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# Guest Editor's Introduction to the Thematic Issue

In the global economy, organizations most likely to succeed should be, at the same time, big and strong as well as small and flexible. Managers of organizations are constantly innovating with their use of available management tools and business practices. Some tools, like strategic planning, leadership, customer segmentation and supply chain management, have gained global acceptance while others are less universal. In this issue we seek answers to the following questions: The variety of organizations and contingencies is immense; is it therefore possible to determine only some dimensions and generic solutions?

This thematic issue begins with a paper written by Elżbieta Wrońska-Bukalska who examines how share repurchase activities are associated with employee compensation plans and firm performance. In the second paper, Daiga Ergle presents a viewpoint on the fostering employee engagement through gamification. In the third paper, Sławomir Jarka in Maciej Ruciński examine the culture as a moderator in high commitment management. In the fourth paper, Eva Gatarik investigates how skilful performance enacts the organizational knowledge. In the last – fifth paper, Binod Timilsina argues that in order to gain and sustain superior business performance, a firm's sustainable competitive advantage is not enough, its operations also needs to be competitively distinct.

We are grateful to the organizers of the MIC 2015 International Conference 'Managing Sustainable Growth,' which was held in Portorož, Slovenia between 28 and 30 May 2015. All papers were refered through a double-blind peer review process and five papers have been accepted for this thematic issue. A special thanks go to the writers of these papers.

Klemen Kavčič University of Primorska, Slovenia

## Stock Repurchases, Stock Compensation, and Firm Financial Performance

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In this paper I examine how share repurchase activities are associated with employee compensation plans and firm performance. I assume that repurchasing shares in order to pay managers/ employees with shares is an incentive and leads to higher effort and better firm financial performance. I perceive firm financial performance in terms of profitability and liquidity (not stock prices). The empirical research was carried out for the years 2004-2013 and for companies that repurchased their share and distributed them among employees/managers as an incentive. I analysed how the financial performance had changed two years after the share repurchase. The empirical evidence in this study suggests that share repurchase is carried out not only as a substitute for dividend payment. Quite often companies announce share repurchase in order to conduct employees/managers incentive program. However, I found that repurchasing shares in order to conduct employees/managers share incentive programs does not lead to firm financial performance improvement.

Key words: share repurchase, buy back, incentive program, compensation plan, firm performance

### Introduction

In recent years, share repurchase programs have become an important financial management tool. E. F. Fama and K. R. French found that in the years 1978–1999 the proportion of dividend payers fell from 66.5% to 20.8% (Fama and French 2001). Grullon and Michaely (2002) found that expenditures on share repurchase programs (related to total earnings) increased from 4.8% in 1980 to 41.8% in 2000. Consequently, share repurchases as a percentage of total dividends increased from 13.1% in 1980 to 113.1% with the amount of 200 billion dollars. They also found that the amount of share repurchase as a percentage of net profit increased from 4% to 31% and the number of companies repurchasing their shares increased from 31% in 1972

to 80% in 2000 (Grullon and Michaely 2002). In 1999 and 2000 industrial firms spent more money on share repurchases than on dividend payments. It means that for the first time in history, share repurchase programs have become more popular than dividends. The number of us companies and the amount of money spent on dividend payment were reduced, while the number of companies and money spent on share repurchase increased (Fama and French 2001; DeAngelo, DeAngelo, and Skinner 2004; Hrdlicka 2006).

Due to the financial crisis, American companies diminished the amount of money spent on dividend and share repurchase. Yet, they did not stop paying them out. Even in uk, Canada, France, Italy, Spain, Denmark, Netherlands, Poland and Switzerland the number of companies repurchasing their shares was growing (Lee, Ejara, and Gleason 2010).

Because of growing popularity of share repurchases, it is worth looking into their reasons and results. Therefore, the main reason of share repurchase, which is commonly quoted in the literature, is cash transfer. What appears to be generally ignored in the literature, are studies exploring other reasons for repurchasing shares (e.g. in order to change capital structure, to create employee ownership). That is why the objective of this paper is to investigate the role of share repurchase in creating employee ownership and the financial results of introducing employee ownership.

The contributions of this study to the debate on share repurchases are two-fold. First, the paper provides evidence that cash transfer is not the most important reason for share repurchase. Second, this research presents the financial standing of companies introducing share repurchase in order to build employee/manager ownership.

This article is organized in the following manner. At the beginning, the paper develops share repurchases' reasons. The reasons for share repurchases are examined internationally. Then, the paper examines the literature on employee/manager ownership and firm financial performance. Later, the study discusses the research methodology and provides empirical analysis on the reasons for share repurchase and financial standing of companies introducing employee/manager ownership. Finally, the study presents the findings and suggestion for future research.

### **Share Repurchase Theories and Reasons: Literature Overview**

There were some attempts that aimed to explain the share repurchase phenomena. Theories trying to explain the share repurchase programs fall into two groups: dividend theories and capital structure theories (Hsieh and Wang 2009). The most popular approach associates share repurchase with payout policy and then share repurchase is regarded as a substitute for dividend payment (cash transfer). These studies attempt to explain share repurchase based on dividend theories but they are still dividend theories, which only might be applied to explain the share repurchase as a payout of excess cash. In all these attempts share repurchase is deemed as a substitute for dividend and share repurchase is deemed as a part of payout policy.

Based on the dividend and capital structure theories there were some theoretical approaches developed. These approaches trying to explain share repurchases popularity include tax environments, the agency theory (agency costs, free cash flows and signalling hypothesis), leverage effect, timing (undervaluation), improving EPS (signalling hypothesis). A variety of theories implies a variety of reasons and motives for share repurchase (Quintana and Hege 2006; Oswald and Young 2002; Dhanani and Roberts 2009; Cremers 2012; Gupta, Jain, and Kumar 2005; Wahid 2013; Hsieh and Wang 2009).

There are many studies carried out for the us companies repurchasing their shares. Studies refer usually to the reaction of investors to share repurchase announcement, signalling hypothesis, and information content, and undervaluation hypotheses. There is a commonplace belief that the us companies repurchase their shares because they want to transfer excess cash or to prevent a fall in share prices (undervaluation hypothesis) (Badrinath and Varaiya 2000). Various influences of the multiple forces behind the increase in share repurchases in the us have changed over time. The early literature on share repurchases (Dann 1981; Vermaelen 1981) developed models consistent with signalling of undervaluation. With the safe harbour policies of the sec in 1983, supported by similar actions by the IRS, tax savings and flexibility motives became stronger. The increased threats of takeovers that emerged at about the same time increased the role of share repurchases as a takeover defence.

The research carried out in France, Germany, and Italy (Lee, Ejara, and Gleason 2010) for the period 1990–2005 found out the support for the undervaluation hypothesis and the takeover deterrence hypothesis. However, they did not provide the support for the excess cash hypothesis or the optimal leverage ratio hypothesis.

The research carried out only for Germany (Zdantchouk 2003) found out that since the ban lift for share buy-backs in Germany in May 1998, the most popular reason for buying back own shares was to use the repurchased stocks as currency for future acquisitions. Undervaluation of the stocks seemed to be the second important rationale for share buy-backs. The role of treasury stocks for its implementation in employees' incentive programs increased significantly over time (4% in 1999 and 12% in 2002).

Another research for Germany and the Netherlands showed that the results confirmed the expectations of the capital market allocation hypothesis, the capital structure adjustment hypothesis, the dividend substitution hypothesis and the undervaluation hypothesis. The free cash flow hypothesis was confirmed only in part. No evidence was found that the low tax rate on capital gain in the Netherlands resulted in higher abnormal returns (Cremers 2012).

Most repurchasing companies in the uk identified multiple reasons. While the opportunity to return excess cash to shareholders was by far the most frequent motivation, for 73%. Other reasons that follow include the need to improve the reported EPS level (49%); signal undervaluation of company shares (39%); and optimise the companies' gearing ratios (36%). Additionally, just under one third of the respondents (29%) claimed that they used repurchase programs in response to investor expectations; 27% – as a flexible means of cash distribution, to influence capital structure and investment decisions; and 26% – to influence company share price. All other motivations including the provision of shares for reissue and as a signal of an improvement in future performance were less prominent, as they were present in under 25% of the cases canvassed (Rau and Vermaelen 2002; Dhanani and Roberts 2009).

As for Canada, there is research carried out by McNally (2002). The majority of analysed companies, as 69% of these firms, were motivated by the insiders' belief that the firm's shares 'represent a good investment' or 'are currently undervalued by the market.' Such wording is generally consistent with both the signalling and undervaluation hypotheses. 12% of the issuer bids were motivated to offset the dilution caused by employee stock ownership plans (ESOPS), and the remaining 19% of the announcements did not offer a clear motive.

Research for Taiwanese listed companies was carried out by Wen (2006). The companies in Taiwan were not allowed to buy back their outstanding shares until August 2000. Listed companies now are able to make repurchase announcements for only three reasons. Empirical research found their importance as follows: (1) providing shares as incentives (64%), (2) converting bonds to shares (1%), and (3) protecting company creditability and equity (35%).

In Japan, both the purpose and the fund for stock repurchase are regulated. Firms can repurchase shares only for the purpose of (1) retirement of shares or granting stock options to executives and employees and (2) assigning stocks for an employee stock ownership plan. Out of all companies repurchasing their shares 23% announced stock option as the purpose of share repurchase program, while 77% announced retirement programs as the purpose (Wada 2005).

To sum up, it is not only the cash transfer or dividend substitution. There are many reasons for the companies to start repurchasing their shares. One of the most important reasons was implementing stock-based compensation programs. Most theories and studies regarding share repurchase refer to cash distribution (associated with MM theorem), and undervaluation (associated with signalling and timing hypotheses).

However, some studies show that important rationale for share repurchase is repurchasing shares in order to distribute them among employees and managers (providing shares as an incentive for employees and managers and building managerial/employee ownership). This facet seems to be a very important issue while discussing the share repurchase phenomena. The role of this rationale seems to be undervalued although it is quite a popular reason for share repurchase in many countries.

### Share Repurchase and Employees/Managers Ownership

There are some studies showing that while repurchases were rising, the use of stock-based compensation was taken off. Three quarters of the members of the S&P 500 from 1994 to 1998 increased stock option grants over the period (Strege 1999; Weston and Siu 2003). Jolls (1996) and Fenn and Liang (2001) focused on the form of executive compensation as an explanation for the growth in share repurchases. Liang and Sharpe (1999) also observe that the sharp increase in buyback in the 1990s was accompanied by a corresponding rise in employee stock-option awards.

The idea of providing shares as an incentive for employees and managers and building employee/managerial ownership draws on the agency theory and agency problems (different interests of principals and agents) (Alchian and Demsetz 1972; Fama 1980; Jensen and Meckling 1976; Fama and Jensen 1983; Jensen 1986). The agency dilemma (principal-agent problem) concerns the difficulties in motivating one party (the 'agent'), to act in the best interests of another (the 'principal') rather than in his or her own interests.

Various mechanisms may be used to align the interests of the

agent with those of the principal (Pendergast 1999). One of them is employee/managerial ownership. Employee share ownership schemes can enhance commitment (direct participation, job satisfaction and investment orientation), resulting in improved economic performance and organizational performance (increased flexibility) and, hence, in improved industrial relations (reduced conflict) (Landau et al. 2007). It provides employees with incentives to work more and better and to cooperate with colleagues and the management, since their income will increase if the company performance improves (Pérotin and Robinson 2002).

There are also a lot of studies referring to impact of managerial ownership on the company performance. The initial thrust of the literature that analyzes the effect of managerial ownership on the company performance was that: greater managerial ownership benefits shareholders because it increases managers' incentives to increase firm value (Jensen and Meckling 1976; Morck, Shleifer, and Vishny 1988; Stulz 1988).

Other studies pointed out, however, that if managers own a substantial percentage of the company shares, they may try to entrench themselves in the company they manage by over-investing (empire building) and accepting negative present value projects that reduce corporate wealth (Demsetz 1983; Fama and Jensen 1983).

Many empirical studies found no relationship between managerial ownership and the company performance (Brick, Palia, and Wang 2005; Cho 1998; Demsetz and Villalonga 2001; Loderer and Martin 1997; Vafeas and Theodorou 1998). However, Faccio and Lasfer (1999) found that this relationship is merely weak. Other studies found that there is a relationship but that it is non-linear. For example, Morck, Shleifer, and R. Vishny (1988) found a positive relationship between Tobin's Q and managerial ownership for ownership levels between o and 5 percent and above 25 percent. For intermediate levels, the relationship is negative. McConnell and Servaes (1990) found a similar relationship in their study, but identified the inflection point between 40 and 50 percent of ownership. Hermalin and Weisbach (1991), Holderness, Kroszner, and Sheehan (1999), Cebenoyan, Cooperman, and Register (2000), Cui and Mak (2002), and McConnell, Servaes, and Lins (2008) provided support for the non-linear relationship between managerial ownership and the company performance.

Employee share ownership can provide a means of 'internalizing the stakeholder-firm relationship' (Landau et al. 2007). The idea of employee ownership has attracted support across the governmen-

tal field, often being perceived as a form of economic equality that matches political democracy. Employee share ownership can have an important role to play in boosting economic growth, promoting a fairer distribution of income and wealth, and giving individuals better control and autonomy over their own lives (Briône and Nicholson 2012: Martes 2012).

### Methodology

Several recent studies have noted a phenomenal increase in stock repurchases in the past two decades. In 1998, for the first time, total funds paid out via repurchases have exceeded those paid out in the form of dividends. Particularly interesting was the surge in repurchases over 1995-1999 during soaring valuations (and the drop in stock buybacks in 2000 when stocks were cheap). This buyback surge was also accompanied by a rise in employee/managers stock awards as an incentive program for managers and employees and attracted an increasing amount of attention from the business press and academics. However, there is no research on the effect of share repurchase (in order to distribute them among employees and managers) on financial performance of the company. The main obvious reason for implementing share incentive programs for employees or managers is to encourage them to more effective effort that leads to better performance.

The purpose of this study is to test the following hypothesis: companies repurchasing their shares in order to distribute them among employees and managers enhance the company financial performance.

The research covers the publicly traded companies on the Warsaw Stock Exchange. The analysis is done for the years 2004–2013. I began by examining firms' motives for share repurchases. I examined share repurchases announcements from 2004–2013 to determine the number of companies that started repurchasing their shares and to find out the rationale for repurchasing shares. I examined also other announcement to find out the number of companies implementing stock incentive programs. The next step was to identify the number of companies repurchasing their shares in order to distribute them among the employees and managers. To investigate this, I use data from gpwInfostrefa to collect information on companies repurchasing their shares and the reasons for this.

After having identified companies repurchased their shares in order to distribute them among the employees and managers, I examined their financial situation. I compared financial ratios before and after repurchasing shares. To investigate this, I use the data from Notoria Serwis to collect financial information of companies repurchasing their shares in order to distribute them among employees and managers.

To verify the hypothesis, I had to decide on the way of measuring financial situation and the method of comparing the financial ratios of companies repurchasing their shares in order to distribute them among employees and managers. A close look at the subject literature on employee/managerial ownership and the company performance raises serious questions about how the company performance was measured and tested. In literature, most measurements of the company performance were one-dimensional and they focused either on firm value (measured as Tobin's Q), equity returns, volatility of equity returns or some other based on stock prices. I decided on several financial ratios:

- profitability: ROS, ROA, and ROE, and
- liquidity: current ratio, quick ratio and cash ratio.

Then I decided to compare the financial ratios of the two periods before and 2 years after repurchasing shares. To verify whether the financial situation has changed, I applied descriptive statistics and non-parametric Wilcoxon test for mean (matched sample, data for the same sample from two different periods).

### **Research Findings**

The total number of companies listed on the Polish Stock Exchange that started repurchasing their shares in the period of 2005–2013 amounts to 239. It is more than one third of the companies listed on the Polish Stock Exchanges listed at the end of 2013.

Under The Polish Commercial Code there is no requirement to indicate the reason for share repurchase. Thus, it is only optional and good will when companies indicate the reasons for share repurchase. Therefore, it is more often than not that companies indicate no reason or many reasons for share repurchase. About 70% of all companies that started share repurchase in the years 2005–2012 do not indicate any reason. One might conclude that companies expect investors themselves to assign information content to share repurchase according to their knowledge. In this manner the managers are given a wide leeway to take decision on allocation and usage of repurchased shares at their convenience. The most common indicated reason for repurchasing shares is an incentive program for

	WSE						
Year	Number	Reasons					
		(1)	(2)	(3)	(4)	(5)	
2005	22	3	4	2	0	13	
2006	14	0	0	2	2	10	
2007	10	0	0	1	0	9	
2008	40	0	4	5	4	27	
2009	30	0	3	10	1	16	
2010	17	0	1	4	2	10	
2011	34	0	1	7	2	24	
2012	45	0	6	3	5	31	

TABLE 1 Reasons for Share Repurchase Indicated by Polish Companies Listed on

NOTES Column headings are as follows: (1) cash distribution, (2) undervaluation, (3) incentive system for employees, (4) capital group restructuring, (5) no reason or many reasons indicated.

managers and employees - 36 companies. About 14% of all companies repurchasing their shares indicate this reason.

It is important that in the previous period (1990-2004) no public company in Poland implemented any motivation programs for employees and managers. In the period of 2005–2013 there were 93 companies that announced starting to develop and implement employee/managers motivation programs. In addition, these intentions resulted in 80 implemented motivation programs (some of them remained not applied). Ultimately, designed and implemented programs were based on different basis (options, or warrants, or newly issued shares, or even bonds or share repurchase programs). Among these companies that started implementing motivation programs were 36 companies repurchasing shares at the same time.

The analysis of financial standing of the companies that started to repurchase their shares in order to provide their employees/managers covers financial ratio of the two periods – before share repurchase and 2 years later. At the beginning the profitability ratio was analysed (table 2).

Less than the half of the companies repurchasing their shares in order to distribute them among the employees and managers (about 14 companies) have higher profitability than the average for the whole economy. However, this is especially true for companies that started repurchasing their shares in 2005, 2006, and 2007. Among companies that started to repurchase their shares in years 2008, 2009, 2010 and 2011 there were fewer companies with profitability

TABLE 2	Profitability Characteristics of the Companies that Repurchased Their
	Shares in Order to Distribute Them among Employees and Managers

(1)		ROS			ROA			ROE	
	(2)	(3)	(4)	(2)	(3)	(4)	(2)	(3)	(4)
2005	100	100	50	100	100	50	100	100	50
2006	50	50	O	100	50	50	100	100	50
2007	100	o	O	100	o	0	100	o	0
2008	80	80	20	40	20	20	20	40	40
2009	50	30	40	50	10	30	40	30	30
2010	25	25	25	50	25	50	50	25	50
2011	71	43	29	43	29	14	57	43	29

NOTES Column headings are as follows: (1) year of share repurchase, (2) percentage of companies with higher ratio than average for the economy before the share repurchase, (3) percentage of companies with higher ratio than average for the economy two years after the share repurchase, (4) percentage of companies that improved ratio during two years after the share repurchase.

TABLE 3 Liquidity Characteristics of the Companies That Repurchased Their Shares in Order to Distribute Them among Employees and Managers

(1)	Curi	Current ratio		Quick ratio		Ca	sh ratio		
	(2)	(3)	(4)	(2)	(3)	(4)	(2)	(3)	(4)
2005	0	50	100	0	50	100	0	О	50
2006	50	О	50	50	50	0	50	50	О
2007	100	О	0	0	О	0	100	o	О
2008	80	60	20	100	80	20	80	60	20
2009	80	70	10	60	80	20	50	50	50
2010	25	75	75	50	75	75	50	50	75
2011	57	71	29	43	57	71	14	О	57

NOTES Column headings are as follows: (1) year of share repurchase, (2) percentage of companies with higher ratio than average for the economy before the share repurchase, (3) percentage of companies with higher ratio than average for the economy two years after the share repurchase, (4) percentage of companies that improved ratio during two years after the share repurchase.

ratios higher than the average for the economy. For the two subsequent years after the year of share repurchase, only one third of the companies improved their profitability ratios (10 companies out of 31 companies).

The second aspect of financial analysis was liquidity analysis (table 3). More than half of the companies repurchasing their shares in order to distribute them among employees and managers have higher liquidity than the average for the whole economy (19 companies). However, this is true for companies that started repurchasing

TABLE 4 Test of Normality for Variables of a Sample

Item	sw	df	р
Ros – before	0.649	31	0.000
ROS – 2 years after	0.615	31	0.000
ROE - before	0.783	31	0.000
ROE – 2 years after	0.490	31	0.000
ROA – before	0.786	31	0.000
ROA – 2 years after	0.806	31	0.000
Current liquidity ratio – before	0.696	31	0.000
Current liquidity ratio – 2 years after	0.741	31	0.000
Quick ratio – before	0.676	31	0.000
Quick ratio – 2 years after	0.715	31	0.000
Cash ratio – before	0.538	31	0.000
Cash ratio – 2 years after	0.657	31	0.000

NOTES sw - Shapiro-Wilk test, df - degrees of freedom.

their shares in 2007, 2008, and 2009. Among companies that started to repurchase their shares in the years 2005, 2006, 2010 and 2011 there were fewer companies with liquidity ratios higher than the average for the economy.

For the two years following the year of share repurchase, more than half of the companies improved their liquidity ratios (16 companies out of 31 companies). For a more thorough analysis I applied statistical hypothesis test method:

- 1. to check whether a sample came from a normally distributed population – a test of normality,
- 2. to compare two related samples, matched samples, with repeated measurement on a single sample to assess whether their population mean ranks differ.

To check whether a sample came from a normally distributed population I applied the Shapiro-Wilk test. The Shapiro-Wilk test utilizes the null hypothesis principle to check whether a sample came from a normally distributed population. The null-hypothesis of this test is that the population is normally distributed.

The level of *p*-value of the Shapiro-Wilk test is less than the chosen alpha level (0.05), then the null hypothesis is rejected and there is not evidence that the data tested are from a normally distributed population.

To compare matched samples (with repeated measurements on a single sample) when sample cannot be assumed to be normally distributed to assess whether their population mean ranks differ, I

TABLE 5 Wilcoxon Test for Differences in the Mean of Financial Ratios

Item	Mean	SD	wx	р
Ros – before	3.8	0.365	-1.254	0.210
Ros – 2 years after	8.6	0.414		
ROE – before	11.8	0.357	-1.717	0.086
ROE - 2 years after	3.8	0.497		
roa – before	5.8	0.160	-1.764	0.078
ROA – 2 years after	1.4	0.097		
Current liquidity ratio – before	2.562	2.678	-0.784	0.433
Current liquidity ratio – 2 years after	2.594	2.159		
Quick ratio – before	2.223	2.684	-0.862	0.389
Quick ratio – 2 years after	2.013	2.031		
Cash ratio – before	1.102	2.129	-0.372	0.710
Cash ratio – 2 years after	0.860	1.288		

NOTES SD - standard deviation, wx - Wilcoxon Test.

applied a non-parametric statistical hypothesis test – the Wilcoxon test. The null hypothesis states that median difference between the pairs is zero.

