffer 2008). Relatively less is reported about IT use in transition economies (Roztocki and Weistroffer 2009) and research about job satisfaction is also scarce (Lange 2009).

Job Competency of IT Professionals

In addition to a solid technical knowledge, also called IT competency (Bassellier, Horner Reich and Benbasat 2001), successful IT professionals must pose a robust understanding of business and have effective interpersonal skills (Todd, McKeen and Gallupe 1995). Overall this set of non technical skills, also termed as business competence, accordingly to the taxonomy proposed by Bassellier and Benbasat (2004) could be divided in two categories: organization specific and interpersonal and management. This taxonomy of business competence is summarized in Table 1.

Competency Category	Sub-Category	Description
Organization specific	Organizational overview	Knowledge about the organization, its goals, core capabilities, customers, and competitors.
	Organizational units	Understanding functions of various organizational units and their role in achieving goals of the organization.
	Organizational responsibility	Responsibility of IT professionals for organizational business processes and their outcomes.
	IT-business integration	Ability to use IT as problem solver for various organizational business problems.
Interpersonal and management	Knowledge networking	Knowing where knowledge resides within and outside the organization.
	Interpersonal communication	Ability to develop and maintain relationships with others, capability to develop a social network across various organizational units and beyond boundaries of organization.
	Leadership	Skills to manage and ability to find ways of integrating business processes with IT.

Table 1. Business Competency Categories of IT Professionals (Adapted from Bassellier and Benbasat (2004)

Job Satisfaction

In essence, job satisfaction is frequently defined as the emotional-affective response of the employees to the job (Spector 1985). Job satisfaction is an important organizational construct as it could explain employee motivation, their performance, absenteeism and turn-over (Koh and Boo 2001). In essence, motivated employees positively affect firm performance. Multiple aspects, such as pay, security, initiative, opportunities for independent decision-making, responsibility, sense of achievement, hours of work, promotion prospects, working with pleasant people and pressure at work (Lange 2009), may explain the satisfaction with a given job.

Environmental Hypothesis for Information System Research

We decided to use the environmental hypothesis as the theoretical foundation of our study (Roztocki and Weistroffer 2011b). Accordingly our research starts with a careful analysis of the environmental factors that may affect business competency leading to job satisfaction among IT professionals working in companies in Central and Eastern Europe. Second, we examined how these environmental factors prevalent in business environment in transition economies located in Central and Eastern Europe may affect job satisfaction. In the third step, we attempted to search for explanations to why business competency may affect job satisfaction in this way. Finally, in step four, we assessed the possible generalization of our findings and speculated who may benefit from our study. The four-step approach of the method is depicted in Figure 1.
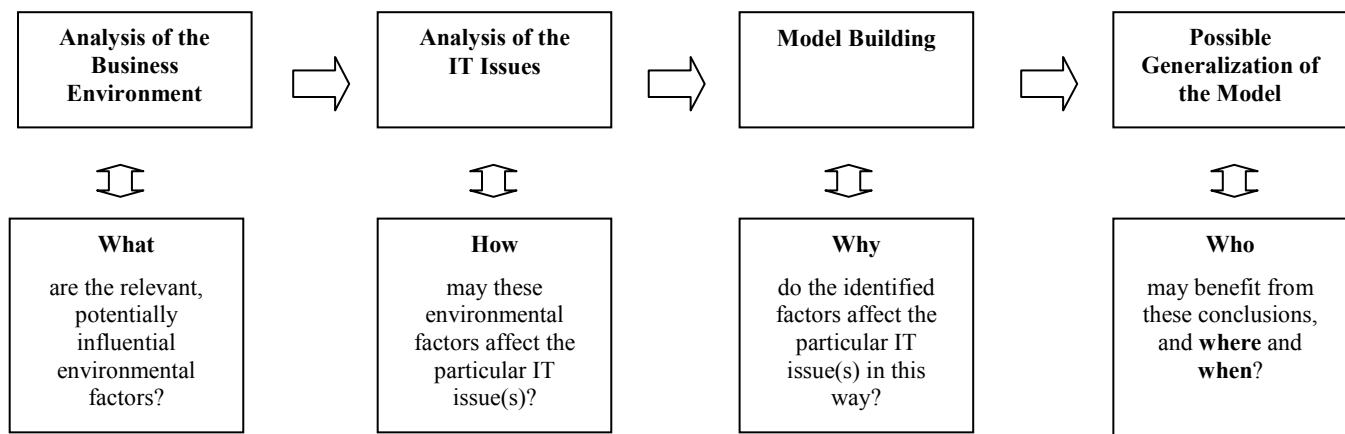
Analysis of the Business Environment	Analysis of the IT Issues	Model Building	Possible Generalization of the Model
What are the relevant, potentially influential environmental factors?	**How** may these environmental factors affect the particular IT issue(s)?	**Why** do the identified factors affect the particular IT issue(s) in this way?	**Who** may benefit from these conclusions, and **where** and **when**?

