

Towards a More Networked Approach for Performance Measurement

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There is a gap between the state of performance measurement and much of the innovation taking place in business models. Where business models are becoming increasingly networked due to outsourcing and various forms of inter-organizational collaboration, performance measurement remains a very hierarchical exercise. This paper discusses the use of transaction cost economics (TCE) in performance measurement. The paper introduces TCE – which is not traditionally well-known by performance management professionals – and applies it to performance measurement. It proposes a framework of three levels of relationships organizations can have with their stakeholders; transactional relationships, added-value relationships and joint-value relationships, and how to use these three levels to define better performance indicators.

1. Innovation in business models

The average size of many firms in various industries has been shrinking (Malone, 2004). An important reason is that outsourcing has become commonplace (Cohen, Young, 2006). Organizations routinely outsource facilities services such as cleaning, cafeteria services and security. Increasingly IT tasks, such as helpdesk services, complete data centers, and even system development have been outsourced as well. The same trend can be observed in areas such as Finance, HR, logistics and other business domains. In many cases, cost savings are an important driver.

Outsourcing is not the only explanation. As early as 1988, Harvard Business Review described value-adding partnerships (Johnston, Lawrence, 1988). Today, many of these alliances between organizations can be observed in practice. Think of contract research in pharmaceutical companies, P&G's much touted global innovation network and technology alliances between competitors to promote technology standards. Currently, significant business innovation comes from co-development. Consider organizations from different industries that seek collaborative innovation, such as the Senseo coffee machine, co-developed by Douwe Egberts and Philips; Nike+, co-developed by Nike and Apple, combining a special sensor in Nike shoes with the iPod nano to produce jogging statistics; or an integrated loyalty program between American Express and Air France / KLM Airlines. These are examples of relationships driven less by cost savings —as in outsourcing— and more by economies of scale, revenue growth, faster time to market or product innovation.

2. Discussing Transaction Cost Economics

With inter-organizational relationships impacting business performance, management attention to performance measurement within these relationships should increase. On managing inter-organizational relationships we can draw on a large body of academic research called Transaction Cost Economics (TCE) (Coase, 1937; Williamson, 1975). TCE emphasizes that, in addition to production costs, transaction costs across markets or within organizations should be taken into account¹. Transaction costs can be composed into four separate costs related to transacting (Dyer, 1997):

- (1) search costs, identifying potential partners;
- (2) contracting costs, negotiating and writing an agreement;
- (3) monitoring costs, setting up a governance system to ensure obligations are met;
- (4) enforcement costs, bargaining, if the contractual obligations are not met.

TCE emphasizes the risks of doing business. It describes the concept of “bounded rationality,” which means that suppliers and customers (contractors) cannot predict every event and cater for that within a contract. This introduces risk. TCE also describes “opportunistic behaviour” among business partners, and the impact of those behaviours on cost and pricing. Sometimes, a customer dictates new terms after the supplier made a specific investment in doing business. If the customer leaves, the supplier would have to write off the specific asset investment. TCE refers to customer-specific investments such as product adaptations, administration, machinery or account management, as “asset specificity.”

In general, TCE helps determine whether transactions should take place in a market, or within the walls of an organization. If transaction costs between parties or on the open market become too high (due to complexity and/or uncertainty), TCE recommends that those activities take place within the hierarchy of the organization.

TCE has been widely elaborated upon since its introduction. For instance, it has been described as a single-party exercise, focused on cost-minimization (Zajac, 1993). Such an approach, which takes only the cost objectives of one’s own organization into account, could actually *invite* opportunistic behaviour among business partners. In other words, opportunism could be a variable, of which the impact increases if the relationship is managed on primarily a cost and transactional basis (Ghoshal, Moran, 1996).

The applicability of TCE goes beyond cost, however, to include other areas of value. In addition to the examples highlighted above, potential advantages of participation in inter-organizational relationships include (summary based on Barringer, Harrison, 2000):

- Access to a particular resource, such as capital, skills, intimate knowledge of a (foreign) market, production facilities;
- Economies of scale, finding partners to expand production volume, and share risk and volume;
- Co-development of a product or service, learning from each other;

- Speed to market, involving for instance contract manufacturing;
- Flexibility compared to one's own organization;
- Collective lobbying power to influence government agencies;
- Neutralizing competitors and building combined market power.

In addition to moving from a discussion of *transaction cost* to *transaction value*, the TCE discussion also has expanded from one about *transactional relationships* to one about more *continuous relationships*. In transactional relationships, price is the most important component, and switching costs are generally assumed to be low. For new transactions, new partners could be contracted. However, an argument can be made for considering longer-term, less cost-oriented relationships, based on trust, ease of doing business, competence, speed of delivery, and so forth. More continuous relationships have a positive effect on transaction costs (Dyer, 1997). A continuous relationship is often in the best interest of both parties in supplier/customer relationships. For customers, repeated transactions with a small set of suppliers and economies of scale, extensive information sharing, trust and adapted processes lower the cost of doing business on the longer term.

