

‘Business Value Creation of (Transformational) Outsourcing, a Performance Based Approach ’

by

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Abstract

This paper is dealing with a number of issues being, in view of authors, essential for successful transformation of business by means of Transformational Outsourcing. Issues such as:

- Can CXO fathom the complexity of his organization and adequately respond to the market changes, supply of raw materials, changes in financial markets, governmental constraints, product and(or) services innovation (to mention but a few) without a reliable model allowing for an impact analysis ?
- Is it possible to measure effects of changes within company and its environment while either preparing or performing company transformation
- What type of models/approach should be chosen in order to understand and maintain transformation processes within organizations
- How do we define performance and would it be possible to measure and monitor performance in order to achieve most optimal transformation result?
- Change is the continuity, how to encounter on and capture effects of continuous transformation of business environment and companies operating in this environment

Authors strive, introducing notions of “Outsourcing Continuum” (Van der Vet), “Transformational Outsourcing Performance Management Continuum” (Van der Vet), the transition of “Business Score Card of Kaplan and Norton” into “Van der Vet Performance Management Quadrant”, to create transparent models allowing precise definition of KPI (model parameters) and valuation of systems performance. The choice of models and parameterization of those will be underlined by use of Rule-Model Based Expert Systems approach, as one of the most reliable and understandable modeling and simulation techniques at hand.

This paper illustrates the steps chosen in order to create and validate the Performance Model and provides the framework to choose the right analytic procedures for researching performance of business transformation.

1. Introduction

“Creating Sustainable Business Value by Transformational Outsourcing will be one of the top priorities the coming years”

In daily life we as individuals make use of a variety of outsourcing services: from the traditional services such as the supply of electricity and water to services improving the work/life balance, such as childcare services, doggie daycare services, personal concierge services and virtual assistants on the Internet. During business hours the same individuals in the role of company staff are continuously improving business processes and optimizing (price/quality) them as much as possible. By analogy with improving the personal work/life balance by outsourcing services, companies are also looking for ways of making more time for what really matters: the future sustainable growth of the core activities.

Outsourcing is a main strategy in freeing high-quality time in a constantly developing ecosystem and optimizing the supply chain. Over the year, several sourcing alternatives have been developed and applied. See Figure 1.

