

# 6789101 Management

4

VOLUME 9 · NUMBER 3 · FALL 2014

Information Content, Signalling Hypothesis  
and Share Repurchase Programs in Poland  
*Elżbieta Wrońska-Bukalska*

3

CEOs' Strategic Orientations in the Most  
Successful Slovenian Companies  
*Dario Berginc*

2

Governance and Real Estate Markets  
Performance in Nigeria: Are They Related?  
*Kazeem Bello Ajide*

1

Product Offerings Testing through  
Customer Satisfaction  
*Tina Vukasović and Nives Mikulić*

Towards Joint Performance: Building  
Dynamic Capabilities for Public Critical  
Asset Maintenance  
*Vesa-Jukka Vornanen and Josu Takala*

ISSN 1854-4231



# Management

The journal *Management* is intended for managers, researchers, students and scholars, who develop skills and put into practice knowledge on organisation management. The journal *Management* integrates practitioners', behavioural and legal aspects of management. It is dedicated to publishing articles on activities and issues within organisations, their structure and resources. It advocates the freedom of thought and creativity and it acknowledges differences in the value system, interests, opinions and attitudes. It promotes the ethics in decision-making, moral responsibility and lawfulness of activities.

*Management* is indexed/listed in IBZ, DOAJ, EconPapers, Index Copernicus, Cabell's, and EBSCO.

ISSN 1854-4231

## EDITOR IN CHIEF

Štefan Bojnec, *University of Primorska, Slovenia*

## ASSOCIATE EDITORS

Imre Fertő, *Corvinus University of Budapest, Hungary*

Josu Takala, *University of Vaasa, Finland*

## MANAGING AND PRODUCTION EDITOR

Alen Ježovnik, *University of Primorska, Slovenia*

## EDITORIAL BOARD

Josef C. Brada, *Arizona State University, USA*

Žiga Čepar, *University of Primorska, Slovenia*

Andrzej Ciešlik, *University of Warsaw, Poland*

Primož Dolenc, *University of Primorska, Slovenia*

Slavko Dolinšek, *University of Primorska, Slovenia*

Liesbeth Dries, *University of Wageningen, The Netherlands*

Aleš Groznik, *University of Ljubljana, Slovenia*

Henryk Gurgul, *AGH University of Science and Technology, Poland*

Birgit Gusenbauer, *FN Joanneum, Austria*  
Timotej Jagrič, *University of Maribor, Slovenia*

Ladislav Kabat, *Pan-European University, Slovakia*

Pekka Kess, *University of Oulu, Finland*

Davorin Kračun, *University of Maribor, Slovenia*

Tadej Krošlin, *University of Maribor, Slovenia*

Masaaki Kuboniwa, *Hitotsubashi University, Japan*

Mirna Leko-Šimić, *Josip Juraj Strossmayer University of Osijek, Croatia*

Matjaž Mulej, *University of Maribor, Slovenia*

Zbigniew Pastuszak, *Maria Curie-Skłodowska University, Poland*

Rajesh K. Pillania, *Institute for Strategy, New Delhi, India*

Klement Podnar, *University of Ljubljana, Slovenia*

Cezar Scarlat, *University Politehnica of Bucharest, Romania*

Hazbo Skoko, *Charles Sturt University, Australia*

Marinko Škare, *Juraj Dobrila University of Pula, Croatia*

Janez Šušteršič, *International School of Social and Business Studies, Slovenia*

Milan Vodopivec, *University of Primorska, Slovenia*

## PUBLISHED BY

University of Primorska  
Faculty of Management  
Cankarjeva 5, 6101 Koper  
Slovenia

Phone +386 5 610 2021

Fax +386 5 610 2015

E-mail [mng@fm-kp.si](mailto:mng@fm-kp.si)

Web [www.mng.fm-kp.si](http://www.mng.fm-kp.si)

*Information for authors and publishing ethics statement are available at [www.mng.fm-kp.si](http://www.mng.fm-kp.si)*



Revija *Management* je namenjena mednarodni znanstveni javnosti; izhaja v angleščini s povzetki v slovenščini. Izid revije je finančno podprla Javna agencija za raziskovalno dejavnost Republike Slovenije iz sredstev državnega proračuna iz naslova razpisa za sofinanciranje izdajanja domačih znanstvenih periodičnih publikacij.

# Management

ISSN 1854-4231 · VOLUME 9

NUMBER 3 · FALL 2014

- 173 Information Content, Signalling Hypothesis  
and Share Repurchase Programs in Poland  
*Elżbieta Wrońska-Bukalska*
- 187 CEOs' Strategic Orientations in the Most Successful  
Slovenian Companies  
*Dario Berginc*
- 205 Governance and Real Estate Markets Performance  
in Nigeria: Are They Related?  
*Kazeem Bello Ajide*
- 223 Product Offerings Testing through  
Customer Satisfaction  
*Tina Vukasović and Nives Mikulić*
- 239 Towards Joint Performance: Building Dynamic  
Capabilities for Public Critical Asset Maintenance  
*Vesa-Jukka Vornanen and Josu Takala*
- 259 *Abstracts in Slovene*



# Information Content, Signalling Hypothesis and Share Repurchase Programs in Poland

ELŻBIETA WROŃSKA-BUKALSKA

*Maria Curie-Skłodowska University, Poland*

*elzbieta.bukalska@umcs.lublin.pl*

The article aims to present the meaning of the share repurchase programs and to identify the reasons of share repurchase and information share repurchase convey to investors. The information comprises the following: signalling better financial prospects or signalling intrinsic value. The article analyses selected statistical data on the listed companies that repurchased their shares. Having carried out research for the selected listed companies, I found that companies are not willing to disclose the reasons for share repurchases. However, if they reveal the reason it is not only cash transfer to shareholders.

*Key words:* share repurchase, information content, signalling hypothesis

## Share Repurchase Programs Popularity and Reasons

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). G. Grullon and R. Michaely (2002) found that expenditures on share repurchase programs (relative 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% in 2000 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).

Using share repurchase as one of the tools of communicating between companies and shareholders, one should note that in the recent years share repurchase programs have become important and more and more common. Therefore, there is a growing number of studies referring to this phenomenon. A number of researchers proved that share repurchase constitutes a substitute for dividend. It particularly holds true for cash transferred to shareholders (Grullon and Michaely 2002). Grullon and Michaely (2002) found that share repurchase activity over the last two decades has helped the average total payout ratio of firms to stay relatively constant despite the decline in the average dividend payout ratio. Consequently, share repurchase is deemed as substitution for dividend. Grullon and Michaely (2002) imply that, because of this substitution, it is the payout (as either dividends or repurchases) that can be used to signal at least excessive cash holdings by managers and companies. That lead investors to think share repurchase signals the company holds excessive amount of cash.

Sharing with stockholders excessive amount of money is not the only reason for share repurchases and not only signal of holding excessive cash. It seems that there are also other reasons. The results of several studies on stock repurchase reasons by different researchers are discussed in the paper of Wang and Johnson (2009). The managers repurchase shares for both internal and external reasons which are the following (Tsetsekos, Kaufman, and Gitman 1991; Grullon and Ikenberry 2000; Dittmar 2000; Wang and Johnson 2009; Hsieh and Wang 2009; Voss 2012):

1. transferring cash to shareholders,
2. changing the capital structure,
3. changing the ownership structure,
4. stabilizing share prices,
5. improving financial ratios (ROE, EPS).

There are many reasons for share repurchase. However, it is worthwhile noting that repurchasing shares in order, e.g. to change capital structure, might result in share prices rise: share repurchase diminishes the amount of shares and the level of equity. It means that capital structure (equity–debt relation) is also changed. This relation should be changed only when the company is able to gain positive effects of leverage. This is viable only for the company with good financial standing and good prospects. These two aspects (the

signal of positive effects of leverage and the diminished number of listed shares), even under constant demand, lead to an increase in market share price. It means that managers might achieve various results at the same time while repurchasing shares.

The reasons of share repurchasing contain the information that companies wish to convey to their shareholders. Once the reasons of share repurchase are identified, it would be possible to find out what signal companies want to transmit to shareholders.

### Information Content Idea and Signalling Hypothesis

At the most fundamental level, the dividend irrelevancy theory of Miller and Modigliani (1961) prove the irrelevance of cash payout to firm value under perfect market assumptions. Relaxing the perfect market assumptions to let managers be better informed, they suggest that payout policy can reveal unrecognized firm value. Miller and Modigliani (1961) suggest also that when markets are incomplete, firms can convey information about future cash flows through changes in payout policy.

The idea of information content draws on agency theory and is connected with information asymmetry and signalling hypothesis. Agency theory was developed by Jensen and Meckling (1976). The main idea of agency theory is that agent (manager) and principal (owner) have got different scope of duties, different interests, and different attitude towards risk. The agent (manager) knows more and has better and thorough knowledge on the company operating activities. It means that manager possesses private information about the firm, the one not shared with the market. That is why there appears asymmetry in the information gained. Moreover, this asymmetric information has the impact on the investor decisions. Judging by decisions taken by managers or actions taken by managers, investors can react properly. This situation leads to conclusions that managers' decisions and actions have information content and might convey information (signal) to the investors.

The theory of information content and signalling hypothesis was developed by Ross (1977) and Bhattacharya (1979). However, the best-known models are those of Bhattacharya (1979), Miller and Rock (1985), and John and Williams (1985). The signalling models developed in the late 1970s and early 1980s suggest that firms adjust cash distribution level to signal their prospects. A rise in dividends or a declaration of a stock repurchase program typically signals that the firm will do better.

Agency theory suggests also that firms with free cash flows in

excess of their investment opportunities are likely to spend them on value-destroying projects that reduce the firm's value. Grossman and Hart (1980), Easterbrook (1984), and Jensen (1986) argue that if shareholders can minimize the cash management controls, it will be much harder for management to engage in unmonitored spending (e.g. invest in negative NPV projects). One way to take excess cash from the firm is to increase the level of payout (free cash flow hypothesis). In the presence of information asymmetry between investors and managers, Easterbrook (1984) and Jensen (1986) argue that managers are imperfect agents of investors and cash payout can mitigate agency conflicts.

Mutual contribution of the theories referring to information asymmetry was the statement that because managers gained a better knowledge of the company, their decisions and activities include information on the financial standing of the company. The investors perceive these managers' decisions and activities as signals of current and future financial standing of the company.

While signalling and conveying information about financial standing of the company, managers might use different tools containing specific information. These tools include the following: decisions about taking loan, paying out dividends, issuing shares or just repurchasing share. Ross (1977) develops models that show executives would use finance to transmit and validate information about their firms.

To disseminate information, executives announce their decision to the market in various ways, one of which is share repurchase announcements. Ofer and Thakor (1987) argue that share repurchase decisions reveal the managers' privately held information. Tsetsekos, Kaufman, and Gitman (1991) find that a majority of the responses of their surveyed were consistent with the signalling hypothesis. In the theory, the signalling hypothesis has become the predominant theory in explaining the causes and effects of share repurchase (Vermaelen 1981; Dann 1981; Asquith and Mullins 1986; Comment and Jarrel 1991; Ikenberry, Lakonishok, and Vermaelen 1995; Stephen and Weisbach 1998; Ofer and Thakor 1987).

If a specific tool is to be deemed as containing information and having ability to convey information, the following conditions must be met:

- managers must be aware that decision, about e.g. raising capital, includes information content (the company is growing and it needs additional financing); it means that managers being aware



of this information content will intentionally take decisions and actions, which have information content;

- investors must be convinced that this very tool possesses information content and helps to form investors' opinion on the situation of the company; it means that investor gaining information on managers' decisions and actions has the ability to forecast the actual magnitude of the specific tool and is ready to respond to the signal (usually by selling or buying shares which results in change in share prices).

This article refers only to one aspect of the problem discussed above. The scope of this article covers investigating whether managers perceive repurchasing shares as a tool of communicating specific information to the investors and, if yes, what kind of information they want to convey to the market.

### Information Conveyed to Investors

The reasons of share repurchasing contain the information that companies wish to convey to their shareholders. Once the reasons of share repurchase are identified, it would be possible to find out what information and signal they transmit to shareholders. Information that might be conveyed through share repurchase program to the investors is following:

- internal – on current and prospect financial situation of the company (level of liquidity ratio, level of cash balance, level of debt–equity ratio, the level of ROE and EPS ratio),
- external – on discrepancy between intrinsic value and market value of shares.

If information is connected with financial situation, it usually conveys good news. It might mean that company announcing share repurchase has excessive cash. Deciding on transferring it to the investors in turn is also a signal that company's financial prospect are not at risk. This is the way managers want to show that company may expect good prospects and is able to gain necessary cash flow from future operations (Bhattacharya 1979; Miller and Rock 1985; Vermaelen 1984). It might also mean that the company disposing cash makes its liquidity ratio lower, and still becomes safe and sound. Another aspect of share repurchase is that that not only liquidity ratio is changing but also debt–equity ratio is changing. The debt–equity ratio is increasing while share repurchase program is launched and the number of shares and the level of equity diminished. Without raising extra debt, share repurchases lead to increase in debt–equity

ratio. Rise in debt–equity ratio should be possible if company is able to gain positive effects of leverage. In addition, this is viable for the company with good financial standing and good prospects.

Share repurchase is an integral feature of the process a firm undergoes from growth phase to a more mature phase. Typically, in a growth phase, a firm has many positive NPV projects available, high capital expenditures, low free cash flows, and high earnings growth. At some point, the firm's growth slows down and its economic profits declines. In this phase, capital expenditures decline, and the firm generates larger amounts of free cash flows (Grullon and Michaely 2004).

Grullon and Michaely (2004) analyze the consequences of a repurchase program for the future performance of a firm. They do not find that firms undertaking share repurchase programs experience a significant increase in earnings or profitability. However, they find that the systematic risk and the cost of capital of these firms decline after these events.

Stephen and Weisbach (1998) present evidence that both expected and unexpected cash flow are positively correlated with the levels of repurchases. Nohel and Tarhan (1998) examine the determinants of post-repurchase operating performance. Their result show that the improvement of post-repurchase performance occurs in low-growth (low-Tobin's-Q) firms. Share repurchase and future profitability is the subject of many studies (Penman 1983; DeAngelo, DeAngelo, and Skinner 1996; Benartzi, Michaely, and Thaler 1997; Grullon and Michaley 2004; Ikenberry, Lakonishok, and Vermaelen 1995; Ikenberry, Lakonishok, and Vermaelen 2000).

If information is connected with the discrepancy between intrinsic value and market value, it also usually conveys good news. Management by repurchasing their own shares signal to the market that their shares are undervalued and they have inside information supporting the higher value of their outstanding shares.

Dittmar (2000) finds that firms repurchase stock to take advantage of potential undervaluation. Brav et al. (2005) surveyed 384 financial executives to determine the factors that drive dividend and share repurchase decisions. The most fundamental explanation as to why companies repurchase their stock is that the company believes their shares are undervalued. When management repurchases stock solely on the basis of undervaluation, management is, in effect, sending a signal to the market that their current and future prospects (projected cash flows) are not accurately reflected in the price of the stock.

Ikenberry, Lakonishok, and Vermaelen (2000) show that firms tend to repurchase fewer shares if the stock price rises significantly in the year following the repurchase. This evidence is consistent with the belief that managers try to take advantage of undervalued stock prices. Share repurchase and undervaluation is the subject of many studies (Vermaelen 1981; Stephen and Weisbach 1998).

The common analysis of buyback as a signal is that it should be positive because the firm is demonstrating concern about the efficient use of its equity capital (Jensen 1986). Share repurchase shows that company avoids investing in projects wasting its free cash flow; this signals that future profit per share should increase. Managers having private information buy undervalued shares to signal good future prospects, which are not valued in the current price (Vermaelen 1984). If this is true, share repurchase might occur whatever the price and the changes in the stock price are. On the other hand, managers may also want to signal an abnormally depreciated stock price and support the shareholders' return. In the latter, buyback will follow decrease in the market price. The difference between these two hypotheses is tiny (Bruslerie 2013). The first is directed more toward the future and the latter looks at the past (Benartzi, Michaely, and Thaler 1997). The first implies that the future earnings should improve after share repurchase announcement (Grullon and Michaely 2004) while the latter means that repurchase is to be the impulse to support the price (Ginglinger and Harmon 2007).

### Methodology of Research

The article refers to only one part of signalling hypothesis connected with information content. This part refers to information content assigned to share repurchase by managers. The article does not analyse the information content of share repurchase seen by investors and does not refer to investors' reaction to the announcement of share repurchase. Their main focus is on the reasons of share repurchase announced by managers of the listed companies.

The article analyses selected statistical data on the listed companies that repurchased their shares from Polish stock exchange (Warsaw Stock Exchange). The table reports the number of companies that started share repurchase in subsequent years with the announced reason for share repurchase. The survey does not cover companies that announced only share repurchase not followed any action. Nor does it cover the companies that continued repurchasing their shares during the next year either; companies are included into research once only.

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

Year	(1)	Reasons				
		(2)	(3)	(4)	(5)	(6)
2005	22	3	0	2	0	17
2006	14	0	0	1	2	11
2007	11	0	0	2	0	9
2008	40	0	4	5	4	27
2009	27	0	2	6	1	18
2010	17	0	1	2	2	12
2011	33	0	2	7	2	22
2012	45	0	6	3	5	31

NOTES Column headings are as follows: (1) number of companies that started share repurchase, (2) cash distribution, (3) undervaluation, (4) incentive system for employees, (5) capital group restructuring, (6) no reason indicated. Adapted from [www.gpwinfostrefa.pl](http://www.gpwinfostrefa.pl)

The survey covers the years 2005–2012. It is important to mention that in 2004 in Poland, there were amendments to Commercial Code and then share repurchase procedure was eased. The analysed period covers the years of both prosperity and crisis.

The total number of companies that started repurchasing their shares amounts to 209. It is almost half of the companies listed on WSE. It is also important to mention that 60 companies announced share repurchase program without implementing it.

The table indicates that the number of companies repurchasing their shares is growing. The years 2008 and 2012 are crucial as the number of companies repurchasing their shares increased to more than 40. It is about 12.5% of companies listed on Warsaw Stock Exchange (WSE). There were also two other important years when the number of companies repurchasing their shares was significant – these were 2009 and 2011 when the number of these companies increased to about 30. It is also about 10.0% of all the companies listed on WSE.

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 for share repurchase. About 70% of all companies that started share repurchase in the years 2005–2012 do not indicate any reason.

If the reason of share repurchase program is revealed, to most common announced reason of shares repurchase is incentive pro-

gram for managers and employees. About 14% of all companies repurchasing their shares indicate this reason. It is important to mention that companies repurchasing their shares in order to distribute them among employees, the number of shares does not change. Nevertheless, the number of listed shares diminishes. The level of equity is temporarily lowered as long as company holds its own shares (until their resale or distribution). Repurchasing shares in order to distribute them among employees means that company wants to change ownership structure. However, repurchasing their shares to distribute them among employees, company cannot achieve all mentioned aims; especially company cannot change capital structure or improve financial ratios.

Another reason indicated by Polish companies is that 8% of all companies repurchasing their shares while undergoing the process of the restructuring of their capital group. It is connected with mergers and acquisitions. It mostly occurs when repurchase of shares is used to pay for the acquired company. Occasionally, it refers to the shares remained after the mergers of the companies.

Only 7% of all companies indicates undervaluation as the reasons for the share repurchase. These companies state that 'current situation on the financial markets does not reflect the actual value of the company.' All of these companies are willing to repurchase their share using procedure that results in share redemption. Share redemption leads to diminishing the amount of shares and the level of equity permanently. Share redemption reflects that the company is able to meet almost all the targets mentioned above. It especially holds true in respect of changing capital structure, changing ownership structure, and improving financial ratios (ROE, EPS).

Only 3 companies (1.4% of all companies repurchasing their shares) admit that they repurchase their shares in order to transfer cash to their shareholders.

## Conclusions and Results

On carrying out the research for the selected listed companies, I found that only few companies are willing to announce the share repurchase reason. However, the most commonly announced reason is associated with changes in the ownership structure. Only 15% of companies that carried out the share repurchases announced reasons associated with signalling theory (cash transfer and undervaluation).

About 70% of all companies that started share repurchase in the years 2005–2012 do not announce any reason to the market. One

might also conclude that managers not revealing the reasons for share repurchase are given a wide leeway to take decision on allocation and usage of repurchased shares at their convenience. They can do whatever they want with repurchased shares without giving to investors any grounds for their behaviour. Companies at the same time give the wide leeway to the investors for they expect investors themselves assign information content to share repurchase according to their knowledge. In addition, for share repurchase is associated with conveying good news, companies expect positive investors' reaction to the share repurchase announcement (even without showing the reason).

Yet, it is also possible to notice that although the reasons are not announced to the market and minority shareholders they are known to strategic investors. Then share repurchase programs let minority owners give up investing in the company without a sense of loss (because they are still supposed to believe it is a good news) and let strategic investors strengthen their voting power.

Because usually share repurchase is deemed as actions, bringing good news companies might try to engage this tool in activities, which signal their quality. Managers being under pressure to make profit and impress investors might try to deploy different techniques to affect market opinion (Jensen 2005). One of these techniques might be share repurchase program. It is especially true for companies that do not reveal the reasons for share repurchase and expect that investors themselves will assign good news to the share repurchase. It is also true for companies that announce share repurchase program without implementing it.