Because the p-value is large (higher than 0.05) for every financial ratio, the data do not give any reason to conclude that the population median differs from the median from the previous period (before the repurchasing date). There is no compelling evidence that the means differ, let alone improve. There are no statistically significant differences between the mean of the financial ratios. It means that repurchasing shares and distributing them among employees and managers did not lead to the improvement of the financial standing of these companies.

### Conclusions

This study was inspired by a growing number of companies that started repurchasing shares. There is also a growing number of research and studies on this subject. I identified several major research questions: what are the reasons for share repurchase, is it the only way to transfer excess cash to shareholders, what are the results of share repurchase programs as far as the stock price and firm financial performance are concerned. For the purpose of this study, an attempt was made to find out the reasons for share repurchase, the importance of stock incentive motivation programs as a reason for share repurchase, and the effect of share repurchase in order to distribute them among employees/managers on financial company performance. There has been no study before comprising all these aspects in one paper. The major contribution of this study is tackling the share repurchase from broader perspective (reasons and results).

My study appears to be supportive for previous observations that it is extremely difficult to find out the rationale for share repurchases in particular countries. This is because companies have no obligation to reveal the reasons for a share repurchase program while announcing it. It makes any research on share repurchase difficult.

My study gives evidence that share repurchase in order to transfer excess cash flow is not the main reason. It is especially true for most of European and Asian companies. They usually carry out share repurchase as a means to achieve different goals (takeover defence, currency for paying in acquisition, capital structure decision) while in the Anglo-Saxon countries it is more popular to repurchase their shares because of undervaluation, as another way of distributing cash, as a signal.

My study shows that the most frequently indicated reason for share repurchase in Poland was share motivation programs. It is consistent with research on Taiwanese and Japanese stock markets.

My study supports the observations that a growing number of share repurchase programs is accompanied with a growing number of share incentive programs.

Nonetheless, contrary to much of the theoretical literature, my results are not compatible with expected effect of employee/managers ownership on financial company performance. My study gives evidence that repurchasing shares in order to distribute them among the employees and managers do not have the statistically significant effect on firm financial performance. However, there are some empirical studies that employee/managers ownership can have no effect or have adverse effects on the company performance.

If the money spent on share repurchase is deemed to be an investment, then one can conclude that this investment did not lead to achieve the expected results (firm financial performance). There might be a couple of reasons for this failure: (1) the share incentive programs were not sufficient for employees to encourage them to greater effort; because for the employees it was compensation (salary for the past effort) not an incentive (motivation to greater effort in the future); (2) the true expected result of share repurchase was not better financial company performance but a signal of their social responsibility to achieve an increase in market stock prices (in this context the announced reasons might be misleading). However, these suppositions need some thorough further research.

### References

- Alchian, A. A., and H. Demsetz. 1972. 'Production, Information Costs, and Economic Organization.' The American Economic Review 62 (5): 777-95.
- Badrinath, S. G., and N. Varaiya. 2000. The Share Repurchase Decisions: Causes, Consequences and Implementation Guidelines. Morristown, NJ: Financial Executives Research Foundation.
- Brick, I. E., D. Palia, and C. J. Wang. 2005. 'Simultaneous Estimation of CEO Compensation, Leverage and Board Characteristics and their Impact on Firm Value.' Working Paper, Rutgers University, New York.
- Briône, P., and C. Nicholson. 2012. Employee Ownership: Unlocking Growth in the UK Economy. London: Centre Forum.
- Cebenoyan, A. S., E. S. Cooperman, and C. A. Register. 2000. 'Managerial Stock Ownership as a Corporate Control Device: When Is Enough, Enough?' NYU Working Paper FIN-00-043, New York University, New York.
- Cho, M.-H. 1998. 'Ownership Structure, Investment, and the Corporate Value: An Empirical Analysis.' Journal of Financial Economics 47:103-21.
- Cremers, J. S. 2012. 'Testing the Motivation for Share Repurchases: Firms in the Netherlands and Germany.' Master's Thesis, Tilburg University, Tilburg.
- Cui, H., and Y. T. Mak. 2002. 'The Relationship Between Managerial Ownership and Firm Performance in High R&D Firms.' Journal of Corporate Finance 8:313-36.
- Dann, L. Y. 1981. 'Common Stock Repurchases: An Analysis of Returns to Bondholders and Stockholders.' Journal of Financial Economics 9:113-38.
- DeAngelo, H., L. DeAngelo, and D. J. Skinner. 2004. 'Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings.' Journal of Financial Economics 72 (3): 425–56.
- Demsetz, H. 1983. 'The Structure of Ownership and the Theory of the Firm.' Journal of Law and Economics 26 (2): 375-90.
- Demsetz, H., and B. Villalonga. 2001. 'Ownership Structure and Corporate Performance.' Journal of Corporate Finance 7:209-33.
- Dhanani, A., and R. Roberts. 2009. Corporate Share Repurchases: The Perceptions and Practices of UK Financial Managers and Corporate Investors. Edinburgh: The Institute of Chartered Accountants of Scotland.
- Faccio, M., and M. Lasfer. 1999. 'Managerial Ownership, Board Structure and Firm Value: The UK Evidence.' Research Paper, Cass Business School. London.
- Fama, E. F. 1980. 'Agency Problems and the Theory of the Firm.' The Journal of Political Economy 88 (2): 288–307.

- Fama, E. F., and K. R. French. 2001. 'Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?' Journal of Financial Economics 60 (1): 3-43.
- Fama, E. F., and Jensen, M. C. 1983. 'Agency Problems and Residual Claims.' Journal of Law and Economics 26:327-49.
- Fenn, G., and N. Liang. 2001. 'Corporate Payout Policy and Managerial Stock Incentives.' *Journal of Financial Ecomomics* 60:45–72.
- Grullon, G., and R. Michaelv. 2002. 'Dividends, Share Repurchases, and the Substitution Hypothesis.' *The Journal of Finance* 57 (4): 1649–84.
- Gupta, L. C., N. Jain, and A. Kumar. 2005. 'Corporate Practices Regarding Buvback of Shares and Its Regulation in India.' Working paper, Indian Council of Social Science Research, New Delhi.
- Hermalin, B. E., and M. S. Weisbach. 1991. 'The Effects of Board Composition and Direct Incentives on Firm Performance.' Financial Management 20:101-12.
- Holderness, C. G., R. S. Kroszner, and D. P. Sheehan. 1999. 'Were the Good Old Days That Good? Changes in Managerial Stock Ownership Since the Great Depression.' *Journal of Finance* 54 (2): 435–69.
- Hrdlicka, C. M. 2006. 'Finding the Disappearing Dividends: Stock Repurchaser Characteristic, and Their Increasing Propensity to Pay.' Working paper. http://dx.doi.org/10.2139/ssrn.1787219
- Hsieh, J., and J. Wang. 2009. 'Stock Repurchases: Theory and Evidence.' Working paper. http://dx.doi.org/10.2139/ssrn.1395943
- Jensen, M. C. 1986. 'Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers.' American Economic Review 76 (2): 323-9.
- Jensen, M. C., and W. H. Meckling. 1976. 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure.' Journal of Financial Economics 3:305-60.
- Jolls, C. 1996. 'The Role of Compensation in Explaining the Stock Repurchase Puzzle.' Working Paper, Harvard Law School, Cambridge,
- Landau, I., Mitchell, R., O'Connell, A., and I. Ramsay. 2007. 'Employee Share Ownership: A Review of the Literature.' Research report, The University of Melbourne, Melbourne.
- Lee, C. I., D. D. Ejara, and K. C. Gleason. 2010. 'An Empirical Analysis of European Stock Repurchases.' Journal of Multinational Financial *Management* 20 (2–3): 114–25.
- Liang, J. N., and S. A. Sharpe. 1999. 'Share Repurchases and Employee Stock Options and their Implications for S&P 500 Share Retirements and Expected Returns.' Finance and Economics Discussion Series 1999-59, Federal Reserve System, Washington, DC.
- Loderer, C., and K. Martin. 1997. 'Executive Stock Ownership and Performance: Tracking Faint Traces.' Journal of Financial Economics 45:223-55.

- Martes, R. J. F. 2012. 'Employee Ownership and Firm Performance: The Performance of Employee-Owned Firms in Europe.' Master's Thesis, Tilburg University, Tilburg.
- McConnell, J. J., and H. Servaes. 1990. 'Additional Evidence on Equity Ownership and Corporate Value.' *Journal of Financial Economics* 27:595–612.
- McConnell, J. J., H. Servaes, and K. V. Lins. 2008. 'Changes in Insider Ownership and Changes in the Market Value of the Firm.' *Journal of Corporate Finance* 14 (2): 92–106.
- McNally, W. J. 2002. 'Open Market Share Repurchases in Canada.' *Canadian Investment Review* 15 (Winter): 24–31.
- Morck, R., A. Shleifer, and R. Vishny. 1988. 'Management Ownership and Market Valuation: An Empirical Analysis.' *Journal of Financial Economics* 20:293–315.
- Oswald, D., and S. Young. 2002. 'Why Do Firms Buyback Their Shares? An Analysis of Open Market Share Reacquisitions by UK Firms.' Working paper.
- Pendergast, C. 1999. 'The Provision of Incentives in Firms.' *Journal of Economic Literature* 37:7–63.
- Pérotin, V., and A. Robinson. 2002. 'Employee Participation in Profit and Ownership: A Review of the Issues and Evidence.' Working paper, Leeds University Business School, Leeds.
- Quintana, P.-E., and U. Hege. 2006. 'Open Market Share Repurchases and Their Signaling Power: The French Experience, 1998–2006.' Research paper, HEC Paris, Paris.
- Rau, P. R., and T. Vermaelen. 2002. 'Regulation, Taxes, and Share Repurchases in the United Kingdom' *Journal of Business* 75 (2): 245–82.
- Strege, D. 1999. 'Strategies for Stock Based Compensation.' *Compensation and Benefits Review* 31 (6): 45–54.
- Stulz, R. M. 1988. 'Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control.' *Journal of financial Economics* 20:25–54.
- Vafeas, N., and E. Theodorou. 1998. 'The Relationship Between Board Structure and Firm Performance in the UK.' *The British Accounting Review* 30:383–407.
- Vermaelen, T. 1981. 'Common Stock Repurchases and Market Signalling: An Empirical Study.' *Journal of Financial Economics* 9:139–83.
- Wada, K. 2005. 'Stock Repurchases in Japan.' Working paper.
- Wahid, A. H. D. A. 2013. 'Measuring the Motivating Factors for Share Buyback: Evidence from Malaysian Companies.' *Online Journal of Social Science Research* 2 (2): 35–50.
- Wen, Y.-F. 2006. 'Additional View as to Why Taiwan's Listed Companies Make Share Repurchase Announcements: A Political Perspective.' *The Journal of Global Business Management* 2 (1): 48–60.

- Weston, F. J., and J. A. Siu. 2003. 'Changing Motives for Share Repurchases.' Working Paper, Anderson Graduate School of Management, Los Angeles.
- Zdantchouk, A. 2003. 'Share Repurchases in Germany: An Empirical Investigation.' Diploma Thesis, Wolfgang Goethe-University, Frankfurt.



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# Fostering Employee Engagement Through Gamification: AirBaltic Forecaster Tool

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Next to the employee productivity or indicators for staff turnover and absenteeism in organizations, Employee Engagement stands out as one of the most significant measurements for Human Resource Management efficiency. With younger generation representatives joining the workforce companies are bound to investigate and pursue some of the new tools and techniques that respond more effectively to engagement triggers of generations Y and Z. At AirBaltic Corporation in Riga, Latvia, management has been trying to foster engagement of the workforce through introduction of a business game, called Forecaster. According to management belief, in addition to improved internal communication, Forecaster has potential to save up to 1 million EUR annually due to the resulting better quality management decisions. Within the article author looks at the theory and research related to application and effects of gamification within corporate settings, as well as reviews workplace environment at AirBaltic Corporation. Further in the article, Forecaster game is described in more detail and its impact on employee engagement and organizational performance is analysed. Finally, recommendations are drawn for organizations to consider when gamifying people management processes in their organizations.

*Key words:* employee engagement, generation Z, gamification

### **Employee Engagement**

Most adults spend a significant amount of time working, and yet only 20 percent of them are highly engaged in their work. According to 'Oxford Handbook of Positive Psychology and Work' the majority of workers are either relatively indifferent to or have quite negative perceptions of their work (Linley, Harrington, and Garcea 2010). In consumer driven society, the motivation to work has traditionally come from the need to earn a living and is often seen largely as a means to an end (Reeves 2001).

The first use of the term 'employee engagement' was mentioned in a 1990 Academy of Management Journal by Professor William A.

Kahn. However, still today, there is no clear definition of employee engagement; instead, there are extensive variations.

Former General Electric CEO Jack Welch has stated that employee engagement should come first, with customer satisfaction and free cash flow coming in second and third, respectively (Mello 2015). Within the last 15 years employee engagement has become hot topic for companies and HR departments. All over the world, most HR leaders carefully watch their employee engagement scores, and businesses all over the world are trying to build inclusive, passionate, multi-generational teams (Bersin 2014a) to outperform increasing competition. Management literature and research offers a number of employee engagement drivers that can boost productivity, among those caring management and visionary leadership, inspiring goals, meaningful work, personal growth and development, etc. In addition to these, most sources insist that being informed about business goals and processes is critically important for employees to feel true ownership for their duties and be engaged with the company.

### COMMUNICATION FOR ENGAGEMENT

Effective communication processes lie in a background of every company that wants to be successful in a long term (Purves 2005). Basic purpose of internal communication is facilitating strategic connections and conversations within an organization. This communication takes place between leaders, managers and employees, or employee-to-employee (Melcrum n.d.).

When considering internal communication as a process that either drives or deters employee engagement one needs to look at it from two perspectives. Firstly – what is company's general strategy, values, culture (the 'content' part of communication) and secondly – how clear and situationally appropriate this strategy, values, culture is reflected in day-to-day communication (the 'process part' of communication).

Any piece of communication can be broken down to the following process. Sender encodes the message, the message is sent over specific medium. Receiver decodes the message and encodes his feedback. Sender decodes the feedback (Lunenburg 2010).

In internal communication, senders and receivers can be any company employee either horizontally or vertically related. The message can be either work related (communicating tasks, reporting status etc.), company related (information about processes, career options etc.) or non-work related (personal experiences, views etc.). Mediums for this purpose might be tête-à-tête, video calls, phone calls,

instant messaging, emails, written mails, notes, intranet and others. Rich mediums are those where the receiver can observe several mediums, with tête-à-tête being probably the richest. The more complex the message, the richer channel should be used.

According to Frost and Sullivan companies with engaged and empowered employees are increasing their customer satisfaction by over 40 percent, improving profitability by nearly 30 percent, and boosting overall performance by 36 percent (Melcrum n.d.).

Wanting engaged and empowered employees is obvious. Creating an environment, which facilitates high performance, is much more difficult and complex. Company has to be able to communicate mission and values, it has to train managers and leaders to follow these values and have to hire employees who fit the culture. Even more, the environment has to be continuously improved (Bersin 2014b).

Research conducted by Forbes (Bersin 2014b) indicates that building a highly engaged workforce takes a combination of many things (providing meaningful work, hands on management, positive work environment, growth opportunity, trust in leadership), each impacting people in different ways. In addition, the surge of younger workers and the increased use of technology at work require the whole environment be even more flexible and transparent, including effective internal information flow.

So how can communication help keep people motivated? M. Welch suggests that engagement consists of three components: emotional, cognitive and physical dimensions. Three psychological conditions necessary for engagement are meaningfulness, safety and availability. Communication is a psychological need of employees, which organizations have to meet to maintain and develop employee engagement (Welch 2011).

Interestingly, Watson Wyatt in his study of engagement in the workplace found that when it comes to communication companies have to heavily involve senior management. According to the study, not only did senior leaders appear to have much stronger influence than immediate supervisors in improving engagement through communication, but also that employees are largely losing confidence in the ability of senior managers to ensure the long-term competitiveness of their respective companies (Watson Wyatt 2006). This concept is confirmed by Roger D'Aprix, creator of 'The Manager's Communication Model' (Holwerda 2007).

According to research developed by Chartered Institute of Public Relations (Ruck and Pilkington 2013) and Centre for Advanced Human Research Studies (Holwerda 2007), if companies want to increase their engagement through communication, between other activities they should:

- 1. Cover basic communication needs. Make sure that employees know what to do on the job, recognize and acknowledge workers for superior performance, facilitate a setting where discussion of performance and progress occurs frequently. This allows to focus on their work instead of worrying about how to do the work.
- 2. Encourage more face-to-face communication and networking by providing opportunities for staff to work together and informal spaces to meet and socialize (Ruck and Pilkington 2013).
- 3. Create feedback opportunities by developing a cascade process for communication that ensures a two-way flow of information between staff and management (Ruck and Pilkington 2013).
- 4. Increase leadership visibility by encouraging senior managers to 'walk the floor' and provide regular updates on the organization's strategic progress through corporate communication channels (Ruck and Pilkington 2013).
- 5. Create open environment where information is shared freely among organizational members without fear and where meaningful communicative interactions take place regularly (Holwerda 2007).

### Gamification for Engagement

Gamification in Human Resource Management is the usage of gamethinking and game mechanics in non-game scenarios, specifically in recruitment, training and development, and motivation, in order to engage users and solve problems (Deterding 2011). The term first appeared in 2002 (Marczewski 2012), but since 2010 has experienced major popularity boom. As discussed above, one of the most common problems in the business world is getting people engaged. Evidence suggests that games are one of the most engaging mediums, so much that doctors are beginning to employ them as a form of pain relief for victims of severe burns and other extreme trauma, as reported by Science Daily, based on Loyola University Health System (2008) research People are quite literally so engaged by gaming content that they are able to enjoy a measure of pain relief. Common elements that are typically 'borrowed' from traditional games and applied in nongame contexts include levels, badges, points, progress bars, leader boards and virtual goods. Each serves to motivate users by providing feedback, recognition, status, and the potential for competition among users (Muntean 2011).

Objective of gamification in business is to take techniques from game design and implement them in non-game contexts, so that the overall experience for the employee is more engaging.

Quite many organizations globally are using gaming to improve workforce alignment, enhance employee skills, solve complicated issues and tap into new talent pools. Typical game design techniques consist of goal setting, competition, real-time feedback and rewards. There are also platforms such as eMee (http://www.emee.co.in) and MindTickle (http://www.mindtickle.com), as well as many others that facilitate Gamification of people management processes in organizations.

The power of Gamification utilizes the competitive streak people have and while playing a game, they become more absorbed and engaged, they feel a greater sense of achievement and are more willing to go the extra mile in either making more effort to choose the right people, or completing more training programs, or even helping other employees to stay motivated. In addition, as they progress, they continue to increase their engagement with the game and thus reach new levels. Human Resources management can use the traditional gamification principles to enhance the engagement of employees into different processes.

Competition is a core principle behind the performance management system, as everyone likes to be appraised as the top performer. However, the gamification can add another element to the system. For example, employees can compete who will be the first employee to finish the entire performance appraisal cycle. Most HR Teams send reminders to complete the assessment. When employees compete – they can see the progress of others. They can be motivated to speed up and finish the document as soon as possible.

Achievement and status are closely connected – everyone who reaches the threshold is awarded for the achievement. However, few selected ones can be also awarded a higher status, which is an emotional prize that has a great value. However, the best principles for Human Resources are altruism and collaboration – making people to work with others to win as a team is most often the best option. The team spirit should be the driving force behind most games and competitions run by the HR department, as the key intention of HR is to form the group into an efficient team. Gamified solutions in Human Resource management can be used in such processes as recruitment, on-boarding, learning and education, training, performance management, talent and retention, occupational health and safety (Herger 2014).

There are certain important game elements that are essential to engage the players. Between those such as rewarding users for returning in a short time period, allowing users to create without typing, showing progress everywhere on everything, enabling self-expression, offering increasing levels of complexity for mastery and having surprises and limited time events have been outlined (Michaelson 2011).

Flow theory (a flow can occur when an activity challenges an individual enough to encourage playful and exploratory behaviours (challenges), without the activity being beyond the individual's reach and control (skills)) by Csikszentmihalvi and Csikszentmihalvi (1992) is the one that most obviously stands behind the idea of applying gamification to work situations.

There are numerous examples of suggestion driven improvement practices through gamification that are successfully implemented by different companies. For example, kBC - one of Belgium's biggest financial institutions. They launched 'the pitch' - a crowdsourcing game, asking employees to design a new product or process to improve their company. Employees could join teams that were having similar ideas, others could buy shares of ideas they believed in. Ideas that won were given resources and were treated like a real start-up.

Another example – TE connectivity, it is a Swiss company providing connector and sensor solutions. TE connectivity did a Business generation, innovation and efficiency improvement project. Employees generated over 88 ideas where one efficiency improvement saves several million Euros a year. They started in 2012 with this initiative and repeated it yearly with success (Herger 2014)

Company Bunchball (www.bunchball.com) that offers gamified solutions for enterprises has promising statistics about users of the business games that they develop:

- 30 % play the game without any extra motivation,
- 85% of the players would play again,
- 80% believe the best ideas were implemented.

### Generation Z

There are different opinions regarding exact name or exact range of birth dates for the generation that is following generation Y or Millennials. Some sources would quote this generation starts at the mid (McCrindle and Wolfinger 2014) or late 1990s (Horovitz 2012) or even from the mid-2000s (Poggi 2013) to the present day.

Understanding the generations is playing an increasingly bigger

role today, with more diversity now existing between the generations than ever before (McCrindle and Wolfinger 2014).

Innovations and technological developments that took years or even decades before, now are happening with increasing frequency. There are upgrades and new versions for what technology can do to improve people lives and way organizations work, every month. This makes people to feel like the world today is changing faster than ever before. According to Daniel Pink, author of A Whole New Mind, Why Right-Brainers Will Rule the Future, we have entered the Conceptual Age. This Age calls for people who are able to conceptualize, to empathize, to create, to see the big picture in a first place (Pink 2008). Generation Z representatives are relatively less influenced by the old, outdated structures and thought frameworks that have been aimed at rather achieving discipline and obedience than foster innovation and creativity. As such, they would be more naturally possessing capabilities required by current age. Consequently, management needs to know them very well to build organizational systems and processes to support their natural strengths and cover up for their weaknesses. It needs to prepare workplace systems and processes that would rather support and foster engagement of the younger generation. The reason global managerial thought becomes more occupied with generation Z related issues is that their parents, teachers, managers and marketing professionals try to understand and engage with this new generation to understand them better in terms of raising, teaching, leading and also offering products and services that they would chose as today's and tomorrow's consumers. Generation Z is relatively least researched generation. Comparing to Generations X and Y, there is still a large gap into understanding of what are the main driving forces and strongest motivators for this generation to perform at work. Reasons for this are simple, the oldest representatives of gen Z are still in universities (first ones started in 2013), and so there has been not much opportunity to observe them at workplaces.