To better coordinate continuous relationships, suppliers seek to adapt to their customers (asset specificity). Adaptations are made in a number of different dimensions (Johanson, Mattsson, 1987). In some cases products or services are tailored to meet the needs of a specific customer. Think of printing a customer's logo on a standard product, for example, or the other end of the spectrum – building a product from scratch according to a customer's specifications. Another form of adaptation can be found in logistics and administration, connecting systems to monitor stock levels or to perform joint planning. Lastly, instead of adapting products, services, processes or systems, organizations can also co-develop complete new products or services by adapting to one another by contributing skills and capitals.

Today, typically the term "network" is used to describe inter-organizational relationships (Thorelli, 1986; Mouritsen, Thrane, 2006; Håkansson, Lind, 2003; Jarillo, 1988; Tomkins, 2001; Johanson, Mattsson, 1987). In networks, coordination is not achieved through a central plan or an organizational hierarchy, nor does it take place through the price mechanism, as in the traditional market model. Instead, coordination takes place through interaction among firms in the network (Johanson, Mattsson, 1987).

To ensure partners in these networks, which involve high switching costs (costs involved in dissolving the partnership and establishing a new comparative partnership), do not engage in opportunistic behaviour, additional controls are needed. Opportunistic behaviour could include, for example, dictating unilateral new terms. Various authors have commented on these controls. Williamson (1985) seeks these controls in what he calls "bilateral governance," agreements on ownership of specific assets or order size guarantees. Håkansson and Lind, with their accounting-based point of view, mention monitoring and influencing people's behaviour in relation to network coordination. However, despite a more networked approach to business, accounting research to date has largely ignored the increasing importance of

supply chains, and planning, budgeting and control processes flowing from one organization into another, as well as their implications for financial decision making and control (Hopwood, 1996).

3. The State of Play in Performance Measurement

Performance measurement is defined as the process of quantifying past action, in which measurement is the process of quantification and past action determines current performance (Neely, 1998). Traditionally, performance measurement is a domain deeply rooted in management accounting and control. From the previous discussion on TCE, networks and management accounting and control, it follows there is a gap between the state of performance measurement and much of the innovation taking place in business models. While business develops adopting a "collaborate-and-communicate" style, performance measurement is still approached in a very "command-and-control" hierarchical way; budgets are rolled-up, scorecards are cascaded and managers "climb the corporate ladder" during their career.

Vosselman (2002) suggests that within inter-organizational relationships, the weaker the vertical bureaucratic relationship, the stronger the need will be to complement the vertical management control system with a horizontal one. Vosselman's assumption functions as a useful model for viewing performance measurement: vertical bureaucratic relationships point to current hierarchical forms of performance measurement are like, and managing relationships between organizations functions as the horizontal control system.

In fact, TCE functions as a rich framework for creating just such a horizontal approach to performance measurement, offering interesting new insights in the process.

It is interesting to see that the most well-known paradigms for performance measurement are not hierarchical per se. Anthony (1988) describes management control, an important objective of performance measurement, as a closed system. Objectives and targets are being set (ex ante), performance is measured (ex post), comparisons between actual results and original targets are made and information on the variance provides strategic feedback. This is not necessarily a hierarchical or vertical exercise, targets can be set in a networked or horizontal approach as well. The same is the case with the Balanced Scorecard (Kaplan, Norton, 1996). The four perspectives of the Balanced Scorecard (financial, customer, process, growth/learning) are aimed at creating a holistic picture of the business. In most examples – including in the books of Kaplan and Norton (1996, 2001, 2004, 2006), this is translated as cascading Balanced Scorecards using the corporate hierarchy.

However, there are alternative forms of implementing Balanced Scorecards:

- Supplier Balanced Scorecards apply the financial, customer, process and growth/learning perspective to managing the supplier relationships;
- Customer Balanced Scorecards can contain an openly communicated brand promise using financial, customer, process and growth/learning aspects;
- Balanced Scorecards can be applied to a single strategic project, describing its impact on the overall organization;
- A set of Channel Balanced Scorecards could span multiple departments, but each describe a customer contact channel such as “mail order,” “shop,” “website” and “call center.”

One could even argue that the common hierarchical approach leads to suboptimal business performance (Buytendijk, 2007). Hierarchical forms of control are based on creating accountability. Targets are assigned to a single owner. In order to achieve accountability, the owner should also control the means and the resources to make those targets. As performance measurement is mostly a hierarchical exercise, there are hardly any controls to assess if reallocating means or resources to other domains of responsibility leads to better results overall. Given the ownership structure of performance measures, performance owners are not naturally driven to explore this.

If managers only focus on optimizing their own performance, and do not recognize the value in the relationships with stakeholders around them, regardless of relationship type, transaction costs increase, as opportunistic behaviour is provoked. Argued this way, it is ironic that the performance measurement, a discipline supposed to contribute to business performance, actually achieves the opposite. Perhaps some of the basics of performance measurement need rethinking.

4. Performance Networks

It is useful to apply the lessons from the discussion about TCE to performance measurement, constructing what I call a “performance network.” In doing so, performance measurement is applied not *within* an organization, but *between* stakeholders. In order to do so effectively, performance measurement needs to take into account:

- The type of relationship between stakeholders
- Transparency between stakeholders
- Reciprocity of performance measures
- Trust between stakeholders.