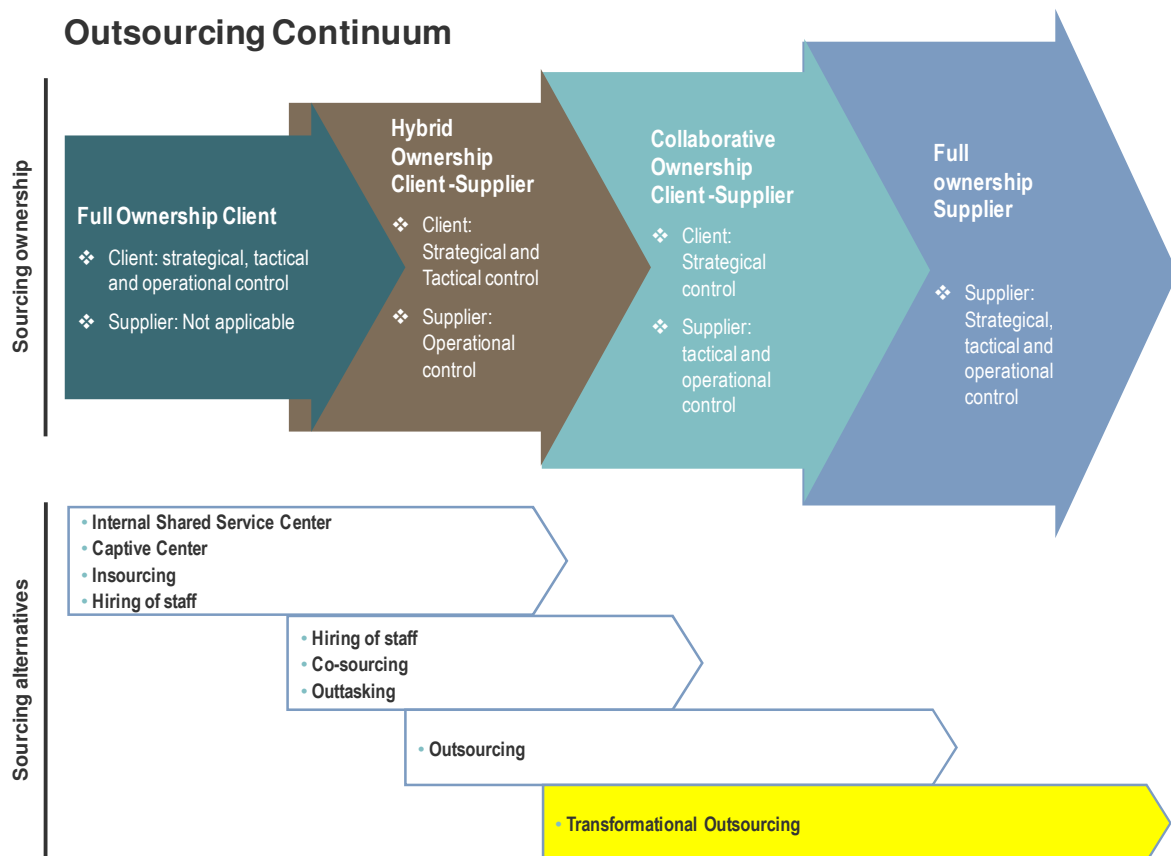


Fig.1

Over the years, Outsourcing developed towards a common practice in day-to-day business with beneficial effects that have been scientifically acknowledged: Outsourcing of IT and Business Processes make companies more agile and responsive to market developments next to a

reduction of the total costs of ownership [1]. Transformational Outsourcing is surpassing this beneficial effects, as confirmed by several client references.

Realizing future growth and sustainable competitive advantage is key for a good business performance according to Porter. Porter's Competitive Strategy is mainly based on cost leadership and differentiation [6],[7]. Enabling cost leadership and differentiation is not an easy task. In complex organizations within a changing scenery/ecosystem, the supposed opposites control and agility go hand in hand. So, it's no surprise, that companies are looking for partners that can help them increase business performance by enabling agility and innovation within a context of controlled business processes. The concept of Outsourcing developed upwards in the value chain, as it is seen more and more as enabler for achieving high business performance. In this process, Transformational Outsourcing is the logical next step in the outsourcing continuum. In essence, it is transformation achieved through and connected with outsourcing of business processes.

The objective of Transformational Outsourcing is to improve the performance of the company. Can we make the added value of Transformational Outsourcing transparent and measureable? Is it applicable for different organizational strategies?

2. The choice of the models and parameterization

The choice and use of different models and model sets for description and simulation of systems will depend on the organization levels (strategic, tactical, operational, supervisory, process or unit) being considered [3]. In fact any system can be described by an infinite number of models. Those can be i.e. : descriptive models, flow chart models, procedural models, score chart models etc.(mostly used at strategic and tactical levels), multiple regression models, input/output models, object interaction models etc. (mostly used at operational and supervisory levels) and last but not least time series AR, MA, ARMA, ARIMA, transfer function, state description, logic diagram etc. (mostly used at process and unit levels) [3], [4]. Each of those models has a unique structure and requires proper choice of parameters in order to adequately represent the system behavior. Criteria for choosing one or another model will drastically depend on the principle: "fit for the purpose". Sometimes one will be interested in a very high output accuracy resulting in a very complex and heavily parameterized model. Sometimes one might be only interested in finding trends of changes and accepting lower output accuracy. There are no universal rules for the choice of the model and its parameterization, it will always be a tradeoff between accuracy and complexity. The goal of this paper is develop sufficiently accurate models, allowing performance measurements, though being still easily parameterized and interpreted in the "language" of the user (CxO). The following paragraphs will underline steps taken in order to describe an organization being in Outsourcing Continuum and will bring the reader into realm of Rule-Model Based Expert Systems.

3. Can we make the "added value" of Transformational Outsourcing transparent and measureable?

The performance of the company can be improved in the support domain (e.g. IT, Finance, HR, procurement) and the business domain. Those domains have different supposed objectives for bottom line and top line effectiveness::

- Bottom line focused on efficiency of a company concerning its spending and operating costs and effectiveness concerning controlling total costs;
- Top line focused on effectiveness in generating sales and revenue.

