

## HOW THE COMPANY'S ACTIONS INFLUENCE NON-FINANCIAL AND FINANCIAL VALUE DRIVERS: MANAGERS' PERCEPTIONS IN POLISH FIRMS

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**Abstract.** This article has two main purposes: to suggest an explanation model of value creation in business that presents the influence of actions on non-financial and financial value drivers and to identify (based on qualitative research) patterns in which managers in Polish firms perceive this influence. Method used in the research is to generate self-reports about how actions performed in the firms influence value drivers, and to identify repeating (replicating) patterns of such influences in the content of these stories. Author of the article has identified three patterns in which particular actions influence non-financial and financial value drivers: actions that increase productive time outweigh actions that increase knowledge in the firms; there are no stories reported about how the reported actions influence new product introductions; only two of eight financial value drivers are perceived as final effects of the performed actions.

Key words: value drivers, value creation, productive time, knowledge management

#### **INTRODUCTION**

Explanation of how value (NPV) is created involves answering three questions: how to measure and manage the value; how to measure and manage the intangible assets; what actions (and relevant spending) can be used as the causes of increase of the immaterial assets (measured by non-financial value drivers) and the value (measured by financial value drivers).

The purpose of this article is to suggest an explanation model of value creation in business that uses actions as causes and value drivers as effects and to identify (based on qualitative research) patterns in which managers in Polish firms perceive these cause-effect relations.

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# FINANCIAL AND NON-FINANCIAL VALUE DRIVERS IN EXPLAINING VALUE CREATION IN BUSINESS

Alfred Rappaport [1986] proposed the concept of financial value drivers as an answer to the question of how to increase value (NPV) in business. The financial value drivers were defined as ways to increase the value or the elements that need to be known to compute value:

- 1. Revenue growth rate.
- 2. Increase of operating profit margin.
- 3. Reduction of taxes paid.
- 4. Increase of effectiveness of working capital investment.
- 5. Increase of effectiveness of fixed capital investment.
- 6. Reduction of cost of capital.
- 7. Extension of ability to generate cash over the cost of capital.
- 8. Development of new business unit (new source of cash generation).

The authors explaining processes of value creation with the usage of financial value drivers usually argue that: financial value drivers are better measures of financial success than the accounting measures [Rappaport 1981, 1983, 1986, 1988] and measures of employees' control and motivation (Key Performance Indicators) should be based on the financial value drivers [Ittner et al. 1997, Gorzeń et al. 2008, Sowińska-Bonder and Fietkiewicz 2008] because it reconciliates (at least partially) the interests of employees and owners.

The concept of financial value drivers raises the question: what are non-financial value drivers? What do they measure? What is their relation to financial value drivers? Various authors suggest different concepts of non-financial value drivers. Srivastava et al. [1998] and Rust et al. [2004] suggest that non-finanacial value drivers: brand awareness and image, and buyer loyalty, are equal to intangible assets. Other authors [Anderson et al. 1992, Ingram et al. 1997] suggest that the non-financial value drivers measure: the number of sales contacts with the target buyers - this is the measure of productive time (the time in which the employee's key competences are used) of salespeople; and the ratio of gained transactions to contacts with target buyers – this is the measure of knowledge that is used during the contacts with the target buyers. Consequently, the two non-financial value drivers measure two intangible assets: productive time and the employees' knowledge. Kaplan and Anderson suggest [2004] that the productive time (the time in which the activities that are needed to serve the client are performed) is the intangible asset. Kłeczek [2014, 2015] suggests that there are two non-financial value drivers that measure two intangible assets: the number of activities (cycles) in which the employee's key competences are used (they measure productive time of employees); and the ratios between the number of successful results of the activities (cycles) and the number of the activities (the cycles) that are treated as trials to achieve success (they measure knowledge of employees).

The suggestions of how to explain the process of value creation in terms of value drivers of(?) an intangible asset require one more question to be answered: what actions should be treated as causes of changes of intangible assets that are measured by non-financial value drivers?