4.1 Type of relationship

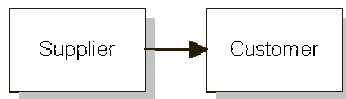
In transactional relationships, adapting to the customer’s needs – asset specificity – may lead the customer to opportunistic behaviour. In more continuous relationships, asset specificity establishes a stronger bond between the firms, more durable relationships and ultimately a platform for further development. From a control point of view a trusting relationship leads to less required transparency, there is no need to share information. From a relationship building point of view, increased transparency actually builds trust.

The TCE discussion demonstrates that there are multiple relationship types, each requiring a different approach. Consider a simple framework, with three levels of relationships:

- Transactional Relationships, representing classical TCE and where customer and supplier each have their own objectives;
- Added-Value Relationships, representing asset-specific situations, adapting to specific customer's needs, where supplier and customer try to align their objectives;
- Joint-Value Relationships, representing the observed trend of co-developed products and services, where the partner has shared objectives.

(See figure 1 for a visual explanation and table 1 for examples of each relationship.)

a) Transactional relationship



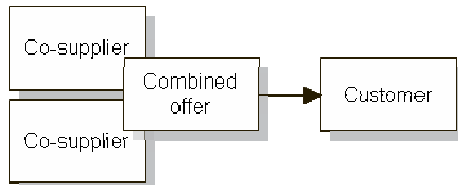
- Supplier / Customer relationship
- Separate objectives

b) Added value relationship



- Embedded supplier process within customer
Or:
- Customized supplier process for customer
- Aligned objectives

c) Joint value relationship



- Co-supplied value proposition for joint customers
- Shared objectives

Figure 1: Three types of relationships

Studying various comparisons demonstrates the logic of the relationship framework.

First, the relationship types build on the adaptation dimensions that Johanson and Mattsson (1987) describe. In transactional relationships, products and services can be adapted, but within the standard parameters of products and processes. In added-value relationships, more asset-specificity is allowed, for instance, offering integrated administration processes. Joint-value relationships involve co-development of products and/or services. Next, each of the levels involve different switching costs. In transactional relationships, the switching costs are low. It is easy to exchange one supplier– or customer for that matter– with another. All parties (customers or suppliers) are equal, and are assumed to have their own specific objectives. In added-value relationships, the switching costs are high. It takes considerable effort to dissolve a relationship and create a comparable new relationship. There is a strong preference to work with a certain partner (customer or supplier) and

objectives become more aligned as interdependency increases. In joint-value relationships, switching costs are irrelevant, as the product or service that was co-developed exists by virtue of that particular relationship. There is no customer or partner relationship – the parties share the same objectives, with a joint-value proposition to a joint set of customers.

Table 1: Examples of different relationships

Type of Relationship	Examples
Transactional Relationship	<ul style="list-style-type: none"> - Outsourcing company cafeteria, cleaning services - Leasing contracts for company cars - Minimal healthcare or car insurance - Internet ordering service for branded consumer electronics
Added Value Relationship	<ul style="list-style-type: none"> - RFID tagged supply chain integration - Management reporting as a service from leasing companies for fleet managers of their business-to-business customers - Usage reporting of mobile phone companies - A travel agent allowing corporate customers direct access to their flight booking systems
Joint-Value Relationship	<ul style="list-style-type: none"> - Companies from different industries co-developing a new product, such as Nike and Apple (Nike+), Douwe Egberts and Philips (Senseo), Adidas and Goodyear (sports shoes with special soles) - Complementary companies from the same industry offering a joint service, such as airline alliance loyalty programs (OneWorld, Skyteam, StarAlliance) - Competing companies collaborating on a common objective, such as competing insurance companies starting a trusted third party, collectively having a majority market share, to entice car repair shops to adopt standardized processes, systems and pricing, driving average claim size down.

Also, these three relationship types are implied by Sako (1992), who describes the various levels of trust observed between stakeholders. *Contractual trust* is the most basic form of trust. It means all parties involved believe that contractual obligations will be met – “keeping your word.” In most societies this is a prerequisite for doing business, and it’s a key element of transactional relationships. *Competence trust* is displayed when parties believe that their partners will not only meet contractual obligations, but also have the right skills, technologies and other resources. Competence trust describes added-value relationships, when organizations rely on processes and systems that are managed by other organizations. Lastly, there is *goodwill trust*, making sure that the partners have the same values and norms, and will make the same decisions as you would, while representing you. Goodwill trust describes joint-value relationships, where organizations share intellectual property and resources such as capital, staff, information,

facilities and materials flow “freely” between the organizations – an intrinsically vulnerable situation.

To further demonstrate the logic of the three levels of relationships, it’s useful to compare inter-organizational relationships with interpersonal relationships. It is popular wisdom that functional interpersonal relationships consist of three parties: “me,” “you” and “we.” The “you” and “me” represent individual independence – choosing to build a “we” relationship represents their interdependence. As organizations can be seen as living organisms (De Geus, 1997), or at least of a group of people with a collective memory, consider how this wisdom can be applied to inter-organizational relationships.

Transactional relationships are “me” oriented, aimed at optimizing the organization’s own performance. Added-value relationships are “you” oriented, with their success based on adapting to the needs of their stakeholders. Joint-value relationships are “we” oriented, realizing their results could never be achieved by each party alone. As can be observed in interpersonal relationships, stakeholders need to agree on the level of relationship they have, in order to collaborate well. If, for instance, one party treats the other in a transactional manner, while the other prefers a deeper relationship, the relationship will most likely develop in a dysfunctional way.

