Collaborative management in consumer goods supply chain. Using balanced scorecard in aligning the strategic performance between a manufacturer and a retailer

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Abstract: Organizational performance is those step and state of the whole organization in which, as a result of congruent decisions and actions, are reached those targets and elements of strategic vision which satisfy all interested parts. To consumer good manufactures, satisfying the needs of "new world thinking", mandatory today in industry, implies collaborative relationships which allow the companies to grow with small costs and to supply products having improved technology.
Using key performance indicators (KPI) it's possible to measure the global performance of alliance relationships in terms of inventories, satisfaction and delivery terms.
The building process of collaborative control panel of ECR alliance between two organizations always begins with establishing of a clear strategy. This strategy has to be an inter-organizational project and, as every effective implementation project of control panel, has to offer the opportunity of cooperation between processes and organizations in order to establish common objectives.
Measuring is the only way to verify the process performance and the need for eventual further actions. After the performance evaluation for the organizations using the Balanced Scorecard, the information and data will be transferred to inter-organizational project team which will incorporate it into the chain control panel. The turnover –a strategic map, a control panel for measuring, targets and initiatives commonly accepted- offers to the management of alliance project the way to follow and an excellent foundation for governing the joint-venture project.

Keywords: Collaborative management, supply chain, performance management, strategic objectives, key performance indicators (KPI), Jointly Agreed Growth, aligning balanced scorecard, alliance scorecard.

1 Introduction

1.1 Strategic performance management

Strategic performance management represents a process through which the company manages its performance, an aligned process to organizational and functional strategies and objectives. There are a lot of instruments and activities within the organization which contributes to that goal. These may include: defining of organizational objectives, priorities and values.
In the process of defining of a balanced scorecard, the steps to be followed in order to achieve the strategy explain the organization's strategic step to create new value. In other words, balanced scorecard has to be seen as a navigating instrument which helps to draw the way the organization will sale in order to achieve the strategy.
Starting from Norton and Kaplan's balanced scorecard model [1], compound of four axes, for each axis we'll use the following indicators:
Financial axis: represents the goal of measurement of all organizational performance indicators. There are many ways for improving financial status, among we take as example market share and productivity rising.
Clients' axis: Always there has to be found new ways to raise market share, news methods for differencing the company from other companies. Three generic values are most considered by the companies: operational

excellence; command level for an excellent response; customer devotion.

Internal processes axis: We may give four examples of big processes in a organization: innovation process; clients relationship management process; arranging product traceability for adding value; relationship process with society.

Learning and growing axis: Learning and growing perspective could be exemplified by three domains: employees' competencies and abilities; new technologies; organizational culture.