However, share repurchase is very costly signalling mechanism. Although announcing a repurchase program is costless (in a monetary sense), both overvalued and undervalued firms can announce their intentions to share repurchase. Companies announcing share repurchase program without implementing it put at risk their credibility. Moreover, the loss of credibility and reputation from not implementing a share repurchase announcement may be perceived as a cost associated with false signalling and investors' being misled (Chan et al. 2007). Whereas carrying out share repurchase is costly tool even in a monetary sense.

Launching share repurchase program might not be associated with current or perspective financial situation or real discrepancy between intrinsic and market value. It might depend on the managers' opinion and belief and sometimes on the managerial confidence. Overconfident managers tend to perceive their firms have

better financial prospects and are undervalued and therefore they launch a share repurchase program aiming to fixing the price discrepancy (Shu et al. 2013).

The conclusions drawn from my observations and statistical data may provide viable grounds for more comprehensive research. One possible direction of such research would be to identify the financial situation of companies before and after repurchasing their shares. This might help companies to determine whether share repurchase is real signalling mechanism or just companies try to mimic other companies in good financial condition and take advantage of investors' goodwill. Yet another possible direction of research is to investigate the investors' reaction and changes in the stock prices. This, in turn, may help to determine whether undervaluation is the main factor that determines share repurchase, or whether share repurchasing is the factor determining the change in share prices.

## References

- Asquith, P., and D. W. Mullins, Jr. 1986. 'Signaling with Dividends, Stock Repurchases, and Equity Issues.' *Financial Management* 15:27-44.
- Bhattacharya, S. 1979. 'Imperfect Information, Dividend Policy, and the Bird in the Hand Fallacy.' *Bell Journal of Economics* 10 (1): 259-70.
- Benartzi, S., R. Michaely, and R. Thaler. 1997. 'Do dividend Changes Signal the Future or the Past?' *Journal of Finance* 52:1007-1034.
- Brav, A. P., C. R. Harvey, J. R. Graham, and R. Michaely. 2005. 'Payout Policy in the 21st Century.' Johnson School Research Paper Series 29-06, Cornell University, Ithaca, NY.
- de la Bruslerie, H. 2013. 'Share Repurchase: Does It Increase the Informativeness of Market Process.' <http://basepub.dauphine.fr/xmlui/bitstream/123456789/11381/1/149.pdf>
- Chan K., D. L. Ikenberry, I. Lee, and Y. Wang. 2007. 'Share Repurchases as a Tool to Mislead Investors: Evidence from Earnings Quality and Stock Performance.' Paper presented at the AFA 2006 Annual Meeting, Boston.
- Comment, R., and G. Jarrell. 1991. 'The Relative Signaling Power of Dutch-Auction and Fixed Price Self-Tender Offers and Open-Market Share Repurchases.' *Journal of Finance* 46:1243-71.
- Dann, L. 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. 1996. 'Reversal of Fortune: Dividend Signaling and the Disappearance of Sustained Earnings Growth.' *Journal of Financial Economics* 40:341-71.



- . 2004. 'Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings.' *Journal of Financial Economics* 72:425–56.
- Dittmar, A. K. 2000. 'Why Do Firms Repurchase Stock?' *The Journal of Business* 73 (3): 331–55.
- Easterbrook, F. H. 1984. 'Two Agency-Cost Explanations of Dividends.' *The American Economic Review* 74 (4): 650–9.
- 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.
- Ginglinger, E., and J. Hamon. 2007. 'Actual Share Repurchases, Timing and Liquidity.' *Journal of Banking and Finance* 31 (3): 915–38.
- Grullon, G., and D. L. Ikenberry. 2000. 'What Do We Know About Stock Repurchases.' *Journal of Applied Corporate Finance* 13 (1): 31–51.
- Grullon, G., and R. Michaely. 2002. 'Dividends, Share Repurchases, and the Substitution Hypothesis.' *The Journal of Finance* 57 (4): 1649–84.
- . 2004. 'The Information Content of Share Repurchase.' *The Journal of Finance* 59 (2): 651–80.
- Grossman, S. J., and O. D. Hart. 1980. 'Takeover Bids, the Free Rider Problem, And the Theory of the Corporation.' *The Bell Journal of Economics* 11 (1): 42–64.
- Hrdlicka, Ch. M. 2006. 'Finding the Disappearing Dividends: Stock Repurchaser Characteristic, and Their Increasing Propensity to Pay.' <http://dx.doi.org/10.2139/ssrn.1787219>
- Hsieh, J., and J. Wang. 2009. 'Stock Repurchases: Theory and Evidence.' <http://dx.doi.org/10.2139/ssrn.1395943>
- Ikenberry, D., J. Lakonishok, and T. Vermaelen. 1995. 'Market Under-Reaction to Open Market Share Repurchases.' *Journal of Financial Economics* 39:181–208.
- Ikenberry, D., J. Lakonishok, and T. Vermaelen. 2000. 'Share Repurchase in Canada: Performance and Strategic Trading.' *Journal of Finance* 55:2373–97.
- Jensen, M. C. 1986. 'Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers.' *American Economic Review* 76 (2): 323–9.
- . 2005. 'Agency Costs of Overvalued Equity.' *Financial Management* 34 (1): 5–19
- Jensen, M. C., and W. H. Meckling. 1976. 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure.' *Journal of Financial Economics* 3 (4): 305–60.
- John, K., and J. Williams. 1985. 'Dividends, Dilution, and Taxes: A Signaling Equilibrium.' *The Journal of Finance* 40 (4): 1053–70.
- Miller, M. H., and F. Modigliani. 1961. 'Dividend Policy, Growth, and the Valuation of Shares.' *The Journal of Business* 34 (4): 411–33.
- Miller, M. H., and K. Rock. 1985. 'Dividend Policy under Asymmetric Information.' *The Journal of Finance* 40 (4): 1031–51.



- Nohel, T., and V. Tarhan. 1998. 'Share Repurchases and Firm Performance: New Evidence on the Agency Costs of Free Cash Flow.' *Journal of Financial Economics* 49:187–222.
- Ofer, A., and A. V. Thakor. 1987. 'A Theory of Stock Price Responses to Alternative Corporate Cash Disbursement Methods: Stock Repurchases and Dividends.' *The Journal of Finance* 42 (2): 365–94.
- Penman, S. H. 1983. 'The Predictive Content of Earnings Forecasts and Dividends.' *Journal of Finance* 38:1181–99.
- Ross, S. 1977. 'The Determination of Capital Structure: The Incentive-Signaling Approach.' *Bell Journal of Economics* 8 (1): 23–40.
- Shu, P.-G., Y.-H. Yeh, T.-L. Chiang, and J.-Y. Hung. 2013. 'Managerial Overconfidence and Share Repurchases.' *International Review of Finance* 13:39–65.
- Stephen, C. P., and M. S. Weisbach. 1998. 'Actual Share Reacquisitions in Open-Market Repurchase Programs.' *Journal of Finance* 53 (1): 313–33.
- Tsetsekos, G. P., D. J. Kaufman, and L. J. Gitman. 1991. 'A Survey of Stock Repurchase Motivations and Practices of Major us Corporations.' *The Journal of Applied Research* 7 (3): 15–21.
- Wang, J., and L. D. Johnson. 2008. 'The Signaling Mechanism of Share Repurchase Programs.' <http://www.northernfinance.org/2008/papers/77.pdf>
- Vermaelen, T. 1981. 'Common Stock Repurchases and Market Signalling.' *Journal of Financial Economics* 9:149–83.
- . 1984. 'Repurchase Tender Offers, Signalling, and Managerial Incentives.' *Journal of Financial and Quantitative Analysis* 19 (02): 163–81.
- Voss, J. 2012. 'Why Do Firms Repurchase Stock?' *Major Themes in Economics* 14:55–75.



This paper is published under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (cc BY-NC-ND 4.0) License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



# CEOs' Strategic Orientations in the Most Successful Slovenian Companies

DARIO BERGINČ

*University of Ljubljana*

*dario.berginc@gmail.com*

This article presents the concept of a CEO's strategic orientation as one of the most important elements of the research into a company's successfulness. Managerial perception is in many ways more important than environmental analysis, since CEOs determine their company's future strategic orientations. A study of CEOs' strategic orientations can provide better information regarding companies' strategic orientations. We performed a qualitative study of CEOs from a sample of the most successful Slovenian companies. The research results indicate numerous commonalities between CEOs' opinions and standpoints, as well as some differences in relation to the characteristics of the companies and industries in which they operate.

*Key words:* strategic orientation, CEOs, successful companies, Slovenia

## Introduction

Nowadays companies must act strategically to remain competitive in an increasingly uncertain environment (Porter 1985). A key influence on strategy formation and company successfulness lies in the hands of managers (Isabella and Waddock 1994). An analysis of managerial perception of the environment is equally or even more important than analysis of the environment in which decisions are being made (Arzenšek 2011). Thus, research into managerial perceptions from the perspective of strategic orientation can provide better information regarding a company's strategic orientation.

A review of key literature in the field of company and CEO strategic orientation (Miles and Snow 1978; Venkatraman 1989; Day and Nedungadi 1994; Hagen, Zucchella, and Cerchiello 2012; Theodosiou, Kehagias, and Katsikea 2012) revealed that research has focused more on the features of different types of strategic orientation and less on the reasons why CEOs choose a particular strategic orientation. Furthermore, we miss the framework which could connect all

types of CEOs' strategic orientation in a more holistic way. Regarding methodology, company CEOs represent only a part of the sample. We believe that a precisely selected sample of CEOs, i.e. excluding (other) members of management boards, and members of middle and lower management, can provide an important added value to the existing literature in this field. Finally, in the literature review we did not find any research that cites CEOs answers.

Research in this field is also lacking in Slovenia, and is only available for certain related fields, for example marketing (e.g. Jančič 2001; Bodlaj 2009) or in the field of mental models and organisational cognitive competencies (e.g. Kovač and Bertoneclj 2008). Research on a sample of Slovenian managers focused primarily on aspects of management (Kramar Zupan 2012), competencies (Strugar 2010), and cognitive schemas (Arzenšek 2011), while not including the subject of CEOs' strategic orientation.

The objective of this article is to research the strategic orientation of CEOs in some of the most successful companies in Slovenia, and to determine the key factors influencing their strategic orientation. We are interested in whether managers are more oriented towards the internal or external environment of the company and, in the case of external orientation, whether they focus more on customers or competitors. Furthermore, we wish to determine whether they predominantly seek competitive advantages in cost efficiency or product differentiation, whether they focus on developing new products/services or new markets when expanding their business, and whether they put more emphasis on marketing or financial goals.

### Construct of Strategic Orientation

Studies of strategic orientation stem primarily from fields of strategic management, strategic marketing, and entrepreneurship (Hagen, Zucchella, and Cerchiello 2012), with the subject being discussed by numerous authors (Miles and Snow 1978; Porter 1985; Venkatraman 1989; Day and Nedungadi 1994; Hagen, Zucchella, and Cerchiello 2012; Theodosiou, Kehagias, and Katsikea 2012). Nevertheless, the literature does not offer a unified view on the conceptualisation of a strategic orientation construct (Hagen, Zucchella, and Cerchiello 2012). We can define it as a connecting link between competencies and resources in a company, and the opportunities and risks in its external environment (Ansoff 1965; Porter 1985), as a principle influencing the activities of strategic behaviour (Noble, Sinha, and Kumar 2002), or as a company's activities leading to greater success (Slater, Olson, and Hult 2006).

Based on an analysis of the relationship between a company and its environment, Miles and Snow (1978) defined four basic strategic types, related to strategic proactiveness: reactor, defender, analyser and prospector. On this basis, Venkatraman (1998) developed six dimensions of strategic orientation of a company: aggressiveness, analysis, defensiveness, futurity, proactiveness and riskiness. Based on a meta-analysis of a wider selection of literature, Hagen, Zucchella, and Cerchiello (2012) divided the strategic orientation into five subsets: entrepreneurial, innovation, product, market and sales orientation. The most researched and developed of these are entrepreneurial (e.g. Lumpkin and Dess 1996) and market orientation (e.g. Kohli and Jaworski 1990; Narver and Slater 1990). Authors nevertheless warn that the presented constructs partly overlap, with the distinctions not always being clear. In real life both companies and managers employ multiple types of strategic orientation (Hagen, Zucchella, and Cerchiello 2012).

On the basis of an analysis of existing literature and concept of dyadic schemes (Axelrod 1973), we developed a research concept composed of five sets that discusses CEOs' strategic orientation differently to previous studies. Our research is focused on CEOs' strategic orientation from the perspective of the internal or external environments, customers and competitors, the search for competitive advantages and developing the offer, and the importance of marketing, financial goals and results. We want to connect findings of basic strategic orientation research (Miles and Snow 1978; Venkatraman 1989; Day and Nedungadi 1994; Hagen, Zucchella, and Cerchiello 2012) with marketing research (Kohli and Jaworski 1990; Narver and Slater 1990), general strategy theory (Porter 1985) and growth strategy theory (Ansoff 1965). Finally, we want to test the preferences of CEOs regarding financial and marketing goals (Venkatraman and Ramanujam 1986). We adjusted the theoretical analysis and interpretation of results to our research concept.

## Specific Types of Strategic Orientation

### INTERNAL/EXTERNAL ORIENTATION

Day and Nedungadi (1994) see the dimension of *internal managerial orientation* as diametrically opposed to customer and competitor orientation. This group of managers is less focused on customers and competitors, which is often caused by a lack of competitive pressure on the market (Day and Nedungadi 1994). On the other hand, Theodosiou, Kehagias, and Katsikea (2012) associate internal orien-

tation of managers with cost orientation and cost leadership strategy (Porter 1985). Defenders and to some extent analysers (Miles and Snow 1978), as well as dimensions of analysis and defensiveness (Venkatraman 1989), can be categorised as internally-oriented managers.

*External* orientation is associated with managerial orientation towards customers, competitors, or both (Narver and Slater 1990; Day and Nedungadi 1994; Theodosiou, Kehagias, and Katsikea 2012). This group corresponds to the prospector type (Miles and Snow 1978) and dimensions of aggressiveness, futurity and proactiveness (Venkatraman 1989).

Managers shift from one orientation to another, mostly from internal to external orientation, which can be linked to the company's evolution from production (product) and sales orientation towards market orientation (Hagen, Zucchella, and Cerchiello 2012). These findings are consistent with one of the key research studies on the market orientation of Slovenian companies, which showed a high frequency of closed-type orientation (product and production orientation), but also the trend of an increasing proportion of companies with open-type orientation (customer and competitor orientation), although it remains well below 50% (Snoj et al. 2004).

On the basis of the review, we formed the first research question:

**RQ1** *Are CEOs of some of the most successful companies in Slovenia oriented more towards internal or external environment of a company, and what are their reasons?*

#### CUSTOMER/COMPETITOR ORIENTATION

We split market orientation into customer and competitor orientation in order to investigate CEOs' preferences according to the concept of dyadic schemes (Axelrod 1973) and existing literature (Day and Nedungadi 1990; Narver and Slater 1990). Managers oriented more towards *customers* anticipate the potential reactions of customers, while their market research focuses on customer preferences and decisions, with performance standards also adapted to these factors. These managers understand their competitive position through the eyes of their customers (Day and Nedungadi 1994), with the focus on forming an additional value for the customers and a proactive orientation towards meeting their needs and wishes (Narver and Slater 1990).

On the other hand, managers focused on *competitors* pay more attention to the potential reactions of competitors, using market research to discover strategies and tactics of their competition. They

operate in highly competitive environments, and their strategies are oriented towards defending against and attacking the competitors (Narver and Slater 1990; Day and Nedungadi 1994).

Managers oriented towards *customers and competitors* are market driven (Day and Nedungadi 1994) and in this way achieve an appropriate balance between both types of orientations (Narver and Slater 1990).

Rojšek and Konič (2003) studied market orientation of small Slovenian firms. Their results revealed that the highest proportion of these firms can be considered *truly market oriented firms*, followed by a smaller proportion of *more competitor-oriented firms* and *more customer-oriented firms*. The smallest proportion of firms, considered information guards, was the least market oriented.

Second research question:

RQ2 *Are CEOs of some of the most successful companies in Slovenia more focused on customers or competitors, and what are their reasons?*

#### COST LEADERSHIP/OFFER DIFFERENTIATION ORIENTATION

Using the generic strategy model, we aim to connect the concept of strategic orientation with the company's offer, i.e. the products and services offered to their customers, with which the company competes against similar providers in the market. Here we rely on the classic model that defines three possible generic strategies: *cost leadership strategy*, *differentiation strategy*, and *focus strategy* (Porter 1985).

Cost strategy is focused on increasing profits by reducing costs and increasing market share through charging lower prices, while still making a reasonable profit on each sale because of reduced costs. Differentiation strategy involves making products or services different from and more attractive than those of competitors; typically pertaining to features, functionality, durability, support and also brand image. Focus strategies concentrate on particular niche markets and, by understanding the dynamics of that market and the unique needs of customers within it, develop uniquely low-cost or well-specified products for the market (Porter 1985).

Research has shown that a differentiation strategy has a positive impact on the creation, dissemination and responsiveness of a firm (Homburg, Krohmer, and Workman 2004). Research also suggests that companies in Slovenia find it difficult to make decisions regarding which strategy will be pursued (Pučko 2002). Both cost leadership and offer differentiation strategies appear to be of equal im-

portance, despite the fact that it is necessary to select only one. This makes companies the so-called 'mid-prisoners' (Jančič 1990).

Third research question:

RQ3 *Do CEOs of some of the most successful companies in Slovenia look for competitive advantages predominantly in cost leadership or offer differentiation, and what are the key reasons for their choice of strategy?*

#### NEW PRODUCT/NEW MARKET ORIENTATION

Furthermore, a CEO's strategic orientation is also related to their company's growth strategies. We used a classic theoretical model of growth strategies with four classic development directions, formulated by Ansoff (1965), which considers the opportunities of offering existing and new products within existing and/or new markets and the levels of risk associated with each. *Market penetration* involves selling more established products into existing markets. *Product development* means developing new products or services and directing them into existing markets. *Market development* comprises taking existing products or services and selling them in new markets, whereas *diversification* involves developing new products and putting them into new markets at the same time (Ansoff 1965).

A study of Slovenian companies has shown that the highest share of companies pursue product/market diversification, followed by market development strategies and conglomerate diversification. Product development strategy is preferred only by a few studied companies, while the least adopted strategy is that of divestment (Lahovnik 2011).

Fourth research question:

RQ4 *Do CEOs of some of the most successful companies in Slovenia focus more on developing new products/services or on developing new markets, and what are the reasons?*

#### MARKETING/FINANCIAL GOAL ORIENTATION

We wish to place the dyadic orientation of CEOs towards marketing and financial goals into our research concept primarily from the perspective of companies' performance measurements (Venkatraman and Ramanujam 1986). Models of performance measurement can be divided into financial and non-financial (Marc et al. 2010), or into financial and marketing models (Venkatraman and Ramanujam, 1986). The financial models are linked to sales growth, return on assets, profitability, cash flow and other financial performance



measures, while the marketing models are linked to market position, market share, product quality and customer loyalty (Venkatraman and Ramanujam, 1986).

Traditionally, managerial performance measurement has focused mainly on financial performance, but the importance of non-financial performance measures, like the balanced scorecard system (Kaplan and Norton 2000), is becoming more and more apparent (Marc et al. 2010). Research conducted by Marc et al. (2010) demonstrated that for large Slovenian firms the key measures of performance are financial, such as income and profit growth, liquidity, and cost control, etc., while non-financial measures, such as customer satisfaction, relations with suppliers, innovation orientation and organizational learning, remain neglected.

Fifth research question:

*RQ5 Do CEOs of some of the most successful companies in Slovenia put more emphasis on marketing or financial goals, and what are the key reasons for their orientation?*

### Research Methodology

Qualitative research of CEOs into some of the most successful companies in Slovenia was performed within the scope of a doctoral study into CEOs' strategic orientation. The research sample was composed of CEOs from some of the most successful companies in Slovenia, classified according to their net profit in 2013. We partially adjusted the sample in relation to the sample heterogeneity criteria (Miles and Huberman 1994), as we wanted to obtain as diverse a sample as possible in terms of type of business, firm reputation, strength of competition, export orientation and type of ownership.

The research was conducted from 21st May to 23rd July 2014. We sent an invitation for participation to 80 CEOs from the sample of successful companies in Slovenia, in accordance with the additional research criteria (other than the performance criterion). Seventeen CEOs agreed to participate. After a prior agreement, in-depth interviews were conducted with all CEOs, lasting on average 54 minutes. The longest interview was 1 hour and 17 minutes, and the shortest 23 minutes. Fifteen CEOs consented to having the interview recorded, and two refused. Transcripts were made of all recorded interviews.