Figure 1. Environmental Hypothesis for Information Systems Research (Adapted from Roztocki and Weistroffer (2011b))

RESEARCH HYPOTHESES

In transition economies, there are many environmental factors that are typical for many of these economies and may potentially affect the job satisfaction of IT professionals. The transition from a centrally planned to a market economy, created opportunities for independent decision-making at the firm level which resulted in more flexible reward mechanisms and larger income inequalities (Lange 2009). Overall many transition economies are faced with typical conditions prevalent in emerging economies where there is a high demand for highly qualified workers but salaries remain low as compared with developed economies (Roztocki and Weistroffer 2011b). The relatively low salaries may motivate IT professionals working in transition economies to seek for new job opportunities in and outside country.

At the first look, in a job market characterized by high demand for IT professionals and high employee turnover, employees possessing more than only technical skills may better brand themselves while looking for new employment opportunities. In addition, possessing solid business competence may help IT professionals to advance in their company. Overall, strong business capabilities should support IT professionals' advancement in their job which will subsequently lead to a greater job satisfaction.

In order to provide answer to the main research question, we decided to use a set of three null hypotheses. In essence, these three hypotheses state that business competence does not have any effect on job satisfaction of IT professional working in transition economies. Obviously, we expect that these null hypotheses would be rejected.

Thus, we propose the following null hypothesis to test whether or not business competence of IT professionals working in companies in Central and Eastern Europe has in general an effect on their job satisfaction:

H1: Business competence of IT professionals has no significant effect on their job satisfaction.

Moreover, we also were interested in knowing if there is a difference how organization-specific business knowledge or interpersonal and management knowledge affect job satisfaction.

Understanding the connection between IT and the business of an organization is a important non-technical skill and is refereed to as organization-specific business knowledge (Bassellier and Benbasat 2004). This knowledge allows seeing and understanding the business of the company, its strategies and sources of competitive advantage. It is about organizational goals and objectives, core capabilities and business environment the company operates. It is also related to understanding the top management preferences, companies' policies and culture. It is quite reasonable to expect that the organization-specific business knowledge will affect employees' choices and their job satisfaction. However, it takes time to accumulate the organization-specific business knowledge and this kind of business competency is not easy transferable.

Therefore, regarding organizational specific business knowledge, we propose the following null hypothesis to test whether or not this business competence of IT professionals working in companies in Central and Eastern Europe has an impact on their job satisfaction:

H2: Organization specific business knowledge of IT professionals has no significant effect on their job satisfaction.

Interpersonal and management knowledge is the ability to interact with and manage others (Bassellier and Benbasat 2004). It includes personal skills such as ability to build a professional network, interpersonal communication skills, and leadership skills (Bassellier and Benbasat 2004). Interpersonal and management knowledge may have a large impact on job satisfaction, as it is transferable to different organization, and IT professionals with these skills have a higher chance to be promoted.

Thus, in regard to interpersonal and management knowledge, we propose the following null hypothesis to test whether or not this business competence of IT professionals working in companies in Central and Eastern Europe has in general an effect on their job satisfaction:

H3: Interpersonal and management knowledge of IT professionals has no significant effect on their job satisfaction.