Still, some research has been carried out and there are sources that offer conclusions and observations. These sources provide good starting point for further research, as well as for experimenting with systems and approaches within the organizations to test validity of observations. Generation Z representatives are being characterized as most socially networked in history, thus able to instantly access, consume and digest large quantities of information. They expect immediate responses to questions and would go directly to decision makers. They are also likely to change jobs frequently and be interested in starting their own business (Branson and Oelwang 2014).

According to McCrindle, generation Z are the most materially endowed, technological saturated, globally connected, formally educated generation our world has ever seen. Technology has played a heavy role in shaping this generation. The age at which people first use technology determines how embedded it becomes in their lifestyle. Generation Z representatives have used technology from the early age; they have seamlessly integrated technology into almost all areas of their lives. That is the reason they are also called digital integrators. They are growing up in a world where there are 5.1 billion Google searches per day, 4 billion YouTube views, over one billion active Facebook accounts and over one million applications in the iTunes App Store (McCrindle and Wolfinger 2014).

Many of this generation rather would watch a video summarising an issue than read an article discussing it. As we live in an era of information overload that is increasing every minute, messages have become image based and marketing has learned to communicate across the language barriers with colour and picture rather than words and phrases.

Comparing to all other generations, young people are extensively connected to and to a high extent shaped by their peers. Opinion and views of social network friends often is more influential for them than the one offered by parents or teachers. In a recent study by McCrindle Research (McCrindle and Wolfinger 2014), it was found that while nearly all the generations had the same amount of close friends (an average of 13). Generations Y and Z had almost twice as many Facebook friends than the older generations. Therefore, the network that influences them is greater numerically, geographically and being technology based, is connected 24/7. This is an important fact in the context of the research question of how to engage people through gamification, as game environment offers many opportunities for interaction and peer feedback.

McCrindle and Wolfinger (2014) also describe the ways that generation Z individuals are different in terms of being engaged with their learning environments. Elder generations were used to verbal messages, sitting and listening to the teacher, focused on content – what to learn, centred on curriculum of a subject, used to a closed book exams, which required severe memorizing of the information. Generation Z prefers and best learns when message is visualized, they need to try and see instead of listening, teacher has to take a role of facilitator for them, they are more focused on process – how they learn, and the process has to be learner-centric, they do not ac-

cept blind memorizing of the information, they strongly prefer open book world where the answer is found through browsing loads of information, not trying to recall something that has been read last night. Hence, learning through gamified environment is much more appropriate for them. Game environment is something very much familiar and 'native' to them, thus it can be assumed that their engagement levels can be positively influenced through creating appropriate work environment where game elements are present.

### AirBaltic Forecaster

AirBaltic Corporation is Latvian national airline that underwent crisis in 2011 and subsequent restructuring during 2012-2014. As a result, company faces low employee commitment scores according to TRIM survey, as carried out by company TNS. AirBaltic employee commitment is well below the market levels (where only 8% remained truly engaged, so called 'drivers'). TNS Latvia is the partner providing annual Employee Commitment Survey for AirBaltic. According to TRIM methodology that is used by TNS, engagement is an essential element into total commitment concept, with the others being staff motivation, retention, loyalty, job satisfaction. Both concepts, commitment and engagement (as defined and measured by Gallup 2013), stand close, therefore it would be appropriate to draw a link between those.

Throughout the years, management at AirBaltic Corporation has been testing different measures to improve commitment scores. Consistently, during annual surveys, employees have kept voicing their opinion that information and communication about the business goals and overall business processes is insufficient. Considering company workforce statistics that show 81 % of the employees being under the age of 40 and 43% under the age 30, with growing population of generation Z representatives, management has been searching for tools that would have potential to engage young employees through solving concern of being insufficiently informed about business goals and processes. As a result, in 2014 business game called AirBaltic Forecaster was introduced. In planning the Forecaster tool, it was assumed that in order for it to be most effective and solicit maximum input from staff above and beyond their direct responsibilities, the tool had to be simple, fun, present basic project information, enable comments and questions, and reward participation.

Tool was launched as a separate website in a simple prediction game format, with the chance to win financial prizes for the most accurate predictions and most insightful comments, thus providing additional incentive for staff to get involved. The idea behind the game was to post in the platform information about different business related projects, upcoming decisions, business ideas, goals, etc. Posts were called Forecaster Projects, and each project offered employees to voice their opinion, whether they believed particular business idea, or upcoming decision was good or not so good, whether particular goal would be reached or not, etc. They were doing so through buying or selling shares of the specific Project (where buying was behaviour in case of positive opinion and selling in the case of negative opinion). Certain amount of virtual money, called Air-Baltic coins, was allocated to each player at the beginning of a game 'season' (each game period lasted for about 1-2 months, where winners of the game were announced at the end of such 'season' and a new 'season' launched). Project 'owners,' the ones who were posting specific projects, tried to foster discussion and comments around those, to have maximum feedback from the staff and to provide additional information in cases where description turned out to be insufficiently clear. It enabled management to pitch ideas in a simple format, and staff to provide insight in a fun way. Moreover, according to management belief, Forecaster had the capacity to save up to 1 million EUR annually due to resulting better quality management decisions. History showed that out of the total investment decisions that management is making during a year there is certain small percentage that are later reversed as incorrect. Belief was that by more staff involvement into decision-making those would be of a better quality and thus company would be able to minimize money lost due to low quality decisions. Therefore, comments and predictions were collected on the Forecaster site and taken into consideration by management team when making final decision about the project in question, thus ensuring staff participation in the decision making process.

Usually, internal communication about business related projects reaches staff after the decisions have been made and implementation started. Forecaster was devised to improve the information flow between staff at all levels throughout the decision making process, thus providing a new approach to improving internal awareness, drastically improving staff involvement in the decision making process, and, in turn, by tapping into the competencies and qualifications of the staff, increasing the quality of the management decisions being made.

The trial or pilot period lasted 5 months (May–September 2014)



FIGURE 1 Example of a Project on Forecaster

during which almost 50 projects were suggested and 20 prizes (4 each month) distributed. 60 staff members took part in the trial period.

At the end of the trial period, feedback from those involved in the Forecaster prediction game indicated that they enjoyed the process, felt more informed about current projects at management level; project owners felt better prepared and could make decisions that are more informed.

The trial period was completed according to plan, and Forecaster was launched for all staff members throughout the company at the beginning of October. Within the first two weeks of being launched throughout the company, over 250 staff members joined, and almost 20 new projects were added. Soon number of employees signed up for the game reached 300, which was close to 30% of all staff.

Participation in the trial period and the high take up of the project within the first two weeks of being rolled out throughout the company indicated staff enthusiasm for the tool, and the opportunities it provided for participation in decision-making.

### Results

Employee feedback was collected through staff interviews and impact of the new engagement tool was analysed six months after the Forecaster game introduction. Most of the comments were positive. People outlined even such benefits that management did not foresee or plan at introducing the game. For example, they outlined that having own project posted on Forecaster creates a higher feeling of responsibility because owner does not want to fail the project and its deadline, as it is public. It turned out that information that was available on Forecaster, as well as progress towards business goals or upcoming decisions or suggested projects got a lot discussed by employees in the corridors and throughout internal grapevine. Positive commentators outlined that it is much more exciting to learn business news in this fun way than from a formal newsletter. They liked the projects where players were encouraged to predict whether the Board of the company will approve certain business case or not, as that gave them a detailed insight into most strategic decisions. Even those who were not active players of the game and didn't enjoy 'selling and buying' part, used to log on few times a week to see new projects, read or post comments and learn more about business in general.

There was also sufficient number of suggestions and further improvement ideas generated by staff members. They suggested, for example, that not only managers but also other employees should be able to submit projects on Forecaster to engage employees and make them feel responsible. One suggestion was to enhance the platform towards idea crowdsourcing tool thus foster creativity and innovation within company. People commented that the user interface should become more user friendly and some additional features, similar to those available on social networks, should be introduced.

On the negative note, few people claimed that they feel burdened by colleagues who approach them with questions to get more insight into specific projects where they do not have sufficient expertise or knowledge to judge on quality of upcoming decision. In this specific game setting finance and commercial department, employees had more natural chances to 'win' the game because of access to relevant data. Few had concerns regarding potential confidentiality issues if sensitive information from Forecaster would leak outside the company.

Overall observation was that people who take part in the Fore-caster game felt better informed and more engaged with the business, as they had a perception of being more knowledgeable about all plans, actual projects, upcoming decisions and key targets for the company. They also valued the opportunity to provide their feedback regarding different upcoming management decisions through 'voting' with their virtual shares for one or another project.

During March and April of 2015, annual Employee commitment survey was repeatedly carried out and results showed slight but considerable improvement in employee commitment score by 5 percentage points. It would not be correct to attribute this improvement entirely to the effect of Forecaster; nevertheless, the belief is that it has played a certain role. Share of employees who were active users of this internal business game were generally very positive in terms of their feedback, which allows to draw conclusion that their overall engagement with the workplace positively correlates with the fact that company offers them new, fun way to learn more about business processes and to participate in those through feedback and opinion demonstration.

## Conclusions and Recommendations

Given the fact that employee engagement/commitment scores at Air-Baltic are below local market average, any measures that are addressed towards improvement of those are welcomed. First year of Forecaster use has turned out to bring some success but also some learning and conclusions regarding potential developments that are required if company aims at higher involvement of its employees. It is clear that gamification alone cannot solve the problem of low engagement. Nevertheless, it can be improved by further developing engaging, fun environment, where Forecaster is of a good help.

Companies that consider introducing similar business games could use some of the learning and conclusions from AirBaltic Forecaster experience. Perhaps, one major learning is around importance of communication plan when introducing a game like Forecaster, where detailed actions are well thought through and consistently implemented. Such a plan might help to involve larger numbers of employee than AirBaltic has managed to do so far.

Sharing lot of information regarding upcoming business ideas and decisions is sensitive. Confidentiality might be an issue and company should consider carefully its culture and also the content of information shared not to risk revealing too much of a sensitive information that may harm the company in case it gets accessed by outsiders.

Organization thinking of a similar solution might want to add features of ideas crowdsourcing, design user-friendly interface, have opportunity for people to interact on the game platform and ask questions or share knowledge. This might enhance usage of the game beyond initial purpose of sharing information and gathering feedback.

Game dynamics have to be maintained constantly by adding new

projects, launching new opinion polls, posting comments and answering questions.

Monetary rewards are contradictive and may harm or distort intrinsic user motivation to play. It is rather advised to use different types of reward, e.g. status, experience or emotions related. However, once monetary rewards are introduced, those cannot be removed without risking to lose user interest.

By no means, further research into this direction is required to prove or dismiss correlation between employee engagement and use of gamification within the working environment. Gamification applied to poor work processes or products will not work. Gamification needs a clear purpose and strategy to succeed. It requires understanding of users (target audience) and what motivates them to engage with the business. Main question of a user always is what is in it for me?

Gamification is only attractive if the action being gamified has intrinsically motivating characteristics. The game on its own is not enough. Material incentives work temporarily but have a negative effect on the long run (e.g. promotes cheating). Gamification has a potential to support reaching business goals through multiplied competence and common wisdom of individuals who are close to specific business processes. A lot of knowledge and creativity is hidden amongst the employees. Getting them to share ideas can improve the business and save money in efficiency improvements. Game settings might be the right environment for people to open up and suggest their ideas, especially if those employees belong to generations Y or Z.

Unique value of the Forecaster is in its standing between internal communication tool and a platform for improved business decisions. It will be interesting to observe further developments of the Forecaster tool and its impact on employee engagement in a longer run.

## References

Bersin, J. 2014a. 'It's Time to Rethink the "Employee Engagement" Issue.' Forbes, 10 April. http://www.forbes.com/sites/joshbersin/2014/04/10/its-time-to-rethink-the-employee-engagement-issue/

2014b. 'The Fine Elements of a "Simply Irresistable" Organization.' Forbes, 4 April. http://www.forbes.com/sites/joshbersin/2014/04/04/the-five-elements-of-a-simply-irresistibleorganization/

Branson, R., and J. Oelwang. 2014. 'Introducing New Ways of Working.' Virgin. http://www.virgin.com

Csikszentmihalyi, M., and I. S. Csikszentmihalyi, I. S. 1992. *Optimal Experience: Psychological Studies of Flow in Consciousness*. Cambridge: Cambridge University Press.

- Deterding, S. 2011. 'Situated Motivational Affordances of Game Elements: A Conceptual Model.' Presented at the CHI 2011 Conference on Human Factors in Computing Systems, Vancouver, 7–12 May.
- Gallup. 2013. 'The Relationship between Engagement at Work and Organizational Outcomes: 2012 Q<sup>12®</sup> Meta-Analysis.' Gallup, Washington. DC.
- Herger, M. 2014. Gamification in Human Resources. N.p.: M. Herger.
- Holwerda, J. 2007. 'Communicating for Engagement.' In 'Employee Engagement: What Do We Really Know? What Do We Need to Know to Take Action?' Ed. C. Dicke, J. Holwerda, and A.-M. Kontakos, 62–71. Center for Advanced Human Resource Studies, Cornell University, Ithaca. NY.
- Horovitz, B. 2012. 'After Gen X, Millennials, What Should Next Generation Be?' USA *Today*, 3 May. http://usatoday3o.usatoday.com/money/advertising/story/2012-05-03/naming-the-next-generation/54737518/1
- Kahn, W. 1990. 'Psychological Conditions of Personal Engagement and Disengagement at Work.' *Academy of Management Journal* 33 (4): 692–724.
- Linley, P. A., S. Harrington, and N. Garcea. 2010. Oxford Handbook of Positive Psychology and Work. Oxford: Oxford University Press.
- Loyola University Health System. 2008. 'Virtual-reality Video Game To Help Burn Patients Play Their Way To Pain Relief.' *Science Daily*, 22 March. http://www.sciencedaily.com/releases/2008/03/080319152744.htm
- Lunenburg, F. 2010. 'Communication: The Process, Barriers, and Improving Effectiveness.' *Schooling* 1 (1). http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C,%20Communication%20Schooling%20V1%20N1%202010.pdf
- Marczewski, A. 2012. *Gamification: A Simple Introduction*. N. p.: A. Marczewski.
- McCrindle, M., and E. Wolfinger. 2014. The ABC of XYZ: Understanding the Global Generations. Bella Vista: McCrindle Research.
- Melcrum. n. d. 'What is Smarter Internal Communication?' https://www.melcrum.com/what-is-internal-communication
- Mello, J. 2015. Strategic Human Resource Management. Boston, MA: Cengage Learning.
- Michaelson, C. 2011. 'Whose Responsibility is Meaningful Work?' *Journal of Management Development* 30 (6): 548–57.
- Mosley, E. 2013. *The Crowdsourced Performance Review*. Boston, MA: McGraw-Hill Education.
- Pink, D. H. 2008. A Whole New Mind, Why Right-Brainers Will Rule the Future. Singapore: Marshall Cavendish.
- Poggi, J. 2013. 'Nickelodeon Targets 'Post-Millennials' in Upfront.' Advertising Age, 26 February. http://adage.com/article/special-report-tv-upfront/nickelodeon-targets-post-millennials-upfront/240045/

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- Purves, K. 2005. 'Meetings and Incentive travel.' *Corporate Communications* 34 (3): 13–5.
- Reeves, R. 2001. *Happy Mondays: Putting the Pleasure Back into Work.*Boston, MA: Pearson Education.
- Ruck, K., and A. Pilkington. 2013. 'Exploring the Role of Internal Communication in Supporting Line Managers to Enhance Employee Engagement.' Chartered Institute of Public Relations, London.
- Watson Wyatt. 2006. 'WorkUSA 2006/2007: Debunking the Myths of Employee Engagement: Executive Summary.' Watson Wyatt. http://www.watsonwyatt.com/research/resrender.asp?id=2006-CA-0039 &page=1
- Welch, M. 2011. 'The Evolution of the Engagement Concept: Communication Implications.' *Corporate Communications: An International Journal* 16 (4): 328–46.



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# Culture as a Moderator in High **Commitment Management:** Affective Commitment Link

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Affective organizational and occupational commitment is crucial for organizations. It has been proven that usage of High Commitment Management (HCM) practices improves affective organizational commitment, but no attention was paid to its influence on occupational type of commitment. They also measured direct influence of national culture on both construct; however, their findings often did not support with each other. By conducting a comparative research among university employees in the Netherlands and Poland нсм was proven to positively influence affective organizational and occupational commitment. Obtaining mixed results from moderated linear regression (only one cultural dimension had actual impact on the correlation between нсм and a focus of commitment) led to leaving the issue of influence of national culture on this correlation. Yet, there are perquisites that led to conclusion that confirmatory studies need to be done in the future to support these findings.

Key words: affective commitment, High Commitment Management, national culture, moderator

### Introduction

Commitment of employees towards an organization was investigated successfully for more than four decades. One of the first consistent and most often cited definitions of organizational commitment was provided by Porter (Porter et al. 1974) describing it as (a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership. Described as attitudinal commitment, a definition was used in a variety of studies (Malik et al. 2010; Mathieu and Zajac 1990; Siders, George, and Dharwadkar 2001; Whitener 2001; Yousaf, Sanders, and Shipton 2011). Contemporary researchers, basing on this typology, distinguish between three types of commitment: affective, continuance, and normative commitment. Affective (value-based) commitment is related to emotional bonding, identification, and strong involvement. Continuance commitment is understood as a calculation of costs caused by leaving an organization. Third, normative commitment is an obligation to stay in an organization as perceived by an employee (Meyer and Allen 1991).

In the 1980s the unity of focus of employees' commitment was questioned (Morrow 1983). Further researches confirmed multifocus of commitment within organization (Becker 1992). Although scientists are not consistent in the differentiation of foci of commitment, supported is that employees distinguish between issues which they are committed to, i.e. organization itself, supervisors, coworkers, work, or occupation (Meyer and Herscovitch 2001; Swailes 2002). Very often organizational commitment is considered jointly attached to all the issues that are related to organization.

The objective of this study is to consider factors influencing employees' affective commitment links within the framework of concept of High Performance Working Systems (HPWS). The literature presents use of human resource management practices as HPWS, which describe methods, which would allow an employer to improve efficiency of employees (Berg 1999; Pfeffer 1995). Development of these methods polarized researchers who focused on HPWSS at a more detailed level. Managing commitment turned out to be one of the issues playing a crucial role in organizations which led to development of High Commitment Human Resource Management (HC-HRM) stimulating employees' commitment by using proper HRM (Guest 1997).

Another issue that arises along with human resource management refers to its worldwide applicability. The question of sensitivity of commitment models on cultural differences was raised repeatedly, as well. The issue of commitment of employees was researched in a variety of national organisations settings, with outcomes not always supporting each other. However, the main result was that it has significant impact on employees' attitude towards organisation. Affective commitment, which is considered as most in line with value-based definition of commitment, has been differentiated among various foci, while most often researchers focused on affective organisational and occupational commitment. Examination into distribution of commitment on these two approaches is essential, and this is why this research focuses on them. Thus, the objective of this research

is therefore to describe the impact of HCM practices, used on focusing employees' affective commitment, on particular targets. This is to be done in line with comparative analysis of cultural influence on obtained correlations. Analysis of cultural differences will be able to be achieved by running an empirical study in the Netherlands and Poland.

Following research hypotheses were developed:

- Usage of High Commitment Management practices has positive influence on (a) affective organizational commitment, and (b) affective occupational commitment.
- H2a National culture does take moderating role in shaping correlation between use of HCM practices and affective organizational commitment.
- H2b National culture does take moderating role in shaping correlation between use of HCM practices and affective occupational commitment.

Figure 1 describes theoretical assumptions of the framework that is meant to help providing the answer for main research hypothesis. The core of the study considers moderating influence of national culture on prescribed correlation. The starting point of the study is verification of hypothesis H1 that assumes that there is measurement of two correlations: High Commitment Management practices and affective organizational commitment (H1a), and High Commitment Management practices with occupational commitment (H1b). Then, the second hypothesis states that given relations are dependent upon influence of national culture (н2а and н2b). Hypotheses н1 was raised basing on reasoning drawn from researches regarding affective organizational and occupational commitment, and usage of нсм practices. Hypothesis н2 was based on lack of consistency between researchers in the field of cultural influence on these factors. Lack of literature on the topic of culture as a moderator of correlation between these constructs caused that H2 was supported with hypothetical and logical reasoning. Nonetheless, both hypotheses were constructed so their verification would allow answering the research hypothesis sufficiently.

It is crucial to emphasise that confirming H1 is not a necessary condition for confirming H2. If moderating relation would be found to confirm H2 while there would be no support for H1 it would mean that the given sample is an example of culture where application of HCM does not influence affective commitment. Nonetheless, if the setting of cultural dimensions differed, such correlation would occur.

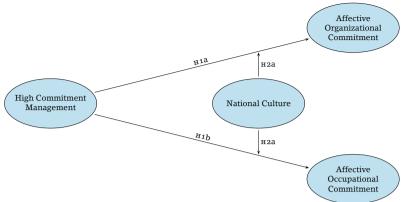


FIGURE 1 Empirical Model

# **Literature Study**

#### AFFECTIVE ORGANISATIONAL AND OCCUPATIONAL COMMITMENT

Since the very beginning, scientists were describing commitment as an attitudinal factor (Porter et al. 1974). The developed theory regarding affective commitment was based on emotional attachment of employees to an organization. The multidimensionality of commitment and distinguishing among different types led to disputes regarding the core of commitment.

Nonetheless, most of the researchers were pursuing the original, attitudinal assumption and were basing their researches (successfully, very often) on affective commitment (although this term was not established yet) as core of organizational commitment (Bateman and Strasser 1984). The study of (Meyer, Allen, and Smith 2002) shows that, although normative and continuance commitment are significantly correlated with the majority of the same outcomes as affective commitment, in cases of affective commitment these correlations are visibly stronger.

#### AFFECTIVE OCCUPATIONAL COMMITMENT

Occupational commitment is considered in terms of devotion to one's career, occupation, or profession (Morrow 1983). Occupational commitment has an affective dimension since it refers to acceptance, identification with, and following the values related to a particular occupation. It is also related to determination to continue to work in that occupation (Vandenberg and Scarpello 1994). Cohen (2000) argues that occupational commitment should be considered as the most influential among other foci, especially in professional envi-

ronment. This is because professional employees may be more focussed on the goals driven by their own occupation (career) than by an organization.

Morrow and Wirth (1989) discuss occupational commitment in terms of one's profession. When researchers first leaned over the subject of occupational and organizational commitment, they were using the term of occupation, career, or profession interchangeably (Morrow 1983). Yet, their followers raised question whether these terms should be considered as synonyms in terms of occupational commitment. Meyer, Allen, and Smith (1993) reject the term of career because its meaning may be considered as ambiguous. Although profession is not thought to be inappropriate, occupation is considered to be more accurate (Morrow and Wirth 1989). Following logics of Meyer, Allen, and Smith (1993), both professionals and nonprofessionals are capable of experiencing commitment to what they do. Therefore, occupational commitment is a term used in general as what is understood an emotional attachment to somebody's occupation or profession.