Performance Management Quadrant Van der Vet

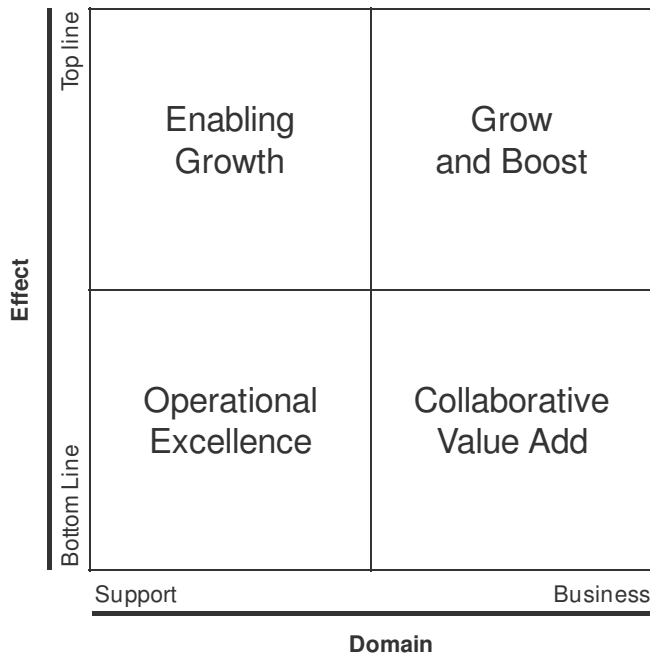


Fig.2

In order to measure the performance in each cell of the above mentioned quadrant, several performance management models can be used. A practical and widespread applied performance management system is the Balanced Scorecard developed by Kaplan and Norton [8], [9], [10]. The Balanced Scorecard is based on the traditional financial measures supplemented with the measures from three additional perspectives: customers, internal business processes and learning an growth. The third generation Balanced Scorecard connects the operational control systems with the development of a strategy and its implementation. Connecting those worlds shall enable companies to integrate their business and financial plans as part of their periodical (or perpetual) business planning.

4. Business Score Card of Kaplan and Norton (Harvard Business Review 1996) and Van der Vet Performance Management Quadrant

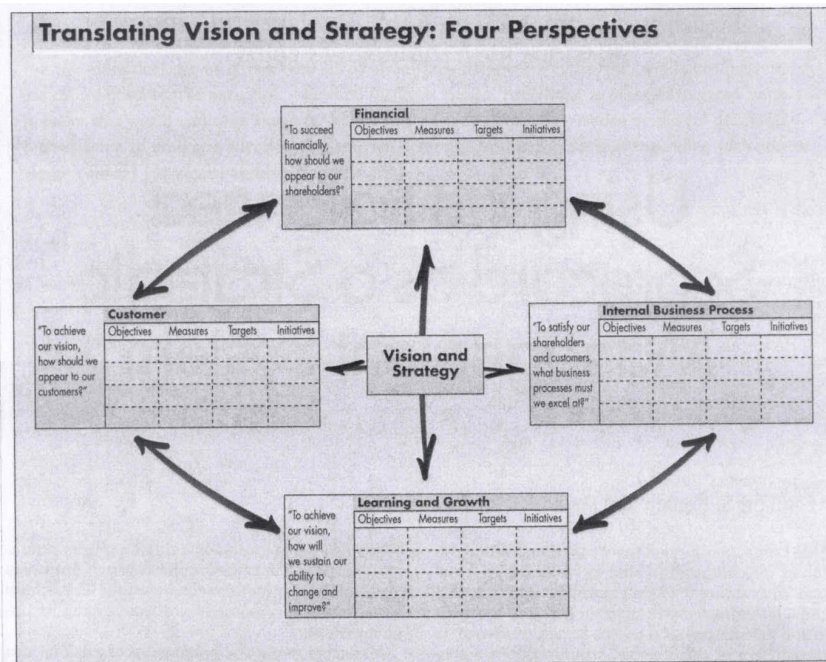


Fig.3

By integrating the above-mentioned Van der Vet Performance Management Quadrant and the Balanced Scorecard most organizations will be able to make the added value of Transformational Outsourcing transparent and measurable. The Balanced Scorecard provides a univocal and practical usable framework, an important foundation for defining and measuring specific bottom and top-line KPI's in the Support and Business Domain.