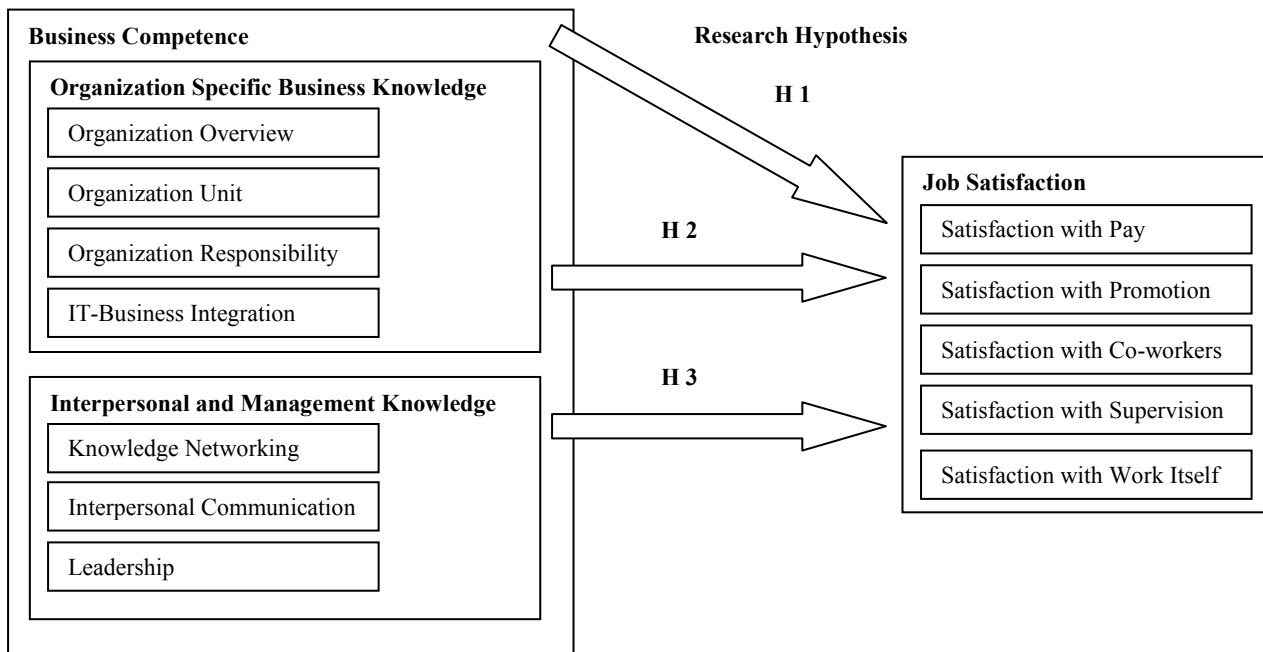Our research model is depicted in Figure 2.

Figure 2. Research Framework

METHODOLOGY

To test the research hypothesis that guided our research, we decided to use a survey. This survey was conducted among IT professionals working for companies that are located in the Lower Silesia region in Poland.

Research Questionnaire Development

For the purpose of our data collection, we decided to use existing and widely-proven survey instruments. The main motivation for adopting existing instruments was their ability proven capability to elicit opinions in various business environments. To measure the independent variables related to business competence, we adopted the questionnaire developed by Bassellier and Benbasat (2004). The questions are depicted in Table 2 and Table 3.