There are two goals of this article: to elucidate the relation between the actions (causes), non-financial value drivers (and respective intangible assets) and financial

value drivers – the author of the article suggests (in the first part of the article) an explanation model of value creation in business that uses actions as causes and value drivers as effects, and to identify (based on qualitative research) the patterns of how managers in Polish firms perceive the influence of actions on the value drivers in their firms – the author of the article presents results of qualitative research (in the second part of the article). Managerial implications and limitations of the research are presented in the end of the article.

#### THE MODEL OF VALUE CREATION

Figure presents the model of relations between actions (causes) and value drivers (effects) in the firm. The model is based on an assumption that the goal of an enterprise is to increase the value drivers and, finally, to increase value (NPV). Consequently, the non-financial value drivers are an important complement of financial value drivers in the analysis of value creation and the question of what actions influence both kinds of value drivers is the main problem in corporate management.

The first non-financial value driver in the model is the number of an employee's activities (cycles) in which his/her key competences are used. The number of the activities can concern the work of particular employees (the more such activities are realized the better) or teams of employees cooperating in processes of value creation in the firm (the shorter time one employee is waiting for the effects of work of another employee, the better). The number of activities measures the first immaterial asset in business: the productive time.

The second non-financial value driver is the ratio between the number of successful results of the activities (cycles) and the number of the activities (the cycles) themselves, that are treated as attempts to reach success. The examples of such a ratio are: (1a) the number of gained contracts to the number of a salesperson's contact with the target buyers, or (1b) reduction of defect number in production or other functions of business. (2) The number of new products introduced into the market to the number of new product projects carried in the firm. The increase of a particular success ratio can concern the effects of work of a particular employee or group/team work. The success rates measure the second intangible asset in business: the knowledge.

There are two types of actions that increase value in business: the actions addressed to allocation of assets, and the actions addressed to institutions ("rules of the game").

Typical actions that increase the productive time asset (reduce the unproductive time) are: (1) automating of secondary activities (the activities in which the main competences of employees are not used) or employing less skilled (and paid) persons to perform those activities. Typical actions that increase the success ratio are: training and easing the knowledge transfer between the employees that cooperate in a processes of value creation. Langlois [2002], Baldwin and Clark [2006], Pil and Cohen [2006], Zhu et al. [2014] all argue that making the knowledge transfer easier increases success ratios. Walker [2011] suggests that creation of social relations between employees that cooperate in processes of value creation is one of the actions undertaken by firms to increase value. One typical institutional (concerning "rules of the game") action that can positively influence the value of business is relaying a motivation system on financial value drivers to align the

interest of employees with the interest of the owner (NPV), and consequently orientate the employees' behavior on increasing of NPV. North [1971] suggests that institutional change influences the effectiveness. Abowd [1990] supplied empirical evidence that motivational systems of managers influence the financial results of the companies in the next year, but the author omitted measuring non-financial value drivers in his research.

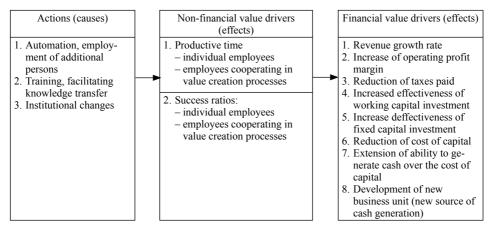


Fig. Actions, non-financial and financial value drivers. Source: Original research.

Summarizing comments to the figure, one can say that changes of non-financial and financial value drivers are correlated, but the company's actions concerning time, knowledge and institutions are the real causes of the changes. The actions can be addressed to individual employees, or to employees that cooperate in processes of value creation (so should not be addressed to employees that don't cooperate in such processes).

## PERCEPTIONS OF HOW THE COMPANY'S ACTIONS INFLUENCE NON-FINANCIAL AND FINANCIAL VALUE DRIVERS: QUALITATIVE RESEARCH

Based on the model presented in the Figure, the author of this article has formulated a following problem: How do managers perceive the relation between actions (the causes) and value drivers (the effects) in their firms? Two research questions follow: what actions are perceived as helping with elimination of unproductive time, and which financial value drivers are perceived as the final consequence of these actions?; What actions are perceived as influencing the success ratios, and which financial value drivers are perceived as the final consequence of these actions?