Furthermore, the outcome of this Performance Management Quadrant can be used in determining the value of an Outsourcing opportunity. Especially, in cases an Outsourcing deal is being considered the result of specific merger and acquisition processes..

Performance Management Quadrant Van der Vet

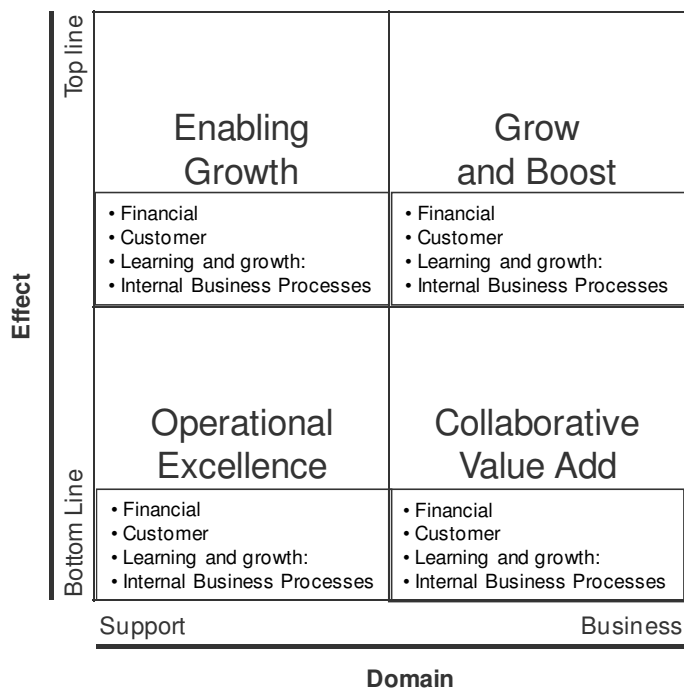


Fig.4

So far, so good. But the proof of the pudding is in the eating of it. The corporate targets should be translated in transparent and concrete KPI's for each cell in the Performance Management Quadrant. Some examples of KPI's are below-mentioned:

- Operational Excellence
 - Financial; e.g. cash flow, gross margin, profit per employee
 - Customer: compliance Service Level and end-user satisfaction
 - Learning and growth: process maturity, certification of staff
 - Internal Business Processes: compliance SAS70, unit costs

As stated before, Transformational Outsourcing will be applied mainly in a Collaborative Ownership arrangement between Client and Supplier. In this arrangement the Client will bear responsibility for the strategic direction and the Supplier will bear responsibility for the tactical and operational execution including the advice for transforming the company. The success of Transformational Outsourcing is based on a collaborative effort to optimize the supply chain and overall business performance. Optimizing the relations with its partners/suppliers is a key aspect in improving the entire supply chain performance, a key success factor in realizing sustainable value creation. The need for collaborative KPI's between Client and Supplier is obvious, because the outsourced services can be considered as part of the own but extended organization. In this context both parties should emphasize joint objectives, management commitment and focus on added value (instead of "them and us" silo-thinking). In case both parties reach a mature level of collaboration we can speak of a true strategic partnership, as refereed in the Buyer-Supplier relationship model of Bensaou [1].

Collaborative KPI's

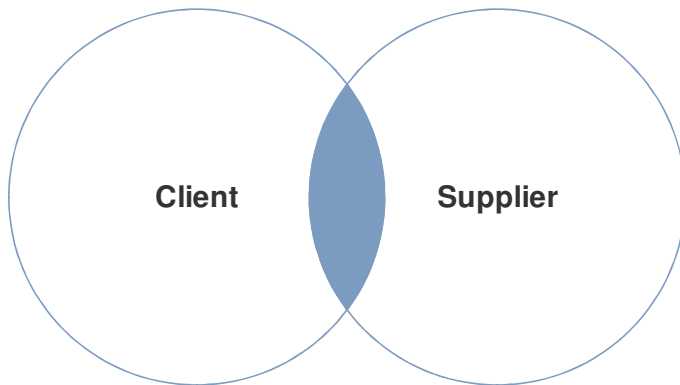


Fig.5

The collaborative KPI's should be set on several levels: strategical, tactical and operational. Setting those collaborative KPI's requires a lot of effort and transparency: e.g. joint objectives, optimizing metrics and monitoring of KPI's. The way companies will collaborate will decide about the joint (and perhaps boosting" effect, as illustrated by the 4S-model of Andrzej Hajdasinski/Van der Vet:

- Synergy: This is the phase in which various organizations seek to cooperate.
- Symbiosis: The phase in which various entities need each other to grow, like an oak tree, a mushroom and a squirrel.
- Symphony: The continued existence of these various elements so they can operate in harmony – a process which requires a conductor.
- Synechia: This is an attack of bacteria on your body which confuses you and leads to total chaos and cacophony. This is the moment of fatigue and indolence. You will then have to rediscover synergy, etc.