Dimension	Variable Name	Question
Organizational Overview	OVR1	Rate your level of knowledge of the organization's external environment (e.g. government, competitors, suppliers, and customers)
	OVR2	Rate your level of knowledge of the goals and objectives of the organization as whole
	OVR3	Rate your level of knowledge of the core capabilities of the organization
	OVR4	Rate your level of knowledge of the key factors that must go right for the organization to succeed
Organizational Units	UNT1	Rate your level of knowledge of the main challenges that different divisions in the organization face in achieving their objectives.
	UNT2	Rate your level of knowledge of the language (e.g. key concepts, jargon, ect.) of the different divisions in the organization
	UNT3	How well do you understand the work processes of the different divisions in your organization?
	UNT4	Rate your level of knowledge of the connections and interdependencies between the various divisions in the organization
Organizational Responsibility	RES1	To what extend do you take actions to stay informed about business development not directly related to IT?
	RES2	How much do you participate in business activities that are not directly related to IT?
	RES3	To what extent are you concerned by the overall performance of your business organization?
	RES4	To what extent does your work have an impact on the performance of the organization?
IT-Business Integration	ITG1	How experienced are you at recognizing potential ways to exploit new business opportunities using IT?
	ITG2	How experienced are you at analyzing business problems in order to indentify IT-based solutions (understanding situations, getting the "big picture" identifying underlying root problems, etc.)?
	ITG3	How experienced are you at evaluating the organizational impacts of IT solutions?
	ITG4	Rate your level of knowledge of the alignment between business goals and information systems in the organization as a whole
	ITG5	Rate your level of knowledge of the way IT contributes to the value of the organization
		All items are measured on a 5-point Likert-type scale: very low (1), low (2), neutral (3), high (4), very high (5)
		* Reverse scale items.

Table 2. Items for Business Competence Regarding Organization Specific Knowledge (Adapted from Bassellier and Benbasat (2004))

Dimension	Variable Name	Question
Knowledge Networking	NET1	If you have a business question or problem that you cannot solve alone, how confident are you about finding the right person to contact in your organization?
	NET2	If you have a business question or problem that you cannot solve alone, how confident are you about finding the right contacts outside your organization (consultants, vendors)?
	NET3	If you have a business question or problem that you cannot solve alone, how confident are you about finding other relevant sources of business Information including Internet site, magazines, trade journals, and conferences?
Interpersonal Communication	COM1	In general, how effective do you think you are at communicating with people at different levels of the organization (e.g., with your subordinates, peers, superiors)?
	COM2	How effective are you at working in a team environment?
	COM3	How well can you communicate about IT matters in non-technical language and within a business context to non-IT specialists?
Leadership	LEA1	In general, how effective do you think you are at managing projects (planning, managing resources, evaluating, etc.)?
	LEA2	In general, how effective do you think you are at acting in a leadership role (e.g. establishing direction, directing people, motivating and inspiring, etc.)
	LEA3	Rate your level of knowledge of the existing practices for the management of change in the organization.
	LEA4	Rate your level of knowledge of the risk management practices that can be applied in the organization.
		All items are measured on a 5-point Likert-type scale: very low (1), low (2), neutral (3), high (4), very high (5)
		* Reverse scale items

Table 3. Items for Business Competence Regarding Interpersonal and Management Knowledge (Adapted from Bassellier and Benbasat (2004))

To measure the dependent variables related to job satisfaction we adopted the questionnaire that was used in previous studies (Vitell and Davis 1990). These variables are depicted in Table 4.

Dimension	Variable Name	Question
Satisfaction with Pay	SPAY1	My organization pays better than competitors.
	SPAY2	My pay is adequate, considering the responsibilities I have.
	SPAY3	I am unpaid for what I do. *
	SPAY4	My fringe benefits are generous.
Satisfaction with Promotion	SPRO1	I do not like the basis on which my organization promotes people. *
	SPRO2	Promotions are infrequent in my organization.*
	SPRO3	If I do a good job, I am likely to get promoted.
	SPRO4	I am satisfied with my rate of advancements.
Satisfaction with Co-Workers	SCOL1	The people I work with do not give me enough support. *
	SCOL2	When I ask people to do things, the job gets done.
	SCOL3	I enjoy working with the people here.
	SCOL4	I work with responsible people.
Satisfaction with Supervisor	SBOS1	The manager I work for back me up.
	SBOS2	The managers I work for are "top notch."
	SBOS3	My superiors don't listen to me fairly. *
	SBOS4	My management doesn't treat me fairly. *

Dimension	Variable Name	Question
Satisfaction with Work Itself	SJOB1	My job is interesting.
	SJOB2	I feel good about the amount of responsibility in my job.
	SJOB3	I would rather be doing another job. *
	SJOB4	I get little sense of accomplishment from doing my job. *
		All items are measured on a 6-point scale: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5)
		* Reverse scale items.