It is to be clearly stated that there is an evident distinction between occupational and organizational commitment (Morrow and Wirth 1989). Though slight correlations exist between the two, they are below the level of significance. Therefore, organizational commitment may be considered as an individual construct (Blau 1988). Besides, there is a number of researchers who suggest that focus of commitment changes depending on the changing variables that influence employees (Johnson 1996). Nevertheless, it has to be remembered that both organizational and occupational commitment are considered from affective perspective. Therefore, following basic definition by Porter et al. (1974) they are based on intrinsic beliefs which cannot be influenced and changed overtime (Morrow and Wirth 1989). Only environmental conditions, which are conformed to pursued values, may alter affective commitment.

Occupational commitment has a great value for employees in terms of its outcomes. Researchers argue that high commitment to one's profession decreases intentions of withdrawal from occupation, which often is linked with leaving an organization (Lee, Carswell, and Allen 2000). Klassen and Chiub (2011) found that high level of commitment to profession among teachers can lead not only to decrease of intentions to quit but also lower overall stress, and stress among students. Besides, it impacts positively the way that students engage in the classes, and allows a teacher to manage classroom more easily and effectively.

#### HIGH COMMITMENT HUMAN RESOURCE MANAGEMENT

Application of particular Human Resource Management practices has its theoretical base in social exchange theory (Blau 1964). It is a long term relation; the assumption of building emotional bonds between employee and organization (Arvee, Budhwar, and Chen 2002).

Theory behind High Commitment Management design of antecedents of organizational commitment, or usage of practices stimulating organizational commitment is described as High Commitment Management (Guest et al., 2003). Using these practices, an organization aims to improve the efficiency of its employees by building their identification with organizational goals and values. Committed employees were more willing to work efficiently in order to follow these values and reach the goals (Arthur 1994; Whitener 2001).

Marchington and Wilkinson (2005) following Pfeffer (1998) list components of 'best practice' нс-ням. It consists of:

- Employment security and internal labour markets,
- Selective hiring and sophisticated selection,
- Extensive training, learning and development,
- Employee involvement, information sharing and worker voice,
- Self-managed teams/team-working,
- High compensation contingent on performance, and
- · Reduction of status differentials/harmonisation.

## Methodology of Research

In order to investigate the influence of culture on relation between usage of HCM practices and employees' foci of commitment, empirical research was done. The research was done among the workers of Wageningen University and Research Centre (wur) and Warsaw University of Life Sciences (sggw) in the Netherlands and Poland, respectively. The reason for choosing academic institutions was motivated mostly by convenience and ease in accessibility of the respondents.

The choice of Poland and the Netherlands was also based on convenience reasons. Comparison of these countries using their scores in the research of Hofstede (2010) shows that they differ in terms of all cultural dimensions. Figure 2 presents scores of Poland and the Netherlands in five Hofstede's dimensions. Poland, on Power Distance Index (PDI) scale, scored with 68 while the Netherlands scored with 38 (out of 100). The results of both countries may be considered

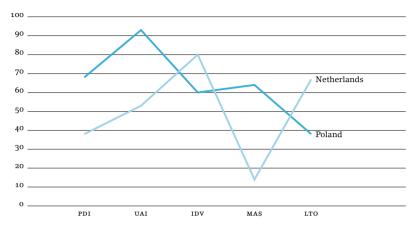


FIGURE 2 Comparison of Cultural Dimensions

as moderately strong, but they are on contrary sides of the scale. The spread of scores in Uncertainty Avoidance Index (UAI) was at the level of 40. Poland was found as strongly uncertainty avoiding with a score of 93. The Netherlands placed in the middle of the scale with the UAI of 53. The results show that in case of Individualism Index (IDV). Poland and the Netherlands were placed on the 'individual' side of the scale.

Although, the Netherlands are more extremely individual, scoring 80 on IDV, Poland was not so far behind them, scoring 60. In the study of (Hofstede 2010) the Netherlands scored with extreme value of 14 on Masculinity Index (MAS), while Poland had moderate 64 points. It is the biggest spread between these two countries in all of the dimensions. Finally, the scores of both Poland and the Netherlands in Long-term Orientation Index (LTO) were rather moderate but on opposite sides of the scale (67 - the Netherlands; 38 - Poland). Given this description, it is to conclude that significant spreads of scores of these countries make them appropriate to this research.

The survey was aimed at all employees (academic, technical, and administrative) of both universities. At wur, requests were sent to the heads of the Science Groups. Finally, cooperation with two out of five Science Groups was arranged, and the questionnaire was spread among approximately 2000 employees (number obtained from the HR departments, which were forwarding e-mails with the survey). Within three weeks of being on-line, the questionnaire was answered 278 times.

At sggw, the questionnaires were sent to all employees of the university basing on lists of employees given on the websites of particular departments. There were approximately 2000 of employees reached with the survey (some emails were forwarded by Dean's offices of particular departments). The questionnaire was on-line for the same period as Dutch version was, it was answered 360 times.

Three weeks of data collection resulted with receiving a total number of 638 responses from the Netherlands and Poland. A large amount of respondents did not complete the survey, and therefore, in total 342 respondents were taken into account. As one of the guestions referred to the sub-department that participants work in (Chair Group level in the Netherlands, and Cathedral in Poland), in total responses from 92 sub-departments were collected. Still, there were sub-departments in which only one employee filled in the questionnaire. Finally 318 respondents were selected ( $n_{NL} = 151$ ;  $n_{PL} = 167$ ) spread among 68 sub-departments ( $n_{NL} = 25$ ;  $n_{PL} = 43$ ). A minimum of respondents per sub-department was n = 2, however maximum number of respondents was  $n_{\rm PL} = 13$  in Polish, and  $n_{\rm NL} = 50$  in Dutch sample.

The empirical study was set using on-line survey software -Qualtrics (www.qualtrics.com). The use of this particular software provided ease in designing, launching, and collecting the surveys, which were sent to the respondents using e-mail. They were to fill in the questionnaire using a web browser, thus every answer given was recorded on Qualtrics account. The inquiry form was built in three versions. First, an English version was created, basing on the questionnaires used repeatedly in prior researchers. Then, translations to Dutch and Polish languages were provided, in order to allow respondents answering the questions in their mother tongues. The translations to both languages were provided by independent, native speakers of that language, three from each case.

## **Data Analyses and Results**

The data obtained in the field research were analysed with three major methods, using correlation analysis, linear regression, and multilevel modelling. The following sections present the confrontation of research results with prior findings.

#### CONTROL VARIABLES

The control constructs, which were included in the empirical model, were age, gender, seniority within the occupation and organization, and proactive personality of respondents. The results were consistent, in general, although there were some differences depending on the sample, and focus of commitment (table 1). Gender (The Nether-

TABLE 1 Correlation Matrix: All Constructs

	Netherlands	lands	Poland	pu	1	2	3	4	5	9	7	8	6	10	11	12
l	Mean	SD	Mean	SD												
1	1 3.44 0.72	0.72	3.68	0.78	1	0.467**	0.160	-0.144	0.142	0.135	0.147	-0.077	0.221**	0.126	0.035	0.406**
73	3.94	0.56	4.10	0.62	0.353**	н	0.281**	-0.087	0.003	-0.042	-0.037	-0.109	920.0	0.184*	-0.004	0.325**
က	3.30	0.53	3.39	0.62	0.100	0.276**	н	0.168*	-0.155	-0.092	-0.197*	0.058	-0.095	0.246**	-0.135	-0.133
4	1.38	0.49	1.63	0.48	-0.070	-0.055	-0.047	Ħ	-0.337**	-0.226**	-0.272**	0.192*	-0.042	0.111	-0.185*	-0.237**
2	45.17	12.08	41.64	11.69	0.302**	0.026	900.0	-0.431**	Ħ	0.796**	0.785**	-0.002	0.124	0.152	0.196*	0.176*
9	2.34	0.82		0.75	0.271**	0.073	-0.042	-0.395**	0.856**	Ħ	0.887**	-0.138	0.079	0.154	0.112	0.116
7	2.14	98.0	2.04	0.82	0.277**	0.001	-0.071	-0.432**	0.828**	0.839**	Ħ	-0.122	0.161	0.177*	0.145	0.142
8	1.25	0.43	1.05	0.21	0.150	-0.221**	-0.073	0.278**	0.090	990.0	0.051	Ħ	0.154	0.015	0.068	-0.189*
6	3.54	0.53	2.93	0.75	0.129	-0.141	-0.021	0.247**	0.127	0.135	0.208*	0.121	1	0.256**	0.097	960.0
10	3.60	0.65	3.69	69.0	0.134	-0.036	-0.063	0.284**	-0.109	-0.132	-0.094	244**	-0.115	Ħ	-0.013	-0.014
11	1.86	09.0	2.23	92.0	0.052	-0.101	-0.058	-0.167*	0.093	0.060	0.054	0.050	-0.013	-0.051	н	0.110
12	3.00	0.55	2.68	0.65	0.295**	0.202*	-0.099	0.097	-0.021	-0.082	-0.092	0.204*	0.055	0.189*	-0.011	Ħ

(9) collectivism, (10) uncertainty avoidance, (11) masculinity, (12) HCM. Occupation coding: academic employee = 1, administrative or technical employee = 2. Seniority NOTES CONSTRUCTS: (1) ORC, (2) OCC, (3) proactive personality, (4) gender, (5) age, (6) seniority within occupation, (7) seniority within organization, (8) occupation, coding: 1 = less than 5 years, 2 = between 5 and 15 years, 3 = more than 15 years. Dutch sample below diagonal. \*p < 0.05, \*\*p < 0.01

TABLE 2 Estimators' Comparison

Parameter	Model 1 (1	moderating va	Model 1 (moderating variable: collectivism)	(c	Model 2	(moderating va	Model 2 (moderating variable: masculinity)	у)
	Moderated linear regression	regression	Multilevel modelling	lelling	Moderated linear regression	regression	Multilevel modelling	lelling
	Estimate	Sig.	Estimate	Sig.	Estimate	Sig.	Estimate	Sig.
Occupation	-0.270	0.000	0.022	0.869	-0.242	0.002	0.034	0.792
Proactive personality	0.247	0.001	0.342	0.001	0.290	0.000	0.353	0.001
нсм	0.220	0.005	0.116	0.280	0.331	0.000	0.272	0.008
Collectivism	-0.110	0.130	-0.109	0.244	-0.112	0.150	-0.128	0.155
нсм × collectivism	0.226	0.004	0.114	0.090	0.155	0.061	0.165	0.019

NOTES Dependent variable: occ.

lands – 53,25% male respondents; Poland – 40,12% male respondents) was not found correlated to either affective organizational commitment (ORC), or affective occupational commitment (OCC). This is in line with common results of various researchers who measured the influence of demographic variables as correlates of affective occupational or organizational commitment (Goswami, Mathew, and Chadha 2007; Meyer, Allen, and Smith 1993; Morrow and Wirth 1989; Yousaf 2010; Yousaf, Sanders, and Shipton 2011).

Regarding age, it correlated positively with orc, and this link was found to be significant only in case of Dutch sample. Seniority in organization and occupation were found significantly correlated to affective organizational commitment only in Dutch set of respondents. This inconsistence between samples might be surprising, since logical reasoning suggests that years spent in profession should improve one's occupational commitment. Yet, over the years, findings of various researchers showed that the time spent in an organization, or within an occupation does not have significant impact on employees' commitment towards organization or occupation (Goswami, Mathew, and Chadha 2007; Morrow and Wirth 1989; Yousaf 2010).

In case of Proactive Personality (PP) variable, there were significant relationships noticed in both samples, with occ only. Also in linear regression, this construct was not significant in the first step of model building. However, this holds for Dutch sample only because in case of Polish set of respondents the coefficient of this variable was significant ( $p_{PL} < 0.05$ ). Looking at the definition of this construct, researchers who investigated issues being consanguineous to proactive personality have usually found them meaningfully influential towards organizational commitment (Becker 1992).

Looking at the results obtained from this research, it may also be assumed that, since responses referring to affective organizational commitment are not entirely consistent with prior findings, they may be considered as not utterly valid. The pattern related to the PP-ORC/PP-occ links is just an assumption based on meta-analytical observation, and cannot be supported with any theoretical bases. Although this assumption may strengthen validity of orc-related results, they still need to be taken analysed with caution.

# The Influence of High Commitment Management and National Culture on Affective Commitment

The results regarding нсм – affective commitment link were not surprising. The studies which were conducted in the past show that there is a direct, and positive influence of HCM practices on affective commitment in organizations (Whitener 2001; Wood and Albanese 1995; Wood and de Menezes 1998; Zeidan 2006), нсм in this research was strongly correlated to both orc and occ, which is in line with prior studies. Besides, although validity of linear regression was questioned by occurrence of correlations within groups of respondents, HCM variable was strongly significant in all models, which it was entered into. Finally, multilevel modelling showed that adding нсм construct to the model increases explanation of variance therefore application of HCM practices does have impact on affective commitment. Lack of studies on influence of HCM on affective occupational commitment stems judgement whether such pattern is found as a general paradigm, but its existence in all models, across both samples may strengthen this assumption.

Significant correlations of HCM with affective commitment in both samples are in line, as well as against the conclusions of researches conducted in the past. Boselie, Paauwe, and Jansen (2001) argued that Human Resource Management practices, which aimed in improvement of employees' commitment were widely, and successfully applied in organizations for many years. On the other hand, Stankiewicz and Moczulska (2012) concluded that High Commitment Management does not meet expectations of Polish workers, and therefore it does not have influence on their commitment. Nonetheless, the results clearly show that there is a meaningful direct influence of HCM on both foci of commitment, no matter where the research was conducted.

The other element that was taken into consideration was related to national culture and its impact on affective commitment of employees. In this case, the results were partially consistent. In the Dutch sample, there was no particular case where this correlation would be shown, while the outcome of Polish set of responses did exhibit correlations between orc and collectivism, and occ with uncertainty avoidance. Both results are in line with conclusions of some of the prior researchers, who in fact did not find common ground and agree upon whether culture influences commitment, or not.

## National Culture and HCM: Affective Commitment Link

The main assumption of this research was to investigate possible influence of national culture on the correlation between application of HCM and employees' reaction in terms of improvement of their affective organizational or occupational commitment. Previous studies focused on direct correlations between culture and commitment, or HR practices. Various, and inconsistent outcomes did not let the researchers build a general model which would provide unequivocal paradigm.

Moderating influence of culture was investigated by building multiple moderated linear regression models (West and Aiken 1996) which examined different sets of cultural interaction variables and their influence on connection between HCM and one of two foci of affective commitment. These models were run once in each sample in order to have ability of making further comparative analyses. As a result only one model (Model 1 нсм × Collectivism with occ as dependent variable in Dutch sample) turned out to be significant in terms of interaction variable having meaningfully high beta coefficient (p < 0.01). Having only one model (out of twelve) which would suggest moderating impact of culture there was need for running further analyses in order to establish the cause of such low significance of other estimators. By using multilevel modelling Model 2 (нсм × Masculinity with occ as dependent variable in Dutch sample) was found to be significant in terms of moderating influence of cultural factor, while interaction variable of Model 1 was above the commonly accepted significance cut-off point (p = 0.05), and therefore it had to be rejected. Regardless of the factors other than statistical, Model 2 can be thus assumed as valid, and confirmatory for moderating role of culture.

Summing the results up, moderated linear regression and multilevel modelling analyses gave similar results, although their significance differed. There were two models (both in Dutch sample, and referring to occ as dependent variable) which in the final step had coefficients of interaction variables on the opposite sides of p = 0.05 significance cut-off point. Table 2 presents comparison of models which in the last step of adding the coefficients had interaction variable significant at the level p < 0.10. All of them were obtained from Dutch sample of respondents. In Polish sample, there was no model, which would have a significant interaction variable.

Collectivism interaction variable that was entered to the model constructed with moderated linear regression is significant ( $\beta_{\rm NL}$  = .226\*\*), while coefficient of the same variable in multilevel model has much lower value, and by the rule of thumb should not be considered as significant ( $\beta_{\rm NL}$  = .114\*\*\*). On the other hand, considering Masculinity interaction variable, there is an opposite situation. Its coefficient obtained in moderated linear regression is of doubtful significance ( $\beta_{\rm NL}$  = .155\*\*\*), while the estimate from multilevel model can be considered as significant ( $\beta_{\rm NL}$  = .165\*\*). Given inconsistency has been already partially explained in the section describing ICC. High

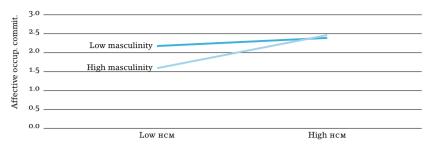


FIGURE 3 Masculinity as a Moderator of HCM-OCC

correlation within particular sub-departments might have breached validity of linear regression. Yet, the results of conducted multilevel modelling analyses (although inverted) seem to confirm outcomes obtained before.

Given results show that both, Collectivism and Masculinity interaction variable had influence on the models that they were entered in. Although this was experienced in Dutch set of respondents only, running two analyses showed that the influence is significant. However, Collectivism interaction variable in multilevel modelling analysis had its significance level not fitting in commonly accepted cut-off point (p < 0.05). Therefore, Model 1 has to be rejected, while Model 2 can be considered as valid in further research.

Figure 3 presents a plot that explains Model 2 where Masculinity has moderating influence on нсм-осс link. A tool designed by Dawson (n.d.) was applied facilitating presentation of moderating relation. Whenever Masculinity as a feature of national culture is low, application of High Commitment Management practices seem to have only marginal impact on increase of affective occupational commitment. The slope that represents HCM-occ link in an environment with low masculinity is characteristic because of its (almost) unnoticeable flexibility. On a contrary, the slope describing high Collectivism environment is evidently more elastic. According to this model, in such conditions application of HCM practices should significantly improve affective occupational commitment. The plot presents one more interesting feature of HCM-occ link. Regardless of the level of national culture, application of High Commitment Management practices should result with approximately the same level of occ, no matter what level of national culture is. Nonetheless, the model shows that lack of HCM should lead to significant drop of affective occupational commitment in highly collectivistic cultures, while in cultures with low collectivism this decrease would rather not be meaningful.

Given these results, there are a number of major issues that have to be stressed out next to these findings. Firstly, Model 2 was built with occ as dependent variable. None of analysed models, neither in linear regression or multilevel modelling, turned out to have a significant interaction variable when orc was considered as dependent item.

It was already stated that analyses investigating control variables showed few inconsistencies regarding their correlations with affective occupational commitment. The most visible and important contradiction was concerning lack of correlation of orc with Proactive personality. If it is assumed that noticed pattern regarding proportions of correlations Proactive personality with different foci of commitment is true, the dataset is valid and the in fact culture does not moderate HCM-ORC link. Yet this this is not the scope of this study, and there is too few information available in the dataset to verify this assumption. On a contrary, if the assumption about this pattern is false, the problem lies in wrongly assessed sample, or another unknown environmental factor.

The second major issue refers to the fact that any significance regarding moderating correlations was found in Dutch sample, only. As stated earlier, occupation should not have significant influence on either affective occupational or organizational commitment. Considering the studies that came up with such results were conducted in different countries (Blau 2003; Guest et al. 2003; Malik et al. 2010; Yousaf, Sanders, and Shipton 2011), national culture does not have impact on this issue, as well. Nonetheless, these statements come from studies on the direct influence of culture on commitment. Since there were no particular studies were conducted in order to investigate moderating effect of culture, it is not sure whether the same correlation is true in this setting of constructs. It may be applied also in other issues like kind of organization, or sector that it exists in. Although both organizations that were researched are universities, Polish institution seems to be financed by government in greater level than Dutch. It positions them differently regarding the sector that they operate in.

Third, only one out of three culture-related variables turned out to have significant influence on  $\mbox{HcM}$  – affective commitment correlation. Again, it is impossible to give an unequivocal reason for appearance of this phenomenon mostly because of no points of reference in prior researches. None of the commitment foci was found dependent upon Masculinity dimension (moderator in Model 2) neither in Polish, nor Dutch sample. Although in Dutch sample, where

Model 2 was significant, none of the other culture-related constructs correlated with orc or occ

Because of lack of arguments supporting the lone Model 2 it is difficult to decide whether Masculinity dimension may be considered as moderator of HCM-occ link. Applying logical reasoning to interpretation of Model 2, employees living in a low-masculinity culture would have higher occ whenever an organization provide, for example, workers with trainings regarding enhancing women at the labour market of this particular occupation. However, other any logical reasoning regarding collectivism or uncertainty avoidance is not backed up with particular model. This might also mean that, although Model 2 is statistically significant, it is just a side effect of wrongly assessed sample. Having a retrospective look into methodology part, described sample is not only spread across broad number of groups, but also their distribution within these groups is widely unequal. As intra-class correlation has meaningfully disturbed the results of regression analysis, such an unequal distribution of respondents might have disturbed the results of multilevel modelling. In that case Model 2, despite of its statistical significance, would have to be rejected.

## **Conclusions and Results**

### HYPOTHESES VERIFICATION

The impact of HCM was investigated in the field of organizational commitment, with researches focusing specifically on affective organizational commitment. There were minor attempts to pinpoint the effect of HCM practices on affective occupational commitment, although there were reasonable theoretical rationales. Therefore, a hypothesis was built stating that usage of High Commitment Management practices has positive influence on (H1a) affective organizational commitment, and (H1b) affective occupational commitment. Basing on the discussion it can be concluded that both hypotheses are supported statistically, because of significant relations found in correlation analysis, linear regression, and multilevel modelling. Although correlations were found, a number of objections can be raised. Since the results regarding orc were not entirely consistent with prior researches in the area of control variables, caution with interpretation of these results is advised, especially regarding H1a. Both regression-based analyses resulted with significant нсм соefficients across all models, although existence of intra-class correlations and unbalanced distribution of respondents among subdepartments could have disturbed their validity. It was therefore concluded that, despite of obtaining repetitive results and prior findings, which support  $\mathtt{H1}$ , a confirmatory study on more reliable sample is needed in order to ensure its validation.

The second hypothesis was based on inconsistency between prior researches regarding direct impact of culture on both, нсм practices and affective commitment. The scientists could not find common ground when investigating immediate correlation, thus it was assumed that national culture does take moderating role in shaping correlation between use of HCM practices and affective organizational commitment (H2a), and between use of нсм practices and affective occupational commitment (H2b). As it was already discussed, pioneering nature of this research disallowed analysing the results by comparison with prior findings. No significant model concerning orc as dependent variable was found to support H2a, regardless of investigated sample, or used method. н2a was therefore refuted. In case of H2b, one out of six models had statistically significant moderating features. Nonetheless, five others did not, and it would be the main objection for accepting this hypothesis. On the other hand, the masculinity dimension is still a cultural factor. Although it was confirmed as a moderator in one sample only, there still are no theoretical, logical, or statistical prerequisites to deny masculinity as a moderator of нсм-осс link. This is why н2b is neither supported nor rejected.