The sample of 17 CEOs included in the research is relatively varied. Nine CEOs (Chairmen of the Board) manage a public limited company, and eight (Director Generals) manage a private limited

company. Sixteen of the 17 companies are big, the remaining one of medium size. The companies represent a range of sectors, with nine production and eight service companies. Eight companies from the sample are distinctly export-oriented, while nine are distinctly focused on the Slovenian market. The majority owner of three of the companies is the state, eight of the companies have a majority domestic (private) ownership, and five have a majority foreign ownership, while the ownership of one company is mixed: partly state and partly domestic private.

Three companies from the sample rank among the top six most successful companies in Slovenia according to their net profit in 2013 (database *AJPES* 2014). Nine companies participating in the research rank in the top 50 most successful companies in the same list, while the other eight rank lower on this list (to 300), but they still fulfilling the criteria of 'most successful' (net profit of companies is still higher than 1 million EUR). This explains why our sample comprises mainly CEOs of big companies and only one CEO from an SME.

Sixteen managers are male and only one manager is female. Two managers are foreign, with the other 15 CEOs being Slovenian. In two cases CEOs did not directly participate in the research; the interviews were conducted with board members who have been working with the respective CEO for years and answered the questions on their behalf.

## Research Results

### INTERNAL/EXTERNAL ORIENTATION

Only four of the interviewed CEOs explicitly said they are more internally oriented, while the majority (nine CEOs) described themselves as more externally-oriented managers. Four CEOs chose balanced orientation, which means that they consider themselves on average focused 50% on the internal and 50% on the external environment. These results do not confirm the findings of one of the key research studies on the market orientation of Slovenian companies, which suggested a domination of closed-type orientation (product and production orientation) (Snoj et al. 2004).

Internally-oriented CEOs see the advantage of this orientation as a greater capacity to influence the operations of the company ('You cannot really influence anything externally, you can only influence your personnel, relationships and employee motivation') and a comprehensive oversight of the internal field of the company's operation. Furthermore, they emphasize their commitment to the field

from which they originate. The latter is especially true for managers originating in technical fields and for production company managers ('Considering the fact we are a production company, we are significantly more oriented towards everything happening internally'). Some interviewed managers additionally stated that areas are already divided between board members ('In our company every board member is in charge of his area. I am in charge of development and production, another is in charge of finances, and another is in charge of marketing'). A more pronounced internal orientation of some CEOs is caused by the owner's strategy ('The owner is in charge of development and marketing') and the regulation in the company's area of activity, with its related restrictions on the influence of the company on the external environment.

Research results partially confirm our existing findings: managers in this group are less oriented towards customers and competitors (Day and Nedungadi 1994), and express a greater orientation towards cost leadership strategy (Porter 1985).

Externally-oriented CEOs primarily emphasize the need for customer orientation and attention to customers, which is congruent with existing research (Narver and Slater 1990; Day and Nedungadi 1994; Theodosiou, Kehagias, and Katsikea 2012). Furthermore, managers emphasize the importance of monitoring the market, its trends, and seeking new market opportunities ('I want to know what is happening outside our company, what our position is, and what it could be – and I want to bring this insight to the company'), also from the perspective of personnel motivation ('A good manager must be externally oriented and also encourage other people in the company to look outward').

Reasons for this orientation may lie, as in the case of the internally-oriented group, with task distribution in the company. If the CEO has a trusted representative on the executive board that handles the internal organisation of the company, then the CEO has more reason to attend to the external environment.

Managers who emphasize both the internal and external orientation speak of the need for a dynamic balance between both types of orientation ('If you want to be a good manager, you have to master everything'). In their opinion, they have to react to activities in their environment, and to seek solutions within the company. One of the CEOs illustrated this balance with the help of boards' agendas ('Company board meetings always deal with both production and sales'). Such an orientation is congruent with the hypothesis that strategic orientations are not mutually exclusive, and that managers can si-

multaneously develop multiple types of strategic orientation (Hagen, Zucchella, and Cerchiello 2012).

Results have also shown the transition in some CEOs from internal to external orientation, which is consistent with previous studies (Snoj et al. 2004), displaying a trend of an increasing proportion of companies with open-type orientation (customer and competitor orientation).

### Customer/Competitor Orientation

The group of customer-oriented managers is dominant. However, all CEOs in this group also say that, at least in general, they monitor their competitors. For this group the customers represent the company's *raison d'être* ('Our salaries are paid by customers') and are clearly the most important ('If I do not have time for a customer who pays my salary, who will I have time for?'). They also understand the strategic partnership and have a mutually-dependant relationship with their customers from the perspective of reducing the business risk ('Problematic customers can be the death of you'). The aspect of understanding their customers is also important to them ('How will you sell to someone if you do not understand him?'), as well as an evaluation of future cooperation ('We need to evaluate how much to adapt to a certain customer, so as not to diversify our assets too much').

CEOs that manage companies on mature, highly competitive markets expressly emphasize the importance of monitoring the competition, in a mutual co-dependence with the customers ('Without customers there would be no competitors. It is doubtful I would be building a brand if there were no competitors'). Some managers emphasize that the company discovers competitors through its customers ('How else would you discover your competition?'), while others stress the importance of competition analysis from the perspective of reflexion ('The company looks at itself through competitors'). Managers who have achieved the balance between customer and competitor orientation are classified as 'market driven' in existing literature (Narver and Slater 1990; Day and Nedungadi 1994).

Some managers warned of the danger of an excessive focus on the competition, which can lead to the fear effect ('We start wondering what they did, what we will do, and then we start to follow the competition') and the follower philosophy ('If we want to be leaders, we have to deal with internal matters, rather than spending all our time following the competition, as we then become only followers').

On the other hand, one of the managers pointed out the disadvan-

tage of not following the competition ('We were surprised by a competitor's bankruptcy. We would surely have obtained a bigger market share if we had foreseen it. Now all competitors obtained a proportionally equal share').

These results differ from those of previous studies on market orientation of small Slovenian firms, which revealed a higher share of competitor-oriented firms than customer oriented firms, when not considering the highest proportion which represents truly market-oriented firms (Rojšek and Konič 2003). This could lead to the hypothesis that small Slovenian firms are more focused on their competitors and less focused on their customers than large firms.

#### COST EFFICIENCY/DIFFERENTIATION ORIENTATION

From the perspective of generic strategies (Porter 1985), CEOs are quite unanimous. Cost control and cost leadership is considered fundamental, with an additional focus on differentiated products and services with a higher added value for specific customer segments, which can be partly linked with innovation orientation. We confirm the findings of some previous research on the positive impact of differentiation strategy (Homburg, Krohmer, and Workman 2004) and also regarding the difficulties inherent in making a clear decision on which strategy is dominant (Jančič 1990; Pučko 2002).

Differentiation strategy is important for CEOs for reasons of higher competitiveness ('In a mature industry, competitiveness is more easily achieved with innovativeness') and differentiation from competitors, including in relation to competitors from China ('That is why the Chinese cannot compete with us – because of our service, which is here, close by – and our joint development with customers.' 'We always have to be a step ahead, with a better solution, since the competitors – Chinese as well – are catching up. We cannot be cheaper; the only solution is higher added value'). One of the managers similarly emphasized that the differentiation strategy is practically the only possible strategy in a mature industry ('We have no chance with cost leadership strategy. We do not sell more kilograms of a product, but a solution: enjoyment when purchasing').

An important aspect we wish to point out is the choice of strategy from the customer's perspective ('Services are focused on the user, for the user. Not because the technology is available, but because the user needs it. New products are developed for the customer and ever more frequently with the customer'). Possibilities for the use of the differentiation strategy are, of course, increased with this approach.

Regarding the cost leadership strategy, managers emphasize that

correct cost control represents a foundation for the differentiation strategy, with one manager warning of the danger of excessive cost control ('I consider it highly unproductive if the manager focuses too much on the costs, as everything then just shrinks. Managers must focus on increasing income, towards new ideas'). According to some managers, the cost leadership strategy is very useful in markets which are not yet sufficiently mature to appropriately consider the added value of a product or service, and are dominated primarily, or exclusively, by the cost aspect. Similarly, one of the managers pointed out that 'excessive emphasis of novelty concerning a generic product in a mature industry can lead to customers' mistrust.' Due to the nature of activities or the inability to influence sale prices in regulated industries, some CEOs emphasize the search for added value in cost leadership strategy.

We also note certain differences due to maturity of the market. Managers in growing markets are more orientated towards differentiation strategy and niche strategy than are managers in mature markets.

#### NEW PRODUCT/NEW MARKET ORIENTATION

CEOs stress the greater importance of developing new products in comparison to developing new markets, primarily because of the large investments required to develop new markets in capital-intensive industries, and the difficulties involved in controlling a large number of markets when considered in relation to company size. Furthermore, there are various additional limitations to expanding into new markets, from geographical determinants to the nature of activities, which hence do not allow expansion into foreign markets due to various regulations. Some managers warn about weak government support for internationalisation of Slovenian companies.

These results differ from the findings of a previous study into growth strategies of Slovenian companies, which revealed a higher priority towards market development strategy in comparison to product development strategy (Lahovnik 2011).

One manager noted the existing presence in most markets as the reason for focusing on new products, which is characteristic for mature industries ('Number of markets is limited, both geographically and in terms of segments'), and another said that, at best, new markets represent a side-product of developing new products.

Managers orientated towards developing new markets emphasize the importance of new market potential. Such orientation is char-

acteristic for managers working in less capital intensive industries, for specific offers, and for products developed in cooperation with foreign customers.

Managers, expressing the great importance of developing products and markets, also stated the need to combine both strategies ('We have to develop new markets with existing products, since existing markets are saturated. And we penetrate completely new segments with new products'), corresponding to the diversification strategy (Ansoff 1965). Such a combination is important from a business risk perspective ('A company must always have new revenue streams; therefore we must consider new services and markets that will facilitate long-term operations. If we focus too much on one product and one market, we face immense risk'), while some CEOs consider developing new products and new markets a prerequisite for growth ('We achieved our peak with this product in this market; our strategy could be to retain this share. However, if we want to grow, we need to develop new products, as well as new markets').

#### MARKETING/FINANCIAL GOAL ORIENTATION

The majority of interviewed CEOs (eight) explicitly emphasized the higher importance of financial goals, while only three assigned a higher importance to marketing goals. Other CEOs (six) chose a balanced orientation, which means that on average they are focused 50% on financial and 50% on marketing goals. This is consistent with previous research into large Slovenian firms which has shown that the key measures of performance are financial (Marc et al. 2010).

Managers orientated towards marketing goals emphasize that, while marketing goals are definitely of prime importance, this does not signify growth-at-any-cost but instead manifests in a focus on added value ('The market situation represents the core, and we consider it in the business plan'). Managers further state that 'customers create added value and financial effects that are then measured in numbers,' and emphasize the huge importance of the marketing aspect ('We never started something with the exclusive goal of profit, but with the objective of increasing our revenue and market share, and profit as a side-effect'). The research findings are congruent with existing literature on aspects of performance measurement (Venkatraman and Ramanujam 1986).

Managers emphasizing the key influence of financial goals on company successfulness are very focused on profitability ('Sales without profit are a failure') and warn of the essential importance of tangible results ('Market shares do not pay salaries'), such as



cash flow and earnings per share, in addition to profit. The latter is congruent with the findings of previous research (Venkatraman and Ramanujam 1986). Managers further emphasize that a financial perspective is even more important for mature, compared to growing, markets.

Regarding the connectedness of financial and marketing goals, managers consider financial results a consequence of marketing activities ('Financial results are consequence and result'), and they connect the two, insofar as possible ('We form marketing goals with financial leverage. Marketing goals are formed with the inclusion of financial data'). Some managers warn about the dangers of the absence of any one type of goal ('If one part fails, it is over'). We can associate the latter opinion with theoretical approaches from the perspective of integration of financial and non-financial performance indicators, with the increasingly used balanced scorecard (Kaplan and Norton 2000).

Furthermore, the time distinction of both goals was shown to be important. Managers see financial goals as short-term, becoming long-term in combination with marketing goals ('Financial profit is a prerequisite for a company's operations. However, since we are long term orientated, we invest heavily in research and development').

Some CEOs indicate a transition from financial to mainly marketing goals ('If focus was on financial goals in the past, it is more on marketing goals in the present'). Furthermore, managers point out the importance of other goals, related to production and innovation, as well as customer, employee and other stakeholder satisfaction.

## Discussion

This research presented a possible conceptual framework, composed of five sets of managers' strategic orientations, and based on the concept of dyadic schemes (Axelrod 1973). We argue for an added value of this framework in the fact that it is not focused on existing concepts, for example product, market, entrepreneurial, innovation or sales orientation, but more on a holistic and sequential perspective. We move from environment analysis to market orientation, strategy choice, growth choice and the selection of financial and non-financial performance measurements. The focus of the research is to explore the reasons for all five sets of managers' strategic orientations.

It was mostly difficult for CEOs to select one of the two dyadic schemes (Axelrod 1973): the answers were mostly not 'yes' or 'no,' but were given in the sense of 'more' or 'less.' Important for our re-



search, therefore, was to understand why managers selected 'more' or 'less.'

In general, CEOs are more externally oriented than internally, which is not supported by the high frequency of closed-type orientation (Snoj et al. 2004). Nevertheless, we can confirm the trend of an increase in the proportion of companies with an open-type orientation (customer and competitor orientation) (Snoj et al. 2004). When expressing external orientation, CEOs are evidently more focused on customers than on competitors. The results differ from previous findings regarding the market orientation of small Slovenian companies, which have revealed a higher share of competitor-oriented firms than customer-oriented firms. Regarding general strategic orientation, all CEOs prefer differentiation strategy, taking into account cost control. The results are consistent with research on the positive impact of differentiation strategy (Homburg, Krohmer, and Workman 2004). Our results also reveal a difficulty for CEOs to decide quickly and clearly which strategy is dominant (Jančič 1990; Pučko 2002).

CEOs prefer the development of a new product/service to the development of new markets, mostly because of the lack of capacities required for internationalization strategy. We cannot confirm the findings of a previous study into growth strategies of Slovenian firms, which revealed a higher priority of market development strategy in comparison to product development strategy (Lahovnik 2011).

Finally, for most CEOs financial goals are more important than marketing goals, but the managers also emphasize the importance of balancing both goals. They consider financial goals as short-term and marketing goals as long-term. This supports findings from previous research into large Slovenian firms which revealed an importance of financial measures of performance (Marc et al. 2010).

A general conclusion of the research could be that customers are the most important element for managers. The majority of strategic orientations of the CEOs is, in principle, connected with customers, when considering more deeply the reasons for these strategic orientations. Customers therefore represent the main independent variable for all types of strategic orientation.

An important added value of this research is in highlighting examples of good practice. The opinions and views of the CEOs, which were intentionally presented in their original form, can serve to provide valuable ideas and solutions to all Slovenian CEOs, and to the firms for which they are responsible. Certain hypotheses offered by the CEOs in this study are limited to a specific sector or business ac-

tivity. However, we can also extract some universal hypotheses that are applicable to all firms, regardless of sector, competitive position, and ownership structure or size.

Recommendations for further study within this field primarily pertain to testing the same hypotheses on a bigger representative sample of CEOs and other managers of the most successful companies in Slovenia, using a quantitative research approach to facilitate generalisation of results to a more general population of managers in Slovenia. Furthermore, additional research into specific industries or company sizes is possible, as well as qualitative research studies into specific types of strategic orientation. A comparison of the strategic orientation between Slovenian and foreign CEOs could also provide insights into this field of study.

## References

- Ansoff, I. H. 1965. *Corporate Strategy*. New York: McGraw-Hill.
- Arzenšek, M. 2011. 'Kognitivne sheme gospodarske krize pri menedžerjih.' Doctoral dissertation, University of Ljubljana, Ljubljana.
- Axelrod, R. 1973. 'Schema Theory: An Information Processing Model of Perception and Cognition.' *The American Political Science Review* 67 (4): 1248–66.
- Bodlaj, M. 2009. 'Povezanost med tržno naravnostjo, inovacijami in uspešnostjo podjetja: konceptualni model in empirična preverba.' Doctoral dissertation, University of Ljubljana, Ljubljana.
- Day, G. S., and P. Nedungadi. 1994. 'Managerial Representations of Competitive Advantage.' *Journal of Marketing* 58 (2): 31–44.
- Hagen, B., A. Zucchella, and P. Cerchiello. 2012. 'International Strategy and Performance: Clustering Strategic Types of SMEs.' *International Business Review* 21 (3): 369–82.
- Homburg, C., H. Krohmer, and J. P. Workman, Jr. 2004. 'A Strategy Implementation Perspective of Market Orientation.' *Journal of Business Research* 57 (12): 1331–40.
- Isabella, L. A., and S. A. Waddock. 1994. 'Top Management Team Certainty: Environmental Assessments, Teamwork, and Performance Implications.' *Journal of Management* 20 (4): 835–58.
- Jančič, Z. 1990. 'Marketing: strategija menjave.' Ljubljana: Studio marketing.
- . 2001. 'Strateško-marketingška usmeritev in sodobna vloga zaposlenih v organizaciji.' In *Uspešna nedozorelost: socialne institucije in kakovostna proizvodnja v Sloveniji*, edited by M. Stanojević, 190–209. Ljubljana: FDV.
- Kaplan, R., and D. Northon. 2000. *Uravnoteženi sistem kazalnikov*. Ljubljana: Gospodarski vestnik.

- Kohli, A. K., and B. J. Jaworski. 1990. 'Market Orientation: The Construct, Research Propositions, and Managerial Implications.' *Journal of Marketing* 54 (2): 1–18.
- Kovač, D., and A. Bertoncelj. 2007. 'Model merjenja podjetniškega potenciala z menedžerskimi kompetencami.' *Organizacija* 40 (4): 98–103.
- Kramar Zupan, M. 2012. 'Relationship between Management and Leadership and Characteristics of Slovenian Managers.' *Dynamic Relationship Management Journal* 1 (2): 20–34.
- Lahovnik, M. 2011. 'Corporate Strategies in the Post-Transition Economy: The Case of Slovenian Companies.' *Journal of Applied Business Research* 27 (1): 61–8.
- Lumpkin, T. G., and G. G. Dess. 1996. 'Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance.' *Academy of Management Review* 21 (1): 135–72.
- Marc, M., D. Peljhan, N. Ponikvar, A. Šobota, and M. Tekavčič. 2010. 'Performance Measurement in Large Slovenian Companies: An Assessment of Progress.' *International Journal of Management & Information Systems* 14 (5): 63–76.
- Miles, M. B., and M. A. Huberman. 1994. *Qualitative Data Analysis*. Thousand Oaks, CA: Sage.
- Miles, R. E., and C. C. Snow. 1978. *Organizational Strategy, Structure and Process*. London: McGraw Hill.
- Narver, J. C., and S. F. Slater. 1990. 'The Effect of a Market Orientation on Business Profitability.' *Journal of Marketing* 54 (4): 20–35.
- Noble, C. H., R. K. Sinha, and A. Kumar. 2002. 'Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications.' *Journal of Marketing* 66 (4): 25–41.
- Porter, M. E. 1985. *The Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
- Pučko, D. 2002. 'Analiza konkurenčnih prednosti slovenskih podjetij.' In *Primerjajmo se z najboljšimi*, edited by J. Prašnikar, 175–95. Ljubljana: Finance.
- Rojšek, I., and M. Konič. 2003. 'Market Orientation and Business Performance of Small Firms in Slovenia.' Paper presented at the 48th World Conference – International Council for Small Business, Belfast, 15–18 June.
- Slater, S. F., E. M. Olson, and T. M. Hult. 2006. 'The Moderating Influence of Strategic Orientation on the Strategy Formation Capability–Performance Relationship.' *Strategic Management Journal* 27 (12): 1221–31.
- Snoj, B., V. Gabrijan, D. Mumel, A. Pisnik-Korda, and A. Petejan. 2004. *Tržni vidiki konkurenčnih sposobnosti podjetij v Sloveniji*. Maribor: Ekonomsko-poslovna fakulteta.

- Strugar, N. 2010. 'Povezanost kompetentnosti managerjev z njihovo uspešnostjo v avtomobilski panogi.' Doctoral dissertation, University of Maribor, Maribor.
- Theodosiou, M., J. Kehagias, and E. Katsikea. 2012. 'Strategic Orientations, Marketing Capabilities and Firm Performance: An Empirical Investigation in the Context of Frontline Managers in Service Organizations.' *Industrial Marketing Management* 41 (7): 1058–70.
- Venkatraman, V. N. 1989. 'Strategic Orientation of Business Enterprises: Construct Dimensionality and Measurement.' *Management Science* 35 (8): 942–62.
- Venkatraman, V. N., and V. Ramanujam. 1986. 'Measurement of Business Performance in Strategy Research: A Comparison of Approaches.' *Academy of Management Review* 11 (4): 801–14.



This paper is published under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (cc BY-NC-ND 4.0) License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

# Governance and Real Estate Markets Performance in Nigeria: Are They Related?

KAZEEM BELLO AJIDE

*University of Lagos, Nigeria*

*kazeemajide@gmail.com*

Governance has been identified as a key determining variable capable of influencing the performance of any economy activity. On this note, the study undertakes to investigate the relationship between governance and the real estate markets performance in Nigeria. The study employs ARDL methodology of Bound Testing Approach for the quarterly series spanning 1996Q1 to 2010Q4. Of the variables considered, the prominent role of real GDP and governance index were clearly brought to fore both in the short and long run while that of inflation and interest rates were less pronounced statistically. The result of ECM further accentuates connection between governance and the real estate market through the establishment a stable long run relationship between them. In the final analysis, a few policy prescriptions are advice for the attention of all stakeholders in the built environment.