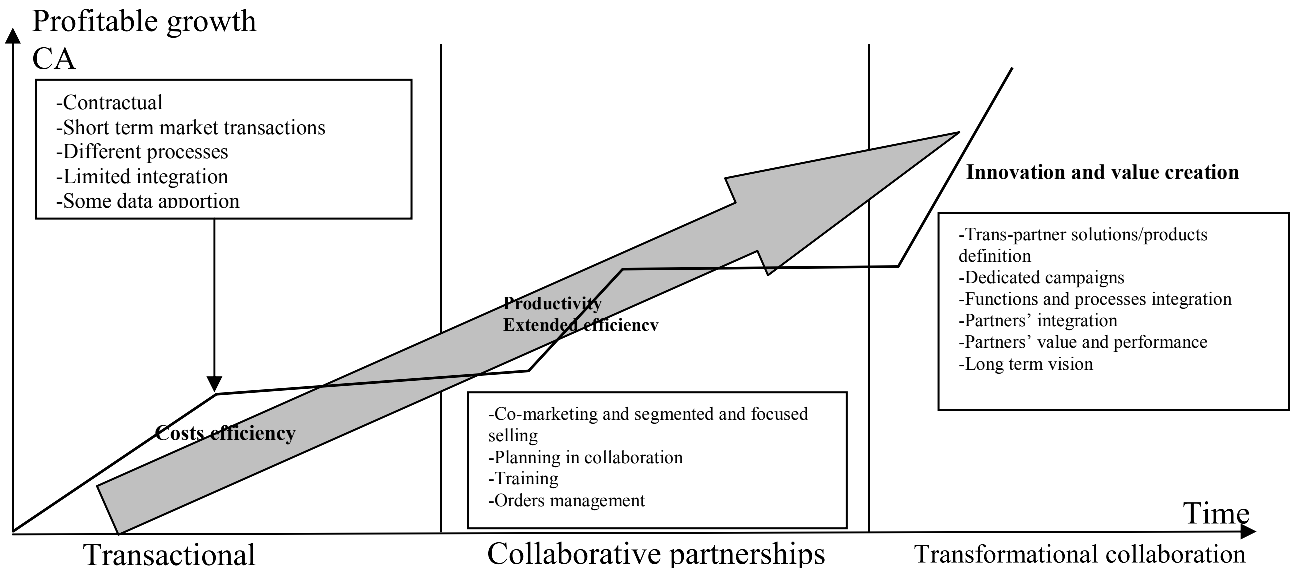
1.2 Collaborative management

Consumer goods producers passed, in general, through three fundamental phases of collaboration development and, adding each phase, there is a new potential regarding news value creating and profitability growing. [2]

Phase 1 – Spreading of transactional relationships

This phase focuses on cost efficiency obtaining when consumer goods producers enter short term contracts, including transactional agreements. The main goal is cost cutting and efficiency improvement.

Fig. 1 – Collaborative relationships-partnerships
The source: Thomson, Jennifer & Co., 2006 [2]



During this phase, business processes are distinct, having a limited integration between involved companies; there is a partial segregation of data. The growing trend of outsourcing for business function, as IT, production and storage allows the companies to focus on their core business, obtain benefits from costs, and transform fix costs into variable costs in order to have greater control and flexibility for financial structure. There is a limited opportunity for adding value beyond price in transactional phase and having decreasing margins, reaching a profitable grows being a difficult process. This leads organizations beyond transactional relationships, in order to develop collaborative relationships to reaching mutual gain, productivity and extended capabilities.

Phase 2 – Collaborative relationships – partnerships

This phase is characterized by co-existence of transactional and collaborative relationships which focus on further improving of productivity and utilization of extended capabilities of knowledge, assets and resources. Relationships from this phase focus on common promoting, marketing and selling activities. This is the point where we could start to identify suppliers and customers as strategic partners.

To consumer goods producers satisfying the demands of "new world thinking" needs developing of collaborative relationships which allow companies to grow with reduced costs, supplying in the same time a increasing value for customers. The relationships from value chain which evolved in time either based on short term market transactions, or developed in long term proprietorship solutions.

Phase 3 – Transformational collaboration vs. other business models

Fig. 1 shows the relationships characterized as un-proprietorship contractual relations – as those based on events (management of selling promotion or new products launching), data sharing or processes harmonizing.

Although there are some advantages connected to costs, those types of relations don't offer enough flexibility for a competitive environment of today. In an effort of transformation of adversity relationships into collaboration relationships, sharing knowledge, mutual assistance and business growing, consumer goods producers focus more and more on identifying and developing of strategic relations with suppliers, distributors and customers. Such of relationships tend to rely on smaller number of key partners which benefit from longer term contracts. Nevertheless, there are limitations of those types of relationships:

Nowadays, the companies focus on developing of collaborative transformational innovating relationships in order to obtain long term growth and profitability for everybody involved. These collaborative partnerships are based on the following ideals: 1. collaborative decision process and generation of new ideas; 2. bi-directional data, knowledge and experience exchange; 3. engagement in sharing the knowledge database and extension of thinking beyond organizational limits to accomplish a win-win scenario, which offers more value adding than every single partner may obtain separately; 4. development of *long term strategic plans (the collaboration is switching from operational level to strategic level)*. Need to switch from the easy of "price advantage" to the hard way of "value for customer" and seeing businesses combined from client perspective.