Understanding and determining the type of relationship between an organization and its stakeholders provides a first round of guidance regarding which measures to set up within the performance network. Figure 2 shows the strategic themes that play a role in each type of relationship. The three types of relationships plotted on the x-axis are connected with their organizational scope on the y-axis. The four “lines” of strategic themes are based on the perspectives of the Balanced Scorecard.

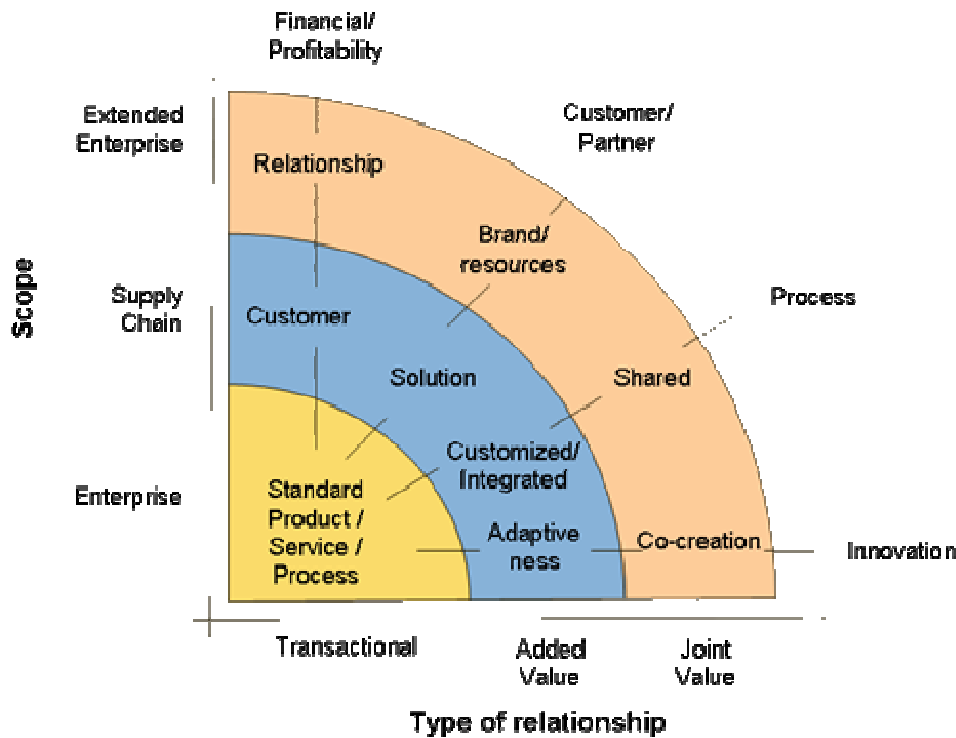


Figure 2: Strategic themes per type of relationship. Inspired by Prahalad and Ramaswamy, 2003ⁱⁱ.

Within a transactional relationship, the focus is on selling an organization's standard products and services profitably to as many customers as possible. Related innovation efforts are likely aimed at improving existing and creating new products and services.

Added-value relationships focus on the supply chain, moving from product selling to solution selling, often involving multiple firms to complement the solution. The solution should become part of the customer's everyday life or business processes, creating a high level of customer loyalty and sustainable customer profitability. However, in many cases the solutions need to be adapted to specific customer uses. A partner network helps in creating these adaptations.

Joint-value relationships focus on the extended enterprise. Multiple parties collaborate to create a new product or service that they could not have created on their own. They share the same objectives: joint success in the market. Each of the firms offers unique skills to come to a joint-value proposition. The profitability comes from the relationship, which began without a finished product or service. Together, the firms create a new product, with each contributing their brand and/or specific resources and skills. They also share processes to maintain the offering over time, and perhaps new products and services as well.

The strategic themes mentioned in figure 1 provide strong guidance on which measures to design to manage the performance network.

Relationships are not static, they move from equilibrium to equilibrium. Mintzberg (1983) states that if we are to improve the way our organizations function, we must understand the power relationships that surround and infuse them. Building a performance network may change the power balance within relationships. Logic dictates that within relationships, stakeholders can have a dominant role, a dependent role and a power-neutral role. There are different ways for a stakeholder to be dominant. For example, dominance may be driven by the size of the organization; its brand value; certain legal protections, such as state regulated organizations; a crucial position in the network, for instance, owning customer information; or technological advantage. A dominant organization in the performance network can effectively drive transactional relationships – others have little choice but to follow the dominant partner. Suppliers that have a dependent relationship with a more powerful partner may wish to seek more added-value relationships. Through added-value relationships, suppliers aim to be embedded in the customer's processes, to raise switching costs and increase customer loyalty. In many cases co-created products and services come from a power-neutral relationship. Each partner has its own unique skills and resources, and contributes its brand name.