*Key words:* governance, real estate market, ARDL, Nigeria

## Introduction and Research Issue

Economics of real estate market has continued to gain wide recognition despite the excruciating pains inflicted on the world economy by the mortgage crisis occasioned by subprime lending which was originated in the us but later culminated into global financial crises with its attendant far-reaching consequences. The crises episode had barely succeeded eroding the potential investors as well as other stakeholders' interests in the sector. The persistent interests can at least be analyzed from the two main perspectives. First, the relative stability in the value of any typically real estate property as well as the likely associated returns seems more reliable and promising as compared to other forms of assets. Thus, the wealth effects associated with residential buildings are more significant than those linked to financial asset holdings in most economies (see Case, Quigley, and Shiller 2005).

Second, it constitutes the major assets in the household's portfolio in the case of the developed nations while it forms the greater proportion of household expenditure for the developing countries. This

explains why investing in real estate properties is becoming more popular and pronounced.

In view of the importance of the sector, several empirical attempts had been made understanding the key performance indicators driving the development of real estate markets and its subsequent accumulation. Notably, a number of factors have been identified as responsible for its development in the literature. Such include stability in the macroeconomic environment, size of country's population, growth of GDP, state of infrastructural facilities and a host of other factors. The importance of governance factor has long been undermined in the literature. However, both anecdotal and empirical evidences have pinpointed bad governance as a major drag on Africa's growth process. Many Africa countries have witnessed different episodes of bad governances resulting exclusively from excessive militarism and sit-tightism syndromes as well as large scale of corruption and other corrupt-related practices. In the light of the foregoing, the study specifically intends to focus on the Nigerian economy which typifies a typical Africa country. It is therefore belief that the emanated outcome of findings of the paper can be extrapolated for other Africa countries that share similar characteristics with Nigeria in many respects. The identified lacuna represents the major void that this study intends to fill. The rest of the study is organized as follows: section 2 gives a concise review of literature on investment decisions. Section 3 presents analytical framework, methodology and the description of the data used in the study. Section 4 presents the estimation results while section 5 concludes the study.

### A Concise Literature Review

A rapidly expanding literature exists on the determinants of investment and the channels through which it can be affected. Theoretically, the traditional neo-classical theory as formulated by Jorgenson (1963; 1971) postulates the role of the cost of capital; the accelerator model posits the importance of rate of change of output; The Tobin's q argues for the critical role for the value of the firm, and the financial repression framework credited to Mckinnon (1973) and Shaw (1973). Over times several other theories had emerged adding to the existing line of argument like the real options theory of investment which uses options-based pricing techniques to study the investment decision of firms.<sup>1</sup>

The recent literature on the determinants of investment behaviour is divided into two groups: the macro econometric studies (or time

series analyses) for one or several countries and micro econometric studies using firm level data. However, although the current tendency is towards the micro econometric studies with panel data at the firm level, this study deals with the first methodology that uses macro data due to the absence of reliable micro data in SSA. Several macroeconomic determinants have also been comprehensively expounded on in the real estate literature (see Lieser and Groh 2011 for detail explanations). Few of these determinants are discussed in turn.

#### ECONOMIC ACTIVITY

Intuitively, it has been argued that real estate investments are correlated with the general economic activity and prosperity of a region or country. In Dipasquale and Wheaton's model (1992), a productive economy has been found to positively affect the demand for real estate assets.

Similar conclusion was arrived at by Chin, Dent, and Roberts (2006) who concluded from survey data that a sound economic structure and an expected strong and stable economy are perceived to be the most significant factors in a region's ability to attract foreign real estate investments.

#### REAL ESTATE INVESTMENT OPPORTUNITIES

The real estate investment opportunities, demographic attributes, and the market structure have been found as constituting important selection criteria for investment decisions (Han 1996). The accessibility of property is a critical factor in real estate investment due to the close link between market entry probability, liquidity risk, and market transparency. Liang and Gordon (2003) estimate the availability of higher quality, not owner-occupied commercial real estate based on GDP estimations.

#### DEPTH AND SOPHISTICATION OF THE CAPITAL MARKET

Mueller (1995) argues that the physical real estate market, with its capital-intensive nature, depends on general international capital flows. Adair et al. (1999) and Adlington et al. (2008) find that viable and sustainable real estate markets require an established liquid capital market, including a stable banking and financial services system. Worzala and Graeme (1997) find that access to local financing and credit facilities is important for investors to mitigate the cross currency risks.

#### INVESTOR PROTECTION AND QUALITY OF LEGAL FRAMEWORK

In their seminal work, La Porta et al. (1997; 1998) find that the legal environment strongly determines the size and extent of a country's capital market and local companies' ability to receive outside financing. They emphasize the difference between law on books and the quality of law enforcement. La Porta et al. (1997) argue that, of the world's four legal systems (English, French, German and Scandinavian), the English common law system is the most suitable for enhancing capital market development, while the French system is the least attractive.

#### ADMINISTRATIVE BURDENS AND REGULATORY LIMITATIONS

Solnik (1999) argues that investors trying to invest in foreign countries are exposed to constraints on management and corporate activity and regulatory limitations, which comprise the restriction on capital flows and ownership controls set upon particular government policies. D'Arcy and Keogh (1998) claim that each country's real estate market is further conditioned, amongst other criteria, by landlord and tenant law, planning law, and urban policy.

#### SOCIO-CULTURAL AND POLITICAL ENVIRONMENT

The fact that international investments are made in a different sovereign political jurisdiction has a major impact on the investment decision. Keogh and D'Arcy (1999) argue that countries' national property markets are defined by their socio-cultural and political environment. The socio-political risk comprises social risk and government policy risk and is an indicator of institutional problems in a country's public sector.

On empirical ground, innumerable number of studies has been documented on the determinants of investment both in the developed and developing economies. Such studies include those who investigates exchange rate adjustment and private investment (Balassa 1988; Duncan, Cuthbertson, and Bosworth 1999; Blejer and Khan 1984, Greene and Villanueva 1991), interest rate policy and private investment (Serren and Solimano 1993; van Wijnbergen 1985; Skully 1997; Pollard and Qalo 1994), and institutional factors and private investment (Weder 1998). What is however clear from the brief expositions show that the investment that have been so far considered were largely non-real estate market investments thus providing a marked line of distinction of our work from the previous research works.



More importantly, the literature that relates institutional factors (specifically, governance variables) to real estate market are still evolving and such examples include Liao and Jianping (1999) and Lieser and Groh (2011). Liao and Jianping (1999) conducted an empirical study on the relationship between institutional factors and real estate returns. Using data from both developed and emerging market countries, their empirical results show that institutional factors do influence real estate returns and that these factors may not be fully priced. They found that when controlling return volatility and level of economic growth, a higher property return is expected in countries where the economy is more efficient and has more economic freedom. Their results support the view that the combination of 'lumpiness' of real estate investment and the volatile nature of international capital flows may expose property investors to extra investment risk, which needs to be compensated. The results also indicated that an improvement in a country's economic efficiency and economic freedom might reduce property variance risk thus enhancing property returns.

Lieser and Groh (2011) examined the determinants of commercial real estate investments of commercial real estate investments using a unique set of panel data series for 47 countries from 2000 and 2009. They explore how different socio-economic demographic and institutional characteristics affect commercial real estate investment activity through both cross-sectional and time-series analyses running augmented random effect panel regressions. They provide evidence that economic growth, rapid urbanization and compelling demographic attract real estate investments and also confirm that lack of transparency in the legal framework, administrative burdens of doing real estate business, socio-cultural challenges and political instabilities of countries reduce international real estate allocations.

In light of the foregoing, the present paper hopes to add and contribute to the emerging literature by examining the relationship between governance and real estate markets performance for the Nigerian economy.

### **Theoretical Framework and Methodology**

In the literature, various different approaches have been adopted such as the Keynesian model, the cash-flow model and neoclassical model in modelling investment behaviour. The neoclassical model is the most commonly adopted approach in the literature (Du Toit 1999; Du Toit and Moolman 2004; Pretorius 1998) in explaining investment decisions of firms. This study considers an augmented neoclassical

approach to be the most suitable approach in estimating the domestic investment function for Nigeria: Unlike the purely neoclassical model, it incorporates institutional characteristics. Therefore, institutional factors such as governance are treated as part of firms' optimization problem when making investment decisions. This study estimates real estate investment model, and augment it with some form of governance indicators, together with the real GDP, user cost of capital (interest rates) and inflation (a measure of macroeconomic instability). This is presented as:

$$REST = F(RGDP, INF, INT, GOVINX), \quad (1)$$

where *REST* is real estate market performance, *RGDP* real gross domestic product, *INF* inflation, *INT* interest rate, and *GOVINX* governance indicator.

Equation can be explicitly rewritten as

$$REST = \varphi_0 + \varphi_1 RGDP + \varphi_2 INF + \varphi_3 INT + \varphi_4 GOVINX). \quad (2)$$

Both *REST* and *RGDP* are in natural logarithms in order to remove the variances as other explanatory variables are in rates.

#### A PRIORI EXPECTATION

*RGDP* is a measure of economic activity. A positive relationship is hypothesized between real estate market development and real GDP. This has confirmed by many empirical studies (Ajide and Lawanson 2012). *INF* is a proxy for macroeconomic instability. Macroeconomic instability may increase uncertainty and adversely affect private investment. A high inflation rate is expected to negatively affect investment. *INT* is a surrogate for user cost of capital. Under the neoclassical investment model, real interest rate is treated as a key component of the user cost of capital and therefore affects investment negatively. However, there is also the argument that a higher real interest rate increases the flow of bank credits, which complements the private sector savings and facilitates private capital formation and hence private investment. *GOVINX* represents governance index. Thus, the worldwide governance indicators developed by Kaufmann, Kraay, and Zoido-Lobaton (1999) were utilised in this study as a measure of governance. The indices cover a broad range of policy and institutional outcomes for large number of countries, and include the rule of law, corruption, government effectiveness, regulatory quality, and political instability. Governance comprises of six governance measures (World Governance Indicators – wgi) provided by the World Bank as proxies of countries' governance qual-

ity (Kaufmann, Kraay, and Mastruzzi 2006). The indicators are constructed using an unobserved components methodology (Kaufmann, Kraay, and Mastruzzi 2010). *Voice and Accountability* (VA) captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. *Political Stability and Absence of Violence* (PS) measures the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism. *Government Effectiveness* (GE) captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. *Regulatory Quality* (RQ) captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. *Rule of Law* (RL) captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. *Control of Corruption* (CC) captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests. Given the brief expositions on governance indicators, we then specify governance as:

$$GOV = f(VA, PS, RL, GE, CC), \quad (3)$$

where GOV stands for governance indicator while VA, PS, RL, RQ, GE and CC are as earlier defined. Thus, a positive sign is hypothesized between governance and real estate market performance.

#### CONSTRUCTION OF GOVERNANCE INDEX

Following the expositions of Ang and McKibbin (2005) and Khan and Qayyum (2006), the principal component analysis (PCA) is used to construct a governance index from six components of governance measures namely Voice and Accountability (VA), Political Stability and Absence of Violence, (PS) Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL) and Control of Corruption (Corr). A composite index on governance index was constructed, using six indicators from the Kaufmann, Kraay, and Mastruzzi (2006). According to Sricharoen and Buchenrieder (2005, 2), 'PCA is an indicator reduction procedure to analyze observed variables that would

result in a relatively small number of interpretable components (group of variables), which account for most of the variance in a set of observed variables.' The eigenvalues are calculated for each component. The size of an eigenvalue indicates the amount of variance in the principal component explained by each component. The first principal component reflects the largest proportion of the total variability in the set of indicators used. The second component accounts for the next largest amount of variability not accounted by the first component, and so on.

#### METHODOLOGY

The methodology of this study is designed to assess the impact of the governance on real estate markets performance in Nigeria. In this study, we utilize the Autoregressive Distributed Lag (ARDL) approach to cointegration as outlined by (Pesaran and Pesaran 1997) and (Pesaran, Shin, and Smith 1999). The ARDL model has been chosen here because it has numerous advantages. Firstly, it can be applied irrespective of whether the individual regressors are integrated of the order  $I(0)$  or  $I(1)$ , regardless of stationarity. Secondly, the ARDL model takes sufficient number of lags to capture the data generating process from a general to specific modelling framework (Laurenceson and Chai 2003). Thirdly, the ARDL approach yields superior estimates of long-run coefficient, and, the diagnostic tests of the estimated equation are more reliable (Gerrard and Godfrey 1998, 235; Laurenceson and Chai 1998, 405). Fourthly, from the ARDL model, one can derive a dynamic error correction model (ECM) through a simple linear transformation (Banarjee et al. 1994, 50–52). The ECM also helps us to measure the short-run relationship among the model's variables. Finally, the ARDL model is a more appropriate measure in the case of a smaller sample. Since the sample size of our study is limited to 60 observations, it provides more motivation for the study to apply the ARDL approach for analysis.

$$\begin{aligned}\Delta \text{LREST}_t = & \beta_0 + \sum_{i=1}^p \beta_1 \Delta \text{LREST}_{t-i} + \sum_{i=1}^p \beta_2 \Delta \text{LRGDP}_{t-i} + \sum_{i=1}^p \beta_3 \Delta \text{INF}_{t-i} \\ & + \sum_{i=1}^p \beta_4 \Delta \text{INT}_{t-i} + \sum_{i=1}^p \beta_5 \Delta \text{GOVINX}_{t-i} \\ & + \Psi_1 \text{LNREST}_{t-i} + \Psi_2 \text{RGDP}_{t-i} + \Psi_3 \text{INF}_{t-i} \\ & + \Psi_4 \text{INT}_{t-i} + \Psi_5 \text{GOVINX}_{t-i} + \sigma_t.\end{aligned}\quad (4)$$

where  $\Delta$  is 1st difference of a variable,  $L$  indicates that the data set are expressed in natural logarithms,  $\beta_0$  is a constant, is a maximum

lag order,  $\beta_1 \dots \beta_5$  represent the short-run coefficients (error correction dynamic),  $\Psi_1 \dots \Psi_5$  correspond to the long-run relationship,  $i$  is time trend, and  $\sigma_i$  is the white noise error.

The implementation of the ARDL approach involves two stages. First, the existence of the long-run nexus (cointegration) between variables under investigation is tested by computing the  $F$ -statistics for analyzing the significance of the lagged levels of the variables (Pesaran, Shin, and Smith 1999) and (Narayan 2004) have provided two sets of appropriate critical values for different numbers of regressors (variables). This model contains an intercept or trend or both. One set assumes that all the variables in the ARDL model are of  $I(0)$ , and another assumes that all the variables are  $I(1)$ . If the  $F$ -statistic lies above the upper-bound critical value for a given significance level, the conclusion is that there is a non-spurious long-run level relationship with the dependent variable. If the  $F$ -statistic lies below the lower bound critical value, the conclusion is that there is no long-run level relationship with the dependent variable. If it lies between the lower and the upper limits, the result is inconclusive. The general form of the null and alternative hypotheses for the  $F$ -statistic test is as follows:

$$H_0 : \Psi_1 = \Psi_2 = \Psi_3 = \Psi_4 = \Psi_5 = 0.$$

$$H_1 : \Psi_1 \neq \Psi_2 \neq \Psi_3 \neq \Psi_4 \neq \Psi_5 \neq 0. \quad (5)$$

Secondly, if the cointegration between variables is identified, then one can undertake further analysis of long-run and short-run (error correction) relationship between the variables.

### Econometric Technique and Discussion of Results

Unit root tests were conducted for all variables in the model and the results are presented in table 1. Both the Augmented Dickey Fuller (ADF) and Phillip Perron (PP) were conducted and both tests reject the null hypothesis of a unit root in the levels of real estate performance (REST) and inflation (INF) variables while this hypothesis is rejected in their first differences. Thus, it can be concluded that REST and INF are integrated of order 0. Both tests support the existence of a unit root in the levels of real GDP (RGDP), interest rates (INT) and governance index (GOVINX) while all three variables are stationary in first differences, thereby meaning they are all integrated of order 1.

The fact that two variables (REST and INF) were integrated of order 0 and the remaining three variables are of order 1 precludes the

TABLE 1 Unit Root Tests

Variables	ADF	PP	ADF	PP	Remarks
	Level		First difference		
REST	-4.7324***	-4.9872	-	-	I(0)
RGDP	-0.3358	-0.7157	-22.6201***	-6.1574***	I(1)
INF	-3.4458**	-5.2179***	-	-	I(0)
INT	-1.3479	-1.8919	-7.4968***	-12.1517***	I(1)
GOVINX	-2.0552	-1.7851	-12.0276***	-8.7612***	I(1)

NOTES Significant at \*\*\* 1%, \*\* 5% and \* 10%.

use of either Engle-Granger or Johansen cointegration techniques. This is because both techniques require all variables to be of order 1 before cointegration tests can be applied. An alternative technique that does not impose this restriction is the Autoregressive Distributed Lag Framework (ARDL) of Pesaran, Shin and Smith (1999). The ARDL allows for the inclusion of variables integrated of order 0 and 1 in the same cointegrating equation.

The ARDL procedure comprises two steps. The first involves testing the null hypothesis of no long run relationship between the levels of the variables. In order to do this, an  $F$ -test with a non-standard distribution is employed. Pesaran, Shin, and Smith (1999) have provided two sets of asymptotic critical values for the cases when all the variables are  $I(1)$  and for cases when all the variables are  $I(0)$ . If the computed  $F$ -statistic exceeds the lower critical value, then the null hypothesis of no long run relationship can be rejected provided all variables are either integrated of orders 0 and 1. On the other hand, if the  $F$ -statistic is lower than the critical value, the null hypothesis cannot be rejected. If a long run relationship exists, then the second step can be implemented. This involves estimation of the ARDL model using either the Akaike Information Criterion (AIC) or Schwarz Criterion (SBC) to select the maximum order of lags to obtain long run coefficients. This method involves the estimation of the error correction model (ECM) of the ARDL model.

#### DISCUSSION OF RESULTS

In accordance with the ARDL method, cointegration tests are conducted to examine the existence of a long run relationship between the variables by computing the  $F$ -statistic for the joint significance of lagged levels of variables. The results of the cointegration tests are presented in table 2.

The critical values used in this paper are extracted from Narayan (2004).<sup>2</sup> The  $F$ -statistic for the model is 40.0163, which is greater

TABLE 2 Bound Test Results

Test statistics	Value	Lag	Sig. levels	Bound Critical Values*	
				I(0)	I(1)
F-Statistics	40.0163	2	1%	4.324	5.642
			5%	3.116	4.094
			10%	2.596	3.474

NOTES \* Restricted intercept and trend, Based on Narayan (2004).

TABLE 3 Long Run Coefficients from ARDL Estimation – Dependent Variable: Rest

Regressor	Coefficient	Probability
Intercept	-2.6167(-9.4217)***	0.0000
LNRGDP	0.8455(11.5273)***	0.0000
INF	-0.0006(-0.5722)	0.5318
INT	0.0208(0.5818)	0.5825
GOVINX	0.0270(6.4076)***	0.0000
$R^2$	0.8773	
Adjusted $R^2$	0.7919	
Durbin-Watson statistics	1.9710	
F-statistics	52.5718	
Probability	0.0000	

NOTES Significant at \*\*\* 1%, \*\* 5% and \* 10%. Figures in parentheses are *t*-ratios.

than the upper critical bound (5.642) at the 1 percent significance level. This suggests that there is a long-run relationship among real estate performance, inflation, interest rates, real GDP and governance index. Thus, we can proceed to obtaining long run coefficients. The long run coefficients are presented in table 3.

The coefficients on all the variables conform to theoretical hypothesized signs except for the rate of interest that bears a contrary sign of positive. From the result, it can be observed that real GDP significantly exerts positive impact on the performance of real estate markets in Nigeria. In fact, a unit increase in the real GDP will increase the real estate market performance by 0.85. The macroeconomic instability proxy by inflation rate has a negative insignificant impact on the real estate markets as indicated by both values of *t*-ratio and probability. A unit increase in the rate of inflation will reduce real estate market value by only 0.0006. The user cost of capital measures by interest rate also indicates a positive but insignificant impact on real estate market. This can be explained in part by the fact that majority of real estate developers can hardly supply collateral securities to be able to source funds from banks. Governance has an apprecia-

TABLE 4 Error Correction Representation for ARDL Model – Dependent Variable: Rest

Regressor	Coefficient	Probability
Intercept	0.0040(1.2152)	0.2298
D(LNRGDP)	0.8026(9.5012)***	0.0000
D(INF)	0.0004(0.4933)	0.6239
D(INT)	0.0055(1.5604)	0.1247
D(GOVINX)	0.0255(5.9172)***	0.0000
ECM(-1)	-0.0475(-0.3393)	0.7358
$R^2$	0.6694	
Adjusted $R^2$	0.6377	
Durbin-Watson statistics	1.9818	
$F$ -statistics	21.0614	
Probability	0.0000	

NOTES Significant at \*\*\* 1%, \*\* 5% and \* 10%. Figures in parentheses are  $t$ -ratios.

ble impact on the performance of the real estate market as a unit increase in governance index will raise the market by 0.37.