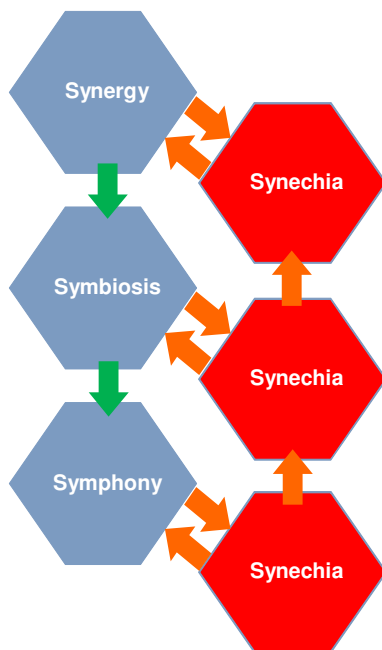


Fig.6

Choice of Key Performance Indicators (KPI's) – Performance Model Parameterization

Studying Economics and Business related literature one will notice a large variety of indicators describing performance of the system (company) under study. It is generally known that the number of indicators (model parameters) is, under circumstances, much too large. As reported by many accounting companies this fact is causing dramatic problems in accounting and company valuations. During the “ICT Watching Symposium”, organized by Capgemini Outsourcing B.V. on November 11, 2007, at Nyenrode Business University, it has been demonstrated by Price Waterhouse Coopers (PWC) that 273 KPI's defined by the company in question, could have been substituted by 6 KPI's delivering consistent accounting, better financial reporting and timely closing of booking year.

The proper choice of KPI's, i.e. model parameterization, is a very important step in building the Performance Model. Couple of rules borrowed from the Systems Theory might be very useful here. First of all KPI's should not be confused with the “Performance Index”, also called “Performance Function” and here “Performance Model”. KPI's are considered to be parameters of the Performance Model and as such have to be determined based on following rules:

Rule 1.

- KPI's, as model parameters have to be **independent** from each other, meaning no direct functional relationship should exist between KPI's in order to guarantee consistency of the model.

Rule 2.

- KPI's must be **meaningful**, i.e. there must exist a measurable relation between a KPI and an outcome of the Performance Model. In other words, there must exist sensitivity of the performance to the changes of a considered KPI.

Rule 3.

- KPI's should be chosen due to so called “**Parsimony Principle**”, also known as “**Occam's Razor**” [4] deduced by the 14th century English monk and stating that *...one should not increase, beyond what is necessary, the number of entities required to explain anything...*, meaning over-parameterization can be destructive for applicability and accuracy of the model and one should tend to apply a minimum number of parameters (KPI's) necessary to explain the system's behavior.

Rule 4.

- KPI's must be **explainable** and **interpretable**.

Rule 5.

- KPI's must be **achievable**.

Following these rules will help to build consistent, explainable and usable Performance Model. Still, choice of KPI's will not be a purely analytical exercise. It will require a substantial insight in short term and long term business objectives, state of the organization, supporting services, ICT

facilities, market and regulatory constraints etc. It means that performance measurements will depend on many constraints present by as well the outsourcing party as the party sourcing in. Performing Transformational Outsourcing will require determination of so called “Collaborative KPI’s”. As illustrated above, such KPI’s will be a subset of KPI’s holding for both sourcing out and sourcing in companies. This also means that KPI’s will have a dynamic character and during Transition and Transformation phases might migrate or change depending on the progress.

5. Is the added value of Transformational Outsourcing transparent and measurable for different organizational strategies?

