APPLYING THE GOAL SETTING PRACTICE IN THE DYNAMIC BALANCE SCORECARD LEARNING AND GROWTH PERSPECTIVE

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Abstract
The purpose of the present paper is to build a system dynamics model for goal dynamics in organizations within a Dynamics Balanced Scorecard framework.
In this paper it is proposed a model of goal dynamics in which Goal Setting and two other related Human Resources practices (Management by Objectives and Training) is viewed as a managerial tool able to enhance workers' goal commitment, and therefore, improve organizational performance. In the first part of this paper, an analysis of Dynamic Balanced Scorecard - to measure performance in dynamically complex systems - and Goal Setting Theory - in bettering worker's performance - are stressed. In the second part, a case-study, the causal loop and a quantitative model of goal dynamics in organizations are described. In the third part, the stock and flow model is depicted. Finally, scenario analysis is presented.

Key-words: goal setting theory, management by objective, dynamic balanced scorecard.

1. Introduction

Goal Setting is one of the most investigated and empirically validated practices in human resource management (Locke & Latham, 2002). A great deal of literature shows that goal setting plays a crucial role in the improvement of decision making processes, by increasing workers' motivation (Barlas & Yasarcan 2008; Bivona & Ceresia 2008; Ceresia 2008, 2009a, 2009b; Forrester 1975; Senge 1990; Sterman 2000; Warren 2008).
In the use of the system dynamics approach, Warren (2008) underlines the importance of setting appropriate goals for the achievement of organizational objectives. Managers may sometimes underestimate or overestimate the obtainable performance thus consequently companies can respectively lose big chances for growth or waste time and precious resources, trying to achieve some ideal but unrealistic goals.
Adopting a System Dynamics (SD) approach, Ceresia (2009b) has proposed a model of goal dynamics in organizations in which Goal Setting, Management by Objectives and Training are viewed as human resource practices able to enhance workers' goal commitment, and therefore, improve organizational performance.
With this regard, the Balanced Scorecard (BSC) approach (Kaplan & Norton. 1996 a), supports the management in assessing the impact of goal setting practice on company performance both from the monetary and non monetary points of view. In particular, the BSC allows to investigate how the goal setting practice, which refers to the learning and growth perspective, influences the internal processes, the customer, and the financial perspectives.

2. The Dynamic Balanced Scorecard to measure performance in dynamically complex systems

In the last decades, traditional performance measurement systems (PMS), exclusively based on financial indicators, have been criticized since they give no information about companies' ability to achieve long-term survival and growth (Kaplan & Norton. 1996 b). For this reason, since the '90s scholars have been proposing several PMS oriented to evaluate company results according to the different dimensions of firms' success. Among them, the Balanced Scorecard (BSC) still represents the most diffuse multi-dimensional PMS both in literature and practice.

The BSC popularity is due to the support it gives to the management in avoiding incoherencies between the company's goals referred to the different managerial sub-areas. In particular, the BSC translates the company's strategy into a set of causal relationships between the objectives and measures contained in four perspectives:

- Financial, which refers to objectives and indicators that are important to shareholders;
- Customer, which refers to performance measures consistent with customer relationships;
- Internal process, which refers to the efficiency of the processes that are crucial in meeting the targets in the customer and financial perspective;
- Learning and growth, which refers to the innovation in the management of human resources, information systems and technology that is necessary to reach the internal processes objectives.

Since its introduction, the BSC has been subjected to a rapid evolution process that has led some scholars to identify three different generations (Cobbold and Lawrie 2002; Neely et al. 2003; Speckbacher et al. 2003).

It is worthwhile noticing that the BSC evolution process does not concern the model original idea, namely the identification of a balanced set of monetary and non-monetary indicators relative to four managerial perspectives. Indeed, authors tried to correct some of its limits that emerged from the use of the BSC in existing firms (Lawrie and Cobbold 2004).

In particular, the focus on the strategic vision as criterion to identify a limited number of relevance performance indicators is not sufficient to guarantee a correct formulation of the BSC (Cobbold and Lawrie 2002). Moreover, though authors emphasize the importance of causal links between lead and lag indicators, such relationships are not deeply analyzed (Neely et al. 2003).

Among the limitations of the BSC can still be mentioned the difficulty to derive strategic objectives from company missions and visions that are quite unclear and undefined, the absence of exact benchmarks for the definition of target-values, a deficiency of the information contained in the strategy maps to communicate company strategy to the different organization levels.

The application of the SD methodology for the formulation of the BSC allows overcoming the above described limitations. In particular, the quantitative analysis underlying the SD models is particularly appropriate for the exam of the potential effects of the intangible resources' dynamics on company financial resources, both in the short and long term. Indeed, the use of non-linear equation and the focus on time delays allow portraying, more realistically than the BSC, the cause-and-effect relationships between monetary and non-monetary resources and analyzing how these causal links develop in the considered time horizon.