The basic diagnosis tests show that 79 percent of the variation in real estate markets can be jointly explained by the set of explanatory variables in the model. The Durbin-Watson statistic shows that the model is free of serial autocorrelation model as its value fall within the acceptance region. The  $F$ -statistic shows that the null hypothesis of insignificance of the joint explanatory variables is rejected at the highest level of significance.

In order to see the short run dynamics, the estimates of the error of the error correction model are presented in table 4.

From the table, quite insightful results emerge as only the coefficient on the real GDP and governance index have the correct a priori signs while other explanatory variables carry contradictory signs. Like in the long run, real GDP still possesses a positive sign and as well significant at 1% level. What this implies in effect is that real GDP is one of the main factors influencing real estate markets performance. It is startling to note that inflationary trend episode and high interest rate tend to improve the performance of the sector. This may be attributed to profit-maximizing attitude of real estate market developers who may care less about the hike in prices of materials used for the construction but only became interested in real estate businesses at the instance of anticipation of maximum future profits. This explains the trend of constant real estate and housing collapse presently witnessing by the country. More importantly, governance factor also exerts significant positive impacts on the development



of real estate markets. This in effect means that, governance plays a key role in real estate market delivery. The error correction term is negative but statistically insignificant. Specifically, only about 5% of the disequilibrium errors that occurred in the previous year, are corrected in the current year. The robustness of the model has been definite by several diagnostic tests such as Breusch-Godfrey serial correlation LM test, ARCH test, Jacque-Bera normality test and Ramsey RESET specification test. All the tests disclosed that the model has a satisfactory econometric properties, it has a correct functional form and the model's residuals are serially uncorrelated, normally distributed and homoskedastic. Therefore, the outcomes reported are serially uncorrelated, normally distributed and homoskedastic. Hence, the results reported are valid for reliable interpretation. This can be confirmed at the appendix.

### Conclusion and Recommendations

The contribution of the real estate markets to economic progress of any economy has been well established in the development literature. The paper examines the causal nexus between governance and real estate markets performance in Nigeria. The paper uses a quarterly series between 1996Q1 and 2010Q4, employing ARDL methodology of Bound Testing Approach. The results show that real GDP and governance index significantly influence the performance of the real estate markets in Nigeria, on the one hand, while inflation and interest rates appear to be insignificant in both runs (short and long). Flowing naturally from this, are a few policy recommendations, which includes government should continue to strengthening as well as promoting the culture of good governance practices in the real estate markets. This can be done through benchmarking each dimension of governance index against internationally recognized criteria. Further, since high and volatile inflationary environment is inimical to nurturing country's economic progress, hence should be discouraged forthwith. This can possibly be achieved by maintaining a single digit inflation rate. Lastly, a high rising interest rate should be discouraged by the government mostly among the financial players in the economy. This can be realized provided a monitoring framework is being put in place and ensure that any defaulter is being severely sanctioned accordingly.

### Notes

1. This section of the paper is not meant to repeat the literature in this respect. For further readings the following can be consulted Greene

and Villanueva (1991), DeLong and Summers (1991), Chibber, Dailami, and Shafik (1992), Serven and Solimano (1993), Bleaney and Greenaway (1993), Bleaney, Greenaway, and Fielding (1995), Ibarra (1995), and Bleaney (1996).

2. All estimation results are obtained using Microfit Version 4.1 developed by Pesaran and Pesaran (1997). Narayan (2004) has provided critical values that are considered more appropriate for ARDL modelling using small samples as compared to Pesaran and Pesaran (1997) and Pesaran, Shin, and Smith (2001). These critical values are based on small sample size between 30 and 80 observations, unlike Pesaran and Pesaran (1997) and Pesaran, Shin, and Smith (2001) which are based on 500 and 1000 observations and suitable for large sample size.

## References

- Adair, A., J. Berry, S. McGreal, L. Syacutokora, A. Ghanbari Parsa, and B. Redding. (1999). 'Globalization of Real Estate Markets in Central Europe.' *European Planning Studies* 7 (3): 295–305.
- Adlington, G., R. Grover, M. Heywood, S. Keith, P. Munro-Faure, and L. Perrotta. 2008. 'Developing Real Estate Markets in Transition Economies.' UN Intergovernmental Conference Paper, RICS Research Foundation, New York.
- Ajide, K. B., and O. Lawanson. 2012. 'Inflation Thresholds and Economic Growth: Evidence From Nigeria.' *Asian Economic and Financial Review* 2 (7): 876–901.
- Ang, J. B., and W. J. McKibbin. 2005. 'Financial Liberalization, Financial Sector Development and Growth: Evidence from Malaysia.' Centre for Applied Macroeconomic Analysis (CAMA) Working Paper 5, Australian National University, Canberra.
- Balassa, B. 1988. 'Public Finance and Economic Development.' PPR Working Paper 31, World Bank, Washington, DC.
- Banarjee, A., D. J. Juan, J. W. Galbraith, and D. F. Hendry. 1994. *Co-Integration, Error Correction, and The Econometric Analysis of Non-Stationary Data*. Oxford: Oxford University Press.
- Bleaney, M., and D. Greenaway. 1993. 'Adjustment to External Imbalance and Investment Slumps in Developing Countries.' *European Economic Review* 37:577–85.
- Bleaney, M. F. 1996. 'Macroeconomic Stability, Investment, and Growth in Developing Countries.' *Journal of Development Economics* 48:461–77.
- Bleaney, M., D. Greenaway, and D. Fielding. 1995. 'Investment, Trade Liberalisation and Structural Adjustment.' *Journal of Development Studies* 32 (2): 175–94.
- Blejer, M., and M. S. Khan. 1984. 'Government Policy and Private Investment in Developing Countries.' *IMF Staff Papers* 31 (2): 379–403.

- Case, K. E., J. M. Quigley, and R. J. Shiller. 2005. 'Comparing Wealth Effects: The Stock Market versus the Housing Market.' *Advances in Macroeconomics* 5 (1): 1-32.
- Chibber, A., M. Dailami, and N. Shafik. 1992. *Reviving Private Investment in Developing Countries: Empirical Studies and Policy Lessons*. Amsterdam: North-Holland.
- Chin, W., P. Dent, and C. Roberts. (2006). 'An Explanatory Analysis of Barriers to Investment and Market Maturity in Southeast Asian Cities.' *Journal of Real Estate Portfolio Management* 12 (1): 49-57.
- D'Arcy, E., and K. Geoffrey. 1998. 'Territorial Competition and Property Market Process: An Explanatory Analysis.' *Journal of Urban Studies* 35 (8): 1215-30.
- De Long, J. B., and L. H. Summers. 1991. 'Equipment Investment and Economic Growth.' *Quarterly Journal of Economics* 106 (2): 445-502.
- Dipasquale, D., and W. C. Wheaton. 1992. 'The Markets for Real Estate Assets and Space: A Conceptual Framework.' *Journal of the American Real Estate and Urban Economics Association* 20 (1): 187-97.
- Du Toit, C. B. 1999. 'A Supply-Side Model of the South African Economy: Critical Policy Implications.' Doctoral dissertation, University of Pretoria, Pretoria.
- Du Toit, C. B., and E. Moolman. 2004. 'A Neoclassical Investment Function of the South African Economy.' *Economic Modelling* 21:647-60.
- Duncan, R., S. Cuthbertson, and M. Bosworth. 1999. 'Pursuing Economic Reform in the Pacific.' Pacific Studies Series 18, Asian Development Bank, Manila.
- Gerrard, W. J., and L. G. Godfrey. 1998. 'Diagnostic Checks for Single-Equation Error-Correction and Autoregressive Distributed Lag Models.' *The Manchester School of Economic and Social Studies* 66 (2): 22-37.
- Greene, J., and D. Villanueva. 1991. 'Private Investment in Developing Countries: An Empirical Analysis.' *IMF Staff Papers* 38 (1): 33-58.
- Han, J. 1996. 'Targeting Markets is Popular: A Survey of Pension Real Estate Investment Advisors.' *Real Estate Finance* 13 (1): 66-75.
- Ibarra, L. A. 1995. 'Credibility of Trade Policy Reform and Investment: The Mexican Experience.' *Journal of Development Economics* 47:39-60.
- Jorgenson, D. W. 1963. 'Capital Theory and Investment Behavior.' *American Economic Review* 53:247-57.
- . 1971. 'Econometric Studies of Investment Behavior: A Survey.' *Journal of Economic Literature* 9:1111-47.
- Kaufmann, D., A. Kraay, M. Mastruzzi. 2006. 'Governance Matters V: Aggregate and Individual Governance Indicators for 1996-2005.' Policy Research Working Paper 4012, World Bank, Washington, DC.
- . 2010. 'The Worldwide Governance Indicators: A Summary of Methodology, Data and Analytical Issues.' Policy Research Working Paper 5430, World Bank, Washington, DC.

- Kaufmann, D., A. Kraay, and P. Zoido-Lobaton. 1999. 'Aggregating Governance Indicators.' Policy Research Working Paper 2195, World Bank, Washington, DC.
- Keogh, G, and E. D'Arcy. 1999. 'Property Market Efficiency: An Institutional Economics Perspective.' *Journal of Urban Studies* 36 (13): 2401-2414.
- Khan, M. A., and A. Qayyum. 2006. 'Trade Liberalization, Financial Sector Reforms, and Growth.' *The Pakistan Development Review* 45 (2): 711-31.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 1997. 'Legal Determinants of External Finance.' *Journal of Finance* 52 (3): 1131-50.
- . 1998. 'Law and finance.' *Journal of Political Economy* 106 (6): 1113-55.
- Laurenceson, J., and J. C. H. Chai. 2003. *Financial Reform and Economic Development in China*. Cheltenham: Elgar.
- Liang, Y., and N. M. Gordon. 2003. 'A Bird's Eye View of Global Real Estate Markets.' Prudential Real Estate Investors, New York.
- Liao, H., and M. Jianping. 1999. 'Institutional Factors and Real Estate Returns: A Cross Country Study.' *International Real Estate Review* 2 (1): 21-34.
- Lieser, K., and A. P. Groh. 2011. 'The Attractiveness of 66 Countries for Real Estate Investments: A Composite Index Approach.' IESE Working Paper 868, University of Navarra, Barcelona.
- Mckinnon, R. I. 1973. *Money and Capital in Economic Development*. Washington, DC: Brookings Institution.
- Mueller, G. R. 1995. 'Understanding Real Estate's Physical and Financial Market Cycles.' *Journal of Real Estate Finance* 12 (3): 47-52.
- Narayan, P. K. 2004. 'Reformulating Critical Values for the Bounds  $F$ -statistics Approach to Cointegration: An Application to the Tourism Demand Model for Fiji.' Discussion Paper 02/04, University of Monash, Melbourne.
- Pesaran, M. H., and B. Pesaran. 1997. *Working with Microfit 4.0: Interactive Econometric Analysis*. Oxford: Oxford University Press.
- Pesaran, M. H., Y. Shin, and R. Smith. 1999. 'Pooled Mean Group Estimation of Dynamic Heterogeneous Panels.' *Journal of the American Statistical Association* 94:621-34.
- Pollard, S., and R. Qalo. 1994. 'Development Sustained by Enterprise: Toward Policies for Economic Stimulation.' *Honolulu Portfolio Management* 12 (3): 261-76.
- Pretorius, C. J. 1998. 'Gross Fixed Investment in the Macroeconometric Model of the Reserve Bank.' *Quarterly Bulletin*, no. 207.
- Serven, L., and A. Solimano. 1993. 'Economic Adjustment and Investment Performance in Developing Countries: The Experience in the 1980s.' In *Striving for Growth after Adjustment: The Role of Capital*

- Formation*, edited by L. Serven and A. Solimano, 147–180. Washington, DC: The World Bank.
- Shaw, E. S. 1973. *Financial Deepening in Economic Development*. New York: Oxford University Press.
- Skully, M. 1997. 'The South Pacific: Finance, Development and the Private Sector.' International Development Issues 48, Australian Agency for International Development, Canberra.
- Solnik, B. 1996. *International Investments*. 3rd ed. Boston, MA: Addison-Wesley.
- Sricharoen, T., and G. Buchenrieder. 2005. 'Principal Component Analysis of Poverty in Northern Thailand.' Paper presented at the Conference on International Agricultural Research for Development, Stuttgart-Hohenheim, 11–13 October.
- Van Wijnbergen, S. 1985. 'Aid, Export Promotion and the Real Exchange Rate: An African Dilemma.' Discussion Paper 88, Centre for Economic Policy Research, London.
- Weder, B. 1998. 'Africa's Trade Gap: What Should Africa Do to Promote Exports.' Paper presented at the Workshop on Asia and Africa in the Global Economy, Tokyo, 3–4 August.
- Worzala, E., and N. Graeme. 1997. 'International Real Estate: A Review of Strategic Investment Issues.' *Journal of Real Estate Portfolio Management* 3 (2): 87–96.



This paper is published under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



# Product Offerings Testing through Customer Satisfaction

TINA VUKASOVIĆ

*International School of Social and Business Studies  
and Doba Faculty Maribor, Slovenia  
tina.vukasovic@mfdps.si*

NIVES MIKULIĆ

*Croatia  
nives.mikulic@net.doba.hr*

Consumer satisfaction is imperative to a successful business, the reason for the choice of topic for this paper being explained thereby. Market changes have resulted in consumer's enormous growth of power, which was recognized by many companies who adapted their business to meeting those expectations. Adaptation, however, also resulted in the need for constant measuring and evaluation. According to the above-mentioned, this paper measures consumer satisfaction with the product offer of the drugstore chain X. The survey results have shown that X's offer has not completely come up to the expectations of a smaller number of interviewees. In relation to the measuring ranks of consumer satisfaction defined, the greatest number of consumers has turned out to be satisfied with the product offer, whereas the percentage of those who find it excellent is smaller than the percentage of those who assess it as average.

*Key words:* consumer, consumer satisfaction, needs and wishes, measuring, research

## Introduction

Customer satisfaction is a very relevant problem from the perspective of sustainable business companies in modern market conditions, i.e. the conditions of the new economy. In broader terms, it is increasingly difficult to survive in the market today and that is why a growing number of companies are constantly fighting for the favour of customers and their satisfaction, and thereby knowledge represents a key resource. The former market was the market of the manufacturer or provider. In other words, they dictated the terms and practiced mass production, which meant the same products and other requirements for all markets. The reason for that was certainly the fact that the demand in those times was greater than the supply.

Today, the situation is quite different. The emergence of new technologies has brought many changes, more and more new products appeared over time, the supply surpassed the demand and therefore, we no longer talk about the market of the manufacturer, but rather of the customer market, where customers have great power. In addition, we are no longer talking about mass production, but rather about differentiated manufacturing, and all in the terms of ensuring customer satisfaction and to, in the end, retain the customer itself. Still, there are companies that still have not recognized that moment and for that reason; they are often faced with very significant problems that gradually lead them into bankruptcy.

Customer satisfaction is viewed as the difference between the expectations that customers have of the product and the customer's experience after purchasing and costuming the product. Realization of customer satisfaction is imperative for today's companies that want to do business successfully. That involves knowledge about customers and their needs and desires, to satisfy them adequately (Radman, Kovačić, and Kolega 2002). It is important to note that the customer needs and desires change over time and it is not enough to assume that our customers are satisfied, but instead, we really have to constantly monitor and investigate. Precisely in the fact mentioned, the fundamental premise of this research reflects. Customer satisfaction is the general impression a customer of the supplier of its products and services offered by supplier (Anderson, Fornell, and Lehmann 1994; Barsky 1995; Kesić 2006; Oliver 2010; Peluso 2011). Operations management and marketing have played important roles in contributing towards an ongoing corporate objective of delivering enhanced customer satisfaction (Walters 2014). We can describe procedures of customer satisfaction in five steps (Nowacki n. d.):

1. Understanding the expectations of consumers.
2. Promises to consumers.
3. Implementation.
4. Dialogue with customers.
5. Customer satisfaction survey.

One of the businesses that places the customer and their satisfaction in the centre of its business, and, at the same time, recognizes the importance of innovation, is drugstore X. Drugstore X, along with three other drug stores, accounts for the majority of drug market in the country. On the official website of drugstore X is specifically stated that precisely the customer satisfaction is in the focus of all business activities. However, it is not enough to merely define the



mission and vision in line with the above, but it is necessary to know how to successfully implement it. Therefore, the problem of this research had, as the main goal, to identify whether and to what extent drugstore X achieves what it has set itself as the foundation of its business, i. e. whether drugstore X actually achieves and maintains the satisfaction of its customers, by understanding their needs and desires. Therefore, the aim of this study was give an answer to the main research question, and to approve or reject the proposed hypotheses. In addition, the aim was to identify the direction in which this company should move in the future in terms of innovation, i. e. upgrading of existing and creation of new products.

The purpose of the research involved the identification of possible new insights and previously unknown measures, to boost customer satisfaction with product offerings. Since it is clear that the struggle for survival in the market grows stronger, one such research is of great significance, and the research results can have their applicability in three directions. Since the customer satisfaction of specific company is measured, drugstore X, the results of this study may have its applicability to the business of drugstore X itself. Through this study, it was possible to identify various positive and negative elements of customer satisfaction of drugstore X, based on which drugstore X can perceive in what kinds of things it eventually leads, and in which it may be mistaken. Furthermore, in Croatia, three nearly identical companies, such as drugstore X, operates and therefore the results of this study may have applicability to the business, i. e. on achieving satisfaction of their customers. In addition, since we are talking about measurement of customer satisfaction by offering retail units products, the results of this research could be applied to all retail units that offer similar products as drug stores.

### Customer Satisfaction Research

Customer satisfaction/consumer satisfaction research is actually a synonym for market research just as the modern understanding of marketing is actually the process of creating this satisfaction (Gutić, Bačelić, and Bačelić 2011; Vukasović 2012). It should also be borne in mind that this is a very complex concept, which is extremely difficult to investigate. On the other hand, some other sources of literature suggest that customer satisfaction research is actually an 'upgrade' to market research.

Vranesević (2000, 78) points out that a study of customer satisfaction can be viewed as:

- *a strategic asset* – to determine how to allocate resources in order to achieve competitive advantage,
- *an operational tool* – to determine how to improve business process in the company,
- *a tool for public relations* – to communicate on how the company focuses on quality and customer satisfaction,
- *a means of motivation and leadership* – to give strength and encouragement to the efforts of employees,
- *a means of control (auditing)* – for the evaluation of the company's success with orientation features on customers, that ultimately determines its financial condition and market position.

Customer satisfaction research is a key factor in company cognition about whether, and to what extent, their customers are happy, but also a key factor in understanding customer dissatisfaction. In other words, it is possible to define the factors that influence the formation of customer satisfaction or dissatisfaction. In addition, through the customer satisfaction research, you can monitor the customer's needs and desires, as well as changes that occur during time. That is why research should indeed be implemented, regularly. That way, the company can define business strategy in the future, especially when it comes to upgrading the existing and creation of new products or innovations. All of the above results from the fact that today's businesses face major challenges due to the changes that occur constantly and they have a huge impact on customers (Oliver and De Sarbo 1988).

Market research and customer satisfaction research cannot be equated; however, they complement each other. Marić (2004) also noted that the two studies complement each other and together achieve a synergistic effect. Vranesević (2000, 77) points out that customer satisfaction research combines the best of what the market research contains as an idea, and that is:

- necessity of systematic observation,
- advantages of the continuous implementation (monitoring), thus measuring the attempts results to improve the business,
- supporting the top management for strategic management of the company by reassessment of the company's most important resource – the customer.

Customer satisfaction research is a complex process consisting of several stages (table 1). Research phases of customer satisfaction, shown in table 1, are explained by Injac (1999) as follows:

TABLE 1 Research Stages of Customer Satisfaction

1. Making a plan of activities.
2. Familiarising with the customer.
3. Familiarising with the market.
4. Introduction of the measuring system.
5. Establishing contact with the customer.
6. Familiarising with the competition.
7. Statistics and analysis.
8. Implementation of corrective measures.
9. Active management of customer satisfaction.

NOTES Adapted from Injac (1999).

1. Creating a plan of activities related to customer satisfaction – including decision-making, the establishment of the project team, providing money, establishing deadline plan etc.
2. Familiarizing with the customer – including surveys, interviews, statistical data collection and analysis. The basis of good business depends on good knowledge of the customer, his needs, demands, problems and desires.
3. Familiarizing with the market – appliance of the most modern forms of benchmarking homogeneous, and then all other manufacturers in the market. It is very thought-form of analysis of what is best; in order to change what can be changed.
4. Familiarizing with the competition – after the techniques of Quality Function Deployment (QFD) and benchmarking are implemented, correct classification of all equally or related manufacturers according to a series of parameters, with a focus on customer satisfaction.
5. Establishment of contact with the customer – building manufacturer-user system, ranging from correspondence to the establishment of personal relationships, all with the aim of better understanding of customers, their purchasing power, demands, desires and satisfaction.
6. Introduction of the measuring system – existence of the customer satisfaction measurement system speaks of the high culture of the company and the exemplary achieved quality of products.
7. Statistics and analysis – concatenation to the measurement system for the assessment and evaluation of customer satisfaction.
8. Implementation of corrective measures – means that a complete system of ensuring customer satisfaction within a company, is al-

ready formed, that should be maintained. Through established feedback connections possible deviations can be established, and necessary corrective measures can be implemented.