Table 4. Items for Job Satisfaction (Adapted from Vitell and Davis (1990))

Research Questionnaire Adaptation and Testing

We decided to adopt several changes to survey instruments. The main change was that we decided to use a 5-point scale. The questionnaire was translated from English to Polish and adapted to Polish cultural conditions. The adaptation included the method of competent judges, items discriminatory power, scales validity (CFA) and reliability (Cronbach's α) analysis. For all dimensions in both questionnaires standardized Cronbach's alpha coefficients were greater than 0.8. To check for the quality of translation, the questionnaires were then translated back in English by a different translator. This version was very similar to the original one.

Participants and Data Collection

The research questionnaire was posted on the web. Invitations to participate were distributed to a random sample of IT professionals working for companies that are mostly located Lower Silesia region in Poland. College of Management Edukacja located in Wroclaw, Poland hosted the online survey. No incentives were offered to the participants; however, they were informed about the value of the research project. Fifty-nine participants completed the on-line questionnaire. The final sample consisted of thirty-tree female and twenty-six male. Thirty-four of the respondents worked for a large company with at least 250 employees, fifteen for a company with ten to 249 employees, while ten worked for small business with less than nine employees. Most of them worked in the manufacturing sector (20%), followed by services (14 %), education (12 %), health care and social assistance (10 %), professional and scientific sector (7 %) and information and communication branches (7%). Only ten respondents indicated that their compensation was below the national level, nineteen earned the average salary, while twenty-nine respondents were earning more than average salary in Poland. The majority of respondents were younger and well-educated IT professionals as depicted in Table 5.

	Number	Percent
Age in years		
20 or below	3	5
21-30	25	42
31-40	21	36
41-50	6	10
51 or above	4	7
Education		
Doctor of science	2	3
Master degree	39	66
Bachelor degree	11	19
High school	7	12
Total	**59**	**100**

Table 5. Participants' Age and Terminal Degree

Statistical Methods

In our analysis, the analyzed variables were continuous (5-point Likert scale, where 1 – means – I strongly disagree, and 5 – I strongly agree), ordinal or zero-one coded. If a variable meant the presence of a certain feature, e.g. technical education – the presence equals 1, and if the phenomenon did not occur – value 0. By using the multi-names methods application such variables were transformed into frequency which, in the light of border theories, makes the usage of statistical parametric methods possible (if the number of sample is bigger than 30).

As the central tendency measures the minimal, maximal and average values, the standard deviation, skewness, curtosis and the coefficient of variation with reference to the average were determined. In this text the arithmetic average is presented (sometimes marked as m), and its scattering measure – standard deviation and the coefficient of variation (marked as Vm), skewness ($a3$) and kurtosis ($a4$). To carry out the research concerning the features' co-changeability, the Pearson's linear correlation coefficient was applied (marked as r) and regression analysis (regression coefficient was signed as b).

To generalize the conclusions coming from the research on the general population the estimation division methods were applied – the confidence divisions were constructed for the average with the confidence rate 1-α=0,95 and the verification of statistical hypotheses.

RESULTS

The descriptive statistics is depicted in Table 6 and the results of the correlation analysis are summarized in Table 7.