For these reasons, in literature it has been proposed a new approach to performance measurement, the DBSC (Wolstenholme 1998; Linard & Dvorsky 2001; Richmond 2001; Akkermans & van Oorshot 2002; Bianchi & Montemaggiore 2008), which allows combining the advantages of the systemic and multi-dimensional analysis of Kaplan and Norton's model with those deriving from a quantitative SD simulation model. Such an approach permits creating *interacting learning environments* (ILE) through which it is possible to test, and eventually correct, company strategy before its implementation, by activating feedforward control mechanisms.

Indeed, the static and qualitative approach characterizing the BSC reduces its capability to support strategic planning and control processes. In fact, in the information age, decision-makers have an increasing necessity for strategic decision tools that are able to support them in the management of

dynamically complex systems. With this regard, Kaplan and Norton explicitly recognize how the formulation of the BSC through the SD methodology allows coping with such a necessity. Precisely, the authors affirm that the BSC framework can be included in a SD model that is able to provide a quantitative description of the value creation process (Kaplan & Norton 1996b). Moreover, they also sustain that simulation through SD models represents the best way to portray company strategy and an excellent foundation for the BSC (Norton 2000; Kaplan & Norton 2001).
Indeed, through the DBSC it is possible to combine traditional accounting models and ultimate generation performance measurement models in order to favorite the connection between the different organization's areas.
Furthermore, the SD methodology support decision-makers in the understanding of the dynamic causal relationships between the performance variables included in the BSC and between these variables and the other factors characterizing the socio-economical system, such as competitors' reaction to company strategy, market recession, and so on. The dynamic and quantitative analysis of the causal links between lead and lag indicators improves the decision-makers' learning process and, hence, their ability to perceive how variations in the stocks of intangibles resources can affect financial results, both in the short and long term.
Briefly, the use of the DBSC allows:

- evaluating company strategy and vision and their coherence;
- identifying potential side-effects that can derive from the implementation of the designed strategy;
- verifying the assumptions underlying the BSC;
- simulating the effects of intangible resources' dynamics on financial results;
- implementing scenario analyses in order to anticipate potential threats.

A further development of the DBSC can be obtained by applying the goal setting practice in the design of the learning and growth policies in order to improve personnel' performance. In the following section, the main concepts of the goal setting theory will be underlined.

3. Goal Setting and Goal Commitment

The Goal Setting Theory is considered one of the powerful motivational theories (Locke & Latham, 2002). The theory is based on the assumption that setting challenging goals, hard to reach (goal difficulty), yet well described (goal specificity), contributes to a general improvement in working performances (Latham & Baldes, 1975). A meta-analysis conducted by Tubbs (1986) confirms the hypothesis that setting challenging goals for workers, after a clear and detailed explanation of the objectives, positively influences their performance.
Many scholars have stressed the importance of participation in the decision making process and acceptance of defined goals (goal commitment) for the determination of high performance standards. In accordance to these studies, a high level of goal commitment helps workers intensify their dedication and persistence to work and better their performance (Hollenbeck & Klein, 1987).
In the Expectancy Theory Model the level of goal commitment affects the causal relationship between goal and performance (Hollenbeck & Klein, 1987). More in details, goal specificity and stated difficulty resulted in a better performance if, and only if, the workers' goal commitment is high. In the opposite case: in the presence of a low level of goal commitment among the workers, the goal setting practice may even produce negative effects on performance.
Locke & Latham (2002) suggest that a high-performance cycle model characterizes the goal setting theory. Specificity and difficulty of set goals positively affect the workers' performance, and this enhances the workers' satisfaction with performance and rewards. The more the workers' satisfaction increases, the more the will to commit to new challenging goals increases, and the more *goal commitment* and other moderator variables effect the causal relationship between goal setting processes and performance.

In short, the empirical studies show that:

- goal commitment works as a moderator variable between goal setting and performance (Hollenbeck & Klein, 1987; Klein et al., 1999; Locke & Latham, 2002);
- goal commitment is a key-variable in a high-performance feedback (Locke & Latham, 2002).

In the following section, the case study will be presented and discussed.

4. The case-study

Nicosia S.p.A. is a company that produces and sells Sicilian wine in Italy and many other countries all over the world. The company was found in 1898 by the founder Francesco Nicosia, who opens the first wine shop in Trecastagni, on the eastern slopes of the Etna volcano, in Sicily (Italy). Actually, Nicosia S.p.A. is a company with an annual income of € 3.8 millions, and with an annual production of about 2 millions of wine bottles.
Our work with Nicosia S.p.A. has begun five month ago. During the preliminary phase, the CEO of Nicosia S.p.A. illustrated us how the firm works at the economic, administrative and productive level. The main objective of this work consist in building, with the collaboration of the CEO and the company management, a SD model illustrating the real firm's functioning and, more important, able to assess the consequences of crucial decisions.

4.1 Building the BSC

In order to build the DBSC, interviews to the company management about company strategy have been conducted. With this purpose, the interviews have been based on the following scheme, which is aimed to synthesize the causal relationship between the key-elements for strategy formulation and, consequently, performance measurement systems design.
In particular, this approach has hallowed to identify:

- the main company's objectives for each BSC perspective,
- the performance indicators through which the management can measure the achievement of the company goals,
- the policy levers the management intends to use to reach these objectives,
- the strategic resources the management can count on to implement the designed policies,
- the company activities that have to be carried out by using the strategic resources,
- the company processes within which the strategic activities are realized and to which the company objectives are referred.

