

## **Strategic Alignment and Financial Performance Indicators**

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**Abstract:** After 1993, the concept of strategic alignment is evaluated from the connection between IT and business to much broader definitions in which the connection between all business functions, horizontally and vertically, and later also with projects and stakeholders is mentioned. To achieve strategic alignment there must be a coordination between the strategy of organizations and those who contribute to the implementation of the strategy and the actual performance of an organization. This process is called Human Oriented Performance Management (HOPM). The HOPM model consists of four dimensions: strategy translation, information and visualization, dialogue and action orientation, and continuous improvement and organizational learning. To measure the effect of strategic alignment a range of financial performance indicators are used. Based on a literature review this paper explores which financial performance indicators could be used to measure the effect of HOPM. The literature was selected over a period from 1996 – 2015. The research is not only focused on the top of the strategy map, but also on the cause-effect relationships in the strategy map. The underlying performance indicators in the strategy map can show on which figures the dialogue in the HOPM model about strategy implementation must be based. This dialogue is the input to action in which strategic alignment comes about. The goal of the research is to optimize this dialogue by looking for performance indicators that can show the effect of HOPM.

**Keywords:** Strategic alignment, Human Oriented Performance Management, Financial performance indicators, Organization performance, Literature research.

### **1. Introduction**

In 1993, Henderson and Venkatraman wrote an article with the title 'Strategic Alignment: leveraging Information technology for transforming organizations'. From that moment, they were the founding fathers of the concept IT alignment. Alignment between business and IT is about the contribution of IT for business processes and management decisions. When the cooperation between business professionals (managers) and IT professionals is perfect, than they are aligned. Twenty years later, Labovitz and Rosansky (1997) published a book with the title 'The power of alignment: How great companies stay centred and accomplish extraordinary things'. In this book the focus on the way how alignment can be achieved. According to Blomme (2003), this was an issue which received little attention in the literature. In the meantime, more publications are appeared who pay attention on this process of alignment (Crosby, 2016; Phillips and Phillips, 2012; Miller, 2013; McCauley and Fick-Cooper, 2015; Papke, 2013; Harrington and Voehl, 2011; Van Dinten, 2013; Eiler and Austin, 2016). In this process, the human factor seems to be an important factor (De Waal and Ter Hedde, 2014; De Waal et al, 2015). The question is however, what triggers individuals (employees) in this process and what are the (performance) indicators to stimulate their behaviour.

In the next session we give an overview of strategic alignment and introduce the Human Oriented Performance Management (HOPM) model. Thereafter, we describe the literature research on financial performance indicators and the results. We will close the this paper with the conclusions of this research and opportunities for further research.

### **2. Theoretical foundation**

#### **2.1 Strategic alignment**

Strategic alignment is a concept that is closely related to performance management (Van Dinten, 2016). So, it is not surprising that Kaplan and Norton who became well-known in the early '90<sup>th</sup> with their construction of the balanced scorecard published a book named 'Alignment' (Kaplan and Norton, 2006). They published articles about the balanced scorecard concept that show how intangible (soft) factors can be made hard, tangible and measurable. In their first article they already wrote about the pivotal role of the organizational strategy: "The scorecard puts strategy and vision, not control, at the center" (p.78). A new insight that was provided by their study of organizations showing these organizations using the balanced scorecard more often in that way. In 1996 their book 'The Balanced Scorecard: Translating Strategy into Action' (Kaplan and Norton, 1996) was published, here we find these insights of their study on their way becoming well-known. Four years