To answer the research questions, the author performed qualitative research in June and July 2015. Twenty two managers, MBA students at the Wroclaw University of Economics participated in the research. Every participant reported (using structured form presented in the appendix) four stories (cases) about how the actions taken in his/her firm influenced non-financial and financial value drivers. Eighty eight cases from various industries (construction, transportation, automotive, logistics, insurances, IT, mining, steel structures, printing, machinery, commercial real estate and tourism) in years 2011–2015 have been generated this way.

The analysis of stories involved looking for recurring (replicating) patterns (minimum twice in stories from different firms) of actions influencing value drivers, and comparing the patterns with the model from the Figure and identificating which of the model-patterns were described in the stories and which were not.

Table.	Perceived relations	between actions ar	d value drivers

Actions	Non-financial value drivers	Non-financial value drivers (time to effect)
Productive time		
Automation of secondaryactivities	<ul> <li>Increase of productive</li> <li>time for individual employees</li> <li>Increase of productive</li> </ul>	Sales, operating profit margin (0–3 months)
Secondary activities implemented by others		
Financial bonuses for non-financial or financial value drivers effects		
Online employees contact instead face to face contact		
Reduction of distance between places in which primary and secondary activities are implemented	time for employees that cooperate in value creation processes	
Success rates		
Periodical meetings of salepersons and other empolyees that cooperate in value creation processes (generation of transfer of knowledge).	Increase of sales effec- tiveness, reduction of number of complaints	Sales, operating profit margin (1–6 months)

Source: Original research.

#### WHAT ACTIONS REDUCE THE UNPRODUCTIVE TIME AND POSITIVELY INFLUENCE THE FINANCIAL VALUE DRIVERS?

Author of this article identified five patterns of actions that increase productive time (reduce the unproductive time) and consequently increase two financial value drivers: sales and operating profit margin.

The first three actions; i.e. automation of secondary activities; secondary activities implemented by others; financial bonuses for non-financial (reducing absenteeism) increase productive time for particular employees. The other two actions; i.e. online employees contact instead of face to face contact (elimination of commute time); reduction of distance between places in which primary and secondary activities are implemented (reduction of physical distance between production, service, sales and accounting departments), reduces the time employees wait for work results of others, and so reduce the time of cooperation. Increases of sales and operation profit are the financial effects (time to effect is 0–3 months) of all five actions addressed to productive time increase.

Managers that participated in the research also reported actions concerning the increase of work time control, but these actions gave mixed results in non-financial value drivers: increase of productive time or increase of number of failures and necessity of repeating operations. They did not tell any story as to: What actions influence the relation between the number of new products introduced to the market and the number of projects of new products; Which actions that increase productive time can increase the other six financial value drivers.

Summarizing the analysis of the stories that influence productive time, one can answer the first research question. Five types of company actions influence the elimination of unproductive time in business and two financial value drivers (sales and operating profit margin).

The identified patterns of actions that influence the increase of productive time (unproductive time reduction) are similar to patterns identified in the previous research [Kłeczek 2014] in which the author also identified the influence of additional actions: integration events and "quality circles" on reducing unproductive time of waiting for the results of others in cooperation in processes of value creation.

## WHAT ACTIONS INCREASE THE SUCCESS RATES AND POSITIVELY INFLUENCE THE FINANCIAL VALUE DRIVERS?

The author identified one pattern of action influencing success rates and thus two financial value drivers – sales and operating profit margin – as seen in the Table: periodical meetings of salespersons and other employees (engineering, production, inventory departments) that cooperate in value creation processes (generating transfer of knowledge) positively influence the relation between sales successes (transactions) and the number of contacts with target buyers, reduces the number of complaints, and finally increases sales and operating profit margin (time to effect 1–6 months).