Variable Codes	Long Variable Labels	*m*	*ll*	*rl*	*Me*	*Min*	*Max*	*s*	*Vm*	*a3*	*a4*
M8_age:	Age	33.03	30.70	35.36	31.00	19.00	60.00	8.94	27.07	0.90	0.62
OVR	Organizational overview	14.58	13.86	15.29	15.00	5.00	19.00	2.74	18.82	-0.71	1.35
UNT	Organizational units	15.08	14.41	15.76	15.00	10.00	20.00	2.58	17.07	-0.17	-0.99
RES	Organizational responsibility	13.14	12.36	13.91	13.00	5.00	20.00	2.97	22.59	-0.26	0.21
ITG	IT-business integration	15.59	14.54	16.65	15.00	5.00	24.00	4.04	25.90	-0.38	0.39
NET	Knowledge Networking	10.47	9.84	11.11	11.00	3.00	15.00	2.44	23.34	-0.81	0.68
COM	Interpersonal communication	11.75	11.25	12.24	12.00	7.00	15.00	1.91	16.25	-0.55	-0.20
LEA	Leadership	13.88	13.15	14.61	14.00	6.00	19.00	2.79	20.11	-0.79	0.38
SPAY	Satisfaction with Pay	9.68	8.65	10.71	9.00	4.00	18.00	3.95	40.81	0.28	-0.87
SPRO	Satisfaction with Promotions	11.39	10.83	11.95	11.00	8.00	16.00	2.13	18.73	-0.01	-0.88
SCOL	Satisfaction with Co-Worker	14.12	13.32	14.92	14.00	6.00	20.00	3.06	21.70	-0.09	-0.22
SBOS	Satisfaction with Supervisors	13.10	11.93	14.27	13.00	4.00	20.00	4.49	34.30	0.01	-0.99
SJOB	Satisfaction with Work Itself	14.32	13.39	15.26	15.00	6.00	20.00	3.58	25.02	-0.34	-0.86
OSBK	Organization Specific Business Knowledge	58.39	56.11	60.67	59.00	34.00	77.00	8.76	14.99	-0.24	0.01
IMK	Interpersonal and Management Knowledge	36.10	34.59	37.61	37.00	20.00	45.00	5.80	16.06	-0.80	0.66
BC	Business Competence	94.49	91.29	97.69	94.00	68.00	120.00	12.27	12.98	-0.21	-0.43
JS	Job Satisfaction	62.61	59.62	65.61	62.00	40.00	90.00	11.49	18.36	0.29	-0.08

Designations: *m*: mean; *ll*: 95% confidential interval left limit; *rl*: 95% confidential interval right limit; *Me*: median; *Min*: the lowest value; *max*: the highest value; *s*: standard deviation; *Vm*: the coefficient of variation; *a3*: skewness; *a4*: kurtosis

Table 6. Descriptive Statistics

Variables	Statistics	JS - Job Satisfaction	SPAY - Satisfaction with Pay	SPRO - Satisfaction with Promotion	SCOL - Satisfaction with Co-workers	SBOS - Satisfaction with Supervision	SJOB - Satisfaction with Work Itself
BC: =OSBK+IMK; Business Competence	r	0.39	0.14	0.15	0.23	0.32	0.43
	p	0.001	0.150	0.136	0.044	0.007	0.001
OSBK: =OVR+UNT+RES+ITG; Organization Specific Business Knowledge	r	0.32	0.08	0.20	0.23	0.25	0.33
	p	0.006	0.271	0.069	0.041	0.030	0.006
OVR: Organizational overview	r	0.45	0.12	0.23	0.37	0.42	0.33
	p	0.000	0.175	0.039	0.002	0.001	0.005
UNT: Organizational units	r	0.41	0.04	0.19	0.27	0.31	0.54
	p	0.001	0.392	0.077	0.019	0.009	0.000
RES: Organizational responsibility	r	0.27	0.09	0.22	0.05	0.18	0.38
	p	0.019	0.248	0.049	0.345	0.091	0.002
ITG: IT-business integration	r	-0.07	0.00	-0.01	0.03	-0.08	-0.13
	p	0.309	0.496	0.460	0.406	0.278	0.154
IMK: =NET+COM+LEA; Interpersonal and Management Knowledge	r	0.3458	0.1679	0.0121	0.1314	0.3113	0.4142
	p	0.004	0.102	0.464	0.161	0.008	0.001
NET: Knowledge Networking	r	0.2847	0.0143	0.0466	0.1512	0.2843	0.3837
	p	0.015	0.457	0.363	0.127	0.015	0.002
COM: Interpersonal communication	r	0.34	0.21	0.05	0.13	0.41	0.20
	p	0.005	0.057	0.353	0.171	0.001	0.063
LEA: Leadership	r	0.2371	0.1935	-0.0500	0.0541	0.1150	0.3864
	p	0.036	0.071	0.354	0.342	0.193	0.002