An organization tries to keep up with or beat the competition to win the client’s favour. Companies are applying several strategies to be successful. But what is strategy? Michael Porter gave his views on this topic in the 1996 Harvard Business Review article, “What is Strategy?” [7]. In Porter’s words: “Essentially, developing a competitive strategy is developing a broad formula for how a business is going to compete, what its goals should be, and what policies will be needed to carry out those goals.” [6] (Porter, Competitive Strategy, 1980). In his book “Competitive Advantage” Porter describes “how a firm actually puts the generic strategies into practice” and “How a firm can create and sustain a competitive advantage”. [11] In general, organizations will have a focus on sustainable and profitable growth and a focus on cash management and improving the financial stability. Furthermore, organizations tend to align the business portfolio with the short and long term objectives. Next to the external focus, companies will address more or less internal challenges, such as regulatory compliance and aligning business and IT strategy. So, strategies tend to address the same aspects, but the execution of the strategy will be different, based on the fact that organizations are facing a different competitive landscape and have set different corporate objectives.

In our Transformational Outsourcing Performance Management we distinguish the following recognizable strategies:

Start up:

An strategic approach that focuses on developing the right products and services by listening and reacting to market developments

Phoenix

An strategic approach that focuses on an organizational makeover creating and establishing new business models of which a new company arises.

Lean and Mean

An strategic approach that focuses on making all business processes as consistent as possible, continuous cost reductions and performance improvements in the value chain -

Strip and Flip

An strategic approach that focuses on consolidation of an organizational entity keeping the profitable parts with the goal of reselling them for a profit.

Gain and retain

An strategic approach that is close to the clients pulse and focuses primarily on attracting and acquiring new clients and an effective client retention

Merge and purge

An strategic approach that focuses on making necessary changes happen to complete a successful organizational integration.¹⁾

The effect of Transformational Outsourcing will probably deviate from applying this methodology on different types of strategy. To visualize this effect, Van der Vet combined the Performance Management Quadrant with the different strategies and created the 3D table Transformational Outsourcing Performance Management Continuum. .

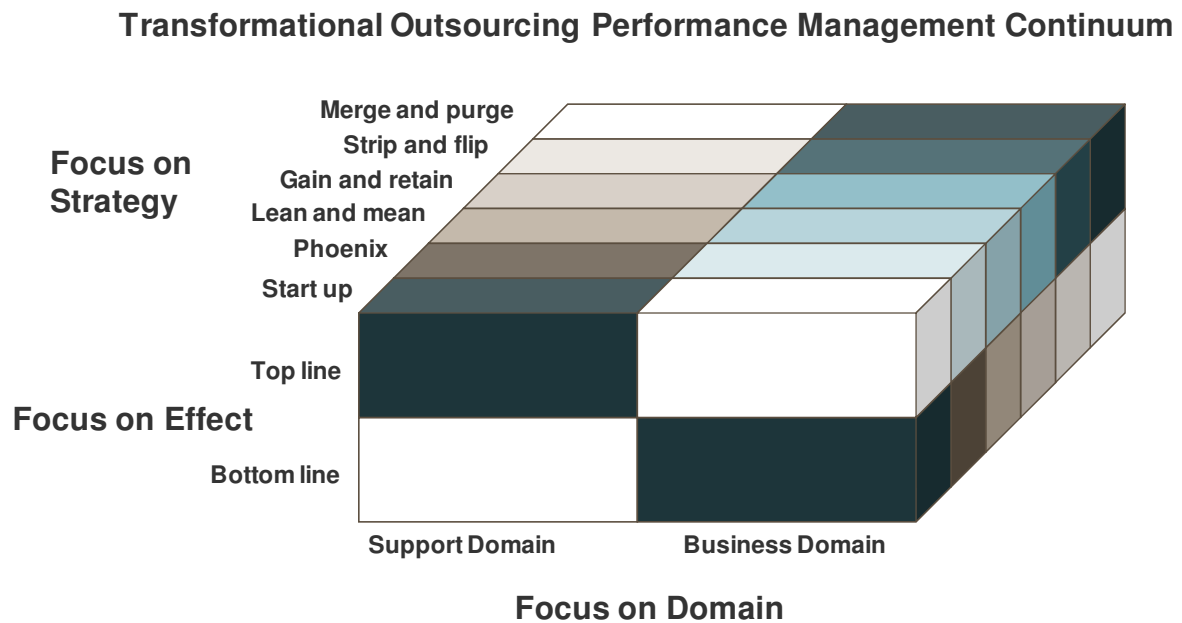


Fig.7

Although many organizations are focusing to fulfill some of these strategies, they tend, in practice, to gravitate towards one of these strategies. The Transformation Outsourcing Continuum is a methodology to provide:

- the value add of transformational outsourcing in the as-is and to-be situation;
- a transparent performance management dashboard;
- an insight in the relevancy of specific KPI's in case of pursuing a different strategy.