Managers that participated in the research also reported actions that involved organization of common work areas for sales and engineering departments, but the effects of these actions were mixed. They didn't tell any story as to what actions influence: the relation between the number of new products introduced to the market and the number of new product projects overall, or the other six (apart from sales and operating profit margin) value drivers.

Summarizing the analysis of the stories that influence success rates, one can answer the second research question: one type of company's actions influences positively the one success rate and two financial value drivers (sales and operating profit margin).

The identified pattern of actions that increase success rates is similar to pattern identified in the previous research [Kłeczek 2014], in which the author also identified other actions (training and purchase of new equipment) concerning transfer of knowledge that increase success rates.

#### SUMMARY AND DISCUSSION

Summarizing the results of the research one can formulate: a theory of how managers perceive the relations between actions (causes) and value drivers (effects), and limitations of the research performed and recommendations for future research of the problem.

Firstly, managers that participated in the research perceive only two (sales and operating profit margin) of eight financial value drivers as the final result of actions that increase productive time and success ratios. The question why any of the other six value drivers are not perceived as the effect of the actions remains unanswered.

Secondly, the identified actions aiming to increase productive time give quicker (0-3 months) results than the actions aiming to improve success rations (1-6 months), so the time management actions give quicker results than knowledge management actions.

The questions that can be asked in future research are:

Is the size of the effects similar (there were no questions about the size of the effects in the performed research);

How long do the effects last (six months, one year or longer).

Thirdly, the scope of identified actions (five actions) to increase productive time is broader than the scope of actions (or action) to increase success ratios.

Fourthly, the managers did not report any actions that increase one type of success ratios: the relation between new products introduced to market and new product projects overall in their companies. This could be a consequence of construction of the form (appendix) used to generate the data (stories) in which, in lines "action 3" and "action 4," devoted to actions that increase the success ratios, was no distinction between two types of the success rates. In future research, the form should distinguish the two types of success rates as the effects of the actions in question.

## APPENDIX

The form used in the research to generate stories about actions that influence non-financial and financial valued drivers.

Actions	Effects - changes in financial and non-financial value drivers
A company in branch performed (when? month/year) an action aiming to eliminate unproductive time, consisting of geared towards the employees on the following posts: ("all" is not an acceptable answer)	employees on the following posts: This change consisted of an increase/decrease* in the amount of activities (what activities?) in which key competences (what competences?) are used, and in an increase/decrease* in the amount of activities (what activities?) in
A company in branch performed (when? month/year) an action aiming to improve knowledge of , consisting of, geared towards the employees on the following posts: ("all" is not an acceptable answer)	improvement/decline* of the success to attempts ratio of the activities consisting of and those consisting of, making a positive/negative* impact on the financial value drivers (which driver?, in what time

#### PLEASE FILL THE BLANKS

\* Delete as appropriate.