r – Pearson's correlation coefficient
p – observed, one tailed significant level

Table 7. Correlation Matrix

As it could be seen from Table 7, not all aspects of job satisfaction are related to competency. Business competence of IT professionals in our sample seems to have a significant effect on their satisfaction with, co-workers, supervisors, and work itself. In contrast, our respondent does not feel that their competency has an effect on their pay. For example, our analysis results show that influence of such dimensions like Interpersonal and Management Knowledge IMK and Satisfaction with Pay SPAY on Job Satisfaction JS is statistically insignificant. Moreover, in Polish conditions, we should also exclude from considerations knowledge of IT-Business Integration as an important factor that determines job satisfaction. The main results of our analysis are summarized in Figure 3.
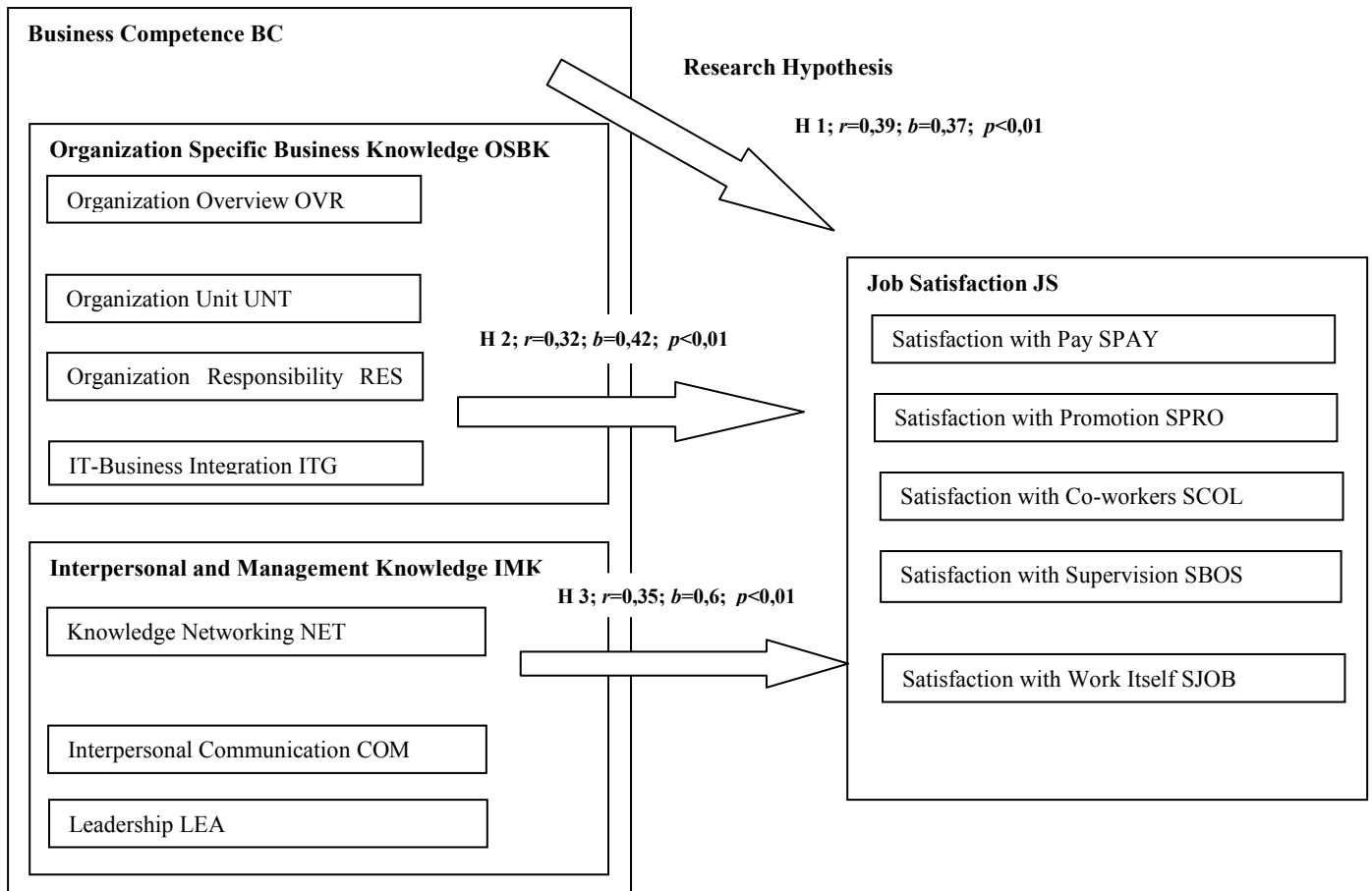

Figure 3. Business Competence and its Effect on Job Satisfaction

In summary, business competence of IT professionals in transition economies has a significant effect on their job satisfaction as summarized in Table 8.