1.3 The collaboration benefits

In the chain of consumer goods value there could be identified three benefits or key motivations to forming collaborative relationships: 1. Increased productivity and cost cutting; 2. Innovation (for products and client information); 3. Growth.

2 ECR Europe studies regarding alliance performances

ECR Europe performed several studies regarding performance.

2.1 The evaluation of improvements impact over profit

A first ECR Europe study which approaches the alliance performance is "Assessing the profit impact on ECR", through measuring the costs and profit over ECR.

"Profit impact on ECR Task Force (PIETF)" created and tested the evaluation methodology of ABD costs, a 6 steps approach to evaluate the impact on profit using a software application, an activity guide, to realize an activity map. These tools are used for establishing costs on activities and also to calculate the impact of improvements on profit. A detail description of methodology and tools is realized in ECR – Europe Guide, The Evaluation of improvements' impact on profit. [3]

Based on PIETF outputs, the companies are encouraged to implement a tool which alleges the organizations in aligning different activity costs and assessing cost and profit when different improving concepts are chosen.

2.2 Integrated suppliers

Another study, named "Integrated suppliers of ingredients, raw materials and packaging", realized by Frannhoffer – Apllication Center Transport, Logistics and Communication Technology, [4] treats measuring of alliance performance from the perspective of relationship between supplier and manufacturer. Supplier integration represents a concept for improving the distribution chain between manufacturers and their ingredients, raw materials and packaging suppliers. Sharing information, both sides may try to optimize others' costs, quantities and delivery or production times in order to simplify production flow and to advance towards a collaborative relationship.

The scorecard for integrated organizations

The scorecard for integrated organizations is structured according to the six key concepts of integrated organizations and is applicable to sides, manufacturer and supplier. The scorecard may be used to self-assessment and to a joint-evaluation with partners. If the partners agreed, in trans-functional terms, with the key concepts, it means that they accomplished the foundations for action. Moreover, the scorecards have to be permanently used in order to monitor regularly the performance and to establish a ceaseless improving culture inside the company and between the partners.

Key Performance Indicators
Using KPI could measure the global performance of alliance relationships in terms of inventions, customer serving and delivery terms.
The most important KPI are: 1. *Inventory level* – it is measured both through inventory level of suppliers materials and manufactures' materials; 2. *Delivery term* – represents an important performance indicator in relationships between supplier and producer; that's why it is considered a KPI; 3. *Level of serving* – evaluated by using the perfect order as KPI. The orders will become almost useless in advanced relationships between integrated organizations. Accordingly, out-of-stock will become a more relevant indicator.