Formulating a conclusion, there is no certain answer to be given for the main research question. It is true that usage of High Commitment Practices does have positive impact on both, affective organizational and occupational commitment. National culture, on the other hand, does not moderate нсм – affective commitment link in case of organizational focus. However, finding one statistically significant model against five not valid suggests that the question regarding HCM-occ link has to be left unanswered. Still, uncertainties that arose along with development suggest leaving other questions open, as well. Repeatedly mentioned unreliable sample, and lack of support for results regarding part of control variables may seriously impeach validity of these answers. On the other hand, because of no corresponding researches that could be taken as a reference point, it is impossible to unequivocally state that all correlations with used control variables behave the same way in case of direct and moderating influence. Therefore, further confirmatory researches need to be done, meanwhile the question regarding moderating impact of national culture on нсм – affective commitment link has to be left opened.

#### References

- Arthur, J. B. 1994. 'Effects of Human Resource Systems on Manufacturing Performance and Turnover.' The Academy of Management Journal 37 (3): 670-87.
- Arvee, S., P. S. Budhwar, and Z. X. Chen. 2002. 'Trust as a Mediator of the Relationship Between Organizational Justice and Work Outcomes: Test of a Social Exchange Model.' Journal of Organizational Behavior 23 (3): 267-85.
- Bateman, T. S., and J. M. Crant. 1993. 'The Proactive Component of Organizational Behavior.' Journal of Organizational Behavior 14:103-18.
- Bateman, T. S., and S. Strasser. 1984. A 'Longitudinal Analysis of the Antecedents of Organizational Commitment.' The Academy of Management Journal 27 (1): 95-112.
- Becker, T. E. 1992. 'Foci and Bases of Commitment: Are They Distinctions Worth Making?' The Academy of Management Journal 35 (1): 232-44.
- Becker, T. E., R. S. Billings, D. M. Eveleth, and N. L. Gilbert. 1996. 'Foci and Bases of Employee Commitment: Implications for Job Performance.' The Academy of Management Journal 39 (2): 464-82.
- Berg, P. 1999. 'The Effects of High Performance Work Practices on Job Satisfaction in the United States Steel Industry.' *Industrial Relations* 54 (1): 111-35.
- Blau, G. J. 1988. 'Further Exploring the Meaning and Measurement of Career Commitment.' Journal of Vocational Behavior 32 (3): 284-97.
- -. 2003. 'Testing for a Four-Dimensional Structure of Occupational Commitment.' Journal of Occupational and Organizational Psychology 76(4): 469–88.
- Blau, P. M. 1964. Exchange and Power in Social Life. New York: Wiley.
- Borkowska, S. 2009. 'zzl a innowacyjność organizacji biznesowych.' Zarządzanie Zasobami Ludzkimi, no. 2: 11–30.
- Boselie, P., J. Paauwe, and P. Jansen. 2001. 'Human Resource Management and Performance: Lesson from the Netherlands.' The International Journal of Human Resource Management 12 (7): 1107-25.
- Cohen, A. 2000. 'The Relationship between Commitment Forms and Work Outcomes.' Human Relations 53 (3): 387-417.
- Dawson, J. N. d. 'Interpreting Interaction Effects.' www.jeremydawson .co.uk/slopes.htm
- Goswami, S., M. Mathew, M., and N. K. Chadha. 2007. 'Differences in Occupational Commitment amongst Scientists in Indian Defence, Academic, and Commercial RandD Organizations.' Vikalpa 32 (4): 13-27.
- Guest, D. E. 1997. 'Human Resource Management and Performance: A Review and Research Agenda.' The International Journal of Human Resource Management 8 (3): 263-76.

- Guest, D. E., J. Michie, N. Conway, and M. Sheehan. 2003. 'Human Resource Management and Corporate Performance in the uk.' British Journal of Industrial Relations 41 (2): 291-314.
- Hofstede, G. 2010. Cultures and Organizations: Software of the Mind. 3rd ed. New York: McGraw-Hill.
- Johnson, R. 1996. 'Antecedents and Outcomes of Corporate Refocusing.' Journal of Management 22:439-83.
- Klassen, R. M., and M. M. Chiub. 2011. 'The Occupational Commitment and Intention to Quit of Practicing and Pre-Service Teachers: Influence of Self-Efficacy, Job Stress, and Teaching Context.' Contemporary Educational Psychology 36 (2): 114-29.
- Lee, K., J. J. Carswell, and N. J. Allen. 2000. 'A Meta-Analytic Review of Occupational Commitment: Relations With Person- and Work-Related Variables.' *Journal of Applied Psychology* 85 (5): 799–811.
- Malik, E. M., S. Naswab, B. Naeem, and R. Q. Danish. 2010. 'Job Satisfaction and Organizational Commitment of University Teachers in Public Sector of Pakistan.' International Journal of Business and Management 5 (6): 17-26.
- Marchington, M., and A. Wilkinson. 2005. 'Human Resource Management at Work.' 3rd ed. London: CIPD.
- Mathieu, J. E., and D. M. Zajac. 1990. A 'Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organizational Commitment.' Psychological Bulletin 108 (2): 171-94.
- Meyer, J. P., and N. J. Allen. 1991. 'A Three-Component Conceptualization of Organizational Commitment.' Human Resource Management Review 1 (1): 61-89.
- Meyer, J. P., N. J. Allen, and C. A. Smith. 1993. 'Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization.' *Journal of Applied Psychology* 78 (4): 538–51.
- Meyer, J. P., and L. Herscovitch. 2001. 'Commitment in the Workplace: Toward a General Model.' Human Resource Management Review 11 (3): 299-326.
- Meyer, J. P., D. J. Stanley, L. Herscovitch, and L. Topolnytsky. 2002. 'Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences.' Journal of Vocational Behavior 61 (1): 20-52.
- Morrow, P. C. 1983. 'Concept Redundancy in Organizational Research: The Case of Work Commitment.' The Academy of Management Review 8 (3): 486-500.
- Morrow, P. C., and R. E. Wirth. 1989. 'Work Commitment among Salaried Professionals.' *Journal of Vocational Behavior* 34 (1): 40–56.
- Pfeffer, J. 1995. 'Producing Sustainable Competitive Advantage through Effective Management of People.' Academy of Management Executive 9 (1): 55-69.

- —. 1998. The Human Equation: Building Profits by Putting People First. Boston, MA: Harvard Business School Press.
- Porter, L. W. 1976. 'Organizational Commitment and Managerial Turnover: A Longitudinal Study.' Organizational Behavior and Human Performance 15:87-98.
- Porter, L. W., R. M. Steers, R. T. Mowday, and P. V. Boulian. 1974. 'Organizational Commitment, Job-Satisfaction, and Turnover among Psychiatric Technicians.' Journal of Applied Psychology 59 (5): 603-9.
- Siders, M. A., G. George, and R. Dharwadkar. 2001. 'The Relationship of Internal and External Commitment Foci to Objective Job Performance Measures.' Academy of Management Journal, 44(3), 570-9.
- Stankiewicz, J., and M. Moczulska. 2012. 'Czynniki klimatu organizacyjnego warunkujące efektywne zaangażowanie pracowników.' In Historia i perspektywy nauk o zarządzaniu: księga pamiątkowa dla uczczenia Jubileuszu 40-lecia pracy naukowo-dydaktycznej prof. zw. dr. hab. Arkadiusza Potockiego, ed. B. Mikuła, 213-24. Kraków: Fundacja Uniwersytetu Ekonomicznego w Krakowie.
- Swailes, S. 2002. 'Organizational commitment: A critique of the construct and measures.' International Journal of Management Reviews 4 (2): 155-78.
- Vandenberg, R. J., and V. Scarpello. 1994. 'A Longitudinal Assessment of the Determinant Relationship between Employee Commitments to the Occupation and the Organization.' Journal of Organizational Behavior 15 (6): 535-47.
- Vandenberghe, C., and K. Bentein. 2009. 'A Closer Look at the Relationship between Affective Commitment to Supervisors and Organizations and Turnover.' Journal of Occupational and Organizational Psychology 82:331-48.
- West, S. G., and L. S. Aiken. 1996. 'Experimental Personality Designs: Analyzing Categorical by Continuous Variable Interactions.' Journal of Personality 64 (1): 1-48.
- Whitener, E. M. 2001. 'Do High Commitment Human Resource Practices Affect Employee Commitment? A Cross-Level Analysis Using Hierarchical Linear Modeling.' Journal of Management Studies 27:515-35.
- Wood, S., and M. T. Albanese. 1995. 'Can We Speak of a High Commitment Management on the Shop Floor?' Journal of Management Studies 32 (2): 215-47.
- Wood, S., and L. de Menezes. 1998. 'High Commitment Management in the UK: Evidence from the Workplace Industrial Relations Survey, and Employers' Manpower and Skill Practices Survey.' Human Relations 51 (4): 485-515.
- Yousaf, A. 2010. 'One Step Ahead: Examining New Predictors of Affective Organizational and Occupational Commitment.' PhD Dissertation, University of Twente, Twente.
- Yousaf, A., K. Sanders, and H. Shipton. 2011. 'Proactive and Politically

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Skilled Professionals: What is the Relationship with Affective Occupational Commitment?' *Asia Pacific Journal Management* 30 (1): 211–30.

Zeidan, S. 2006. 'The Relationship between High Commitment Management and Employee Attitudes and Behaviours: The Role of Psychological Contract Fulfilment and Justice.' PhD Dissertation, Victoria University, Melbourne.



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# Framing Skilful Performance to Enact Organizational Knowledge: **Integrating Data-Driven** and User-Driven Practice

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Pointing out flaws and errors can be a risky pastime for employees, particularly when the information therein conflicts with rules, routines and theories held dear by management. However, skilful performance is not about strictly adhering to such established rules, routines and theories when seeking ways out of problem situations. This contribution argues that skilful performance arises out of the practice of shared meaning rather than punctiliousness. Especially in the event of uncertainty, equivocation and doubt, people in organizations should not just apply given rules, but also jointly classify, interpret and transform observed data into new knowledge that feeds back, so that subsequent action and its justification can tap into the prevailing business climate, reduce ambiguity, and offer prospects that are more exciting. A holistic approach is proposed that may also assist in the construction, processing and justification of knowledge, establishing meaning within an organization in order to improve organizational performance in the long term. Finally, a specific case of redevelopment in an SME illustrates the argument.

Key words: skilful performance, organizational knowledge, organizational learning, sense making, Language-Information-Reality framework

#### Introduction

Organizational performance may suffer from the fact that decisions within organizations often rest upon more or less incomplete information and misrepresented knowledge (Tsoukas 1997; 2005). Organizational knowledge, however, is usually assumed to be based upon computationally collected, processed, stored, retrieved, and communicated decision-relevant information. Organizational success is then explained and assumed to be reproduced in a controlled manner via explicit rules for action (Kogut and Zander 1992). Organizational success is thus assumed data-driven. This means that it may rest upon well-chosen documentation. However, data in such records or guidelines may change. Procedures assumed to explain and reproduce organizational success are usually tested, or rather evaluated, with respect to the results of their application, by persons assumed to have expertise in certain areas of practice. There appears to exist an implicit presupposition that the operationalisation and application of rules, once they have been explicated, do not need to draw further upon the extra knowledge of experts (Kogut and Zander 1992). However, this is erroneous, since an understanding of the meaning of calculated results, necessary to their evaluation, and the *selection* of those found acceptable might be faulty or absent. In 1969, Karl Weick suggested that this situation be addressed with the concept of sense making, which has lead to an explanation of the success of high reliability organizations (Weick and Roberts 1993). The concept of sense making tallies largely with a user-driven approach to explain organizational success.

The aim of this contribution is to examine the interplay between the data-driven and user-driven approaches necessary to understanding of, and support for, the enactment of organizational knowledge with a view to long-term organizational success via skilful performance. A holistic framework will be introduced, concerning – primarily but not exclusively – the relation between language, information and carefully selected parts of reality. The use of this framework for the analysis, guidance and evolution of actions to be taken with respect to the production and reproduction of skilful performance, and thus organizational success in the long term, will be discussed. To illustrate the matter in question, the initial situation in an Austrian SME, for which redevelopment was later analyzed within the framework outlined immediately above, follows.

Some years ago, the management of Beham Techn. Handels GmbH, an Upper Austrian sme specializing in the production of precision metal parts, realized that the company was no longer able to settle all its payments. Few people were aware that serious liquidity problems had been in existence for some years before the management was forced address the situation. Among these were, naturally enough, the accountants who lived daily with the liquidity difficulties. The main reason that this information did not penetrate to management sooner is that the employees believed that they might turn the situation round by working harder. However, the more they strove, the more clearly they realized that the threat to the company was increasing.

The solution to this case reconstructed below will portray (Shotter

and Tsoukas 2007, 21) the argument, developed within the framework provided, that skilful performance manifesting itself in organizational success does not stem from strictly and stubbornly adhering to established rules or best practices. Instead, people in organizations should be able to step out of such a given system and jointly classify, interpret and transform observed data into new knowledge that feeds back, so that subsequent action and its logical justification can offer prospects that are more exciting for them and their organization.

A review of related research traditions is provided to frame the argument. After that, hypotheses are developed to demonstrate their impacts on skilful performance, and thus organizational success: first, strictly and unreflectively adhering to rules is examined and second, overruling rules via the practice of seeking and sharing meaning within organizational environments. The impacts are examined within the holistic framework of analysis and in terms of prediction. Finally, the prerequisites for an appropriate actualization of the suggested approach within an organization are discussed.

# Skilful Performance, Organizational Learning and Sense Making

What explains skilful performance and how it is created is a question dating all the way back to Plato. Somewhat more recently, Taylor (1911) maintained that if there were an answer to this question; one would know what to concentrate upon and what to do to enhance the performance at individual, group and organizational levels. In fact, research into skilful performance is now among the most prominent subjects for organization and management studies (Vogel 2012) and consists of several intertwined streams of investigation. These various approaches address skilful performance by means of conceptualizing the various manifestations of knowledge: capabilities, competence/skills, and expertise (Fauré and Rouleau 2011; Rouleau and Balogun 2011; Sandberg and Pinnington 2009; Attewell 1990; Ingold 2000: Sennett 2008; Danneels 2010; Collins and Evans 2007; Dreyfus 2005; Dreyfus and Dreyfus 1986). Thus, there is no shortage of ideas about what can characterize particular types of knowledge. However, there is significantly less understanding about how these manifestations of knowledge are enacted in the kind of skilful performance that underlies organizational success in the long term (Danneels 2010; Sandberg and Targama 2007; Tsoukas and Vladimirou 2001; Tsoukas 2005).

Skilful performance, however, is tightly interwoven with individ-

ual and organizational learning (Brown and Duguid 1991; Gherardi 2006; Nicolini, and Yanow 2003; Tsoukas 2005). According to Argyris (1976), learning in and by organizations may be understood as a process of tracking down and eradicating discrepancies. When this process enables an organization to apply its present rules or to achieve its goals, the process may be termed single-loop learning (Argyris and Schon 1974), which can be understood to correspond to the data-driven perspective upon explanation of skilful performance, and thus of organizational success as such. Single-loop learning may be compared to a thermostat, in that it is said to know when it is too hot or too cold in the room; it is then instructed to turn the heat on or off: 'The thermostat is able to perform this task because it can receive information (the temperature of the room) and therefore take corrective action' (Argyris 1977, 116). However, if the thermostat could question itself about whether it should be performing in the room at all, it would be capable not only of tracking down a discrepancy in temperature, but of questioning the underlying theory and its own rules, or rather algorithms for action, too. That is learning of a second order, famously labelled double-loop learning by Argyris and Schon (1974), and it can be interpreted as corresponding to the user-driven approach to the explanation of skilful performance in and by an organization, and thus of organizational success.

When the employees in the introductory case became aware of the liquidity problems within their company and simply attempted to work harder or, put differently, to apply established rules or processes ever more diligently, in order to save their company, this exemplified single-loop learning. If they, jointly with the management, had begun to confront the causes of the company's imminent non-liquidity, it would have constituted double-loop learning, since they would have questioned the underlying theories and rules their organization was built upon.

Mezias and Starbuck (2003), Winter (2003), Weick, Sutcliffe, and Obstfeld (2005) implicitly parallel the points made by Argyris (1977), maintaining that slavish obedience to rules arising out of a data-driven approach inhibits organizational performance in the long run. On the other hand, if employees can act upon 'making sense of circumstances' (Weick, Sutcliffe, and Obstfeld 2005, 415) and in a context where there are incentives to reach general long-term goals, success in the organizational performance may pursued (Weick and Roberts 1993).

Organizational sense making as introduced in Weick (1995) is about the question: 'What does a situation mean?' When people then

ask: 'What should I do in this situation?' this additional question is capable of bringing meaning into existence, meaning that allows action into the future, continuation of action, and maintenance of a sense of remaining in touch with the continuing flow of experience.

Thus, sense making focuses constructively around equivocality, since the latter gives priority to the search for meaning as a way of dealing with uncertainty (Mills 2003). Weick, Sutcliffe, and Obstfeld (2005) assume that explicit efforts at sense making can be found whenever the current state of the world is perceived to be different from its expected state. Sense making may thus arise out of the question: *the same or different?* 

Thus, Argyris and Weick correctly highlight the dynamic character of rules and their underlying theories. However, it still has not been made clear how it is possible for people to recognize the difference and to act upon it in ways that appear to move towards general long-term goals (cf. Polaroid's flawed foray into digital photography in Tripsas and Gavetti 2000, or, more generally, organizational boundaries of identity in Santos and Eisenhardt 2005). Moreover, Weick, Sutcliffe, and Obstfeld (2005) do not explain the causal relationships between applying the rules and sense making explicitly enough, thus rendering it impossible to predict either failures or successes in organizational performance. Further, while it is acknowledged that meaning becomes embedded in organizations, proper development of how it may arise is lacking, as is any explanation of how individuals can, or do, draw upon it.

# Framing Skilful Performance

As indicated above, literature related to skilful performance primarily comprises descriptions and even prescriptions, leaving everything as it is. What seems to be missing is a dynamic theory that firstly deals with the system (organization) together with its environment, secondly allows for endogenous change of the system (organization), thirdly makes room for creative action, and finally, acknowledges the roles of historical accident and chance (Porter 1991). However, a dynamic theory of skilful performance is unlikely to be developed if researchers persist in merely recording social regularities or seeking allegedly immutable laws by which skilful performance may be explained and predicted.

Out of this impasse arose the Language-Information-Reality (LIR) multidimensional systemic-semantic framework of analysis (Born 1982; Born and Gatarik 2013; 2014; Gatarik and Born in press). This may not only provide a chance to *explain and predict* both the failures

and successes of an organization in dealing with its environment (first desideratum), but also highlight in which way the *creation of meaning* could produce or reproduce, in a controlled manner, *creative action* considered as an *example of skilful performance* (third desideratum). This means that it may become possible to show how to overcome established organizational presuppositions, assumptions, and rules whenever necessary in order to move toward general long-term goals (second desideratum). Put differently, with the help of the LIR framework, a holistic organizational epistemology could be established, which would assist in the construction, processing and justification of knowledge establishing meaning within an organization to improve organizational performance in the long term (fourth desideratum).

To illustrate the matter in question, the LIR framework will be employed below to examine the following two hypotheses:

- HO Skilful performance arises out of a strict and unreflective application of routines. These are explicable as norms/rules (datadriven approach to organizational performance). Mistakes, interruptions or unintended results are then understood and investigated as the result of an inefficient, improper or inexact application of the explicated routines by their users.
- H1 Skilful performance does not arise out of strictly adhering to routines and rules when seeking ways out of problem situations. It is driven by the continuous search for, and sharing of, meaning within organizational environments. Thus, instead of investigating the misapplication of theories, routines and rules, their formal incompleteness is to be reconsidered and replaced by reflecting the limits of their application. A dialogical culture as a way of thinking together and learning from each other is, therefore, essential to provoke this kind of reflection and develop an understanding of the limits of the application of established theories, routines and rules to ensure and support innovation and progress.

# The Language-Information-Reality (LIR) Framework

The analytical basis for the examination of the hypotheses introduced above, the LIR (Language-Information-Reality) framework, appears in figure 1.

The right side of the framework combines both experiential knowledge/expertise E (expertise) and cultural knowledge/capabilities F (folk knowledge) as commonsensical knowledge C, realized and nat-

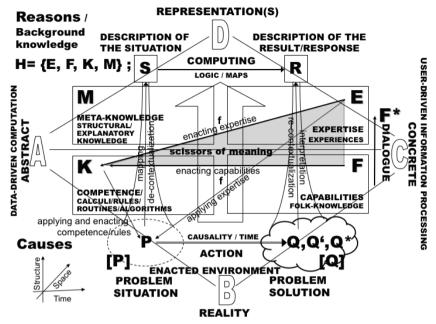


FIGURE 1 The LIR Framework of Analysis, Showing the Scissors of Meaning.

urally developed in enduring and robust organizations of commons (Hess and Ostrom 2007). The left side of the framework combines rules/routines/competences K (calculi) and structural/explanatory models M (meta-knowledge) constructed out of experiences at E, and addresses abstract knowledge A. These four knowledge components or knowledge roles {E, F, K, M} build up background knowledge H (hypotheses) out of which meaning can arise.

Meaning is enacted in an organization when all the components in figure 1 are dynamically interconnected, i.e. when the bottom level B illustrating causal connections in reality ( $P \Rightarrow Q$ ) and the top level D illustrating necessary simplifications (f) and thus incomplete representations ( $S \rightarrow R$ ) are connected properly. This means that there is a need for a switch between the knowledge roles called expertise E, user knowledge F, rules K, and meta-knowledge M. There is also an essential need for an endeavour/active and constructive effort to understand something well and not just to wait for a translation into one's own epistemic world, is available.

The *scissors of meaning* indicate differences between the knowledge components expertise at E and user/folk knowledge at F in terms of their effects on the evaluation and acceptance of the pro-

duced problem solutions Q, since when applying either expertise E or just lay/folk knowledge F to certain routines/rules at K, different solutions Q,' Q\* may emerge.

Sense making (Weick 1995) organizes the meaning, stipulating interaction between the knowledge components expertise (E), user/ folk knowledge (F) and rules/routines (K).

As previously mentioned, a dynamic theory must acknowledge historicity. Thus, a dynamic theory of skilful performance should aim to outline the processes or generative mechanisms that have previously produced specific empirical events (Hedstrom and Swedberg 1998). A process approach should replace the standard variance approach (Mohr 1982).