9. Active management of customer satisfaction – long-term planning and management of an established system. This is not referred to manipulation of the customer, his demands and desires, but on the long-term policy of creating a genuine partnership and shared goals.

#### REASONS FOR MEASURING CUSTOMER SATISFACTION AND THE RESULTS OF PREVIOUS MEASUREMENTS

Many studies have shown that precisely the customers are the ones that affect market the most, and therefore it is clear that no company should ignore that fact, if it wants to survive in the same market. In the paper 'Customer satisfaction – how to measure it?' (Kos, Trstenjak, and Kralj, 2011) the reasons, based on which we approach to measuring satisfaction, are defined, and they are:

- customer retention (loyalty bond),
- crystallization of the business areas that needs improvement,
- customer reactions in introducing new products to the market,
- measurement of customer satisfaction level,
- product quality maintenance that impose regulations.

Through the work, the importance of retaining existing customers has already been highlighted, where it is evident that retaining existing customers requires indeed lower costs, than those that imply attracting entirely new customers. In addition, efforts of retaining existing customers may result in loyalty, which, of course, should be the goal of every company. If a certain failure happens, it is reacted to on time because its existence is investigation-established; there is a great possibility that with such reaction the company, from only a satisfied customer, gets a loyal customer. By measuring customer satisfaction, it is also possible to identify the areas that need improvement. That is why those companies, that do not conduct such measurements, remain deprived of crucial important details, responds to the problems too late or does not respond at all, and the consequences are, therefore, often devastating. The introduction of new products to the market, in the opinion of companies that comply with the customer's requirements, can still cause dissatisfaction of customers. Then, the measurement is required to determine whether there is a need for further improvements or even possible withdrawal of these products. Measuring customer satisfaction level is

particularly important, because the goal of every company should be to achieve that uppermost level of customer enthusiasm. By measuring, the company can determine whether it, from that point of view, moves in the right direction, or whether, over time, improves the satisfaction of its customers or whether it manages to keep that customer satisfaction. In the article, 'Customer satisfaction – an important indicator of business performance' (Sušić, Meleš, and Čizmić 1999) states that the measurement of customer satisfaction arises as a logical advancement of the quality assurance system, compliant with international standards of ISO 9000 series, where the new ISO 9000:2000 standard, in section 8.2.1, sets a clear demand: 'The organization must establish control over the measurement of satisfaction and/or dissatisfaction of the customer.' To date, there have been many such researches/measurements of customer satisfaction that brought companies very significant information. In the article 'Product quality in line with the concept of marketing' (Motik and Kusa 1997) states that, for example, previous researches of customer satisfaction found that only four out of every hundred customers complains directly to the manufacturer, each unhappy customer will tell about his bad experience to the other ten customers, and only ten dissatisfied customers, out of 100, will continue to buy the products of the same manufacturer. It also states that it takes five times longer time to win over new customers, than it is necessary to keep an existing one. Acting according to this information, many companies improved and maintained their successful business. However, the fact that change is constant, so rules that apply today will certainly not fully, or not at all, correspond to some future times. Precisely in this fact, reflects a fundamental need for research/measurement of customer satisfaction. As a result of customer satisfaction measurement, a number of indicators of customer satisfaction have developed. One of them, certainly the most famous, is the American customer satisfaction index, which has been found by the American Society for Quality, University for Michigan Business School and the Arthur Andersen company.

Sušić, Meleš, and Čizmić (1999) explained how the American customer satisfaction index helps customers to identify and understand what promotes satisfaction and customer loyalty, and also their relationship to the final financial result. By measuring customer satisfaction it is possible to identify, along with already existing, some new measures to improve the level of customer satisfaction. Anderson, Fornell, and Lehmann (1994) explain how a high degree of customer satisfaction should be an indication of loyalty increase of existing

customers, reduced 'elasticity' of prices, insulation of current customers from competitive efforts, lower costs of future transactions, reduced costs of failure, lower costs of attracting new customers and enhanced corporate reputation. Thus, by measuring customer satisfaction it is possible to achieve numerous benefits for the company, which represents the key to survival and successful business (Sadeghi and Farokhian 2011).

## Measuring Customer Satisfaction through Product Offerings of Drugstore X

### STRUCTURE OF THE SAMPLE

The target population of this research involved the female population of Croatian territory, but only those women who, up to the time of conducting the research, bought some of the products from product offerings of drugstore X, at least once. This moment is important because customer satisfaction includes all those factors formed during the purchase, and after. From a defined target group a sample is separated, i. e. smaller group of women, the current customers of product offerings of drugstore X. When selecting units in a sample, evident feature was taken into account – exclusively females. In addition, orientation was only for the women who come, or are currently, in the counties where drugstore X has their retail outlets for a long time, assuming that, for these persons, there was greater possibility that they, at least once, bought some of the products from product offerings of drugstore X. Defined pattern implied a deliberate pattern. Since the formation of the sample took into account evident feature – gender, the most appropriate deliberate pattern, according to literature, was a quota sample. In determining the representation of each subgroup that makes the pattern, authors were guided by the total number of women of selected counties, from which the percentages of women by each county relative to the total number are calculated. On this basis, the conclusion about what county should contain the most respondents, which one the least, and so on. The resulting percentages were further checked with a number of stores per county, assuming – the more stores, higher the probability for a large number of current customers. The study included 57 stores of drugstore X, and the location from which the units in the sample were selected, was webpage of drugstore X, on the social network Facebook. By the start of the study, the activities on the site were actively monitored, and every time when a person with pre-defined characteristics was observed, the same person was asked to participate in the study.

TABLE 2 The Main Research Question and Specific Questions

Main research question	Are customers satisfied by fulfilling their needs and desires through product offerings of drugstore X?
Specific research questions	Do the customers have confidence in in product offerings of drugstore X? According to customers experience, is a complete product offerings of drugstore X always available in all stores? According to customers preferences, does the product offerings of drugstore X offer a sufficiently wide range of different products from different manufacturers? Are customers satisfied by fulfilling their needs and desires through product offerings of drugstore X?

### RESEARCH METHODOLOGY

During the study of customer satisfaction with product offerings of drugstore X, quantitative method of data collection through questionnaire was used. The survey was conducted in writing, i. e. online by forwarding the link of the questionnaire to the selected subjects. The questionnaire was not taken from previous researches, but was formed independently. As a guideline during the formation of the questionnaire, a number of fundamental issues presented in table 2 were set.

Leading to the main research question, shown in table 2, the survey examined whether there is any difference between the initial customer expectations and their fulfilment, and if there is, how great of a difference. The questionnaire was conducted in the period from July 8, 2014 to July 24, 2014, i. e. until a sufficient number of respondents defined by a pattern were achieved.

### RESEARCH RESULTS

Only the most important results of the study are shown, the ones that provided an answer to the main and specific research questions, and that provided test results of pre-defined research hypotheses. Given that the questionnaire assembled by the model of the famous instrument for customer satisfaction measurement, gap analysis, one of the questions aimed to establish whether there is a gap or difference between the initial customer expectations and actual fulfilment or non-fulfilment of those expectations. In addition, the aim was to determine what is the size of a gap, if one exists.

Based on the data shown in the figure 1, it is clear that the gap, i. e. the difference between the initial customer expectations and actual satisfying of these expectations, actually exists. Thus, we got an answer to the main research question, which is 'Are customers



FIGURE 1 Determination of the Existence/Non-Existence of the Gap in the Total Number of Respondents Who Make up the Sample ( $n = 500$ )



FIGURE 2 Customers Confidence in Terms of Product Offerings Quality of Drugstore X

happy by fulfilling their needs and desires through product offerings of drugstore X?' Accordingly, the percentage of customers satisfied with the fulfilment of their needs and desires through product offerings of drugstore X is evidently predominant. However, in regards to the identified gap, the smaller percentage of customers still is not satisfied with the fulfilment of their needs and desires through product offerings of drugstore X.

Next question from the questionnaire was aimed to determine whether customers have confidence in the product offerings quality of drugstore X, and thus test the first research hypothesis. According to the data shown in figure 2, we see that more than 90% of respondents have confidence in the product offerings quality of drugstore X. In other words, the percentage of respondents who have confidence in the product offerings quality of drugstore X exceeds 60%, and from this, it further follows:

H1 *First research hypothesis, which states: 'More than 60% of customers have confidence in the product offerings quality of drugstore X' is confirmed.*

Another one of the questions from the questionnaire was related to quality. The goal of this question was to collect data about the extent to which goes the trust and/or distrust of the customers in the product offerings quality of drugstore X, and to identify the average ratings of product offerings quality of drugstore X. As a measure, scale from 1 to 5 was used: 1 – poor, 2 – satisfactory, 3 – good, 4 – very good, 5 – excellent.

According to the data shown in figure 3, we see that almost half of respondents rated product offerings quality of drugstore X with 4 – very well. Taking into account the previously collected data on the evaluation of the product offerings quality of drugstore X, in table 3 the corresponding mean values were calculated. For the calculation, Microsoft Excel program was used.



## Product Offerings Testing through Customer Satisfaction

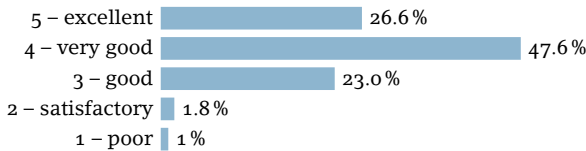


FIGURE 3 Representation of Each Individual Rating of Product Offerings Quality of Drugstore X in the Total Number of Respondents Who Make up the Sample



FIGURE 4 Customers Satisfaction through the Wide Range of Product Offerings of Drugstore X

According to the calculations in table 3, we see that the average rating of the product offerings quality of drugstore X, according to customers' evaluations, is 3.97. The most common rating of the product offerings quality of drugstore X is 4 – very good. Also, it can be seen, from the table 3, that 50% of the collected ratings of the product offerings quality of drugstore X, is greater than or equal to 4, i. e. 50% of the ratings is less than or equal to 4.

In order to test the second research hypothesis, one of the questions from the questionnaire should have examined whether customers are satisfied with the wide range of products and manufacturers, that make up the overall product offerings of drugstore X. According to data from figure 4, it is evident that the existing product offerings of drugstore X, satisfies slightly above 90% of respondents. Therefore, according to customer preferences, percentage of respondents satisfied with the wide range of products from the products offerings of the drugstore X, is significantly prevalent and thereby exceeds 50%. Hence follows:

*H2 Second research hypothesis, which states: 'According to the preferences of more than 50% of customers, product offerings of drugstore X does not offer a wide enough range of different products from different manufacturers,' is rejected.*

TABLE 3 The Amounts of Mean Values Considering the Assessment of Product Offerings Quality of Drugstore X

Mean values	The amount of mean value
The arithmetic mean (average value)	3.97
Mode (most common value)	4
The median (central value)	4

TABLE 4 Representation of Each Individual Level of Products Availability from Drugstore X at Retail Outlets

Availability	Percentage
Always available all products	40.4
Rarely unavailable individual products	44.8
Often unavailable individual products	13.6
Always unavailable individual products	1.2

The third research hypothesis was tested, through the question from the questionnaire that aimed to examine the availability of all products from the product offerings of drugstore X at retail outlets. As a measure, four self-defined levels of product availability were used:

- always available all products,
- rarely unavailable individual products,
- often unavailable individual products,
- always unavailable individual products.

The data shown in table 4 shows that slightly less than 60% of respondents believe that all products from the product offerings of drugstore X are rarely, often or always unavailable at retail outlets. As a percentage of the same does not exceed a percentage of 60%, follows:

- H3 Third research hypothesis, which states: 'In the experience of more than 60% of customers, a complete range of product offerings of drugstore X, in retail outlets, is not always available' is rejected.

Within the questionnaire there was also a question whose aim was to identify any suggestions of respondents, when it comes to product offerings of drugstore X, so the measures to overcome the possible gap (whose existence was confirmed through research), and measures for further improvements, could that way be defined. Answers collected by the questionnaire are summarized by the key suggestions of the respondents of all counties together, although based on the research results, answers can be viewed separately for each county.

Suggestions are related to the introduction of aspects of rewarding customers, by giving away the test product packaging to customers. There are also suggestions for the introduction of existing products of certain manufacturers, that are part of the product offerings of drugstore X, and not just the individual products. Suggestions are

also related to the expansion of existing product offerings, modelled on competitive companies, with the introduction of a large number of test packaging products to retail outlets (separate shelf with test packages), and to more often advertising of the products. Suggestions related to more frequent discounts on all products (especially baby products) were also noted, where some customers claim that those discounts are the best benefits of drugstore X.

Next are the suggestions of a better availability control of items, and suggestions for cooperation with indigenous manufacturers of natural cosmetics and introduction of the same in the existing range of product offerings. Suggestions also include an extension of the existing product brands that other drugstores do not offer (e.g. professional products); enhancing benefits related to baby products and the expansion of additional own brands. Also noted are: suggestions related to the expansion of the current offerings of decorative and preparative cosmetics to other brands, suggestions related to the reduction and adjustment of product prices to those competitive, and suggestions related to the introduction of company's own brands, due to lack of knowledge about the existence of the same in the product offerings of drugstore X. Suggestions are also related to enlarging the range of healthy food products and teas. Then follow the suggestions related to the provision of larger amounts of products currently on discount, and introducing the possibility of signing up through the website and at retail outlets of drugstore X, in order to receive catalogs and leaflets relating to the products from product offerings of drugstore X, to a home address. Customers see the necessity of such opportunities because of the elderly and people who cannot view the product offerings via the internet, as they are not using it. The following suggestions refer to quality improvement of some of its own brands. A small portion of suggestions are related to the support of current product offerings of drugstore X, and benefits related to the same (rewarding, discounts).

The remaining suggestions, which have no direct connection with the product offerings of drugstore X, refer to the opening of even larger number of retail outlets, both in large and in small cities. Due to an insufficient number of retail outlets, customers report they often decide to, and getting used to, purchase competing products. Suggestions related to the benefits that a loyalty program offers (where respondents report that summing of discounts, achieved on the membership basis in a loyalty club and other discounts, and increasing loyalty points on the card, should be enabled), were also noted. It is also important to highlight suggestions related to the

stronger motivating and coaching of the staff, since respondents point out their frequent lack of information and lack of motivation to work. This moment is extremely important because precisely the employees are the ones who are in direct contact with customers, so their lack of interest may have extremely negative impact on company's innovation.

## Conclusion

Based on all this, we can conclude that drugstore X is a company that recognizes the importance of customer satisfaction; however, this is precisely one of the areas on which a lot more measures for improvement needs to be conducted. These measures should be carried out as soon as possible, so the previously identified gap would not advance even more and made problems that are more specific to the company. Based on the research results, it can be concluded that a large number of measures, that should be implemented, are firmly related to the product offerings of drugstore X. A need to expand the existing offer by introducing additional international brands, products of indigenous manufacturers, but also new own brands, was shown. What should particularly be worked on, is the quality of own brands, considering that the quality is very closely related to customer satisfaction and the profitability of the business itself. We should also work a bit on prices, products availability at retail outlets, implementing discounts and products reclamation area. In addition, studies have identified the indicators that point to the need for measures, relating to some other aspects of the business. It is primarily about the current number of drugstore X stores, and obviously, there are not enough of them. On the other hand, it is also about staffs that do not leave a positive impression on customers, due to the frequent lack of information and lack of motivation to work. It is also possible to conclude that some customers are saturated by the current offerings of drugstores. It is very important to notice this moment, because the number of such customers will sure grow over time. In this very fact reflects an opportunity for drugstore X. Customers want something new, something that no other drugstore cannot offer them. With this approach, it is possible to attract even the part of customers, who never shopped in drugstores. According to many studies, it is found that such customers on the Croatian market do exist, and precisely in that reflects still untapped potential. As we see, innovation is the key answer to the customer's needs and desires, but also the key to winning the overall customer satisfaction, i. e. the key to success.

## References

- Anderson, E. W., C. Fornell, and D. R. Lehmann. 1994. 'Customer Satisfaction, Market share and Profitability: Findings from Sweden.' *Journal of Marketing* 58 (3): 53–6.
- Barsky, J. 1995. *World-Class Customer Satisfaction*. Burr Ridge, IL: Irwin.
- Gutić, D., Z. Bačelić, and J. Bačelić. 2011. *Istraživanje tržišta (po marketing konceptu)*. Osijek: Grafika.
- Injac, N. 1999. 'Zadovoljstvo kupca: što je to?' *QM* 5:29–35.
- Kesić, T. 2006. *Ponašanje potrošača*. Zagreb: Opinio.
- Kos, A., M. Trstenjak, and A. Kralj. 2011. 'Zadovoljstvo kupca: kako ga mjeriti.' *Zbornik radova Međimurskog veleučilišta u Čakovcu* 2 (1): 48–54.
- Marić, K. 2004. 'Utjecaj kvalitete proizvoda na zadovoljstvo potrošača.' Master's thesis, University of Zagreb, Zagreb.
- Motik, D., and A. Kusa. 1997. 'Kvaliteta proizvoda u skladu s koncepcijom marketinga.' *Hrvatska gospodarska revija: časopis za ekonomiju i pravo* 3 (97): 24–8.
- Nowacki, R. N. d. 'Five Step Customer Satisfaction Process.' <http://www.ampolbiz.com/consulting/resources/cust-sat/cust-sat.pdf>
- Oliver, R. L. 2010. *Satisfaction*. 2nd ed. Armonk, NY: Sharpe.
- Oliver R. L., and W. S. De Sarbo. 1988. 'Response Determinants in Satisfaction Judgements.' *Journal of Consumer Research* 14 (4): 495–507.
- Peluso, A. M. 2011. *Consumer Satisfaction*. Bern: Lang.
- Radman, M., D. Kovačić, and A. Kolega. 2002. 'Consumer Satisfaction with City Markets in Croatia.' *Agriculturae Conspectus Scientificus* 67 (1): 33–9.
- Sadeghi, T., and S. Farokhian. 2011. 'The Role of Customer Satisfaction in Product Planning.' *Middle-East Journal of Scientific Research* 7 (1): 39–45.
- Sušić, V., A. Meleš, and V. Čizmić. 1999. 'Zadovoljstvo kupca: bitan pokazatelj uspješnosti poslovanja.' *Goriva i maziva* 38 (6): 411–21.
- Vranesević, T. 2000. *Upravljanje zadovoljstvom klijenata*. Zagreb: Golden marketing.
- Vukasović, T. 2012. *Trženje: od temeljev trženja do strateškoga tržišnog načrtovanja*. Koper: Založba Univerze na Primorskem.
- Walters, D. 2014. 'Market Centricity and Producibility: An Opportunity for Marketing and Operations Management to Enhance Customer Satisfaction.' *Journal of Manufacturing Technology Management* 25 (2): 299–308.



This paper is published under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



# Towards Joint Performance: Building Dynamic Capabilities for Public Critical Asset Maintenance

VESA-JUKKA VORNANEN

*City of Seinäjoki, Finland*  
*vesa.vornanen@seinajoki.fi*

JOSU TAKALA

*University of Vaasa, Finland*  
*josu.takala@uva.fi*

This study aims to present path the joint performance – how the build dynamic capabilities for public critical asset maintenance. The study examined this by finding out the Sand Cone model and Kano model content linkages to the 20 Finnish largest municipality's Council's Action Plans (CAPs). The study overall is based on a case study, supplemented by the content analysis and the survey. Referring to the content analysis of Finnish 20 largest municipalities previous and current Council's decision-making 2012–2013, a common strategic objective is economic continuity. The case study explains the implementation to conduct multi-focused strategies to the common order fulfilment process. The dynamic capabilities conduct several strategic actions. The study utilized Critical Factor Index analysis to examine network partners. The most significant contributions of the paper are the task of resource allocation to achieving multi-focused strategic goals and an example how the task has been made of.

*Key words:* local public government, dynamic capabilities, critical factor index, Kano model, sand cone model

## Introduction

Does the number of public strategies fragmented common will? Fragmentation is characterized by a dynamic environment, but is it a complex puzzle without a corner piece? Complexity challenges the common objectives and policies on a large scale. Maintaining customer service delivery in every circumstance is a key objective of the Finnish society. In this study, combined with the Finnish 20 largest municipality decision-making and results of the maintenance network's dynamic capabilities research, is aiming to build a development path the joint performance.