4.2 Transparency

A second round of guidance on how to create the right performance measures within the performance network comes from an understanding of transparency between stakeholders. From a TCE perspective, extensive exchange of information reduces information asymmetry between organizations, and reduces complexity and uncertainty, leading to lower transaction costs for the organization receiving the information. At the same time, the higher the complexity and uncertainty of the relationship, the more information is needed to monitor the relationship, leading to an increase in transaction costs for the organization supplying the information. Hence, exchange of information is seen as a means of control. In transactional relationships, there is an inverse relationship between the willingness to trust and the need for information.

In the discussions around TCE, a positive association between information and trust also has been emphasized (Tomkins, 2001). Particularly in early stages of a relationship, information exchange is a means to build trust. Operational information about order status, for instance, drives contractual trust. Similarly, supplied management information on cost savings realized builds competence trust. And supplied management information along with external information (such as market research) on joint initiatives helps build goodwill trust. Proactive and voluntarily sharing of information beyond what is minimally needed can be seen as a signal of supplier trustworthiness (Dyer, 1997).

Practical developments in performance measurement shed new light on the discussion. So far, information exchange has been focused on providing control. However, there are many examples where information exchange has become a product or a service in its own right, as part of an overall value proposition. Car lease companies share management reports with the fleet

managers of their customers, as a competitive differentiator. Some phone companies offer simple personalized reporting capabilities on the use of telephone services, and provide advice on the best fitting subscription. Similarly, energy companies have begun providing reports to corporate and private customers on the use of electricity. Privatized healthcare management providers send management reports to the HR departments of their customers. In these cases and many others, exchange of information moves from a transaction cost instrument to a generator of transaction value.

Every type of relationship has its own transparency requirements. Within transactional relationships, transparency follows the traditional path of TCE, and concentrates on operational and financial information exchange, derived from the flow of transactions. Examples would include status information on transactions, such as tracking and tracing information within logistical environments, or approval status within back-office departments in administrative environments. The financial information would typically consist of invoices and payment information.

When managing added-value relationships, a supply of management information often accompanies operational information.. In most cases this management information is aimed at enabling the stakeholder to better manage the relationship. In added-value relationships, transparency broadens beyond the borders of information exchange alone. Transparency extends to cross-organizational processes and systems.

Within joint-value relationships, transparency consists of complete management information, just as any company would require from its internal operations. In addition to management information, transparency would also include exchange of capital, contribution of skills and staff, materials, and use of facilities. Regardless of governance structure, managing joint-value relationships requires a voluntary and open exchange.

Table 2. Transparency per type of relationship

Type of relationship	Examples
Transactional	<ul style="list-style-type: none"> • Information on orders, inventory, sales, promotions, invoices and other transactional topics
Added value	<p><i>In addition to transactional information:</i></p> <ul style="list-style-type: none"> • Benchmark information for customers or suppliers, comparing themselves with others • Management information on cost savings, or generated opportunities • Integrated processes and systems for processing and controlling transactions between the organizations
Joint value	<p><i>In additional to information and integrated systems and processes:</i></p> <ul style="list-style-type: none"> • Full set of management information on the joint activity • Flow of capital between partners • Allocated staff resources to the joint initiative • Sharing facilities and materials

4.3 Reciprocity

While management relationships within organizations are usually hierarchical, a different dynamic exists *between* organizations. Rather than a hierarchy, continuous relationships should be treated as a network (Thorelli, 1986).

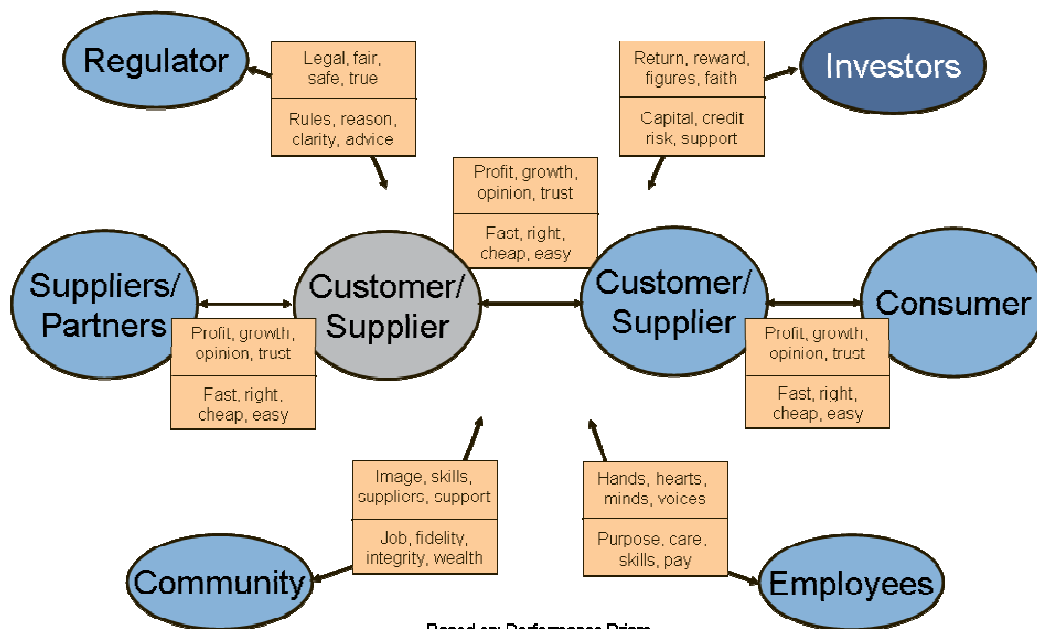
Within an organization, traditional hierarchical performance measures are utilized to answer the question, “how do I optimize my performance?” A network, which is not hierarchical, requires a different type of performance measure. One of the few frameworks that is helpful here is the Performance Prism (Neely et al., 2002). It consists of five inter-related perspectives on performance that pose the following questions:

- Stakeholder Satisfaction – Who are our key stakeholders and what do they want and need?
- Stakeholder Contribution – What do we want and need from our stakeholders (on a reciprocal basis)?
- Strategies – What strategies do we need to put in place to satisfy the wants and needs of our key stakeholders, while satisfying our own requirements too?
- Processes – What processes do we need to put in place to enable us to execute our strategies?
- Capabilities – What capabilities do we need to put in place to allow us to operate, maintain and enhance our processes?

The Performance Prism methodology introduces a stakeholder approach to performance measurement. Where the focus in TCE is mostly on suppliers, customers and business partners, the Performance Prism additionally recognizes investors, employees, regulator/community and other alliance

relationships. The central premise of the Performance Prism is that organizations should consider the wants and needs of all stakeholders as the starting point for performance measurement, instead of deriving measures from a central strategy.

In other words, traditional performance measures focus on the question “how do I optimize my own performance,” leading to local optimization. But within networks, only part of the performance is realized within the organization; measuring stakeholder contribution focuses on “how do my partners contribute to my performance,” which creates opportunities to optimize performance under new business models. Reciprocity is the basis for every relationship – and what follows the question of contribution is the question of stakeholder satisfaction: “what do I contribute to my stakeholder’s performance?” Neely et al. (2002) have developed a set of themes for what stakeholders want from an organization and vice versa. For instance, customers seek an easy, fast, and reasonably error free way of doing business with their suppliers, for a reasonable price. Suppliers seek growth and profit, as well as feedback from customers regarding performance. In addition, suppliers want to be trusted, so that customers return. Figure 3 represents reciprocal themes between stakeholders.



Based on: Performance Prism
Prof. Andy Neely, Cranfield University

Figure 3: Reciprocal performance measures, adapted from Performance Prismⁱⁱⁱ

In this visualization of the Performance Prism, supplier/customer relationships form the core of the performance network. These relationships are the basis of value creation throughout the complete value chain. Other stakeholders, such as employees, the community, regulators and investors, supply the means to value creation, making it possible. Regulators ensure fair

competition; the community provides a platform to work in, such as infrastructure; investors supply the necessary capital to operate; and employees provide the necessary labor. Hence, every stakeholder represents a vital component in making the value chain flow smoothly. Optimizing towards investors alone – the traditional central business stakeholder – would disrupt the reciprocity of good stakeholder relationships.

Reciprocity is also important within transactional relationships. Companies need to track what is important for their stakeholders, to make sure they are still on the right track. Failure to do so will lead to loss of stakeholder satisfaction and – where switching costs are relatively low – stakeholder defection. However, measuring what is important to the stakeholder is done with a focus of optimizing one's own performance towards the needs of that stakeholder.

Performance measurement within added-value relationships is significantly impacted by reciprocity. The organization needs to track what it achieves for its stakeholder's performance. Measures should point out cost savings for the stakeholder, return generated, opportunities created and any other measure of success.

Within joint-value relationships, organizations share objectives and measurements, and all parties seek the same measures of success. An element of added-value relationships exists here, because the parties may have made unique contributions in terms of capital, skills, material and facilities. In addition to the shared objectives, each party should also measure the return for the others, in order to maintain the relationship.

The three types of relationships, combined with the reciprocal themes between stakeholders, provide guidance on what measures to create within a performance network. Out of the many possible examples of relationships between stakeholders, table 3 provides one example for each reciprocal theme, in each type of relationship, in a relationship between an organization and a reseller (or other type of channel partner)^{iv}.

Table 3: Examples of reciprocal metrics between the organization and a business partner per type of relationship

	“Me”	“You”	“We”
Stakeholder Contributions	Transactional Relationship	Added value Relationship	Joint value relationship
Profit	<ul style="list-style-type: none"> • Shareholder value and profitability 	<ul style="list-style-type: none"> • Partner margin 	<ul style="list-style-type: none"> • Revenue and profit joint initiative, compared to internal profit
Growth	<ul style="list-style-type: none"> • Market share 	<ul style="list-style-type: none"> • Share of Wallet 	<ul style="list-style-type: none"> • “Blue Ocean” growth^v
Opinion	<ul style="list-style-type: none"> • Customer satisfaction survey 	<ul style="list-style-type: none"> • Personal, more qualitative, feedback Partner 	<ul style="list-style-type: none"> • Continuous operational and management feedback
Trust	<ul style="list-style-type: none"> • Cross sell ratio 	<ul style="list-style-type: none"> • % Process integration 	<ul style="list-style-type: none"> • Growth in investment in joint initiative
Stakeholder Satisfaction			
Fast	<ul style="list-style-type: none"> • Avg time own process 	<ul style="list-style-type: none"> • Avg time overall process 	<ul style="list-style-type: none"> • Time to Market
Right	<ul style="list-style-type: none"> • % transactions “first time right” 	<ul style="list-style-type: none"> • Meeting partner requirements through customization 	<ul style="list-style-type: none"> • High asset specificity
Cheap	<ul style="list-style-type: none"> • Price Benchmark 	<ul style="list-style-type: none"> • Cost savings for Partner 	<ul style="list-style-type: none"> • Low Transaction Costs
Easy	<ul style="list-style-type: none"> • Channel availability 	<ul style="list-style-type: none"> • Channel preference 	<ul style="list-style-type: none"> • Crossover resources (capital, staff, material, use of facilities, information exchange)