The LIR framework outlines the following mechanisms generating organizational performance. The first mechanism of the LIR framework allows the user to analyze and explain both the success and the possible failures in real-life enterprises, viewed as projections of certain organizational structures. This leads to the three aspects depicted in figure 1 at knowledge components {E, F, K, M} and problem solutions Q on the one hand, and the causality of practical production cycles (in signs:  $P \rightarrow Q$ ) on the other hand. These three aspects are:

- 1. Applying expertise E in an enterprise to specific and well-selected problems P, in symbolic terms:  $E(P) \Rightarrow Q$  [read as expertise E applied to a problem (P) causally yields/produces some solution O1.
- 2. *Enacting expertise* E via the bureaucracy of established routines of production procedures K, manifesting itself in the competence of a firm, and leading to algorithms, in symbolic terms:  $\langle K|E\rangle$  (P)  $\rightarrow$  Q' [read as rules/routines under the condition expertise E applied to a problem (P) causally yields/produces some solution Q'].
- 3. Enacting capabilities F, i.e. replacing expertise E by folk knowledge F to reproduce the success of enacted expertise (2.) in a controlled manner, in symbolic terms:  $\langle K|F\rangle$  (P)  $\rightarrow$  Q\* [read as rules/routines under the condition folk-knowledge F applied to a problem (P) causally yields/produces some solution Q\*].

The second mechanism of the LIR framework concerns the identification and selection of organizational units in a real-life enterprise in accordance with their knowledge roles as actualizations of the interaction of explanatory knowledge components {E, F, K, M} that are, via LIR, considered to be explanations of the practical success of an enterprise in dealing with its environment. In this sense, the LIR framework can be used to guide the reorganization of an enterprise according to identified knowledge roles realized (actualized or incorporated) in organizational units.

The third mechanism of the LIR framework, in organizational practice relevant especially with respect to decision-making and decision support, allows the analysis of managerial decisions and justifications, as well as of any persuasive arguments for the measures to be taken in practice, e.g. by employees: see the top level of the framework:  $H = \{E, F, K, M\}; S \rightarrow R$ .

Finally, the fourth mechanism of the LIR framework allows understanding and evaluation of the relation between explanation, in symbolic terms:  $H = \{E, F, K, M\}; S \rightarrow R$ , and enactment or description, in symbolic terms: E (P)  $\Rightarrow$  Q in general,  $\langle K|E\rangle$  (P)  $\Rightarrow$  Q' due to experts,  $\langle K|F\rangle$  (P)  $\Rightarrow$  Q\* due to lay people, and thus insight into the limits of the application of theories insofar as they rest upon over-simplifying classifications, incomplete information and knowledge, and the dynamics of an ever-changing world.

# **Case Study**

A case study may serve to illustrate the point. As indicated above, it was developed at Beham Techn. Handels GmbH, an Upper Austrian SME specialising in the production of precision metal parts since 1948, in the course of its redevelopment. The LIR framework is here employed as the main means of analysis in a description of remodelling Beham's processes in such a way as to enhance skilful performance in terms of creativity, flexibility and innovation in the long run.

#### INITIAL SITUATION

Some years ago, Beham encountered massive financial difficulties. Their budget was simply unable to cover future payments (problem situation P represented in S as red numbers in figure 2). On the basis of his own experience, the CEO, himself a layman (F) to the special issues of tax law and business economics, thought (in symbols,  $H = \{F\}; S \rightarrow R\}$  that his tax adviser could contribute to solving the liquidity problem with his special expert knowledge (E). It would therefore be possible to reach the target state (represented as R, the response/result of a certain solution Q in figure 2), i.e. the capacity to settle all payments, by developing a liquidity plan that involved increasing the credit limit on the current account to accommodate immediate requirements. Moreover, this solution Q was to have been endorsed as a future routine or rule K (determining the transition from P to O), thus: 'If you are no longer able to service current debts, a liquidity plan will be prepared and, if necessary, the credit limit of your current account will be increased.' However, Beham did not have sufficient credit guarantees to do so; the *rule/routine* proposed as solution Q could not be realized.

In quest of a fresh solution, reasons for the lack of liquidity were first sought by investigating cash flow from: (a) business activities that lay outside the ordinary course of business, (b) extraordinary processes (such as severance payments, settlements with partners), and (c) currently unprofitable fields of business. A solution now appeared to be calculable and accessible to plausible representation, after which it could be realized simply - close down divisions not belonging to the core business, abandon unprofitable branches, and avoid extraordinary, inherently *one-off* processes. In the light of such plausible solutions, the credit institution might be more likely to finance a short-term surge of liquidity, as an immediate local optimization.

Such calculable steps might have made it possible to achieve short-term, at best medium-term, prospects of survival, but no sustainable existence and development for Beham GmbH would have been guaranteed, by any means.

#### ENACTING ORGANIZATIONAL KNOWLEDGE IN PRACTICE

It was clear that sustainable solutions in this case could not rest upon one-dimensional, monetarily justified selection of knowledge. In other words, the management realized that partial (e.g. financial) explanations and suggestions for action derived from the former in a non-reflective way needed to be overcome, indeed overruled, and replaced by fresh practical problem-solving ideas (H;  $S \rightarrow R$ ), based upon a sort of enactment of a joint meta-reflection (M) of problem situations (P) in the concrete organizational context (P  $\Rightarrow$  Q): see figure 2.

Therefore, the CEO first commissioned an external economic management consultant to prepare a solution that would go beyond the original suggestions. In the end, it was decided that an eight-person management team be created, which could be seen as a mode of enactment of knowledge component M.

The team members were individually supplied with all the necessary information available. Everyone was encouraged to present their ideas unreservedly, then determine reorganization steps collectively and in advance, while remaining capable of initiating all

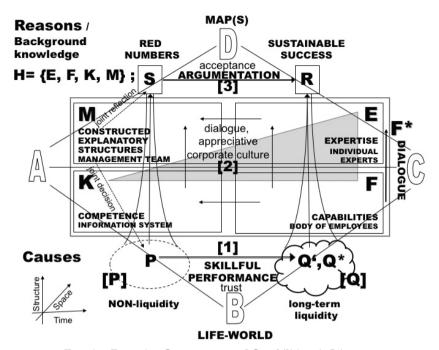


FIGURE 2 Enacting Expertise, Competence, and Capabilities via Joint
Meta-Reflection at M in the Interests of Skilful Performance at Beham
GmbH, Depicted in LIR

managerially relevant decisions. How this step could be used to develop creative, innovative solutions and maximum flexibility appears in figure 2.

Figure 2 shows the enactment of expertise, competence, and capabilities via joint meta-reflection at M towards skilful performance at Beham GmbH. This employment of organizational knowledge is embedded into a mode of knowledge and meaning transfer supportive of corporate culture and characterized by dialogue and appreciation.

Further, figure 2 indicates the three levels of reflection: At the first level [1], the proposed or produced *solutions* Q,' Q\* via E and F are evaluated. At the second level [2], the means are reflected upon, i.e. the rules, structures, expertise, etc., that produce results. Level [3] is the process of contemplation of the justifications for what is proposed by the decision-makers and their selection of the measures/actions to be taken to generate sustainable results.

Finally, figure 2 depicts the *scissors of meaning*, used to address the dialogue between experts at E and users at F to move towards enhancing the epistemic resolution levels F to  $F^*$ .

However, the quality and innovativeness of the Beham solutions depended on more than just the implementation of knowledge component M in the form of a management team; extended involvement of the influence of the other three knowledge components of the LIR scheme allowed the all-embracing knowledge of the entire enterprise to be take into account. The precise selection of the members of the management team ensured that they also conveyed to the decision-making process their particular perspectives and the challenges generated by their various departments (in terms of E). In addition to this, these experts provided an excellent interface with other employees, whose aspirations and opinions (knowledge component F) could thus be said to have been represented at team meetings. Finally, through the special use of a sophisticated information system K and the extensive experience of an it specialist as one of the eight members of the management team, information that is even more significant was shared.

Further, the members of the management team may also perform, and even enact, the various knowledge roles that form the essential theoretical backbone of the LIR scheme. When addressing the topic discussed and the situation, they play a number of parts: they may be specialists/ experts; they may provide general knowledge and life experience; they may think and argue in both procedural and regulatory terms; and they may provide certain reflective external perspectives.

This kind of *thinking together* is explained by, and rests upon, the LIR framework initiated at Beham GmbH as a theoretical backbone for sustainably skilful performance. This framework provides guidance for the actions of the employees. However, although the specific direction the enterprise should take is indicated, the employees themselves are granted local autonomy to find ways of maintaining that course

### DEVELOPMENT AND CURRENT STATUS OF BEHAM GMBH

From the corporate-financial point of view, the positive effects of the re-modelling at Beham GmbH may be selectively summarized after eight years. The company turnover has increased threefold; Beham has been listed as the most successful enterprise of those in which the participating private equity-fund has ever invested (proportional to size) and the capital invested by outside parties has been superseded by internal equity capital generated over the eight years. Moreover, after the re-modelling Beham has been the recipient of several business awards, among them the international Best

Business Award for Sustainable Management, Europaregion Donau-Moldau, in 2014: the rating criteria were economic success, uniqueness, employee status, innovative power, sustainability and social responsibility.

Although space dictates that the Beham case cannot be covered in more detail, the case study may nevertheless be used to highlight that any re-modelling of an enterprise requires, inter alia, outstandingly open-minded attitudes on the parts of the managers and employees and an appropriate corporate culture. These are vital to the reflective transfer of the approach to other enterprises.

## **Reflective Conclusion: Meaning versus Routines**

The central aim of this contribution has been to argue that skilful performance originates in a continuous search for meaning, as well as to provide a meta-theoretical foundation that may enhance the search for meaning as a kind of proactive reflection by organizations and within them. It indicates a means of decision support in an explanatory, rather than a merely descriptive (or even prescriptive) way. The general intentions are to facilitate understanding and improve the evolutionary processes that influence the integration of reliability in organizations.

Within the meta-theoretical LIR framework, two alternative explanations of skilful performance, and thus organizational success, have been employed and the why and how explained, the way in which н1 overrules но. To portray the argument, a real-life case has served as a counterexample to но.

The theoretical approach to framing skilful performance suggested here is about the identification, construction, processing and corrective application of organizational knowledge. It explicates the practical idea that meaning is a means to come to terms with reality. In the real-life case, at Beham, this was actualized via the establishment of a management team as an enactment of the fourth, explanatory knowledge component M within the LIR framework. However, simple enactment of the meta-theoretical reflection M is not the sole path to success. The importance of the population of M must be considered, together with the way in which it can help give or create meaning to the data, documentation and algorithms at K and to the transfer of knowledge from experience and expertise E into an episteme for decision support.

Recognizing the limits of established organizational rules or algorithms and, if applicable, overruling them, may also involve dialogue, sensu Bohm (1996), between experts at E and users at F, leading to enhancing knowledge F towards F\*. This dialogue can keep background knowledge H dynamic and facilitate understanding of changes in meaning and their creative, flexible and innovative influence upon problem solutions. It may also help to explain, predict and guide action in everyday organizational life, as it allows for *fixing* and establishing reference in the world in a new way.

The dynamic background of the LIR framework calls for a short summary:

- 1. Simply adding up the local optimization of expertise, competence, and capabilities is suboptimal to the success of the whole - here, an organization.
- 2. In many cases, although not all, skilful performance does not depend upon strictly or stubbornly obeying or applying rules but on awareness of how knowledge comes about and of the limits of the application of those rules, and thus such performance requires reflective and corrective practice.
- 3. Reflection upon the limits of following a rule might well assist understanding of the constraints and presuppositions about the world we live in and support a more ecological point of view.
- 4. Understanding the coming about of knowledge via LIR should help to delimit and correct the misuse of bureaucracies in organizations and support or provide freedom for innovation and creativity at all levels; further, it may prevent the digitalization and replacement of innovation and creativity by an unreflective and mechanical use of routines.

It may be concluded that the integration of organizational and management practices into the LIR framework can facilitate understanding and controlled reproducibility of those actions that are considered and accepted as examples of skilful performance mirrored in sustainable success, economic or otherwise.

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#### References

- Argyris, C. 1976. 'Single-Loop and Double-Loop Models in Research on Decision Making.' Administrative Science Quarterly 21(3): 363-75.
- -. 1977. 'Double Loop Learning in Organizations.' Harvard Business Review 55 (5): 115-25.
- Argyris, C., and Schon, D. A. 1974. Theory in Practice: Increasing Professional Effectiveness. San Francisco: Jossey-Bass.
- Attewell, P. 1990. 'What is Skill?' Work and Occupations 17 (4): 422-44. Bohm, D. 1996. On Dialogue. New York: Routledge.
- Born, R. P. 1982. Sprache, Information, Wirklichkeit: Bericht über die zweite Conceptus-Arbeitstagung vom 7.-8. September 1981 in Linz (Österreich). Vienna: Verband der wissenschaftlichen Gesellschaften Österreichs.
- Born, R., and E. Gatarik. 2013. 'Knowledge Management and Cognitive Science: Reflecting the Limits of Decision Making.' In Cognition and Motivation: Forging an Interdisciplinary Perspective, ed. S. Kreitler, 321-51. Cambridge: Cambridge University Press.
- -. 2014. 'Against Crowding Out the Meaning of Meaning.' In Conceptions of Meaning, ed. S. Kreitler and T. Urbánek, 89-112. New York: Nova Science.
- Brown, J. S., and P. Duguid. 1991. 'Organizational Learning and Communities of Practice: Toward a Unified View of Working, Learning and Innovation.' Organizational Science 2 (1): 40-57.
- Collins, H., and R. Evans. 2007. Rethinking Expertise. Chicago and London: Chicago University Press.
- Danneels, E. 2010. 'Trying to Become a Different Type of Company: Dynamic Capabilities at Smith Corona.' Strategic Management Journal 32 (1): 1-32.
- Dreyfus, H. L. 2005. 'Overcoming the Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Expertise.' Proceedings and Addresses of the American Philosophical Association 79:47-65.
- Dreyfus, H. L., and S. E. Dreyfus. 1986. Mind Over Machine: The Power of *Human Intuition and Expertise in the Era of the Computer.* New York: Free Press.
- Fauré, B., and L. Rouleau. 2011. 'The Strategic Competence of Accountants and Middle Managers in Budget Making.' Accounting, Organizations and Society 36:167–82.
- Gatarik, E., and R. Born. In press. 'Managing Network Economies: The Competitive Advantage of Commons as Ecosystems of Innovation.' Journal of Organizational Transformation and Social Change.
- Gherardi, S. 2006. Organizational Knowledge: The Texture of Workplace Learning. Oxford: Blackwell.
- Hedstorm, P., and R. Swedberg. 1998. Social Mechanisms: An Analytical Approach to Social Theory. Cambridge: Cambridge University Press.

- Hess, C., and E. Ostrom. 2007. *Understanding Knowledge as a Commons*. Cambridge, MA: MIT Press.
- Ingold, T. 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill.* London: Routledge.
- Kogut, B., and U. Zander. 1992. 'Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology.' *Organization Science* 3 (3): 383–97.
- Mezias, J. M., and Starbuck W. H. 2003. 'Managers and Their Inaccurate Perceptions: Good, Bad or Inconsequential?' *British Journal of Management* 14 (1): 3–19.
- Mills, J. H. 2003. Making Sense of Organizational Change. London: Routledge.
- Mohr, L. 1982. Explaining Organizational Behavior. San Francisco: Jossey-Bass.
- Nicolini, D., Gherardi, S., and D. Yanow. 2003. *Knowing in Organizations: A Practice-Based Approach*. New York: Sharpe.
- Porter, M. E. 1991. 'Towards a Dynamic Theory of Strategy.' *Strategic Management Journal* 12 (\$2): 95–117.
- Rouleau, L., and J. Balogun. 2011. 'Middle Managers, Strategic Sensemaking, and Discursive Competence.' *Journal of Management Studies* 48 (5): 953–83.
- Sandberg, J., and P. Pinnington. 2009. 'Professional Competence as Ways of Being: An Existential Ontological Perspective.' *Journal of Management Studies* 46 (7): 1138–70.
- Sandberg, J., and A. Targama. 2007. Managing Understanding in Organizations. London: Sage.
- Santos, F. M., and K. M. Eisenhardt 2005. 'Organizational Boundaries and Theories of Organization.' *Organization Science* 16(5): 491–508.
- Sennett, R. 2008. The Craftsman. London: Yale University.
- Shotter, J., and H. Tsoukas. 2007. 'Theory As Therapy: Towards Reflective Theorizing in Organization Studies.' Paper presented at the Third Organization Studies Summer Workshop, Crete, 7–9 June.
- Taylor, F. W. 1911. The Principles of Scientific Management. New York: Harper.
- Tripsas, M., and G. Gavetti. 2000. 'Capabilities, Cognition and Inertia: Evidence from Digital Imaging.' *Strategic Management Journal* 21 (10–11): 1147–61.
- Tsoukas, H. 2005. *Complex Knowledge: Studies in Organizational Episte-mology*. Oxford: Oxford University Press.
- -----. 1997. 'The Tyranny of Light: The Temptations and the Paradoxes of the Information Society.' *Futures* 29 (9): 827–43.
- Tsoukas, H., and E. Vladimirou. 2001. 'What is Organizational Knowledge?' *Journal of Management Studies* 38 (7): 973–93.
- Vogel, R. 2012. 'The Visible Colleges of Management and Organization

- Studies: A Bibliometric Analysis of Academic Journals.' *Organization Studies* 33(8): 1015–43.
- Weick, K. E. 1969. The Social Psychology of Organizing. Reading, MA: Addison-Wesley.
- Weick, K. E. 1995. Sensemaking in Organizations. Thousand Oaks, ca: Sage.
- Weick, K. E., and K. H. Roberts. 1993. 'Collective Mind in Organizations: Heedful Interrelating on Flight Decks.' *Administrative Science Quarterly* 38 (3): 357–81.
- Weick, K. E., K. M. Sutcliffe, and D. Obstfeld. 2005. 'Organizing and the Process of Sensemaking.' *Organization Science* 16 (4): 409–21.
- Winter, S. 2003. 'Mistaken Perception: Cases and Consequences.' *British Journal of Management* 14:39–45.



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# Competitively Distinct Operations as a Key for Superior and Sustainable Business Performance: An Example from Walmart

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Existing research on the resource-based view (RBV) has provided limited evidence on how firms achieve superior and sustainable business performance; this failure is because current literature de-emphasizes the importance of operations. This paper argues that to gain and sustain superior business performance, a firm's sustainable competitive advantage is not enough, its operations also needs to be competitively distinct. Therefore, through unifying the necessary conditions of superior and sustainable business performance the paper presents a better understanding of the RBV. The success story of Walmart, from existing literature, is considered as an example to support the proposed framework. The paper concludes that the cost of operations, opportunity cost, cost of resources and possible output are the crucial factors in resource choice and operations decision to secure competitively distinct operations. Finally, theoretical and managerial implications, research limitations and future research possibilities are discussed.

Key words: RBV, competitive and sustainable competitive advantage, competitively distinct operations, superior and sustainable business performance, Walmart

#### Introduction

Managerial decisions are often made in reference to uncertainty (Hult, Craighead, and Ketchen 2010), intuition and market pressure (Timilsina, Haapalainen, and Takala 2014), constraints and limitations like time, knowledge, information and resources. A firm's performance outcomes are always affected by these factors. In business practices, it is difficult to say what makes the performance difference between firms. However, the resource based view (RBV) is considered as an influential theory to answer the questions of a firm's performance difference (Barney, Ketchen, and Wright 2011; Kozlenkova, Samaha, and Palmatier 2014). According to RBV, firm specific resources allow gaining competitive advantage, which enables firms to earn above average profit (Peteraf and Barney 2003). The underlying assumption of RBV is that the managerial effort in a firm is to gain sustainable competitive advantage, to identify and emphasize strategic choice and to deploy key resources for profit maximization (Fahy and Smithee 1999).

Nevertheless, the RBV has been criticized by several authors, for example: RBV is not a complete theory (Kraaijenbrink, Spender, and Groen 2010), assumptions made in resource based research are partial, implicit and problematic (Foss and Kundsen 2003), decision making- mechanism is not explained by RBV literatures (Kunc and Morecroft 2010), and managerial role in the integration of resources and value creation is underdeveloped in RBV (Sirmon, Hitt, and Ireland 2007).

No matter what the ground for criticism, it is not questionable whether the resource characteristics proposed by Peteraf (1993) and Barney (1991) will provide sustainable competitive advantage or not. Certainly, any firm with these resource characteristics (see figure 1) will have certain advantages over its competitor. However, referring to explicit product market competition Costa, Cool, and Dierickx (2013) says sustainable competitive advantage does not increase nor guarantee higher profits within the firm and over its competitors. On the other hand, operations alone hold 60-80 percent of direct expenses, which is an obstruction to the firm's performance (Chase, Jacobs, and Aquilano 2006). According to Goodale et al. (2011), a strong control over cost related to operations is one of the accepted traits of successful business. Therefore, it is reasonable to say that the process of resource coordination, configuration, utilization and deployment needs to be unique, cost efficient, and result-oriented.

Hence, the paper argues that to gain and sustain superior business performance, a firm's sustainable competitive advantage is not enough; its operations also need to be competitively distinct (figure 1).

This argument is based on several assumptions. First, if managerial or strategic expectations are in line with resource choices and operations decisions, then sustainable business performance can be achieved. Second, a firm might gain advantage over its competitors if there is a proper understanding of the future outcome of operations. Third, the foundation of competitive advantage through resources and capabilities lies in the operations (Coates and McDermott 2002).

However, there has been less effort made to explain the methods of aligning resource choices and operations decisions, which

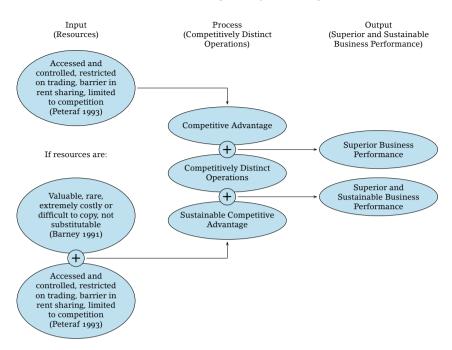


FIGURE 1 Conceptual Framework for Superior and Sustainable Business Performance

make operations competitively distinct, allow better utilization of resources and thereby lead to superior and sustainable business performance. Hence, this research provides a better understanding of RBV by unifying necessary conditions of superior and sustainable business performance and highlighting the significance of competitively distinct operations (figure 1). By doing this, the research aims to make theoretical contributions in organizational performance and RBV literature.