2.3 JAG (Jointly Agreed Growth) model of collaborative growth

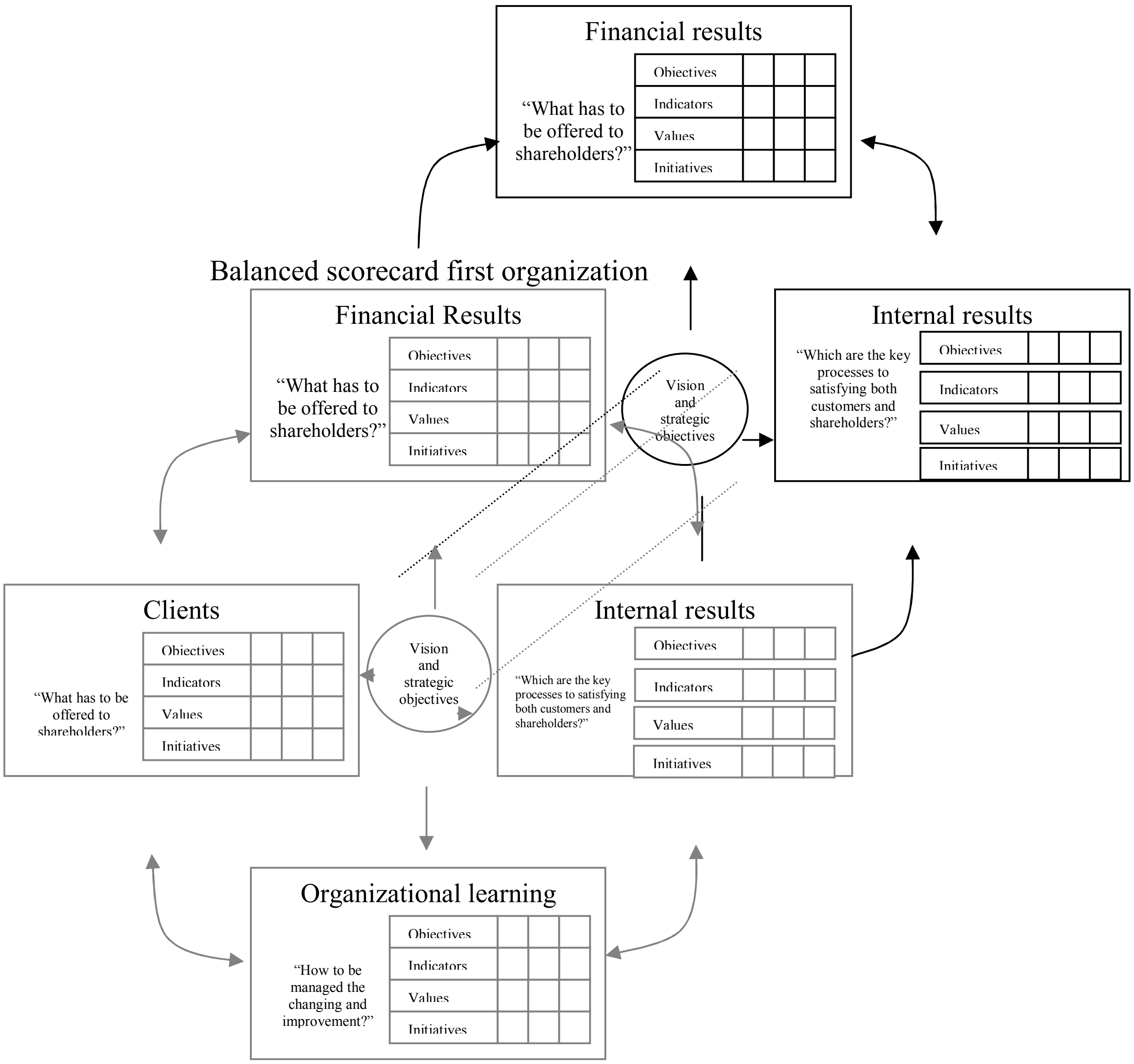
JAG is a more rational framework for negotiation which permits a bigger growth on the market. [5]
The current approach, common from collaborative management point of view is: Less time for agreeing about growing actions; Growing actions less efficient; Narrowed growth; Bigger financing need; More time spent with bargaining; Less time for gathering data; Focus on finance problems.
Jointly Agreed Growth approach generates a considerable leap forward through: Common development of market context and trends' understanding; Growth strategies commonly developed; Implementing of a business plan focused on demand stimulation and growth engendering; Offers a negotiation frame.
The steps of the process in order to obtain a successful collaboration: A three years JAG plan; Annual established objectives; A program reviewed during the year; A good relation seller-buyer for functional relations, planning coordination, agreement and follow-up after the execution; Mix teams for analyzing and planning in order to sustain the buyer and the seller.
The principles of collaborative growth in business: 1. Develop the market in a sustainable, profitable and competitive way in order to assure the highest satisfaction for customers; 2. Obtain commercial advantages for each side*; 3.* Have eyes wide open to any company which brings new knowledge and capacities; 4. Build a common process based on information about shared data and knowledge; 5. Be devoted to a clear execution plan; 6. Allocate the resources needed to execute the plan properly; 7. Review the JAG process regularly. Respect the Confidentiality Agreement; 8. Respect all legislation: regulating competition, health, environment and intellectual property; 9. Try to involve top management into the process in order to ensure the 3 years framework needed by JAG.