later they published another book: 'The Strategy Focused Organization' (Kaplan and Norton, 2000). In this book they describe the result of their 10-year experience of working with organizations, people, using the balanced scorecard. In these years the focus shifted from getting information, insights in the present performance of the organization, to getting a solid foundation for target setting and so creating an instrument that can be used for strategy development, strategy execution and the use of the PDCA-cycle. Another four years later they published 'Strategy Maps: Converting Intangible Assets into Tangible Outcomes' (Kaplan and Norton, 2004) in which they show how critical success factors, playing an important role in the balanced scorecard, are connected and influencing each other and also how they are connected with the process of value creation. Everything that is of a critical importance (the critical success factors) is direct or indirect connected with each other which makes optimization possible. Here we see alignment, a concept consisting of the components connection, tuning and commitment (Van Dinten, 2013). Alignment is often a problem hindering the execution of an organizations strategy. Unfortunately, also in case of an excellent strategy. Without a good execution you're still empty handed (Martin, 2010). Beer's book 'High Commitment, High Performance' (2009), learns us about blockades, roadblocks that hinder getting aligned. All these blockades have a relation with leadership and communication and he considers them as silent killers because the people who contribute to the execution of the strategy know them, but staff members almost never openly discuss them with the members of the management team, although they discuss them among peers frequently. Beer (2009) considers this an organizational silence, making it possible for these silent killers to do their destructive work undisturbed. We find all the blockades as 'a team' doing its destructive work in organizations. It's never just one or two. Therefore it is a syndrome, the complete set of symptoms of an illness. An illness hindering organizational success or making it even impossible. According to Van Dinten (2013) this can be seen as a misalignment syndrome, which he made visible and measurable for specific situations. So, this makes it possible to calculate the extent of this problem and as we know "What gets measured gets managed" (Peter Drucker is often quoted having said this: however, there is no reference proving it). Misalignment is no innocent illness. It makes it, we mentioned it before, impossible or problematic to execute strategies or sub optimizes the success of the organization. Regardless the definition of this success. Because both profit and not for profit organizations can be a high commitment, high performance (HCHP) organization according to Beer's definition. A HCHP is "an organization that achieves sustained high levels of performance through organizing and managing to: (1) implement its strategy, (2) elicit commitment, and (3) enable ongoing learning and change" (Beer, 2009). Therefore, controlling human behaviour in organizations is the essence of management control writes Vaasen (2015), who came to a definition of management control from the work of Anthony (1965): "...the process by which managers influence other members of the organization to implement the organization's strategies". From this we conclude that management control is closely connected with strategic alignment, since his definition uses the concept of alignment implicit in the same way we do. Alignment in an organization is always directed on getting everybody on the same page, on making them show behaviour that is in line with the strategy. Alignment is the capability to tune the contribution each and everyone makes to the realization of the organizational strategy. What gets tuned is concrete behaviour. Departments, processes, but also individual employees can be aligned or not. It's always people who tune with each other, so blockades that hinder this are something between people as well (Van Dinten, 2013). Poor alignment makes an organization fragile: one is not able to do anything useful with the options that are available (Taleb, 2012). In literature we find, as we mentioned before, also IT alignment and alignment from a HR/Communication perspective. In the case of alignment in the HR/Communication perspective, it is commitment what we are talking about. Employee commitment regarded as a key to success (Aarnoutse, 2016). From a strategic perspective (strategy realization) the emphasis is placed on tuning. Commitment can be considered to be a success factor therefore.

Another issue is mentioned by Barr (2017). She describes alignment as follows: "Alignment means that goals and measures and activities throughout an organization sensibly and usefully relate to one another. These relationships make it possible for everyone to see how they contribute to the organisation" (p.110). When alignment becomes visible in the set of aligned scorecards that we can find in organizations (as soon as they have departments), an organization is aligned. Not necessarily good aligned, but aligned anyway. The use of (critical) performance indicators can result in insightful cause-effect relations that are useful for employees and make learning (PDCA-cycle) possible. This is important for the continuous improvement of the organization. Therefore 'learning (and growth)' is one of the standard balanced scorecard perspectives. Often, performance indicators are used to judge employees (sometimes gentle words like 'assess' are used instead of 'judge'). Judging employees can do more harm than is helpful for the organization. In that case the balanced scorecard with its performance indicators isn't a tool that can be used to lead the organization substantiated

(based on evidence) towards the targets it aims at, but a stick to beat them towards the target. According to Barr (2017) "... high-performance organisations don't use measures for judging. They see measures as tools in people's hands, not rods for their backs" (p.55). According to Barr it is possible to keep them "accountable for using measures to continually improve business results; they are not accountable for hitting the targets for those measures"(p.56). What we learn from this analysis is that paying attention to the human side of alignment is crucial to be successful for any organization, as employees are each and every one a bracelet in the process of executing the strategy. In the next section we will describe how this process occurs and which dimensions are important.