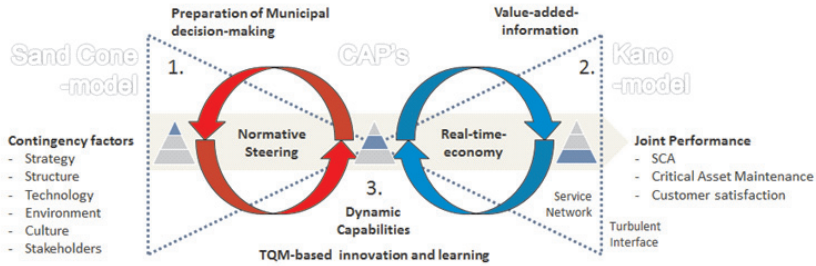


FIGURE 1 Control and Economic Processes as a Part of Public Order Fulfilment Process

## Background

How to build dynamic capabilities for public critical asset maintenance? This is the key question of the paper. In a larger perspective, the challenge is to find a solution to conduct the several public and Public-Private partnerships – organizations effectively for achieving sustainable competitive advantage – where to start? The research approach is as follows. The paper examined municipalities' sequential Councils' Action Plans (CAPs) to identify and quantify the frequency of keywords and content criteria of dynamic capabilities that were related to the Sand Cone and Kano model linkages. Referring to Rannisto (2005, 39) and Jalonen (2007, 171) the political and administrative processes are in close interaction in the preparation of municipal decision-making. To measure the public order fulfilment process goal, the paper drafts shared (1) the CAPs-based expectations and (2) Kano model-based customer satisfaction objectives – what matters taken into account to promote modern, the vital functions maintenance. To clarify the service network's operations the study brings together a CAPs-based proposal for Balanced Scorecard (BSC) criteria. To manage the service network, the research identifies a critical factor index (CFI) of the network's dynamic capabilities (3), see figure 1.

The BSC-based external customer is a functioning health care and welfare services under all circumstances, or other responsible authority's critical asset need in escalating circumstances – as an objective of a comprehensive security in the public order fulfilment process. Both the common factor is a useful and appropriate operational floor space, which will create a mission to reliable and resilient service supplier. In the case study supplier for the needs is the public facilities services unit, a municipal support service with service network. The network management is based on the publicly available



Technical Centre's operation rule of the City of Seinäjoki (Seinäjoki 2011), and the author's role in the management of the public management post.

The Author's organizational status is multi-dimensional. It includes strategic level task (Preparedness Liaison Officer), but not direct contact or systematic dialogue with the political decision-makers. In the paper, Author interprets the council's policies, identify capabilities and possibilities, and implement several development actions as in the portfolio approach in the case study. According to the Author's work history in three different size organization between 2002–14 (2002–6; ~2000 citizens, 2006–9; ~4500 citizens, 2009–; ~60000 citizens), the size of the municipality organization's structure changes the nature of the officeholder activities, content and activity level, for example, closer to the customer interface and turbulent environment. Referring Beckford (1998, 160) the key to organizations' success rests on communication within the organization and between the organization and its environment. Tuomi (2012, 18) writes that, in many cases the situational approach would be suitable for the quality management in the public sector. There are three main tasks of the system: (1) strategic policymaking process, (2) design and development control, and (3) measure improvement actions, control and monitoring. Figure 1 illustrates the research's framework as well.

#### THE RESEARCH DESIGN

According to Arbnor and Bjerke (1997) the creation of methodological approach as a process, which combining the theory of science and methodology. The research paradigm has an influence to the whole research process from selecting the research problem, selecting the research methods, implementing the research, and finally the kind of contribution that can be achieved through the research. The study overall is based on a case study, supplemented by the content analysis and the survey, hence, the paper can be characterized as qualitative and multidisciplinary. Referring to Arbnor and Bjerke, this study examines the reality as mutually dependent fields of information, as a word of symbolic discourse, and as a social construction. The theoretical part describes methodology, and the empirical part builds dynamic capabilities. The study takes advantage of the resource-based theory and transformational leadership. The motivational factor to do the study is based on the multi-municipal-oriented risk management related research needs, especially from the municipality point of view. The need for the research emerged from the Annual Mu-

TABLE 1 Kano Model-Based Data Mining and the Structure of Content-Classification

Example	Criteria for CAPS-Based Service			
	Cost	Flexibility	Quality	Time
'Must be' phrases in the CAPS	Cost	Flexibility	Quality	Time
'Profit for the year must be ...'	×			
Sum (weights)	$n_c$ (0.000)	$n_f$ (0.000)	$n_q$ (0.000)	$n_d$ (0.000)

municipalities Risk Management Days event, which author participated and outlined the research challenges.

## Methodology

The Kano model (Kano et al. 1984) helps to understand the product or service characteristics of relationship with customer satisfaction. The Kano model ([www.kanomodel.com](http://www.kanomodel.com)) defines the quality attributes of product/service in three ways: Performance, Basic, and Excitement. In this paper, the Kano model-based service expectations are formed from the 20 largest Finnish municipalities Council's Action Plans, CAPS. On the other words, the customer satisfaction to support service's processes is linked to multi-municipal expectations of service quality and characteristics (table 1). In the original, a competitive service meets Basic attributes, maximizes Performance attributes, and includes as many Excitement attributes as possible at a cost the market can bear. This study examines the CAPS contents according to performance capability criteria to form a successful business strategy.

The Council's Action Plan (CAP) is based on the Local Government Act (section 65). The local public government CAPS are publicly available materials. In substance, the CAP can be described as functional or policy, and only first year of the plan, the budget, is legally binding. CAP presents municipality's operating and financial targets. The CAP is not just a strategy map, it is the multi-strategy map, the highest decision-making document that describes by words and numbers all of the services operating principles of the municipality to produce and arrange. The CAP has all strategic policies, highly approved information, which is based on the interpretations made. It is just the right length in relation to interpretability. Every Council is required to submit an action plan, as well as the previous did every year. The information provided by CAP is possible to build an illustrative picture the multivalent municipality. Technically, the document is A4 size, traditionally printed on paper, and pages are written on both sides. More and more public documents are available on the internet too. As of 2013, Finland has 320 municipalities. The group of 20 major cities of Finland is based on the deci-

sion of the Ministry of Finance, which set the productivity program co-ordination and follow-up group of the 20 largest municipalities of the 6th of May 2010. The group represents 2013 about 50.6% of Finland's population, but only 6.3% of all municipalities. The municipal elections are held every four years. Municipalities the highest decision-making body, Council, may change at the time and the municipal strategies may be subject to change as well. The latest municipal elections were 2012 and current Councils started in the beginning 2013. A year after this, it is the time to look at what kind of changes can be seen. The current Councils have their first administrative year behind.

The Sand Cone model (Ferdows and De Meyer 1990) illustrates the structure of four different capabilities (Cost efficiency, Speed, Dependability, Quality) contributing to organizations' manufacturing strategies. In order to illustrate the layered nature of the strategic goals and the possibilities of achieving them in the Finnish Air Force (FAF), the sand cone model of Ferdows and De Meyer was further developed to illustrate the total picture of the strategy (Takala et al. 2006, 339). In the FAF case was used analytical hierarchy process (AHP)-based methodology to assess the central strategies and their key success factors concerning the credibility of defense goal at FAF (Takala 2002). In this study, using a similar type of approach, but utilizing the content analysis of the AHP-method instead. Publicly available local strategic documents, CAPS, offer fast and at the same time cost-effective starting point for the exploration. The local public government strategy paper's interpretation is possible to form a competitive advantages and achieving it and also on leading the business strategy with the balanced scorecard. Table 2 shows the CAPS keywords, related to the linkages of the dynamic capabilities and forming balanced scorecard criteria.

#### THE DYNAMIC CAPABILITIES

Eisenhardt and Martin (2000) have written that dynamic capabilities are combined, rearranged, creative and release processes that make use of the resources to respond to market change and even create change. According to Teece (2007) dynamic capabilities can be divided into three different categories: (i) *sensing* of opportunities and threats, identification and assessment, (ii) *seizing* that potential and (iii) *reconfiguring* of constant reform, which means the competitiveness of maintenance, improvement by combining and protecting the organization's tangible and intangible capital and, if necessary, by redesigning it. According to Teece and Pisano (1994) dynamic capabilities help the organization to meet the rapidly changing business

TABLE 2 Balance Scorecard-Based Data Mining and the Structure of Content Classification

Brand	Brand	External structure (0.000)	Dynamic capabilities
Customer loyalty	Customer loyalty		
Customer relationship	Customer relationship		
Customer satisfaction	Customer satisfaction		
ICT & IT	Information technology	Internal process (0.000)	
Innovation	Innovation		
Process	Process development		
Engagement	Engagement	Learning and growth (0.000)	
Competence	Competence		
Expert, expertise	Know-how		
Knowledge, data, skills	Knowledge		
Cooperation	Benevolent collaboration	Trust (0.000)	
Empathy	Empathy		
Openness	Openness		
Promise, trust	Performance-to-promise		
Profession	Professional relationship		
Customer, customers	Customers	Business performance (0.000)	
Financial	Financial		
Sales	Sales		
	Sum of keywords	1.000	

environment newest and edited an operational capability, while at the same time they help the organization to renew or modify the resource base. Dynamic capabilities create new competitive resource configurations to capitalize changed.

*The Quantitative Content Analysis* studies the linguistic material (Chi 1997). Varieties of content-classifications are used to analyze the phenomenon of contents and structures. Research problem and theoretical framework form the basis for categories of content selection and definition. Analysis follows the logic of statistical research. The data collected from the text according to the number of keywords. Structuring and grouping connects the results to the larger research context. The study used Krippendorff's (2004, 30) framework for content analysis.

#### THE BUSINESS STRATEGY AND CAPS COMBINED WITH THE NULL-TEST

According to Myers and Well (2003) the correlation is useful statistical technique when a researcher is interested to know if two variables are related to each other. The paper's key hypothesis of com-

binning methodology is that the Null-test is positive; the result will be greater than zero. There are several reasons why this should be occurred. Municipalities have 535 statutory duties. The normative steering is same for all municipalities, as the Author has found not all the tasks exist in every municipality. In a smaller organization has smaller resources; there are fewer inhabitants, less customers in need of services, etc. Services have to adapt to even the declining population development. Municipal organizations with limited resources have to do collaboration to arrange services. Therefore, it is very likely the CAP reflects the political activity and thereby preparation of Municipal decision-making too – as the size of the municipality because in the smaller municipalities are no time to write a lot of strategies. The expectation is that the CAP reflects the municipality's strategic choices, which are expressed in the standard words; the more activities, the more strategic objectives. Thus, the amount of keyword 'strategy' and the length of the document are positively correlated with each other. In order to make prediction, the result should be statistically significant ( $0.001 \leq p < 0.01$ ). Statistical significance was assessed at  $\alpha = 0.05$  and analyses were conducted using MS Excel Sheet software (version 2010).

The Critical Factor Index (CFI) method is a measurement tool to indicate which attribute of a business process is critical and which is not, based on the experience and expectations of the company's employees, customers or business partners (Ranta and Takala 2007). In fact, the CFI method is a supporting tool for the strategic decision-making. The critical factors of knowledge intensive business in a globally competitive case company can be measured and dynamically developed by 'Sense & Respond' methodology (Bradley 1998). The CFI-surveys questionnaire was based on the Balanced Scorecard, which evaluates the organization's external structure, internal process, learning and growth, trust and business performance. The survey carries out at online survey by using Webropol, which is a solution for e.g., conducting surveys and gathering data in close interaction with MS office tools. The survey was implemented in the Author's network. The respondents cover the entire case study period and representing the management and experts from different organizations. Half of the survey addressed to persons to whom the Author has any earlier relationship.

The CFI method identifies the critical factors that perform unsatisfactorily or pose risks for the organizations in concern. Critical factors are sought by measuring the expectations and the experiences of the stakeholders that are related with the target organizations or

operations. The identified CFIs will form the basis of the corrective actions used in order to improve and develop the organization or operation. The calculation of the dimensionless CFI values is based both on the measures of central tendency, i. e. the mean and the measures of dispersion, i. e. the standard deviation of the stakeholders' experiences and expectations as can be observed from formulas (1), (2), and (4), as shown below. Moreover, the stakeholders' views about the direction of development, as shown in formula (3), in terms of experiences and expectations form part of CFI formula (4) (Liu 2010).

$$I_{Imp} = \frac{\bar{x}_{Ep}}{10} \quad (1)$$

$$I_{Gap} = \left| \frac{\bar{x}_{Er} - \bar{x}_{Ep}}{10 - 1} \right| \quad (2)$$

$$I_{DoD} = \left| \frac{C_B - C_W}{100 - 1} \right| \quad (3)$$

$$I_{CF} = \frac{s_{Ep} - s_{Er}}{I_{Imp} \times I_{Gap} \times I_{DoD}}, \quad (4)$$

where  $x_{Ep}$  is mean of expectations,  $x_{Er}$  mean of experiences,  $s_{Ep}$  standard deviation of expectations,  $s_{Er}$  standard deviation of experiences,  $C_B$  better performance than expected,  $C_W$  worse performance than expected,  $I_{Imp}$  importance index,  $I_{Gap}$  gap index,  $I_{DoD}$  direction of development index (percent values), and  $I_{CF}$  critical factor index.

Critical Factor Index (CFI), as well as its developed and stabilized form, Balanced Critical Factor Index (BCFI) (Nadler 2008), refer directly to the concept of 'Sense & Respond' philosophy and represents easy in use tool for supporting the strategic decision-making which applicability has wide potential on various markets and types of organizations. Sense & Respond method measures criticality of company's vital attributes in terms of resourcing and performance. Development needs of critical targets are evaluated after the completion of survey.

The Case Study (Yin 1994) began in September 2002 and still continues. The empirical study has been carried out in the Local Public Government's environment in Western Finland, operating mainly with economic functions in Technical departments of three different regions. The main difference between office holding and between regions has been in the size of an organization's structure, which had contributed to the job description. The first four years (2002–6) author's Technical Director's duty included preparation of municipal decision-making in municipal business purposes, the next three years (2006–9) to identify the criticality of assets. The key observa-

tion was public buildings have failure frequency referring to maintenance culture which indicate consequences in the future. The lead technical office-holding tasks were combined in creative ways, and these experiences and the most recent findings are relevant to the ongoing maintenance management and results interpretations.

## Results

### RESULTS OF THE QUANTITATIVE CONTENT ANALYSIS

The study has two objectives. First is to examine the CAPs as a useful source of information. Secondly, is to explore the key issues related to the Kano model and the further developed sand cone model. The data analysis is carried out as follows. The first phase of the data collected is downloading all the 20 largest municipality's 2012 and 2013 CAP in PDF format. For better customer service, it is recommended that all municipalities favour the accessibility of the publicly available files. The total volume of words studied with the Free On-line Word Counter ([docwordcounter.com](http://docwordcounter.com)), which counts and classifies the words in PDF, Word, and standard text files. The data processing method, coding, is done in Finnish, because the expectation is all the publicly available files can be read in the native language. The English-language keywords are the Author's free translation. In preparation for data, mining was noticed that the frequencies of keywords affected by Finnish-language phrasing and thereby some Finnish words divided freely (without hyphenation). These sub-words tested as separate keywords and added to the number of the keyword.

In the content analysis author found 165 sentences (66 in 2012 and 99 in 2013), where the 'must-be' and 'must-have' keywords were used and refers to the Kano models expectations. Found sentences were grouped into four ranks by the content of the sentence. The figure 2 presents the results of must-be expectations grouping and the indicators of the service strategy. These expectations together with the delightful or excitement effect (innovation-keyword) refers to the overall connectivity of the Kano model and the further developed CAP-based system. The contents of the investigated CAPs are the direction and the beginning of measurement, but in the end customer, satisfaction detection needs the annual financial statement. This paper does not deal with the financial statement because sequential financial statements are not yet available.

The two most common keywords refer to the strategic and economic cooperation. The word 'strategy' (including 'strategic') was

TABLE 3 Common order fulfilment factors

Factors	CAP		NM	
	2012	2013	2012	2013
External structure	0.015	0.014	0.012	0.010
Internal process	0.123	0.114	0.109	0.100
Learning and growth	0.065	0.062	0.073	0.066
Trust	0.252	0.257	0.278	0.289
Business performance	0.545	0.554	0.528	0.534

found 2205/2232 times (2012–3). The word ‘finance’ (including ‘financial’) was found 2276/2837 times (2012–3). The most growing keyword in the period 2012–3 is the ‘risk management’ (316/422). On the other hand, the word ‘customer loyalty’ and ‘empathy’ are not found at all (2012–3). The ‘risk management’ keyword indicates the central governments normative steering (Emergency Powers Act, section 12 and Local Government Act, section 13-3a). From the beginning of 2014, risk management has been Councils task.

The weights of factors of common order fulfilment process and dynamic priorities are shown in tables 3 and 4. The results reflect shared expectations. Personal network is emphasized in the benevolent collaboration more than in the common values.

#### THE RESULTS OF THE BUSINESS STRATEGY AND CAPS COMBINING WITH THE NULL-TEST

Data collected were analyzed using inferential statistic (Myers and Well 2003). The null hypothesis was tested using Spearman rank correlation. All correlation coefficients  $r_s > 0$ , this implies positive agreement among the ranks. The lower the  $p$ -value is, the more likely the result is reliable. It seems that only at the end of the Council’s planning period, the result is statistically significant ( $0.001 \leq p < 0.01$ ), as follows, positive results confirm the key hypothesis of the paper: the CAPS content analysis is a useful tool for common information gathering. Table 5 presents the results of the test.

The Results of the Survey of Network’s Dynamic Capabilities addressed to 61 persons. There are only 13 respondents (21.3%), which is limited scientific evidence in the statistical point of view. However, the number of respondents is adequate when presenting the methods. The respondents are the managers in decision-making positions. They are doing the preparatory work for Councils and interpret the environment of the organization to act. Referring to the high quality of respondents, the respondents have an important role in the study. As the research framework (figure 1) describes, managers



TABLE 4 Dynamic Priorities by the Number of Keywords

Dynamic priorities	CAP		NM	
	2012	2013	2012	2013
Customer relationship (10.1)	0.000	0.000	0.000	0.001
Customer satisfaction (10.2)	0.014	0.012	0.009	0.009
Customer loyalty (10.3)	0.000	0.000	0.000	0.001
Brand (10.4)	0.001	0.001	0.003	0.001
Process improvement (11.1)	0.082	0.074	0.075	0.065
Innovation (11.2)	0.020	0.013	0.022	0.017
Information technology (11.3)	0.022	0.027	0.012	0.018
Know-how (12.1)	0.032	0.028	0.036	0.034
Knowledge (12.2)	0.030	0.031	0.034	0.029
Competence (12.3)	0.000	0.000	0.000	0.000
Engagement (12.4)	0.002	0.003	0.003	0.003
Performance-to-promise (13.1)	0.009	0.008	0.009	0.008
Professional relationship (13.2)	0.051	0.055	0.057	0.065
Openness (13.3)	0.000	0.001	0.001	0.001
Benevolent collaboration (13.4)	0.191	0.193	0.212	0.216
Empathy (13.5)	0.000	0.000	0.000	0.001
Financial (14.1)	0.256	0.259	0.234	0.233
Sales (14.2)	0.091	0.088	0.112	0.093
Customers (14.3)	0.199	0.207	0.182	0.208

combine the public policies (CAP) by the results of the Network's dynamic capability survey. 48% ( $n = 12$ ,  $N = 25$ ) from professionals in the Author's work history responded to survey. The responses generated a sufficient understanding of the extent of the Author's network. The network covers 20% of the 20 largest municipalities in eastern, western and southern Finland. The respondents represent the internal and external customer, partners and employees of the facilities services unit.