In joint-value relationships, one could say that partners are each other’s supplier and customer at the same time. The measures in this type of relationship are focused on measuring the joint initiative – the “we” side of the relationship. The joint initiative has joint customers who are serviced with the combined product or service. This relationship between the partners and their customers can be transactional or added-value in nature.

4.4. A Summary on Trust

In addition to the issues of trust related to the three levels of relationships, trust and transparency have a complex relationship. An increase in trust may sometimes lead to an increase in transparency when shared voluntarily, and sometimes to a decrease, when shared to compensate for a lack of trust. Transparency and trust are therefore separate factors in building a performance network.

There is an interesting dynamic between trust and performance measurement in general. Performance measurement is used primarily as an instrument of control. Quantitative targets are set and monitoring processes are designed to create objective measures of success, for which people are held accountable. Accountability is one of the main objectives of performance measurement. However, in more strategic relationships, *too much accountability* hurts. An atmosphere of strong accountability does not fit well with the creation of trust, whereas an atmosphere of open commitment does (Vosselman, van der Meer-Kooistra, 2006). Without an open commitment between parties, the relationship can be terminated at any moment. This leads to lower switching costs, and in general to more transactional behaviour. As an important point of guidance as to which performance measures to design within a performance network, *too much* performance measurement can lead to higher transaction costs and lower performance. In many cases, building trust instead of control can lead to lower transaction costs and higher performance.

Trust is important both within and between organizations. Employees should trust the management and vice versa. However, there is a crucial difference between trust within an organization and trust between organizations. A trusting environment within organizations no doubt impacts business performance, but the basis of performance measurement in most organizations consists of hierarchical “command and control.” However, in managing relationships between organizations, trust is the basis. Even in dealing with dominant stakeholders, there is contractual trust, where business is done based on believing that the terms in the contract will be honoured. In order to be successful, added-value relationships require competence trust, and joint-value relationships need goodwill trust.

In addition to transparency and reciprocity, building the level of trust that matches the relationship type must be an explicit part of defining a performance network. The link between performance and trust seems tenuous because current performance measurement is not always able to capture what really matters to trust (Yang, Holzer, 2006)^{vi}. Transparency and performance alone do not automatically lead to trust.

The link between performance and trust is influenced by many other factors, including (Yang, Holzer, 2006):

- Trust is earned only if there is a fit between the organization's strategy and the external stakeholder's expectations, not by good performance per se. Organizations with a strong drive for quality will not particularly trust price-fighting companies;
- Customers may have a certain brand perception, regardless of how the organization is performing. Bad performance may not immediately impact the brand perception;
- Business performance is not the only thing that stakeholders use to evaluate their relationship to an organization. Public opinion may be influenced by factors such as an organization's social behaviour;
- Lastly, the performance and trust scale do not always have a symmetrical relationship. Good performance for some services tends not be noticed, while bad performance leads to immediate distrust. Think of an outsourcing company that deals with payroll processing. If performed perfectly, service is considered normal, if performed slightly less than perfectly, service is bad.

5. Summary and recommendations

There is a gap between the state of performance measurement and much of the innovation taking place in business models. Business models are becoming increasingly networked due to outsourcing and various types of inter-organizational collaboration that falls outside of the traditional organizational hierarchy. However, performance measurement to date remains a very hierarchical exercise.

Current performance measures, aimed at managing performance within the organization, reflect the hierarchical nature of the organization. If managing relationships in a networked environment is making a greater impact on business performance, different – more networked – performance measures are needed. Applying Transaction Cost Economics (TCE) to performance measurement leads to interesting new insights. Though TCE is not well known or used amongst performance measurement professionals, it is an important contributor to performance measurement in today's enterprise.

Measurement drives behaviour. This is the premise of the Hawthorne effect, dating back to the times of scientific management. This means performance measures can drive the right or the wrong relational behaviours between stakeholders. Using a simple framework of three levels of relationships between stakeholders, transactional relationships, added-value relationships and joint-value relationships, one can create better performance measures. Traditional performance measures in a networked environment lead to transactional behaviours. In transactional relationships this is appropriate, but if the relationship has more potential, transactional performance measures inhibit improved combined business performance. In managing stakeholder relationships, performance measures should reflect the level of relationship as *is*. Additionally, as measurement drives behaviour, progressive performance measures can be designed that encourage behaviours toward relationships *to*

be. Putting in new performance measures within a transactional relationship could help the process of moving to an added-value or joint-value relationship.