## 2.2 Human Oriented Performance Management

Performance Management (PM) is described by Gartner Inc. (2006) as follows: "Performance Management is the combination of management methodologies, metrics and IT (applications, tools and infrastructure) that enable users to define, monitor and optimize results and outcomes to achieve personal or departmental objectives while enabling alignment with strategic objectives across multiple organizational levels (personal, process, group, departmental, corporate or business ecosystem)." According to this definition performance management can be considered a multidisciplinary domain. In order to achieve increased performance many factors (organization, management, employees, processes, IT-systems) need to work together. In practice this multidisciplinary cooperation seems to be very difficult (Gartner Inc., 2013). It seems that more is needed than just data gathering and reporting the outcomes. The influence of human behaviour on performance is more and more important (Jaenka, 2013; Nazier et al, 2013; Schläpke et al, 2013). Based on these observations, De Waal and Ter Hedde (2014; Ter Hedde and De Waal, 2015) have developed a Human Oriented Performance Management (HOPM) model. The HOPM model is presented in Figure 1.



**Figure 1:** Human Oriented Performance Management-model

The main setup of the HOPM model is based on Argyris' theories on double loop learning and the Ladder of Inference (Argyris, 1992; Argyris and Schön, 1974, 1978). The first learning loop is the bottom loop around the question: Are we doing things right? It concerns all the actions that are taken place within organization as a result of strategic choices made. The second learning loop is concerning the question in the top part of the model: Are we doing the right things? This concerns the evaluation whether the actions taken have resulted in outcomes that were predicted within the strategy. The Ladder of Inference (Argyris and Schön, 1974) describes the process of thinking that people go through to get from a fact to a decision or action. The thinking stages can be seen as rungs on a ladder. Starting at the bottom of the ladder, we have reality and facts. From there, we experience these selectively, based on our beliefs and prior experience. Next, we interpret what they mean and apply our existing assumptions, sometimes without considering them. Thereafter, we draw conclusions based on the interpreted facts and our assumptions and develop beliefs based on these conclusions. Finally, we take actions that seem "right" because they are based on what we believe. This can create a vicious circle. Our beliefs have a big effect on how we select from reality, and can lead us to ignore the true facts altogether. Soon we are literally jumping to conclusions – by missing facts and skipping steps in the reasoning process.

Translated to the HOPM model, the Ladder of Inference theory assumes that to improve organizational performance it is crucial to start the dialogue with facts about the execution of the strategy and the results of the actions taken. Within the HOPM context these facts mostly concern the scores on the organization's KPI's as visualised in management reports and on dashboards.

The HOPM model consists of four main dimensions:

1. Strategy translation: To what extent are the objectives and strategy of the organization translated into a focused, well-balanced set of Key Performance Indicators?
2. Information, measurement tools and visualization: To what extent is the information within reports and dashboards easy to understand and can it easily be communicated? Furthermore does the information reflect current (KPI) performance?
3. Dialogue and action orientation: To what extent are management and employees involved in dialogues and focussed on actions to improve performance?
4. Continuous improvement and organizational learning: To what extent are management and employees focused on challenging themselves and the current performance of the organization?

In this model is measurement of performance indicators a key element. Not only to give feedback to individual performances, but also to measure the progress of human oriented interventions of performance management. However, the question is which performance indicator can be used to measure this progress. To answer this question, a literature review is conducted to find out which indicators are used to measure performance management. For practical reasons, the literature review is restricted to financial performance indicators.

### **3. Research methodology**

A literature review was conducted to identify papers which describe financial performance indicators. Full-text, peer reviewed articles were searched worldwide libraries in a combination of 8 databases, including WorldCat.org, Business Source Complete, ScienceDirect, Academic Search Complete, Directory of Open Access Journals, ACM Digital Library, Emerald Group Publishing Limited, and SAGE Journals. The selected databases were searched based on the topic-related keyword "financial" AND "performance" AND "measurement" in the title for articles published between 1996 and 2015. This resulted in 578 articles. The further selection of the articles were based on the following criteria:

- The object of the study must be financial performance measurement;
- The full text must be available in public or through the university library;
- Only articles in English were selected.