#### Literature Review

### RESOURCE-BASED VIEW (RBV)

'Edith Penrose's work has been widely acknowledged to have played a central role in providing the intellectual foundations of the resource-based view' (Lockett and Thompson 2004, 193). According to Penrose (1956), the firm is a bundle of resources governed by administrative framework and these two factors (bundle of resources and administrative framework) determine the firm's growth. During 1980's, this thought was further developed. Some influential works are Wernerfelt (1984), Rumelt (1984), Barney (1986), Dierickx and

Cool (1989), Barney (1991), Peteraf (1993), Oliver (1997) and others. The RBV has been considered as one of the most prominent and influential theories to explain organizational behaviour (Barney, Ketchen, and Wright 2011) and firm performance (Leiblein 2003). Furthermore, the RBV has been widely accepted in the field of strategic management (Newbert 2007), strategic human resource management (Paauwe and Boselie 2003), international business (Peng 2001), management literature (Runyan, Huddleston, and Swinney 2006), and marketing (Kozlenkova, Samaha, and Palmatier 2014). However, most of the research based on RBV shares the same ontology and argues that by means of productive resources, a firm can have competitive and sustainable competitive advantage.

#### COMPETITIVE AND SUSTAINABLE COMPETITIVE ADVANTAGE

A firm can gain superiority over competitors through efficient use of resources and access to information (Das, Zahra, and Warkentin 1991), information technology (Chae, Koh, and Prybutok 2014), logistics and supply chain (Mellat-Parast and Spillan 2014), low cost or product differentiation or market focus (Porter 1985), customer value (Woodruff 1997), innovation (Hana 2013), human resource management (Florea, Cheung, and Herndon 2013), knowledge management (Danskin et al. 2005) and so on. If such advantage allows a firm to maintain above average performance over its competitors is said to have a competitive advantage (Wang, Lin, and Chu 2011). According to Dröge, Vickery, and Markland (1994) competitive advantage is interrelated to superior skills, resources and superior performance. Similarly, if a firm is able to earn above average profit for several years is known to have a sustainable competitive advantage (Peteraf and Barney 2003).

#### COMPETITIVELY DISTINCT OPERATIONS

Operations decision range from simple to complex. Simple decisions are tactical and repetitive in nature, relate to day-to-day operations, are made by operational or line manager and have short-term impact on business performance. Complex decisions are on the other hand strategic, made by top management and have significant impact on short and long-term performance (Hughes and Thevaranjan 1995). In fact, resources and operational capabilities are the root of business strategy and organizational identification (Wu, Melnyk, and Flynn 2010). Similarly, the act of recombining and reconfiguration of assets not only helps to sustain profitable growth, but also helps an organization to make a fit with the changes occurring in market, technology and to avoid disadvantageous situations (Teece 2007), so does operations decisions. According to Banker and Morey (1993) resource allocation and operations decisions significantly impact fixed and variable cost, service quality, profit margin and overall business performance.

Therefore, it is advantageous to make resource choices and operations decisions in the light of cost-benefit analysis. The cost-benefit analysis in decision-making not only allows close coordination between resource choice and operations decision, but also provides justified ground for resource choice and operations decision. Hence, it reduces the risk of operational uncertainty. Here competitively distinct operations refer to operations decisions, which are based on the optimal balance between resource choices, and operations decisions gained through cost-benefit analysis (a detailed discussion is provided in the later section.)

#### SUPERIOR AND SUSTAINABLE BUSINESS PERFORMANCE

A firm is assumed to have superior business performance if its return on assets is above average (Baaij, Greeven, and Dalen 2004; Banker, Mashruwala, and Tripathy 2014) for at least five consequent years, the above average return here referring to a return higher than the industry average return on assets (Roberts and Dowling 2002). In practice, it is extremely difficult to gain and sustain superior business performance over a longer period of time (Wiggins and Ruefli 2002). This may be due to Schumpeterian innovation because it wipes out competitive advantage and restricts the possibility of sustaining superior performance; this is for example evident in the computer industry where a new technology emerges every now and then. (Baaij, Greeven, and Dalen 2004). According to Corbett et al. (2013), Schumpeterian innovation is not only destructive, but also generative as it may bring about opportunity during high uncertainty. However, managerial practice helps an organization to sustain its performance in the long run through 'directing, changing and managing the operational and support processes' (Bititci et al. 2011, 854).

Besides this fact, for the managerial process to be effective and efficient in the management of technological and market change, to avoid path dependencies and to sustain superior business performance, there must be close co-ordination between resource choice and operations decision. After all, most of the managerial decisions either strategic or operational involve organizational resources and operational capability.

#### Theoretical Framework

# EFFICIENT RESOURCE CHOICE AND OPERATIONS DECISION: DESIGN OF COMPETITIVELY DISTINCT OPERATIONS

The main argument of this section is that for efficient utilization of resources and to increase firm performance, resource choice and operations decision need to be performed simultaneously. In business practices, resource allocation is a repeated process (Noda and Bower 1996) and so is the operations decision. Figure 2 shows the decision framework for efficient resource choice and operations decision that aims to secure competitively distinct operations. The presented framework consists of operational and decision making dimensions. Each of these operational and managerial practices is in-

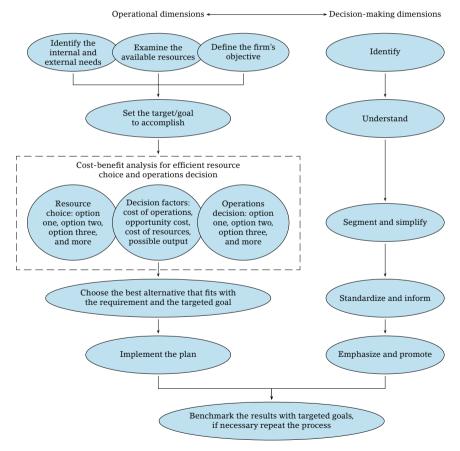


FIGURE 2 Decision Framework for Efficient Resource Choice and Operations
Decision: Design of Competitively Distinct Operations

terconnected as shown in the diagram above. In addition, both dimensions are complementary to each other; none is complete and efficient in the absence of the other. Therefore, for the effectiveness of the decisions made by top management each step of the decision making process needs to be in correlation with each element of operational dimension. However, this paper mainly deals with the operational dimensions.

According to the framework, the first step is to know internal and external needs. The next step is to examine the available resources; this will give a clear picture of which resources exist and which need to be acquired. After this, the firm's objective is defined. These three activities are highly interrelated and influence each other. The next step is to set the target/goal to accomplish (for example periodic, vearly or long-term goals).

Now the main task begins, here the challenge is to align resource choice and operations decision. In this context, Sirmon, Hitt, and Ireland (2007) proposed a framework of the resource management process as 'structuring,' 'bundling' and 'leveraging.' The underlying assumption in their framework is an efficient resource choice and operations decision. There could be a number of possible options to use the resources (see figure 2) but choosing the best operational methods for resource deployment is crucial, because it is the path for optimal utilization of resources and firm's performance. Therefore, the operations need to be unique, cost-efficient, and result-oriented. The presented framework (figure 2) considers cost of operations, opportunity cost, cost of resources, and possible output as important factors in resource choice and operations decisions. Reasons for considering these factors in designing competitively distinct operations through cost-benefit analysis are explained below.

Costs of operations. These are the actual costs incurred in business operations, and can be classified into fixed costs and variable costs. Fixed costs include expenses like rent, salary, mortgage, depreciation, administrative expenses, interest and taxes, and utility cost; while variable costs include production wages, commissions, raw materials cost, shipping and transportation costs. Some authors claim that the cost of operations can range from 60-80% of direct expenses, which is a burden to firm performance (Chase, Jacobs, and Aquilano 2006). Referring to the large firm, Bettis and Prahalad (1983) says that operations are the important source of funds. This means that a strong control of operations cost is very important for business performance. In other words, the lower the cost of operations, the higher the profit margin.

Opportunity cost. Along with payoffs and the likelihood of the project, consideration of opportunity cost in resource allocation decision has been emphasized in management accounting and capital budgeting textbooks (Chang, Ho, and Lin 2002). However, managers fail to consider opportunity cost in the evaluation of projects (Milad 2010). Opportunity cost is not recorded in accounting and financial books of an organization, but it is a very important factor in making economic and financial decisions (Shavit, Rosenboim, and Malul 2011), hence in resource choice and operations decision. In practice, managers pay limited attention to opportunity cost in resource allocation (Shavit, Rosenboim, and Malul 2011; Schiffels et al. 2014) and operations decision. This may be due to the indirect nature of opportunity cost (Schiffels et al. 2014) and its difficulty in measuring (Victoravich 2010). However, opportunity cost can be calculated in an implicit and explicit manner. Here, implicit opportunity cost represents the amount of profit earned if another plan had been carried out instead of the current project, while explicit opportunity cost represent lost profit due to the implementation of a current plan of action (Chang, Ho, and Lin 2002; Victoravich 2010).

Based on the study made in the medical industry, Wu (2013, 1285) suggests that opportunity cost should not be considered in allocating a firm's capabilities 'given the technical uncertainty in the new market.' Besides, the consideration of opportunity cost is important because it allows a decision maker to make a wise interpretation between identified strategy and future outcomes (Mackey and Barney 2013). The author further suggests that low opportunities cost indicates the need for further investment in an existing business, while higher opportunity cost signals to stop further investment.

Cost of resources and possible output. In resource choice decision, it is useful to know the cost of resources beforehand. Sometimes the resource choice is not economical and might have a negative impact on firm performance. In addition, it is very important to consider the output that could be gained with the resource choice and mode of resource deployment. Output could be measured through earning numbers as it represents the output gained through investments and operations, also the series of earning number reflects the associated risk and fluctuations in the investment and operations (Baginski and Wahlen 2003). Similarly, the cost of resources and possible output from its operation is crucial both strategically and financially. This is because the basis of resource choice made by a firm is highly influenced by strategic decisions, which ultimately influence the business performance (Mariadoss, Johnson, and Martin 2014).

The consideration of these above-mentioned factors gives an opportunity not only to make cost-benefit analysis among different options, but also helps to make constant alignment between resource choice and operations decision. Most importantly, it helps to answer questions like Does the resource choice increase or decrease the operating cost? What is the best combination of resource choice and operations decision? How does the optimal balance between resource choice and operations decision affect net profit? What opportunities are being lost? On the other hand, the omission of these factors may lead to wrong choices being made which might influence firm performance. However, consideration of cost of operations, opportunity cost, cost of resources, and possible output permits rational decision making and helps to identify the best possible combination of resource choice and operations decision (i.e. competitively distinct operations). Thus, with the given constraints of operating cost and planning horizon, operating profit can be maximized by considering the right combination of resource choice and operations decision.

The next step is to choose the best alternative that fits with the requirements and the targeted goal. Now the plan needs to be implemented in practice. Finally, the obtained results are benchmarked with the targeted goals. If the results are not as planned, it is recommended to repeat the process and make necessary changes to a future course of actions.

# The Case of Walmart: An Example

Walmart is regarded as a fast growing, highly successful company, whose annual revenues exceed the sum of economies of world's thirty nations (Werther and Chandler 2010). In 2014, Walmart ranked number one company on the Global 500 list by revenue (Fortune 2014) with \$473.1 billion in sales for the fiscal year ending January 31, 2014. Now Walmart operates more than 4900 retail facilities within the USA including 4281 Walmart stores and 640 Sam's Club warehouse there are more than 6100 retail facilities internationally within 26 countries besides the Unites States (http://news.walmart .com/walmart-facts/corporate-financial-fact-sheet). Walmart differentiated itself from competitors in several ways, such as low overhead cost and customized product mix reflecting market demography, customer buying pattern and requirements (Aggarwal 2001). The most significant differences are self-developed management system of warehouses and stores, location choice, the culture to support values and skills, use of technology, excellent relationship with the supplier and consumer, human resources management and employee motivation (Chase, Jacobs, and Aguilano 2006). This leads to higher productivity and lower operating cost, resulting in higher profit margin.

In terms of resources like marketplace, technology and customer taste, there is not much difference among the competing firms: Walmart stores Inc., Target Corp., Sears Holdings Corp., Kroger Co. and Costco wholesale Corp. However, among these firms, Walmart is able to differentiate itself. How? What could be the reason behind its outstanding performance? One of the most promising and practical answers comes from Walmart's operations strategies based on resource capability, i.e. alignment of resource choice and operations decision thus making operations to be competitively distinct. In practice, Walmart has realized the dream of being a low cost firm by capitalizing on competitive operations.

Strategies supporting cost minimization are the foundation of Walmart's success (Werther and Chandler 2010). The cost minimization arises from low price strategy (Richardson 2008; Hill, Gareth, and Schilling 2015; Basker 2007), choice of location (Vance and Scott 1994; Govindarajan and Gupta 1999; Lewis and Dart 2014), technological innovation and supply chain management (Werther and Chandler 2010; Wrigley 2000; Teece 2010), operations and distribution strategies (Basker 2007; Govindarajan and Gupta 1999), advertising and sales strategy (Wang and Zhang 2005; Steidtmann 2003), and innovation in business model (Chesbrough 2010; Sorescu et al. 2011). All these features of Walmart's business model are the results of resource choice and operations decision; hence, they offer a perfect fit to lower the cost of operations, opportunity cost, cost of resources, and higher output. Furthermore, Walmart is a good example of a successful business model where one can see how well the resource choice and operations decisions are aligned in the value chain by means of cost-benefit analysis.

In a similar manner, considering valuable, rare, inimitable, and non-substitutable (VRIN) analysis, a framework proposed by Barney (1991); it can be concluded that the combination of different features (resource choice and operations decision) has made Walmart's business model not only valuable, rare, inimitable and non-substitutable, but has also made it possible for them to gain and sustain competitive advantage (table 1 on p. 284).

Table 2 (pp. 284-285) summarizes the strategic benchmarking of Walmart and its close competitors. The purpose of this benchmark is to give a close look on key financial indicators, so that the comparative analysis and interpretation of financial performance can be evaluated in the light of resource utilization and effectiveness of operational processes. During the year 2005 to 2014, Walmart was able to maintain consistent and above average revenues, operating income, net income, return on assets and return on invested capital in comparison to its competitors.

The comparative analysis (table 2) shows that besides the lower gross margin and operating margin Walmart is able to maintain higher values of revenue, and net income. This signifies that Walmart is better at managing operating cost. This observation is in line with Peterson and Fabozzi (1999), who examined the financial performance of Walmart during the years 1988-1997 with the rest of the retail industry and confirmed that Walmart is efficient at managing operating cost in comparison to its competitors. In the similar manner, higher and consistent values of return on assets and return on invested capital from years 2005-2014 suggest that Walmart is efficient at not only resource deployments and utilization of capital to generate more revenue, but also efficient at transferring revenue into substantial profit. However, the above average financial achievement in terms of revenue, operating profit and net income during the years 2005-2014, suggests that Walmart is able to maintain superior and sustainable business performance (table 2).

#### **Discussion and Conclusion**

The paper presents a framework for superior and sustainable business performance highlighting the importance of aligning resource choice and operations decision. The different findings show that Walmart is able to gain and sustain superior and sustainable business performance not only because of competitive and sustainable competitive advantage but also due to competitively distinct operations. Furthermore, the comparative analysis of key financial indicators (table 2) and features of Walmart's business model (table 1) not only provides sound evidence for the conceptual framework for superior and sustainable business performance (figure 1 and figure 2), but also shows Walmart's excellence in the alignment of resource choice and operations decision. These findings support the argument that 'practices are transformed into capabilities only through carefully coordinated deployment and integration with other practices' (Schoenherr and Narasimhan 2012, 3767). The constant integration of resource choice and operations decision has allowed Walmart to enjoy the benefits of low cost structure leading to superior performance. However, the consideration of cost of operations, op-

TABLE 1 VRIN Analysis of Walmart's Business Model

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valuable	ies,	ies, because it itas proveit to keep tow operatuig cost.	ilas piove	faay oi ii:	iow oper	aung cost					
Rare	Yes, rare	Yes, though the business model practiced by Walmart is popular, the Walmart's approach makes it rare in the retail industry.	e business til industr	s model pi y.	acticed by	y Walmar	t is popula	ır, the Wal	mart's ap <u>ı</u>	proach ma	kes it
Inimitable	Yes,	Yes, competitors have tried to copy the model, but are not able to implement as efficient as Walmart.	rs have tri	led to cop	y the mod	el, but are	not able	to implem	ent as effi	icient as W	/almart.
Non-Substitutable	Yes, adva	Yes, because it is not easy for competitors to use different capability to exploit Walmart's competitive advantages.	is not eas	y for com	petitors to	o use diffe	rent capa	bility to ex	tploit Walı	mart's con	petitive
TABLE 2 Strategic Benchmarking of Financial Indicators	nchmaı	rking of Fi	nancial In	dicators							
Companies Indic	Indicators	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Walmart Stores Inc.	(1)	287,989	315,654	348,650	378,799	405,607	408,214	421,849	446,950	469,162	476,294
	(2)	17,091	18,530	20,497	21,996	22,798	23,950	25,542	26,558	27,801	26,872
	(3)	10,267	11,231	11,248	12,731	13,400	14,335	16,389	15,699	16,022	15,828
	(4)	23.70	23.80	24.20	24.40	24.50	25.40	25.30	25.0	24.90	24.80
	(2)	5.90	5.90	5.90	5.80	5.60	5.90	6.10	5.90	5.90	9.60
	(9)	9.12	8.69	7.80	8.09	8.20	8.58	9.33	8.39	8.57	7.86
	(2)	14.63	14.09	12.97	13.45	13.69	14.33	15.52	14.20	14.54	13.36
Target Corp.	(1)	46,839	52,620	59,490	63,367	64,948	65,357	62,390	69,865	73,301	72,596
	(2)	3,601	4,323	5,069	5,272	4,402	4,673	5,252	5,322	5,371	4,229
	(3)	3,198	2,408	2,787	2,849	2,214	2,488	2,920	2,929	2,999	1,971
	(4)	32.90	33.60	33.80	32.60	32.00	30.30	30.90	30.90	30.40	29.5
	(2)	7.70	8.20	8.50	8.30	6.80	7.10	7.80	2.60	7.30	5.80
	(9)	10.04	7.16	7.70	96.9	4.99	5.61	6.62	6.48	6.33	4.25
	(7)	15.89	11.56	12.63	11.19	8.55	9.30	10.77	11.02	10.51	8.37

Sears Holdings Corp.	(1)	19,701	49,124	53,012	50,703	46,770	44,043	43,326	41,567	39,854	36,188
	(2)	1,821	2,124	2,523	1,586	302	713	474	-1,501	-838	-927
	(3)	1,106	828	1,490	826	53	235	133	-3,140	-930	-1,365
	(4)	25.50	27.70	28.70	27.70	27.10	27.70	27.40	25.50	26.40	24.20
	(2)	9.20	4.30	4.80	3.10	09.0	1.60	1.10	-3.60	-2.10	-2.60
	(9)	15.01	4.37	4.91	2.87	0.20	0.94	0.54	-13.76	-4.57	-7.26
	(2)	31.23	98.6	10.66	6.70	1.77	3.53	3.32	-30.72	-6.14	-19.90
Kroger Co.	(1)	56,434	60,553	66,111	70,235	000'92	76,733	82,189	90,374	96,751	98,375
	(2)	847	2,035	2,236	2,301	2,451	1,091	2,182	1,278	2,764	2,725
	(3)	-100	928	1,115	1,181	1,249	70	1,116	602	1,497	1,519
	(4)	25.30	24.80	24.20	23.40	22.90	23.20	22.20	20.90	20.60	20.60
	(2)	1.50	3.40	3.40	3.30	3.20	1.40	2.70	1.40	2.90	2.80
	(9)	-0.49	4.68	5.35	5.43	5.49	0.30	4.79	2.56	6.22	5.63
	(2)	2.21	11.05	12.08	11.89	11.85	3.03	10.80	7.18	14.26	12.20
Costco Wholesale Corp. (1)	. (1)	52,935	60,151	64,400	72,483	71,422	77,946	88,915	99,137	105,156	112,640
	(2)	1,474	1,626	1,609	1,969	1,777	2,077	2,439	2,759	3,053	3,220
	(3)	1,063	1,103	1,083	1,283	1,086	1,303	1,462	1,709	2,039	2,058
	(4)	12.40	12.30	12.30	12.40	12.70	12.80	12.60	12.40	12.60	12.60
	(2)	2.80	2.70	2.50	2.70	2.50	2.70	2.70	2.80	2.90	2.90
	(9)	6.73	6.49	5.84	6.37	5.09	5.69	5.78	6.34	7.10	6.50
	(7)	11.69	11.48	10.93	12.05	89.6	10.86	11.32	12.69	14.24	12.83

NOTES Column headings are as follows: (1) revenue (million USD), (2) operating profit (million USD), (3) net income (million usp), (4) gross profit margin (%), (5) operating margin (%), (6) return on assets (%), (7) return on invested capital (%). Based on data from Morningstar (http://financials.morningstar.com).

portunity cost, cost of resources and possible output, and constant integration of resource choice and operations decision in securing competitively distinct operations are relatively unexplored features of Walmart's business model. The paper asserts that because of these features, the Walmart showed a consistent level of performance even during the economic crisis (table 2). Based on the findings, it is expected that firms integrating resource choices and operations decisions through cost benefit analysis should secure competitively distinct operations leading to superior and sustainable business performance.

#### THEORETICAL CONTRIBUTIONS AND MANAGERIAL IMPLICATIONS

Kraaijenbrink, Spender, and Groen (2010) have emphasized the need for a framework that moves the RBV into a dynamic model. In this vein, the paper introduces the concept of competitively distinct operations, which aims to help managers' in decision making over time (i.e. according to the needs of the changing business environment). It thereby offers strong support to the dynamic nature of the RBV (see figure 1 and figure 2); this is in contrast to Priem and Butler (2001) who argued that RBV is static. Thus, the paper contributes to RBV and organizational performance literature by incorporating managerial decision-making mechanism and demonstrates the benefits of aligning resource choice and operations decision in gaining and sustaining superior performance (figure 1 and figure 2). This contribution is also an attempt to address the existing research gap in the literature, for example, literature in the RBV does not explain the decision-making mechanism (Kunc and Morecroft 2010) additionally the managerial role in integrating resources and value creation is underdeveloped (Sirmon, Hitt, and Ireland 2007).

The theoretical framework presented in this study helps managers and decision makers in four different ways: first, real time operations can be designed on the basis of available resources; second, the better resource choice can be made to support operational activities; third, it optimizes the resource use, and fourth, it makes operations to be competitively distinct as suggested in theoretical framework section. Most importantly, the presented framework (figure 1 and figure 2) increases the operational validity of RVB and enables managerial efforts in building VRIN resources. This is in response to the arguments: RBV lacks operational validity (Priem and Butler 2001) and RBV does not explain how a managerial effort creates VRIN resources (Connor 2002). However, a firm's abilities to acquire, maintain and deploy the right capabilities are key parameters that determine long-term survival and success in a turbulent business environment (Helfat and Winter 2011).