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#### REFERENCES

- Abowd, J.M. (1990). Does performance-based managerial compensation affect corporate performance? Industrial and Labor Relations Review, 43, 53–72.
- Anderson, R.E., Hair, J.F., Bush, A.J. (1992). Professional Sales Management. McGraw-Hill, New York.
- Baldwin, C.Y, Clark, K.B. (2006). Modularity in the design of complex engineering systems. Springer, New York.
- Gorzeń, W., Piernicki K., Pniewski, K. (2008). Formułowanie i komunikacja strategii wzrostu wartości. [In:] A. Szablewski, K. Pniewski, B. Bartoszewicz (Eds), [Value Based Management]. Koncepcje, narzędzia, przykłady. Poltext, Warszawa, 119–120.
- Ingram, T.N., LaForge, R.W., Schwepker, Ch.H. Jr. (1997). Sales management. Analysis and Decision Making. (3rd ed.). The Dryden Press, New York.
- Ittner, C.D., Larcker, D.F., Rajan, M.V. (1997). The Choice of performance Measures in Annual Bonus Compensation. The Accounting Review, 72, 2, 231–255.
- Kaplan, R.S., Anderson, S.R. (2004). Time-Driven Acivity-Based Costing. HBR Publishing Corporation.
- Kłeczek, R. (2014). NPV-Relevant Product Description and B2B Marketing Contribution to Value Creation. Management and Business Administration. Central Europe, 22, 4 (127), 109–117.
- Kłeczek, R. (2015). Productive time and success rates: their causes and effects in Polish firms. [In:]
   E. Magier-Łakomy (Ed.), Potencjał kulturowy i społeczny oraz zasoby ludzkie w procesach zarządzania. Prace Naukowe Wyższej Szkoły Bankowej w Gdańsku, 41, 149–163.
- Langlois, R.N. (2002). Modularity in technology and organization. Journal of Economic Behavior & Organization, 49, 19–37.
- North, D. (1971). Institutional change and economic growth. The Journal of Economic History, 31 (1), 118–125.
- Pil, F.K., Cohen, S.K. (2006). Modularity: Implications for imitation, innovation, and sustained advantage. Academy of Management Review, 31, 995–1011.
- Rappaport, A. (1981). Selecting strategies that create shareholder value. Harvard Business Review, May–June, 139–149.
- Rappaport, A. (1983). Corporate performance standards and shareholder value. Journal of Business Strategy, 3, 28–38.
- Rappaport, A. (1986). Creating Shareholder Value. A Guide for Managers and Investors. The Free Press.
- Rappaport, A. (1988). Cash Flow Analysis of Corporate Performance. Small Business Reports, 13, 9, 80–86.
- Rust, R.T., Ambler, T., Carpenter G.S., Kumar, V., Srivastava, R.K. (2004). Measuring marketing productivity: Current knowledge and future directions. Journal of Marketing, October, 76–89.
- Sowińska-Bonder, K., Fietkiewicz, D. (2008). Motywowanie menedżerów do realizacji wzrostu wartości. [In:] A. Szablewski, K. Pniewski, B. Bartoszewicz (Eds), [Value Based Management]. Koncepcje, narzędzia, przykłady. Poltext, Warszawa, 159–182.
- Srivastava, R.K., Shervani, T.A., Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. Journal of Marketing, 62, 1, 2–18.
- Walker, J.W. (2001). Zero defections? Human Resource Planning, 24 (1), 6-8.
- Zhu, F., Sun X., Miller, J., Deng, Z. (2014). Innovations in Knowledge Management: Applying Modular Design. International Journal of Innovation Science, 6, 2, 83–96.

## JAKIE DZIAŁANIA WPŁYWAJĄ NA NIEFINANSOWE I FINANSOWE CZYNNIKI WZROSTU WARTOŚCI – PERCEPCJE MENEDŻERÓW W POLSKICH FIRMACH

**Streszczenie.** Celem artykułu jest przedstawienie modelu wyjaśniającego, w jaki sposób podejmowane w firmach działania wpływają na niefinansowe i finansowe czynniki wzrostu wartości, oraz identyfikacja (na podstawie badania jakościowego) powtarzalnych sposobów postrzegania tego wpływu przez menedżerów w polskich firmach. Metoda wykorzystana w badaniu polega na generowaniu opisów działań podejmowanych w polskich firmach w celu uzyskania wpływu na niefinansowe i finansowe czynniki wzrostu wartości oraz identyfikacji powtarzalnych schematów w treści tych opisów. Autor artykułu zidentyfikował trzy schematy wpływu działań na niefinansowe i finansowe czynniki wzrostu wartości: zakres działań zwiększających czas produktywny jest większy od zakresu działań zwiększających wiedzę, nie zostały wygenerowane żadne opisy wpływu podejmowanych działań na wprowadzanie nowych produktów, tylko dwa spośród ośmiu czynników wzrostu wartości są postrzegane jako efekt podejmowanych działań.

Słowa kluczowe: czynniki wzrostu wartości, tworzenie wartości, czas produktywny, zarządzanie wiedzą

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