3. The collaborative control panel of ECR Alliance

Our proposal is the collaborative balanced scorecard between manufacturer and a retailer
The building process of the collaborative scorecard for ECR alliance between two organizations (a local dairy manufacturer and a global retailer) always begins with establishing of a clear strategy.
This strategy has to be a inter-organizational project and has to offer the opportunity, for the player from different processes and organizations to cooperate in order to establish common objectives. Once that the team members established the common strategy, they can move forward to build the collaborative scorecard aligned to this strategy.
A tool capable to operate both into different structures / substructures of the alliance and to integrate each of these structures' efforts in order to be aligned to the objectives of the purchasing-distribution chain is the version of the balanced scorecard presented in
Figure 2 - The Norton-Kaplan model, adjusted for two strategic aligned organizations. The balanced scorecard formally connects the alliance's global objectives with the chosen strategies for achieving these objectives using some general indicators of performance measuring.
Those objectives, strategies and measuring indicators at alliance level could be aligned at organizational level. Here, the organizations develop objectives, strategies to fulfill these objectives and alliance's performance measuring indicators. This process is repeated at the level of the axes of interest from the organizations members of the alliance.
These strategic objectives for measuring the ECR alliance's performance may be thought as the essence of the alliance. We may represent it graphic as two circles which contain the vision and strategic objectives. These are the management of organizations which form the alliance.
In order to implement a scorecard for the alliance, as a leading tool of the alliance chain performance, we'll start from the vision defining, major objectives and their targets at which they'll align the own strategies, targets

and strategic objectives following that each company to develop measurements and indicators for their own scorecard. Every organization's target, objective and action are created to support the common strategy, and KPI derive from the strategic objectives. Each scorecard is integrated and aligned to the common scorecard.

Fig. 2 – The collaborative scorecard of ECR alliance
The source: The Norton-Kaplan model, adjusted for two strategic aligned organizations



There are a lot of people which believe that "if you cannot measure a phenomenon, then you can't control it". At this moment of time, some measurement systems provide a clear image of the global performance, underlying the causes of performance problems or the improvement opportunities. The reason is simple: it is difficult to realize a robust and useful measuring program. Establishing of an agreement between the companies regarding what has to be measured, about defining the chosen measurement system and how often the measurement should be made may imply a very big effort. Also, the manager commitment on the fundamental proposal of measuring program could be the most controversial activity of all.

At the highest level, alliance's operations are expected to contribute at the company's financial performance. For that, the performance's measuring tools has to accomplish three major objectives: first, it has to transform financial objectives and target into efficient measurements of operational activity. Second, it has to transform the operational performance into exact future previsions of incomes or sales. And, third, it has to lead behaviors into the allied organizations which sustain the global strategy of the common business.

Measurement is the only way to verify if the performance of the processes increases or decreases and if is necessary to take supplementary actions. Much too often, the companies find out about the problems regarding the success or failure in achieving the objectives after these are happening, in the moment when the income decreases, the customers run to the competition or when the result decrease under the expectations.

For an easy collaboration in alliance performance management through the balanced scorecard with dual commitment we propose The Strategic Alliance's Balanced Scorecard (Table 1). Table 1 shows some of the key objectives which may be included into such a alliance scorecard. Also, a list of measurement indicators is projected leading, by aggregation, to a correct measurement of the strategic step.