#### LIMITATIONS AND FUTURE RESEARCH

The research only makes a mark on the importance of aligning resource choice and operations decision and the concept of competitively distinct operations has only partially been introduced to answer the question how a firm can gain and sustain superior business performance. Yet many critical questions are to be explored on the interactions of firm's resource choice and operations decision, and the design of competitively distinct operations. In this context, the paper considered only a few key elements: cost of operations, opportunity cost, cost of resources and possible output, therefore future research could explore additional antecedent and moderating factors. Accordingly, the research does not claim universality of the presented concept of superior and sustainable business performance. but rather suggests further longitudinal and detailed case studies of successful firms as well as companies, which are declining or losing market share. This could not only support and validate the conferred model but also lead to profound managerial implications. Similarly, it would be interesting to investigate the role of competitively distinct operations on firm performance considering turbulent business environment, speed of decision-making, performance measurement and the firm's life cycle.

#### References

- Aggarwal, R. 2001. 'Value-Added Annual Shareholders Meetings: Reflections on People's Capitalism at Wal-Mart.' Journal of Retailing and Consumer Services 8 (6): 347-49.
- Baaij, M., M. Greeven, and J. V. Dalen. 2004. 'Persistent Superior Economic Performance, Sustainable Competitive Advantage, and Schumpeterian Innovation: Leading Established Computer Firms, 1954-2000.' European Management Journal 22 (5): 517-31.
- Baginski, S. P., and J. M. Wahlen. 2003. 'Residual Income Risk, Intrinsic Values, and Share Prices.' The Accounting Review 78 (1): 327-51.
- Banker, R. D., R. Mashruwala, and A. Tripathy. 2014. 'Does a Differentiation Strategy Lead to More Sustainable Financial Performance than a Cost Leadership Strategy?' Management Decision 52 (5): 872–96.
- Banker, R. D., and R. C. Morey. 1993. 'Integrated System Design and Operational Decisions for Service Sector Outlets.' Journal of Operations Management 11 (1): 81–98.
- Barney, J. B. 1986. 'Strategic Factor Markets: Expectations, Luck, and Business Strategy.' Management Science 32 (10): 1231-41.

- ——. 1991. 'Firm Resources and Sustained Competitive Advantage.' Journal of Management 17 (1): 99–120.
- Barney, J. B., D. J. Ketchen, and M. Wright. 2011. 'The Future of Resource-Based Theory Revitalization or Decline?' *Journal of Management* 37 (5): 1299–315.
- Basker, E. 2007. 'The Causes and Consequences of Wal-Mart's Growth.' *The Journal of Economic Perspectives* 21 (3): 177–98.
- Bettis, R. A., and C. Prahalad. 1983. 'The Visible and the Invisible Hand: Resource Allocation in the Industrial Sector.' *Strategic Management Journal* 4 (1): 27–43.
- Bititci, U. S., F. Ackermann, A. Ates, J. Davies, P. Garengo, S. Gibb, J. Macbryde, D. Mackay, C. Maguire, and R. Van Der Meer. 2011. 'Managerial Processes: Business Process That Sustain Performance.' *International Journal of Operations & Production Management* 31 (8): 851–91.
- Chae, H. C., C. E. Koh, and V. R. Prybutok. 2014. 'Information Technology Capability and Firm Performance: Contradictory Findings and Their Possible Causes.' MIS *Quarterly* 38 (1): 305–26.
- Chang, C. J., J. L. Y. Ho, and P. Lin. 2002. 'Managers' Resource Allocation: Review and Implications for Future Research.' *Journal of Accounting Literature* 21:1–37.
- Chase, B. R., F. R. Jacobs, and N. J. Aquilano. 2006. *Operations Management for Competitive Advantage*. Boston, MA: McGraw-Hill/Irwin.
- Chesbrough, H. 2010. 'Business Model Innovation: Opportunities and Barriers.' Long Range Planning 43 (2): 354–63.
- Coates, T. T., and C. M. Mcdermott. 2002. 'An Exploratory Analysis of New Competencies: A Resource-Based View Perspective.' *Journal of Operations Management* 20 (5): 435–50.
- Connor, T. 2002. 'The Resource-Based View of Strategy and Its Value to Practising Managers.' *Strategic Change* 11 (6): 307–16.
- Corbett, A., J. G. Covin, G. C. O'Connor, and C. L. Tucci. 2013. 'Corporate Entrepreneurship: State-of-the-Art Research and a Future Research Agenda.' *Journal of Product Innovation Management* 30 (5): 812–20.
- Costa, L. A., K. Cool, and I. Dierickx. 2013. 'The Competitive Implications of the Deployment of Unique Resources.' *Strategic Management Journal* 34 (4): 445–63.
- Danskin, P., B. G. Englis, M. R. Solomon, M. Goldsmith, and J. Davey. 2005. 'Knowledge Management As Competitive Advantage: Lessons from the Textile and Apparel Value Chain.' *Journal of Knowledge Management* 9 (2): 91–102.
- Das, S. R., S. A. Zahra, and M. E. Warkentin. 1991. 'Integrating the Content and Process of Strategic MIS Planning with Competitive Strategy.' *Decision Sciences* 22 (5): 953–84.

- Dierickx, I., and K. Cool. 1989. 'Asset Stock Accumulation and Sustainability of Competitive Advantage.' Management Science 35 (12): 1504-11.
- Dröge, C., S. Vickery, and R. E. Markland. 1994. 'Sources and Outcomes of Competitive Advantage: An Exploratory Study in the Furniture Industry.' Decision Sciences 25 (5-6): 669-89.
- Fahy, J., and A. Smithee. 1999. 'Strategic Marketing and the Resource Based View of the Firm.' Academy of Marketing Science Review 10 (1): 1-21.
- Florea, L., Y. H. Cheung, and N. C. Herndon. 2013. 'For All Good Reasons: Role of Values in Organizational Sustainability.' Journal of Business Ethics 114 (3): 393-408.
- Fortune. 2014. 'Global 500 2014.' http://fortune.com/global500/2014/
- Foss, N. J., and T. Knudsen. 2003. 'The Resource-Based Tangle: Towards a Sustainable Explanation of Competitive Advantage.' Managerial and Decision Economics 24 (4): 291-307.
- Goodale, J. C., D. F. Kuratko, J. S. Hornsby, and J. G. Covin. 2011. 'Operations Management and Corporate Entrepreneurship: The Moderating Effect of Operations Control on the Antecedents of Corporate Entrepreneurial Activity in Relation to Innovation Performance.' Journal of Operations Management 29 (1): 116-27.
- Govindarajan, V., and A. Gupta. 1999. 'Taking Wal-Mart global: Lessons from Retailing's Giant.' Strategy and Business (17): 14-25.
- Hana, U. 2013, 'Competitive Advantage Achievement through Innovation and Knowledge.' Journal of Competitiveness 5 (1): 82-96.
- Helfat, C. E., and S. G. Winter. 2011. 'Untangling Dynamic and Operational Capabilities: Strategy for the (N) ever Changing World.' Strategic Management Journal 32 (11): 1243–50.
- Hill, W. L. C., J. R. Gareth, and M. A. Schilling. 2015. Strategic Management Theory: An Integrated Approach. Stamford: Cengage Learning.
- Hughes, J. S., and A. Thevaranjan. 1995. 'Current Production Targets and Strategic Decisions by Corporate Managers.' Journal of Operations Management 12 (3): 321-29.
- Hult, G. T. M., C. W. Craighead, and D. J. Ketchen Jr. 2010. 'Risk Uncertainty and Supply Chain Decisions: A Real Options Perspective.' Decision Sciences 41 (3): 435-58.
- Kozlenkova, I. V., S. A. Samaha, and R. W. Palmatier. 2014. 'Resource-Based Theory in Marketing.' Journal of the Academy of Marketing Science 42 (1): 1-21.
- Kraaijenbrink, J., J. C. Spender, and A. J. Groen. 2010. 'The Resource-Based View: A Review and Assessment of Its Critiques.' Journal of Management 36 (1): 349-72.
- Kunc, M. H., and J. D. Morecroft. 2010. 'Managerial Decision Making and Firm Performance under a Resource-Based Paradigm.' Strategic Management Journal 31 (11): 1164-82.

- Leiblein, M. J. 2003. 'The Choice of Organizational Governance Form and Performance: Predictions from Transaction Cost, Resource-Based, and Real Options Theories.' *Journal of Management* 29 (6): 937–61.
- Lewis, R., and M. Dart. 2014. The New Rules of Retail: Competing in the World's Toughest Marketplace. New York: Palgrave Macmillan.
- Lockett, A., and S. Thompson. 2004. 'Edith Penrose's Contributions to the Resource-Based View: An Alternative Perspective.' *Journal of Management studies* 41 (1): 193–203.
- Mackey, T. B., and J. B. Barney. 2013. 'Incorporating Opportunity Costs in Strategic Management Research: The Value of Diversification and Payout as Opportunities Forgone When Reinvesting in the Firm.' Strategic Organization 11 (4): 347–63.
- Mariadoss, B. J., J. L. Johnson, and K. D. Martin. 2014. 'Strategic Intent and Performance: The Role of Resource Allocation Decisions.' *Journal of Business Research* 67 (11): 2393–402.
- Mellat-Parast, M., and J. E. Spillan. 2014. 'Logistics and Supply Chain Process Integration as a Source of Competitive Advantage: An Empirical Analysis.' *The International Journal of Logistics Management* 25 (2): 289–314.
- Milad, A. I. 2010. Business Management Handbook. Bloomington, IN, USA: AuthorHouse.
- Newbert, S. L. 2007. 'Empirical Research on the Resource-Based View of the Firm: An Assessment and Suggestions for Future Research.' *Strategic management journal* 28 (2): 121–46.
- Noda, T., and J. L. Bower. 1996. 'Strategy Making as Iterated Processes of Resource Allocation.' *Strategic Management Journal* 17 (Special Issue): 159–92.
- Oliver, C. 1997. 'Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views.' *Strategic Management Journal* 18 (9): 697–713.
- Paauwe, J., and P. Boselie. 2003. 'Challenging "Strategic HRM" and the Relevance of the Institutional Setting.' *Human Resource Management Journal* 13 (3): 56–70.
- Peng, M. W. 2001. 'The Resource-Based View and International Business.' *Journal of Management* 27 (6): 803–29.
- Penrose, E. 1956. *The Theory of the Growth of the Firm.* 3rd ed. Oxford: Oxford University Press.
- Peteraf, M. A. 1993. 'The Cornerstones of Competitive Advantage: A Resource-Based View.' *Strategic Management Journal* 14 (3): 179–91.
- Peteraf, M. A., and J. B. Barney. 2003. 'Unraveling the Resource-Based Tangle.' *Managerial and Decision Economics* 24 (4): 309–23.
- Peterson, P. P., and F. J. Fabozzi. 1999. *Analysis of Financial Statements*. Hoboken, NJ: Wiley.

- Porter, M. E. 1985. The Competitive Advantage: Creating and Sustaining Superior Performance. New York: Free Press.
- Priem, R. L., and J. E. Butler. 2001. 'Is the Resource-Based "View" a Useful Perspective for Strategic Management Research?' Academy of Management Review 26 (1): 22-40.
- Richardson, J. 2008. 'The Business Model: An Integrative Framework for Strategy Execution.' Strategic Change 17 (5-6): 133-44.
- Roberts, P. W., and G. R. Dowling. 2002. 'Corporate Reputation and Sustained Superior Financial Performance.' Strategic Management Journal 23 (12): 1077-93.
- Rumelt, R. P. 1984. 'Towards a Strategic Theory of the Firm.' Competitive Strategic Management 26:556-70.
- Runyan, R. C., P. Huddleston, and J. Swinney. 2006. 'Entrepreneurial Orientation and Social Capital as Small Firm Strategies: A Study of Gender Differences from a Resource-Based View.' The International Entrepreneurship and Management Journal 2 (4): 455-77.
- Schiffels, S., A. Fügener, R. Kolisch, and O. J. Brunner. 2014. 'On the Assessment of Costs in a Newsvendor Environment: Insights from an Experimental Study.' Omega 43:1-8.
- Schoenherr, T., and R. Narasimhan. 2012. 'The Fit between Capabilities and Priorities and Its Impact on Performance Improvement: Revisiting and Extending the Theory of Production Competence.' International Journal of Production Research 50 (14): 3755-75.
- Shavit, T., M. Rosenboim, and M. Malul. 2011. 'Opportunity Costs in Buying and Short Selling: Do They Really Matter?' Economics Letters 112 (1): 122-24.
- Sirmon, D. G., M. A. Hitt, and R. D. Ireland. 2007. 'Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box.' Academy of Management Review 32 (1): 273-92.
- Sorescu, A., R. T. Frambach, J. Singh, A. Rangaswamy, and C. Bridges. 2011. 'Innovations in Retail Business Models.' Journal of Retailing 87 (1): s3-s16.
- Steidtmann, C. 2003. 'A Retail Tsunami: Wal-Mart Comes to Japan.' Deloitte. New York.
- Teece, D. J. 2007. 'Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance.' Strategic Management Journal 28 (13): 1319-50.
- -. 2010. 'Business Models, Business Strategy and Innovation.' Long Range Planning 43 (2): 172-94.
- Timilsina, B., P. Haapalainen, and J. Takala. 2014. 'Effect of Company Size on Manager's Perception.' Management and Production Engineering Review 5 (1): 65-73.
- Vance, S. S., and R. V. Scott. 1994. Wal-Mart: A History of Sam Walton's Retail Phenomenon. New York: Twayne.

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- Victoravich, L. M. 2010. 'When Do Opportunity Costs Count? The Impact of Vagueness, Project Completion Stage, and Management Accounting Experience.' *Behavioral Research in Accounting* 22 (1): 85–108.
- Wang, S., and Y. Zhang. 2005. 'The New Retail Economy of Shanghai.' *Growth and Change* 36 (1): 41–73.
- Wang, W. C., C. H. Lin, and Y. C. Chu. 2011. 'Types of Competitive Advantage and Analysis.' *International Journal of Business and Management* 6 (5): 100–4.
- Wernerfelt, B. 1984. 'A Resource-Based View of the Firm.' *Strategic Management Journal* 5 (2): 171–80.
- Werther, W. B., and D. Chandler. 2010. Strategic Corporate Social Responsibility: Stakeholders in a Global Environment. Thousand Oaks, CA: SAGE.
- Wiggins, R. R., and T. W. Ruefli. 2002. 'Sustained Competitive Advantage: Temporal Dynamics and the Incidence and Persistence of Superior Economic Performance.' Organization Science 13 (1): 81–105.
- Woodruff, R. B. 1997. 'Customer Value: The Next Source for Competitive Advantage.' *Journal of the Academy of Marketing Science* 25 (2): 139–53.
- Wrigley, N. 2000. 'The Globalization of Retail Capital: Themes for Economic Geography.' In *The Oxford Handbook of Economic Geography*, ed. G. L. Clark, M. P. Feldman, and M. S. Gertler, 292–313. New York: Oxford University Press Inc.
- Wu, B. 2013. 'Opportunity Costs, Industry Dynamics, and Corporate Diversification: Evidence from the Cardiovascular Medical Device Industry, 1976-2004.' *Strategic Management Journal* 34 (11): 1265–87.
- Wu, S. J., S. A. Melnyk, and B. B. Flynn. 2010. 'Operational Capabilities: The Secret Ingredient.' *Decision Sciences* 41 (4): 721–54.



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# Abstracts in Slovene

# Ponovni odkup delnic, nadomestilo v obliki delnic in finančna uspešnost podjetja

Elżbieta Wrońska-Bukalska

V tem delu raziskujem, kako se dejavnosti ponovnega odkupa delnic povezujejo z načrti izplačevanja nadomestil zaposlenim in finančno uspešnostjo podjetja. Predvidevam, da je odkup delnic z namenom plačila vodstvu/zaposlenim vzpodbuda in da vodi k večjim prizadevanjem in večji finančni uspešnosti podjetja. Finančno uspešnost podjetja dojemam v smislu donosnosti in likvidnosti (in ne glede na cene delnic). Empirična raziskava je bila izvedena v letih 2004-2013 in sicer v podjetjih, ki so ponovno odkupila svoje delnice in jih razdelila med zaposlene kot vzpodbudo. Analizirala sem, kako se je finančna uspešnost spremenila dve leti po odkupu delnic. Empirični dokazi v tej študiji nakazujejo, da se ponovni odkup delnic ne izvaja samo kot nadomestek za izplačilo dividend. Pogosto ga podjetja najavijo z namenom izvedbe programa vzpodbude za zaposlene/vodstvo. Vendar pa sem ugotovila, da ponovni odkup delnic z namenom izvedbe programa vzpodbude za zaposlene/vodstvo ne vodi k izboljšanju finančne uspešnosti podjetja.

Ključne besede: ponovni odkup delnic, ponovni odkup, program vzpodbude, načrt nadomestil, uspešnost podjetja

Management 10 (3): 201-217

# Vzpodbujanje storilnosti zaposlenih s pomočjo gamifikacije: AirBalticovo orodje Forecaster

Daiga Ergle

Poleg produktivnosti zaposlenih ali kazalnikov fluktuacije in odsotnosti z delovnega mesta zaposlenih znotraj organizacij, motivirano delovanje zaposlenih izstopa kot eden od najbolj pomembnih pokazateljev učinkovitega upravljanja s človeškimi viri. Delovni sili se pridružujejo mlajše generacije in podjetja so zavezana k raziskovanju in uvajanju nekaterih novih orodij in tehnik, ki bolj učinkovito privedejo do aktivnosti generacij Y in Z. Vodstvo korporacije AirBaltic v Rigi, Latvija, poskuša svojo delovno silo bolje motivirati za delo z uporabo poslovne igre, imenovane Forecaster. Po prepričanju vodstva ima – poleg izboljšane interne komunikacije – Forecaster potencial za prihranek do 1 milijona EUR letno zaradi kvalitetno izboljšanih odločitev vodstva. V članku avtor obravnava teorijo in raziskave, povezane z uvajanjem in učinki gamifikacije v korporativnem okolju, pa tudi poda oceno delovnega okolja v korporaciji AirBaltic. Kasneje v članki je igra Forecaster opisana bolj podrobno in analiziran je njen vpliv na motivirano delovanje zaposlenih in na organizacijsko uspešnost. Na koncu so podana

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priporočila ki jih morajo organizacije upoštevati pri uvajanju procesov gamifikacije v svojem okolju.

Ključne besede: motivirano delovanje zaposlenih, generacija Z.

gamifikacija

Management 10 (3): 219-234

## Kultura kot moderator visoko zavezanega vodstva: povezava z vedenjsko zavezo

Sławomir Jarka in Maciej Ruciński

Afektivna organizacijska in poklicna zavezanost je ključnega pomena za vsako organizacijo. Dokazano je, da uporaba prakse visoke zavezanosti vodstva (High Commitment Management – нсм) izboljša afektivno zavezanost organizaciji, njenemu vplivu na poklicni tip zavezanost pa doslej ni bilo posvečene dovolj pozornosti. Izmerjen je bil neposreden vpliv nacionalne kulture na oba primera, vendar se ugotovitve dostikrat ne ujemajo. Z izvedbo primerjalne raziskave med zaposlenimi na univerzah na Nizozemskem in na Poljskem je bilo dokazano, da visoka zavezanost vodstva (нсм) pozitivno deluje na afektivno organizacijsko in poklicno zavezanost. Dobljeni mešani rezultati moderirane linearne regresije (le ena kulturna dimenzije je dejansko vplivala na na povezavo med visoko zavezanostjo vodstva (нсм) in središčem zavezanosti) so vodili k temu, da vpliv narodne kulture ostaja v tej povezavi. Vendar pa obstajajo predpogoji, ki so privedli do zaključka, da bi bilo v prihodnosti potrebno izvesti potrditvene študije, ki bi podprle te ugotovitve.

Ključne besede: afektivna zavezanost, zavezanost vodstva (High Commitment Management), narodna kultura, moderator Management 10 (3): 235-254

Uokvirjanje spretnostne uspešnosti za sprejemanje organizacijskega znanja: vključevanje prakse na podlagi podatkov in na podlagi uporabnikov

Eva Gatarik

Izpostavljanje pomanjkljivosti in napak lahko predstavlja tvegano zabavo za zaposlene, še posebej, če so prisotne informacije, ki niso skladne s pravili, postopki in teorijami, ki jih odobrava vodstvo podjetja. Vendar pa pri načelu spretnostne uspešnosti ne gre za strogo upoštevanje uveljavljenih pravil, postopkov in teorij, ko se išče pot iz težavne situacije. Ta prispevek dokazuje, da spretnostna uspešnost izhaja iz prakse deljenih pomenov, ne toliko iz pedantnosti. Posebej v primeru negotovosti, dvoumnosti in dvoma se ljudje v podjetjih ne bi smeli zgolj držati uveljavljenih pravil, ampak tudi z združenimi močmi klasificirati, interpretirati in preoblikovati obdelane podatke v nova znanja, ki nudijo povratne informacije, tako da se lahko posledični

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ukrepi in utemeljevanje le-teh izkoristijo v prevladujočem poslovnem vzdušju, zmanjšujejo dvoumnost in ponujajo bolj zanimive možnosti. Predlagan je celostni pristop, ki lahko pripomore k izgradnji, obdelavi in utemeljevanju znanja, vzpostavljanju pomena znotraj organizacije, z namenom dolgoročnega izboljšanja organizacijske uspešnosti. Na koncu je trditev ponazorjena še s posebnim primerom prenove v sme.

Ključne besede: organizacijska uspešnost, organizacijska znanja, organizacijsko učenje, osmišljanje, okvir jezik-informacija-realnost (Language-Information-Reality Framework)

Management 10 (3): 255-271

# Konkurenčno različno delovanje kot ključ za vrhunsko in trajnostno poslovno uspešnost: primer iz Walmarta Binod Timilsina

Obstoječe raziskave pogleda, temelječega na virih (Resource-Based View – RBV) so zagotovile le omejene dokaze o tem, kako podjetja dosegajo vrhunsko in trajnostno poslovno uspešnost; razlog za slabši rezultat je verjetno dejstvo, da aktualna literatura temu posveča premalo pozornosti. To delo postavlja trditev, da za doseganje in vzdrževanje vrhunske in trajnostne poslovne uspešnosti ne zadošča le trajnostna konkurenčna prednost podjetja, pač pa se morajo konkurenčno razlikovati tudi njegove dejavnosti. Zato skozi poenotenje potrebnih pogojev za vrhunsko in trajnostno poslovno uspešnost to delo predstavlja pogled, temelječ na virih (RBV) z namenom boljšega razumevanja. Walmartova zgodba o uspehu, kot jo predstavlja obstoječa literatura, velja za primer, ki podpira predlagani okvir. To delo podaja ugotovitev, da so stroški poslovanja, oportunitetni stroški, stroški sredstev in potencialne proizvodnje ključni dejavniki pri izbiri virov in poslovnih odločitev za zagotovitev konkurenčno različnih operacij. Na koncu sledi še razprava o teoretičnih in vodstvenih posledicah, raziskovalnih omejitvah in prihodnjih raziskovalnih možnostih.

Ključne besede: pogled, temelječ na virih (Resource-Based View – RBV), konkurenčna in trajnostno konkurenčna prednost, konkurenčno različni postopki, vrhunska in trajnostna poslovna uspešnost, Walmart

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