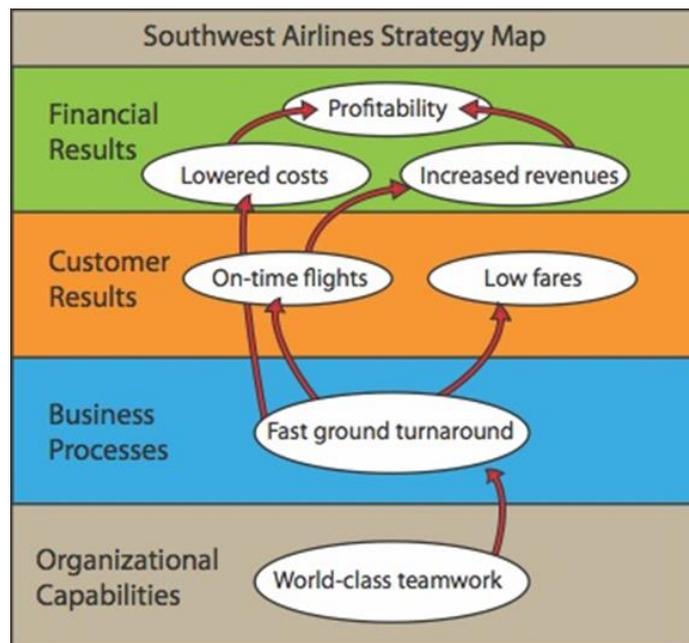
Application of the criteria on the keywords and the perusal of abstracts, resulted in 24 articles that could be used for this study.

### **4. Results**

The findings of the literature review are presented in Appendix A. In total, 60 different performance indicators were indicated in the studies. It is remarkable that many indicators are used only in one study. The most used indicators are Return on Assets (ROA), Economic Value Added (EVA), Return on Equity (ROE) and Return on Investment(ROI), followed by Earnings Per Share (EPS) and Net Profit Margin (PM). Furthermore, we can see that some studies use more indicators and some studies only one or two.

### **5. Discussion and conclusion**

From the results we can conclude that in most studies high level financial performance indicators are used to indicate organizational progress. From an organizational perspective, these indicators are at the top of the strategy map. Herein come together the underlying perspectives of what is important for the organization and what the focus is to carry out the strategy (Marr, 2012). These underlying perspectives are for a human oriented approach of performance management extremely important. Figure 2 gives an example of a simple strategy map.



**Figure 2:** A simple strategy map showing the relations between critical success factors (from McKnight, Kaney and Breuer, 2010)

The strategy map can be used to see which aspects contribute to the overall (financial) success and which elements are essential for the result to be achieved (Van Dinten, 2016). If we descend into the series of performance indicators that influence each other and different organizational levels, then gradually the person who performs this performance becomes more and more visible. To investigate the success of a human oriented approach of strategic alignment it is therefore important to construct a strategy map and indicate which team or person is responsible for a specific (sub) performance indicator. In the construction of the strategy map must first and foremost be the perspective of the individual employee. Strategy maps are the visual presentation of the connections in the balanced scorecard, making it more useful for communicating about the strategy. If the connections are visible and the importance of this is recognized, tuning of the different roles and contributions is next. These important factors are called critical success factors for a good reason. Their importance is critical, it is decisive of nature for the organizational success. The (critical or key) performance indicators that are used to measure the qualitative critical success factors and so giving them a value are buttons used to test the effects of interventions. These effects flow through the strategy map from one critical success factor to one or more others. This makes it easy to communicate. Management already had a language of its own to discuss important issues. Now they can visualize what they are discussing.

What (financial and other) performance indicators at the operational level are relevant can be seen in the strategy map of the particular organizational unit. First we can distinguish two types of relevant indicators:

(1) Indicators linked to indicators of a higher organizational level. It is easy to see the relevancy of these indicators to the most important organizational success. In case of profit organizations this means that that they are relevant to their financial success.