These correspond to all of the Balanced Scorecard perspectives (Kaplan and Norton 1996). Table 6 indicates responses of the respondents. The External customer respondents are the managers of the health care and welfare services from different municipalities. The direction of development is weakening. Referring the content analysis, there are any keywords of customer loyalty, in any of the 20 CAPS 2012–2013. The number of keywords and respondents' expectations in direction development can be interpreted as indicating the same negative thing; the public policy in the municipalities has not changed. In external customer's column (table 6, column 2), rows

TABLE 5 The Results of the Spearman Rank Correlation and the Null-Test

Mun.	CAP						Strategy					
	2012			2013			2012			2013		
	$X_1$	$i_1$	$X_2$	$i_2$	*	$r_1$	$r_1 - r_2$	$d^2$	$r_2$	*	$Y_1$	$i_1$
1	300	0.080	332	0.089	11.198	3	-2	4	5	47.956	215	0.098
2	235	0.062	240	0.064	2.618	8	-12	144	20	-63.306	210	0.095
3	162	0.043	154	0.041	-4.482	13	-2	4	15	-19.448	65	0.029
4	214	0.057	204	0.054	-4.215	12	3	9	9	4.476	139	0.063
5	218	0.058	215	0.057	-0.902	11	5	25	6	45.070	111	0.050
6	144	0.038	155	0.041	8.156	5	1	1	4	55.985	57	0.026
7	92	0.024	84	0.022	-8.257	17	7	49	10	3.856	39	0.018
8	220	0.058	199	0.053	-9.111	18	1	1	17	-33.530	162	0.073
9	278	0.074	277	0.074	0.119	10	-4	16	14	-17.016	125	0.057
10	98	0.026	118	0.031	20.987	1	-11	121	12	-14.480	67	0.030
11	151	0.040	135	0.036	-10.167	19	16	256	3	77.953	151	0.068
12	180	0.048	165	0.044	-7.893	16	9	81	7	40.386	57	0.026
13	112	0.030	117	0.031	4.966	6	-2	4	8	22.665	120	0.054
14	137	0.036	152	0.041	11.482	2	0	0	2	91.406	48	0.022
15	159	0.042	151	0.040	-4.575	14	3	9	11	-10.399	86	0.039
16	246	0.065	252	0.067	2.931	7	-11	121	18	-36.098	269	0.122
17	220	0.058	187	0.050	-14.592	20	7	49	13	-15.971	87	0.039
18	160	0.042	162	0.043	1.736	9	8	64	1	100.987	29	0.013
19	212	0.056	197	0.053	-6.629	15	-4	16	19	-62.821	93	0.042
20	227	0.060	251	0.067	11.104	4	-12	144	16	-32.823	75	0.034
20	3765	1.000	3747	1.000				1118			2205	1.000

NOTES \*  $(i_2 - i_1)/i_1 \times 100$

TABLE 6 Dynamic Priorities of the Respondents

Dynamic priorities	(1)	(2)	(3)	(4)
Customer relationship (10.1)	5.44	5.73	4.14	5.28
Customer satisfaction (10.2)	4.36	7.24	4.19	5.30
Customer loyalty (10.3)	5.56	3.84	6.22	7.33
Brand (10.4)	4.82	4.65	3.96	4.09
Process improvement (11.1)	5.25	7.26	5.62	3.96
Innovation (11.2)	5.25	5.60	5.83	3.39
Information technology (11.3)	5.03	5.65	5.62	5.48
Know-how (12.1)	5.88	5.60	5.25	6.78
Knowledge (12.2)	6.37	5.88	5.62	5.05
Competence (12.3)	5.06	4.78	5.62	13.66
Engagement (12.4)	4.40	4.81	3.79	4.14
Performance-to-promise (13.1)	5.55	4.76	4.10	4.97
Professional relationship (13.2)	5.29	4.68	5.83	6.83
Openness (13.3)	4.37	5.76	4.32	3.86
Benevolent collaboration (13.4)	4.24	5.87	4.26	4.77
Empathy (13.5)	5.56	5.11	6.35	1.82
Financial (14.1)	4.29	3.82	4.06	1.06
Sales (14.2)	6.40	4.76	6.59	5.48
Customers (14.3)	6.88	4.21	8.61	6.78

NOTES Column headings are as follows: (1) internal customer NSCFI, (2) external customer NSCFI, (3) employees NSCFI, (4) partner NSCFI.

10.2 (customer satisfaction) and 11.1 (process improvement) means the need of relevant addressable attention; in that case, the situation is returning to normal. The content analysis revealed parallel to the same factors; the direction of development is within acceptable limits. The partner respondents are Preparedness Liaison Officers from different rescue organizations.

Figures of the employees and internal customer are from the Facility Management organization where internal customer has real estate's operational management task and employees are from the supplier unit. The both units share a common concern about the economy (14.1 financial). Partners, employees and internal customer relations are discussed in the next research paper.

### Managerial Implications

The Case Study of the Central Control Room (CCR) shows how the research issues have been implemented. Actions are summarized by five key policies: High-quality Personnel, Public Asset Criticality, Customer Focus, Quality and Trust.

#### STRATEGY OF HIGH-QUALITY PERSONNEL

One of the common entities for all of the municipal administrative sectors is an obligation to care subsidized employment. It is the Employment Degree-based function for maintaining public workforce in the municipalities. The target organization has formed a Subsidized Employment (SE) team at 2010. It is the facilities services unit's internal user service group, which support unit's core processes. From the regulatory perspective, the SE team is a core function of every municipality.

However, as in the FAF case, for the target unit SE team is same time a recruitment channel. Every support-employed person is equipped and familiarized as the staff. The mission is same for all, and function is the same in all circumstances. The target organization has a high average age in the core processes. The retirement leave has been taken into account in the service process development (Vornanen 2009, 25). Figure 2 presents the comprehensive development. The productivity growth is based on the fact that the number of buildings is at the same time grown without the new staff has been employed. The project portfolio 2009–4 presents the quarterly development steps to execute the unit's mission (Vornanen 2013, 34).

#### STRATEGY OF CUSTOMER FOCUS & QUALITY

All municipal functions common factor is an operational floor space and fixtures. Premises relate to maintenance activities and therefore fixtures need to be moved to a temporary location before maintenance begins, and after that, restore the place. These transfer operations are supported action for facilities services core processes. This is an example of identifying the content of the work and the competence requirements. The SE team has made it possible to re-arrange to transfer-intensive tasks, which had a positive impact on the quality of core service and customer feedback. Every unit needs a budget reservation for fixtures. After succeeding budgeting, the purchasing unit will assemble individual needs for larger entity and implement the acquisition.

#### STRATEGY OF PUBLIC ASSET CRITICALITY

'It all starts with the fire load reduction.' All the technical premises must be addressed only real estate technical use, all unofficial storage should be stopped and improve the efficient use of real estate. Real estate users need support the removal of fixtures and centralizing them. This operation led to the creation of organization's internal

## Towards Joint Performance

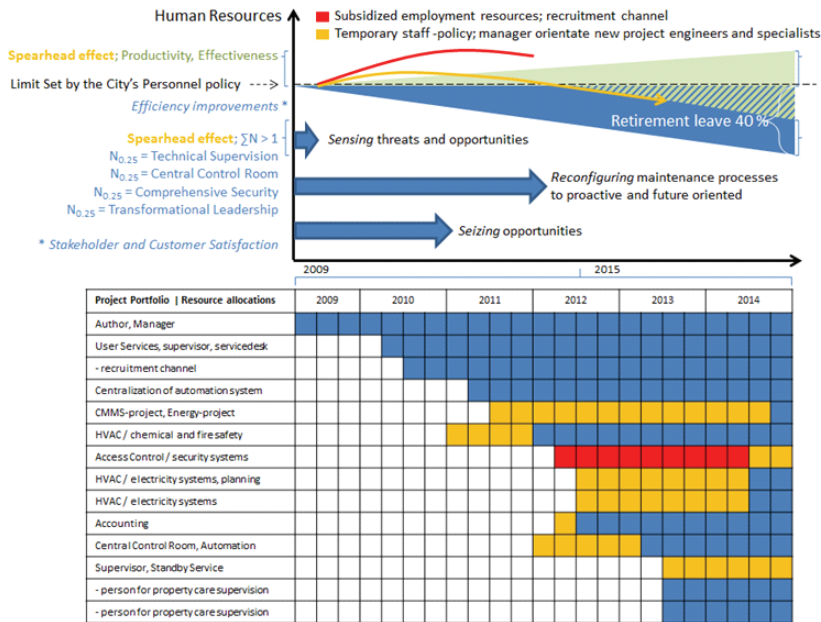


FIGURE 2 The Project Portfolio/Establishment of the ccr/Building Dynamic Capabilities

market place. To manage internal market and to create subsidized project work possibilities, the target organization implemented the Centralized Recycling Centre (crc). This carried out by transforming formal storage to production space. crc's mission is to reduce the need to buy new furniture and that impact directly on the municipality's annual budgeting. crc enables the accounting task to measure the speed of recycling of the fixtures. When a table is no longer good for customers, it can be modified, repair or separated from the metal and wood for the fuel.

### STRATEGY OF TRUST

The basis for maintaining is to keep, preserve, and protect, and especially in the municipalities, maintaining as a support service is a strategic task. The definition of support services is not completely finished and trouble-free in the public sector. Figure 2 presents how a proactive maintenance management is needed for orientation preserving. In order to achieve objectives this maintenance manager-driven internal control requires two important factors; skilled personnel, and a place to do data analyze and produce value-added information. These factors allow for multi-focused strategies and

gathers situational awareness in the ccr. According to the content of project portfolio table in figure 2, the ccr is the assets based information-generating counterpart for the one or more municipalities command centre or the Civil Defense Districts (cdd). cdd's are led from their own regional command centres, which operate under the main command centre of the area (Ström 2007, 44). Summarizing the affection of legislation and the economic process in the municipality; to form cross-border functionalities it is essential to get things into the right hands in the right place at the right time.

## Conclusion

### ASSEMBLE THE PUZZLE

The preceding case study (Vornanen 2013, 46–48) introduced Transformational Leadership indexes (TLi) for the target organization's levels in different circumstances. According that implementation of sustainable competitive advantage and the earlier service process development (Vornanen 2009, 61–66) Manager's characteristic controlling leadership can be seen as a key piece to the puzzle solving, a signal processing in complex environments, ability to strategic changes in the operations' direction. In fact, these case studies deepen the importance of controlling leadership in the successful culture change of support service in the era of comprehensive security.

### DISCUSSION

According to Takala, Hirvelä, and Liu (2007, 342) and this case study research, the Local Public Government could have an operation rule-based authorization near the turbulent customer interface, the proactive maintenance officeholder to combine critical tasks in a creative way. By authorization, the unit has opportunity put together own 'management team.' Palmroos (2014, 149) address the teamwork gave the researcher extra information which could not have been provided by a traditional research method. Therefore, the maintenance manager's role as a 'dynamic engineer' is to clarify the purpose of the maintenance operations in different circumstances, to focus the mission, to make himself/herself redundant for the manufacturing processes. By empowering manager's development team members to create solutions with their staff, it is possible to reach objectives despite the constraints.

The paper's methodological bottleneck is described in the research framework. The case study combines two very wide and different

perspectives and the research methods as well. According to Tuomi (2012, 30), this kind of application of total quality management is justified in the complex environment of the public sector. Same time the unifying case study refers to the need for further investigation.

The Author does not describe the whole path to sustainable competitive advantage neither all networks of partners. The main reason for this is that the sequential financial statements are not yet available (The Local Government Act, section 71). As the case study shows, it is highly possible that the further developed sand cone model and the Kano model combines in the future. Although the research data are limited, the CAPS and CFI analysis has both the same direction as decided by the political decision-makers. Method gave clarity to the common core factor of the Sand Cone model (Ferdows and De Meyer, 1990). The CAPS could combine models as a system. The Author return to this issue in the following article context. On the other hand, the paper filled main purpose to build a development path that walks through.

#### PROPOSALS FOR FURTHER STUDY

Future research could be multiple case studies utilizing the findings of the multi-municipal ccr's and crc's, which could validate the resource-based project portfolio approach to strategic management as a way to build dynamic capabilities.

#### References

- Arbnor, I., and B. Bjerke. 1997. *Methodology for Creating Business Knowledge*. London: SAGE.
- Beckford, J. 1998. *Quality: A Critical Introduction*. London: Routledge.
- Bradley S. P., and R. L. Nolan. (1998). *Sense and Respond: Capturing Value in the Network Era*. Boston, MA: Harvard Business Review Press.
- Chi, M. (1997). 'Quantifying Qualitative Analyses of Verbal Data: A Practical Guide.' *The Journal of the Learning Sciences* 6 (3): 271–313.
- Ferdows, K., and A. De Meyer. (1990). 'Lasting Improvements in Manufacturing Performance: In Search of a New Theory.' *Journal of Operations Management* 9:168–85.
- Eisenhardt, K. M., and J. A. Martin. 2000. Dynamic Capabilities: What Are They? *Strategic Management Journal* 21:1105–21.
- Jalonen, H. 2007. *Kompleksisuusteoreettinen tulkinta hallinnollisen tehokkuuden ja luovuuden yhteensovittamisesta kunnallisen päätöksenteon valmistelutyössä*. Julkaisu 693. Tampere: Tampereen teknillinen yliopisto. <http://dspace.cc.tut.fi/dpub/bitstream/handle/123456789/47/jalonen.pdf?...1>

- Kano, N., S. Nobuhiku, T. Fumio, and T. Shinichi. 1984. 'Attractive Quality and Must-Be Quality.' *Journal of the Japanese Society for Quality Control* 14 (2): 39-48.
- Kaplan, R. S., and D. P. Norton. 1996. *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press.
- Krippendorff, K. 2004. *Content Analysis: An Introduction to Its Methodology*. 2nd ed. Thousand Oaks, CA: Sage.
- Liu Y. 2010. *Implementing Sustainable Competitive Advantage for Proactive Operations in Global Turbulent Business Environments*. Vaasa: University of Vaasa.
- Myers, J. L., A. D. Well. 2003. *Research Design and Statistical Analysis*. 2nd ed. Mahwah, NJ: Erlbaum.
- Nadler, D., and J. Takala. 2008. *The Development of the Critical Factor Index Method*. Vaasa: University of Vaasa.
- Palmroos, L. E. 2014. *Construction of an Institutionally Aware Process-Oriented Performance Measurement System: A Case Study of a Finnish Local Government*. Vaasa: University of Vaasa.
- Rannisto, P.-H. 2005. *Kunnan strateginen johtaminen: tutkimus Seinäaapurikuntien strategiaprosessien ominaispiirteistä ja kunnanjohtajista strategisina johtajina*. Tampere: Tampere Yliopisto.
- Ranta, J.-M., and J. Takala. 2007. 'A Holistic Method for Finding Out Critical Features of Industry Maintenance Services.' *International Journal of Services and Standards* 3 (3): 312-25.
- Seinäjäjoki. 2011. 'Toimintasääntö.' [https://www.seinajoki.fi/material/attachments/seinajokifi/seinajoenkaupunki/julkaisut/6GpMYkb2z/TELA\\_TOIMINTASAAANTO\\_23032011.pdf](https://www.seinajoki.fi/material/attachments/seinajokifi/seinajoenkaupunki/julkaisut/6GpMYkb2z/TELA_TOIMINTASAAANTO_23032011.pdf)
- Ström, M. (2007). 'Varautuminen kunnassa.' [http://www.pelastusopisto.fi/download/35628\\_strom2007.pdf](http://www.pelastusopisto.fi/download/35628_strom2007.pdf)
- Takala, J. 2002. 'Analysing and Synthesizing Multifocused Manufacturing Strategies by Analytical Hierarchy Process.' *International Journal of Manufacturing Technology and Management* 4 (5): 345-50.
- Takala, J., J. Hirvelä, and Y. Liu. 2007. 'Global Manufacturing Strategies Require "Dynamic Engineers"?' *Industrial Management & Data Systems* 107 (3): 326-44.
- Takala, J., J. Leskinen, H. Sivusuo, J. Hirvelä, and T. Kekäle. 2006. 'The Sand Cone Model: Illustrating Multi-Focused Strategies.' *Management Decision* 44 (3): 335-45.
- Teece, D. J. 2007. 'Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance.' *Strategic Management Journal* 28 (13): 1319-50.
- Teece, D. J., and G. Pisano. 1994. 'The Dynamic Capabilities of Firms: An Introduction.' *Industrial and Corporate Change* 3 (3): 39-63.
- Tuomi, V. 2012. *Quality Management in Public Sector: What Kind of Quality Management There Is and How It Is Implemented; Some Cases from*



- Universities Academic Libraries and Health Care Services Between the Years 2000–2010*. Vaasa: University of Vaasa.
- Vornanen, V.-J. 2009. 'Building Marketing Mix in the Public Sector – Case: Service Process Development in the Technical Department.' Master's thesis, Seinäjoki University of Applied Sciences, Seinäjoki.
- . 2013. 'Implementing Sustainable Competitive Advantage to the Public Sector's Management System: By Sense and Respond Methodology in Facilities Services Unit's Preparedness.' Master's thesis, University of Vaasa, Vaasa.
- Yin, R. K. 1994. *Case Study Research: Design and Methods*. Beverly Hills, CA: Sage.



This paper is published under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



## Abstracts in Slovene

### Vsebina informacij, signalna hipoteza in programi ponovnega odkupa delnic na Poljskem

*Elżbieta Wrońska-Bukalska*

Namen članka je predstaviti pomen programov ponovnega odkupa delnic in ugotoviti razloge za ponovni odkup ter te informacije posredovati vlagateljem. Podatki obsegajo signalizacijo boljših finančnih možnosti ali signalizacijo dejanske vrednosti. Članek proučuje izbrane statistične podatke navedenih družb, ki so znova odkupile svoje delnice. Po izvedbi raziskave za navedene izbrane družbe smo ugotovili, da podjetja ne želijo razkriti svojih razlogov za ponoven odkup delnic. V primeru pa, da razlog razkrijejo, ne gre samo za gotovinski prenos delničarjem.

*Ključne besede:* ponovni odkup delnic, vsebina informacij, signalna hipoteza

*Management* 9 (3): 173–185

### Strateška naravnost vodilnih managerjev najuspešnejših slovenskih podjetij

*Dario Berginc*

V prispevku je prikazan koncept strateške naravnosti vodilnih menedžerjev kot eden od pomembnih elementov raziskovanja uspešnosti podjetij. Percepcija menedžerja je v mnogočem bolj pomembna od analize okolja, saj je on tisti, ki se odloča o prihodnjih strateških usmeritvah podjetja. Raziskovanje strateške naravnosti menedžerjev nam tako lahko poda boljše informacije o strateški naravnosti podjetja. Izvedli smo kvalitativno raziskavo med vodilnimi menedžerji iz vzorca najbolj uspešnih podjetij v Sloveniji. Rezultati raziskave so pokazali številne skupne točke med mnenji in stališči vodilnih menedžerjev, pa tudi nekaj razlik glede na značilnosti podjetij, ki jih vodijo, in panoge, v katerih nastopajo.

*Ključne besede:* strateška naravnost, vodilni menedžerji, uspešna podjetja, Slovenija

*Management* 9 (3): 187–204

### Upravljanje in uspešnost nepremičninskega trga v Nigeriji: sta povezana?

*Kazeem Bello Ajide*

Upravljanje je bilo opredeljeno kot ključna spremenljivka, ki lahko vpliva na uspešnost katerekoli gospodarske dejavnosti. Namen študije je torej raziskati odnos med upravljanjem in delovanjem nepre-

mičninskega trga v Nigeriji. Študija uporablja metodologijo ARDL pristopa vezanega testiranja (Bound Testing Approach) za četrtletne podatke iz obdobja 1996–2010. Izmed upoštevanih spremenljivk sta bili vidni vlogi realnega BDP in indeksa upravljanja jasno v ospredju, tako na kratki kot dolgi rok, medtem ko sta bili vlogi inflacije in obrestne mere manj statistično izraziti. Rezultat ECM še dodatno poudarja povezavo med upravljanjem in nepremičninskim trgom in pomembnost oblikovanja dolgoročne stabilne zveze med njima. V končni analizi je navedenih še nekaj predpisov, namenjenih vsem interesnim skupinam s področja gradbeništva.

*Ključne besede:* upravljanje, nepremičninski trg, ARDL, Nigerija  
*Management* 9 (3): 205–221

### **Testiranje ponudbe izdelkov skozi zadovoljstvo potrošnikov**

*Tina Vukasović in Nives Mikulić*

Zadovoljstvo potrošnikov je nujno za uspešno poslovanje, s tem pa je pojasnjena tudi izbira teme študije. Spremembe na trgu so povzročile ogromno rast moči potrošnikov, kar so potrdila tudi številna podjetja, ki so svoje poslovanje prilagodila, da bi izpolnila tovrstna pričakovanja. Prilagajanje pa je povzročilo tudi potrebo po stalnem merjenju in vrednotenju. Glede na zgoraj omenjeno, pričujoča študija meri zadovoljstvo potrošnikov s ponudbo izdelkov drogerijske verige X. Rezultati raziskave so pokazali, da ponudba verige X ni v celoti izpolnila pričakovanja manjšega števila anketirancev. Glede na opredeljene merske stopnje zadovoljstva potrošnikov se je izkazalo, da je največje število zadovoljno s ponudbo izdelkov, medtem ko je odstotek tistih, ki so ponudbo ocenili kot odlično manjši od deleža tistih, ki so jo ocenili kot povprečno.

*Ključne besede:* potrošnik, zadovoljstvo potrošnikov, potrebe in želje, merjenje, raziskave  
*Management* 9 (3): 223–237

### **K skupni uspešnosti: izgradnja dinamičnih zmogljivosti za javno kritično vzdrževanje premoženja**

*Vesa-Jukka Vornanen in Josu Takala*

Namen študije je predstaviti pot skupne uspešnosti – kako graditi dinamične zmogljivosti za javno kritično vzdrževanje premoženja. Obravnava je bila opravljena z iskanjem povezave med vsebino stožčastega (Sand Cone) in Kanovega modela in akcijskimi načrti 20 največjih finskih občin. Delo na splošno temelji na študiji primera, dopolnjeni z analizo vsebine in raziskavo. Pri obravnavi odločitev prejšnjih in sedanjih občinskih svetov 20 največjih finskih občin, v obdobju 2012–2013, opazimo skupni strateški cilj, in sicer gospodarsko kontinuiteto. Študija primera pojasnjuje izvajanje večsmernih strategij za postopek doseganja skupnega reda. Dinamične zmogljivosti izvajajo več strateških

ukrepov. Za namen študije smo uporabili indeks ključnih dejavnikov (Critical Factor Index), da bi preučili partnerje v mreži. Najpomembnejša prispevka študije sta naloga dodeljevanja sredstev za doseganje večsmernih strateških ciljev in zgled, kako je bila naloga izvedena.

*Ključne besede:* lokalna javna uprava, dinamične zmogljivosti, indeks ključnih dejavnikov, Kanov model, stožčasti model

*Management* 9 (3): 239–257



University of Primorska  
Faculty of Management  
[www.mng.fm-kp.si](http://www.mng.fm-kp.si)