Using the three levels of relationships helps to define the right measures within a performance network. First, the three levels of relationships help determining the level of transparency between stakeholders. Within transactional relationships there is an information exchange on operational topics such as logistics and administration. Within added-value relationships, the information exchange also includes management information, which points to the realized benefit for the other party, and transparency expands to also include shared processes and systems. Joint-value relationships require a full set of management information, as one would need for one's own organization. Transparency expands to all types of assets within an organization: information, capital, labour, materials and facilities.

The Performance Prism framework of Neely et al. (2002) describes the reciprocal nature of measures within a performance network. Amongst other perspectives, the Performance Prism distinguishes stakeholder satisfaction and stakeholder contribution. Within transactional relationships, stakeholder contributions are more or less ignored; the focus instead is on "how to optimize my own performance." Stakeholder satisfaction measures are based on what the organization, within its confines, has contributed to its stakeholder – a limited view. Within added-value relationships, stakeholder contributions and stakeholder satisfaction are measured in terms of "how do we contribute to each other's performance," a "win-win" for all parties. Within joint-value relationships, stakeholder contribution and satisfaction are mutual – shared and aligned – the results of a joint initiative are measured. The focus is on "how do we create joint performance."

Trust is a critical component in defining measures for managing a performance network. Too many measures reduce open commitment and have a negative impact on trust. Too much accountability drives relationships into a more transactional mode. Added-value relationships are based on competence trust, and joint-value relationships require goodwill trust.

In order for organizations to close the gap between the innovations in their business model, and current practices in performance management, my recommendations are:

- Step 1: Determine the stakeholders that drive value, and determine the level of your relationship with them ('as is' and 'to be')
Step 2: Start sharing information with these stakeholders to strengthen and improve that relationship
- Step 3: Use performance measures to drive behaviours. Reciprocal metrics drive collaborative behavior.

In summary, table 4 describes the attributes of the three levels of relationships to provide guidance on choosing the right measures within an overall performance network.

Table 4: Attributes of the three levels of relationships in a performance network

	Transactional Relationship	Added Value Relationship	Joint Value Relationship
Strategic Focus	Standard products and services	Adaptive customer focused solutions	Co-creation, joint value proposition
Scope	Enterprise	Supply Chain	Extended Enterprise
Stakeholder Objectives	Different	Aligned	Shared
Switching Cost	Low	High	No switch possible
Transparency	Operational information, derived from the flow of transactions.	Management information as a service, aimed at optimizing the relationship or contributing to customer performance	Exchange or contribution of management information, capital, staff, facilities and material.
Reciprocity	Focus on own performance	Contributing to stakeholder performance	Contributing to each other's performance
Trust	Contractual trust	Competence trust	Goodwill trust
Power balance	All Power Balances	Improving power balance between unequal stakeholders, where the dependent stakeholder builds brand preference and tries to increase switching cost.	Neutral, interdependent, building joint brand preference

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Frank Buytendijk is Vice President of Strategy for Oracle | Hyperion. In this role, Buytendijk helps drive strategic direction for Oracle | Hyperion worldwide. A highly respected authority on business intelligence and Business Performance Management, known for his out-of-the-box style of consulting and research, Buytendijk joined Hyperion in early 2006 from Gartner, where he was a Research Vice President and Gartner's lead analyst in performance management. Buytendijk has close to 20 years of focused experience in a wide variety of roles.

ⁱ For a straightforward introduction to transaction cost economics, see Douma and Schreuder (2002)

ⁱⁱ The original diagram uses the same style of visualization, however it focuses on customer co-creation concepts, describing "experience innovation." I replaced the stages of experience innovation with the three levels of relationship, which are similar but not the same, and used the four perspectives of the balanced scorecard to establish the content of the diagram. While in the rest of the paper I concentrate on a different methodology, the Performance Prism, I have chosen to use the four perspectives of the balanced scorecard, as this methodology is better recognized and leads to a better understanding of the figure.

ⁱⁱⁱ This figure is based on the Performance Prism book (Neely et al, 2002) and represents my summary of stakeholder satisfaction and stakeholder contribution within the Performance Prism.

^{iv} As this paper is about performance networks, I focus on stakeholder contribution and stakeholder satisfaction, although for the full view on performance management the other perspectives of the Performance Prism are crucial too. I have chosen these two perspectives, instead of the balanced scorecard perspectives that I used in figure 2, to stress the point of reciprocity. The strategic themes from figure 2 loosely map to stakeholder contribution and satisfaction. Stakeholder contribution is broader than the customer perspective from the Balanced Scorecard. Stakeholder satisfaction is broader than the financial perspective from the Balanced Scorecard. The Balanced Scorecard's process perspective is broader than my use of it as a means to come to stakeholder satisfaction. Growth and learning (also often referred to as the innovation perspective of the Balanced Scorecard) comes through recognizing the three types of relationship.

^v A "Blue Ocean Strategy" (Kim, Mauborgne, 2005) is a strategy aimed at creating a completely new market, as opposed to a "Red Ocean Strategy" that aims at competing in an existing market.

^{vi} Yang and Holzer researched the performance-trust link in a governmental environment. It is my suggestion that these lessons apply in the private sector as well. Yang and Holzer describe the factors that influence the link between performance and trust as a critique of other researchers on the performance-trust link. They then discuss and where possible refute these points of critique. I have chosen to use these factors in my line of argumentation anyway, as they represent valid topics of discussion.