(2) Indicators that measure hygiene factors on the particular organizational level/unit. For example: An indicator monitoring how well a unit respects the limits of its budget. If they are not successful in avoiding to overstep the budgetary limitations it will be their problem at the beginning. But, the question 'to what extend' is important when problems get out of hand, because eventually they will be problems that harm the organizational success.

What performance indicators measure hygiene factors depends on the organization and the level or unit. What performance indicators form the main road to –for example- the most important financial indicator in case of a profit organization can be seen in the successive strategy maps. Because they are all connected, basically any performance indicator can become literally a critical performance indicator. We suppose that any performance indicator that conquered a place in the balanced scorecard (and obviously also in the strategy map) is relevant. By a direct connection to the main performance (cat.1) or indirectly (cat.2). An indicator that is not, has no right to exist. By steering on a particular indicator this can change its influence and relevance (Kaplan & Norton, 2004, 2006). What we need is further research and discussion about what indicators are

influenced most by a human oriented performance management approach and whether these indicators can be found in operational level scorecards alone or also in the balanced scorecard at organization level.

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## Appendix 1: Overview of financial performance indicators

	Hoque and James (2000)	Lipe and Salterio (2000)	Kaplan and Norton (1993)	Ittner et al (1997)	ELY (1991)	Davis and Albright (2004)	Muhammet Mercan (2003)	Evans (2004)	Laitinen (2002)	Dalton et al (2003)	Li (2008)	Johnson (2009)	Cohen (2008)	Ponraj Priya (2009)	Bardla (2008)	Brocke (2007)	Abernethy (2013)	Cooper (2013)	Grigouroudis (2012)	Ittner (2013)	Jakub (2015)	Koufteros (2014)	Rytková (2013)	Striteska (2012)	Total	
• Annual earnings																				X					1	
• Asset turnover					X																					1
• Average return on equity							X																			1
• Business unit profit																		X								1
• Cash flow			X	X																						2
• Cashflow Return on Investment (CROI)																	X						X			2
• Catalog profits		X																								1
• Cost of capital																						X				1
• Cost of Funds						X																				1
• Cost reduction				X																						1
• Current Ratio (CR)													X						X							2
• Daily Sales Outstanding (DSO)																								X		1
• Debt Ratio (DR)								X				X							X							3
• Earning Assets/Total assets							X																			1
• Earnings Before Interest and Taxes (EBIT)																		X				X		X		3
• Earnings Per Share (EPS)				X						X					X									X		4
• Economic Value Added (EVA)	X		X				X								X		X		X	X			X	X		9
• Equity dept																						X				1
• Free cash flow																							X			1
• Generation of cash flow	X																									1
• Inventory turnover																			X					X		2
• Loan Volume						X																				1
• Loan Yield						X																				1
• Market share relative to retail space		X																								1
• Market value									X																	1
• Net Charge-Offs						X																				1
• Net income				X																						1
• Net profit/Total Liabilities							X																			1
• Net Profit Margin (PM)													X	X			X		X							4
• New store sales		X																								1
• Non-Interest Deposit Volume						X																				1
• Non-Interest Expense						X																				1
• Non-Interest Income						X																				1
• Operating income	X			X																						2
• Operating Revenue (OR)													X													1
• Operational cash flow									X																	1
• Personnel expenses/ Earning assets							X																			1
• Profit forecast reliability			X																							1
• Profitability								X																		1
• Project profitability			X																							1
• Quick ratio									X																	1
• Return on Assets (ROA)				X	X					X	X	X	X	X			X			X		X		X		11
• Return on Capital (ROC)				X				X																		2
• Return on Capital Employed (ROCE)	X	X													X											3
• Return on Equity (ROE)				X	X				X				X		X								X			6
• Return on Investment(ROI)	X						X		X							X								X	X	6
• Return on Sales (ROS)		X							X	X																3
• Return on total assets (ROTA)																							X			1
• Revenue / Salary Expense						X																				1
• Revenue growth							X																			1
• Revenues per sales visit		X																								1
• Sales				X																						1
• Sales backlog			X																							1
• Sales growth	X	X																								2
• Shareholder value								X														X				2
• Shareholders' equity							X																			1
• Stock price return				X																						1
• Stock return					X																					1
• Total expenses/ Total income							X																			1
• Value based management																						X				1