Table 1. The Alliance's Balanced Scorecard

Manufacturer

	Importance	Strategic objectives	Objectives hierarchy	Measurements/Indicators	Analytical hierarchy	Values		Spread analysis (%)	Balanced score (%)
						Target	Effective moment		
Clients	150	1. Order cycle duration 2. Out-of-stock 3. Price benchmark 4. Brand image	100 200 400 300	1. Days between order and re-order 2. Days of out-of-stock 3. Competition prices 4. Position in classification	15 30 60 45			95 95 90 80	14.25 28.50 54 36
Processes	175	1. Stock management 2. Delivery quality 3. Days for provisioning 4. Returned materials	400 200 200 200	1. Average inventory 2. % on-time delivery 3. Number of days for provisioning 4. Value of returned materials	70 35 35 35			95 90 95 98	66.50 31.50 33.25 34.30
Learning	75	1. % EDI Integration 2. % ECR trained persons 3. Standardization level / optimum practices	400 200 400	1. % Volume of EDI treated information 2. % trained persons 3. % personnel respecting best practices	30 15 30			90 100 85	27 15 25.50
Financial	100	1. Costs of goods sold 2. % Personnel costs 3. Working productivity 4. ROA	350 250 200	1. Product costs 2. % Personnel costs 3. Turnover / No. workers 4. Net profit / Assets	35 35 30 20			88 96 94 97	30.80 24 28.20 19.40
Total 1	500				500			-	468.30

Retailer

	Importance	Strategic objectives	Objectives hierarchy	Measurements/Indicators	Analytical hierarchy	Values		Spread analysis (%)	Balanced score (%)
						Target	Analyze moment		
Clients	150	5. Client satisfaction 6. Serving level 7. Transaction volume 8. Price benchmark	350 100 50 500	1. Satisfaction index 2. Number of complaints 3Transaction value 4. Similar price-product report	52,2 15 7,5 75			98 95 90 90	51,45 14,25 6,75 67,5
Processes	100	Inventory days 5. Out-of-stock 6. Shrinkage 7. Food safety	350 250 275 125	1. Day / Inventory 2.Days of out-of-stock 3. Lost volume 4. Product withdrawals	35 25 27,5 12,5			96 94 98 97	33,6 23,5 26,95 12,125
Learning	75	4. % EDI integration EDI 5. %ECR trained persons 6. Serving level	300 300 100	1. % Volume of EDI treated information 2. % trained people 3. % lost clients	22,5 22,5 30			100 85 92	22,5 19,125 27,6
Financial	175	5. Sales increasing 6. Gross margin 7. ROI 8. Operational expenses	300 200 150 350	1. % turnover increasing 2. Gross margin / profit brut 3. Net profit / equity 4. % op. expenses / turnover	52,5 35 26,25 61,25			88 99 89 87	46,2 34,65 23,3625 53,2875
Total 2	500				X				462,85
TOTAL	1000	x	x	x	1000	x	x	x	931,15

4. Conclusions

After analyzing the results of performance assessment for the two organizations with the scorecard, the information and data will be transferred to inter-organizational project team which will incorporate it into the chain scorecard.

Thus, the team will meet monthly to analyze the general scorecards for the two organizations and, based on this analyze, they'll upgrade the level of indicators from the scorecard and will study the differences between the goals of these indicators and the realized level. Then the tem will propose solution in order to achieve the goals which haven't been yet achieved.

The development of an alliance's scorecard may lead to the decreasing of conflict between the partners. The process of strategic map and scorecard building puts face to face the top management of the two sides to establish clearly the alliance's objectives as well the strategy for achieving those objectives.

A selling and marketing alliance could underline the low cost of acquiring new clients, the minimum term for launching new products on the market and sales increasing as a result of acquiring new clients and improving the relationships with the existent clients. An alliance based on development and innovation is focused on the quantity and level of innovation of the new products, and the impact of technology transfer over the mother companies. A production alliance could have as purpose decreasing the production costs, improving the quality, reducing the period between ordering and delivering.

The output – a strategic map, a control panel for measuring, targets, fundamental and commonly accepted initiatives- offers to the alliance's project management the way to follow and an excellent base for governing the joint-venture project.

More and more the companies use the alliances to compensate lack of their own abilities and to enter new markets and regions. Aligning with these partners isn't an easy process. Many alliances end up in disappointments and failures. Having a common set of indicators isn't an easy thing.

Each side has its own process of reporting and measuring and every company has its own perspective regarding their own contribution to the alliance and the profit from that alliance. To overpass these informational and motivational asymmetries, they need a transparent process in which every side articulates sound and clear the expected contributions and outputs, from which to result a summarizing document with the strategic situation of the alliance.

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