1) Result of discussion between Marco Gianotten (Giarte) and Marco van der Vet

6. Methodology of model building

To measure the real impact of Transformational Outsourcing on the performance of a company is a major challenge. This manifest aims to contribute to the understanding of potential benefits a Transformational Outsourcing contract can generate. Taking all the above-mentioned models and do's and don'ts into consideration authors decided that the best fit for modeling, parameterization and measuring efficiency of the Transformational Outsourcing Performance Model can be provided by an Expert System [2].

In order to improve strategic decision making a specific type of Expert System, the so-called **Performance Management Expert System**, will facilitate the prediction, simulation and evaluation of the business performance outcome, based on expert knowledge, defined models, rules and parameterization and presented in a Board level friendly format (Van der Vet).

For the further research the Rule- and Model-Based Expert Systems (RMES), developed by A. Niederlinski [5] has been chosen.

Specific arguments for the choice of and are as follows:

- Ability to create the “dashboard function” for the Performance Index
- Ability to perform simulations and running different scenarios
- Modeling facilities for as well bottom line (operational research) as top line (business process redesign) in realm of the Transformational Outsourcing Performance Management Continuum
- Dynamic experience building – knowledge capturing
- Flexible set up of the Performance Model
- Dynamical Knowledge Database
- High degree of applicability by CXO's



The RMES should be seen as a family of four expert system shells (see [5]): RMSE_EE – elementary exact, RMSE_AE – Augmented Exact, RMSE_EU – elementary uncertain and RMSE_AU – augmented uncertain. The RMES is focused on making logical choices of rules together with algebraically intensive calculations. This fully web enabled and self-explanatory expert system is suitable for practical management and business science (systems theoretical approach, business process reengineering, operational research).

Rounding up our discussion these will be steps in implementing the Performance Model:

- Definition of the Model Set
- Model choice
- Model parameterization
- Parameters determination and estimation (if required in case of statistic and stochastic models)
- Simulation
- Validation – comparison of simulation results with the real behavior of the modeled system

7. Example of Expert System based Transformational Outsourcing – Chemical Company Case

In 1991 the Chemical Company (further Company), started research on improvement of company results based on so called On-Line Process Accounting System. The main goal of this project was to provide the management of the Company with a “Dashboard System” allowing for an immediate response to the changing conditions within their production processes, market requirements, purchasing of raw materials, energy consumption and managerial support. This research started a continuous transformation of the Company from production to management company in 2004.

The first result of the transformation process was, by means of an tailor made Expert System, determination of Strategic and Operational KPI's being reflected on the Management Dashboard and supported by rules – actions to be taken in case of dissatisfactory discrepancy in those 6 KPI's. Based on three years' experience, the Company, as one of the first chemical companies in the Netherlands, decided to source out ICT and maintenance of her plants, introduced the energy saving program and, extended the Expert Systems for operational control of production.

In 1998 the Company decided to migrate from the producer to the Global Distributor, selling her production plants in the Netherlands and sourcing out Warehousing activities. Closing processing agreements with producers in Poland, Russia, Eastland, Saudi Arabia and Brazil, they remained the market leader. In all those steps the Management Dashboard was used in order to validate the impact of transformations. In 1999 the Company moved all her offices to Brussels and sourced out all accounting activities to the Shared Service Center. In 2004, the Company, selling out or sourcing out her remaining production sites, storage facilities and estate, became the pure Management Company managing outsourcing contracts and performing marketing and sales activities. All those consecutive steps were taken in order to create add value to the company, maintain a leading position in the global market and ensure outstanding profit margins to the shareholders. It is hard to believe but in all those changes the Expert System built and implemented in 1991 has been operational. In, the Company, completing her Transformational Outsourcing Voyage, has been taken over for undisclosed amount of money.

All specific information on technology used, definition of KPI's and financials remain proprietary to the Company.

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