Hypothesis	Supported	Comments
1	No	Business competence of IT professionals has a significant effect on their job satisfaction.
2	No	Organization specific business knowledge of IT professionals has a significant effect on their job satisfaction.
3	No	Interpersonal and management knowledge of IT professionals has a significant effect on their job satisfaction.

Table 8. Overview of Results

DISCUSSION

There are several important findings in our study. First, business competency seems to be related to the overall job satisfaction of IT professionals in transition economies. However, many IT professionals feel that their compensation level and promotion opportunities are inadequate for competency they posses. A possible explanation could be seen in the existing compensation structures in many Polish companies. Frequently, in Polish companies it may be difficult to offer competitive compensations for a small group of talented workers. Moreover, a large number of newly-graduated IT professional seeking jobs, may depress the salary level for the whole group. This imbalance between a large number of IT professionals seeking jobs and relatively small number of job openings is typical for the job markets of many transition economies. In those job markets, relative high demand enjoy professions such as maintenance personal, cleaners, janitors, sales force, security personnel and construction workers, while job offers for university graduates are rather rare (Kowal, Kwiatkowska and Patro 2010). In essence, the situation on the job markets in transition economies mirrors their phases of the transition process. Although the transition economies are able to attract foreign investors yet, the difficulty in attracting and retaining headquarters of global players persists; while, knowledge and technology is imported from developed countries than created (Roztocki 2012). Furthermore, as many IT outsourcing initiatives have commodity character and seek the cost advantage rather than look for special skills, they could often be conducted with the help of newly-graduated IT professionals. Consequently, the demand for extremely qualified, experienced knowledge workers is flat and, as a result, many of the requests for radical salary increases and promotions from these workers could be simply turned down.

Second, possessing knowledge of IT-Business Integration by IT professionals working in Polish organizations seems to have no effect on their job satisfaction. According to research reports from developed, matured economies IT professionals should be encouraged to act as problem solvers for business related issues (Bassellier and Benbasat 2004). Thus, in essence IT-Business Integration requires from IT professionals ability to recognize ways in which IT could be used to increase business performance. It requires solid business knowledge combined with a high level of abstraction and creativity that allows connecting various IT solutions with existing business problems. One explanation- of this could be seen in the education of Polish IT professionals that emphasize technical skills. It is also quite possible, that middle management in many Polish does not value acquiring additional business knowledge by their employees and rather discourages business thinking. To this extent, a more recent study reports that sixty-seven percent of Polish managers believe that there is no need for continuous, professional training (Kowal 2011). In essence, this middle managers' resistance to continuous training and education, essential for competitiveness in global knowledge economy, could be seen as a relic from the communist past. Many decision-makers currently holding managerial positions in Poland were educated and started their careers in a centrally planned economic system. In this old, communist system, there was no need for business thinking and initiative by young employees were suppressed and individuals showing signs of excelling within a group were seen as destructive for socialist group harmony (Lange 2009; Longenecker and Popovski 1994).

CONCLUSIONS AND FUTURE RESERARCH

To conclude we believe that our research presented in this paper makes a substantial contribution to the existing knowledge. First, it is perhaps the first research about job satisfaction of IT professionals in a transition economy. Second, our research confirms that many research results from developed, mature economies have little validity in the unique business environments of transition economies.

In addition, our research could serve as a foundation for other research projects. For example, our results could be tested in context of other transition economies. In particular, research may be conducted in a transition economy that is less advanced in the transition process as Poland in order to vary the possible external variables. To conclude, we hope that our research presented in this paper will inspire other researchers to conduct their own research on this interesting topic.

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