These elements have been analysed on the light of the reciprocal influences between the company system and the environmental system and shareholders and stakeholders system.
In figure 1, the strategy formulation and analysis process is portrayed.

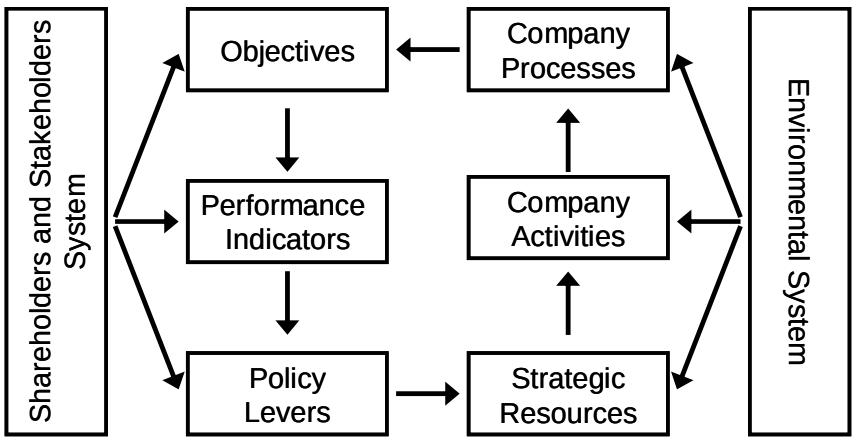

Figure 1: the strategy formulation and analysis process

In particular, in the *financial perspective* the main company's objective is the improvement of company profitability by doubling the operating revenue and reducing the average product cost. In order to achieve this goal, the management intends:

- to invest in credit management to improve company liquidity and, hence, to reduce bank exposures and negative interests,
- to increase the sales volume in the HO.RE.CA. market channel,
- to raise the price of the high-end products.

In the *customer perspective*, the management aims to improve the company image in order to become a landmark in the wine sector. This should allow the company to increase its customer base with particular reference to the consumers of the high-end products.

The company performance in this perspective will be measured by the following indicators:

- customer satisfaction, detected through surveys to resellers or short questionnaire available in the website for end customers,
- number of spontaneous reviews on magazines,
- number of awards in wine competitions,
- number of customers and, in particular, number of loyal customers.

In order to achieve the customer perspective objectives the management plans:

- to increase the number of sales agents,
- to invest in advertising and communication,
- to introduce a new high-end product.

In the *internal processes perspective*, the management aims to improve product quality according to the different quality certification requirements. Furthermore, the company intends to increase the efficacy of the management control system in order to gather strategic information that can help managers in the decision making process. This should allow the management to measure and, then, improve machineries efficiency. In fact, the availability of production data should permit the management to identify activities and/or processes that can increase machineries efficiency in terms of breakdowns frequency and number of bottles of wine per hour effectively produced.

In order to achieve the internal processes objectives the management intends:

- to invest in personnel training programs about quality certification procedures,
- to improve the management control system buying new and more powerful softwares,
- to buy hi-tech machineries.

The main objectives in the *learning and growth perspective* is to build a strong corporate culture in order to increase commitment and personnel skills. With this regard, the management intends to measure personnel performance. For this reason, individual objectives will be assigned to each worker and the percentage of goal fulfilment will be evaluated. The main policies referred to this perspective that will be implement are:

- personnel training programs,
- the application of goal setting practices,
- the design of an adequate incentives system.

In table 1, a synthetic representation of the resulting company BSC is portrayed.

Table 1: the company BSC chart

Perspectives	Objectives	Measures	Initiatives
Financial	- improvement of company profitability	- operating revenue - average product cost	- investment in credit management - increase in the sales volume in the HO.RE.CA. market channel, - raise in the price of the high-end products
Customer	- improvement of company image - increase of the	- customer satisfaction - number of spontaneous reviews	- increase of the number of sales agents - investment in advertising and

	customer base	on magazines - number of awards in wine competitions - number of customers	communication - introduction of a new high-end product
Internal Processes	- improvement of product quality - increase in the efficacy of the management control system - increase in machineries efficiency	- breakdowns frequency - number of bottles of wine per hour	- investment in personnel training programs about quality certification procedures - investment in management control system - purchase of hi-tech machineries
Learning and Growth	- building a strong corporate culture - increase of commitment and personnel skills	- personnel's percentage of goal fulfilment	- personnel training programs - application of goal setting practices - design of an adequate incentives system

4.2 The CLD analysis

According to the information reported in the BSC prospect, a causal loop analysis ha been conducted and shared with the management in order to identify the main feedback loops that can affect company performance as a consequence of strategy implementation.

Figure 2 shows the main causal loops that have been identified by interviews to the company's management.

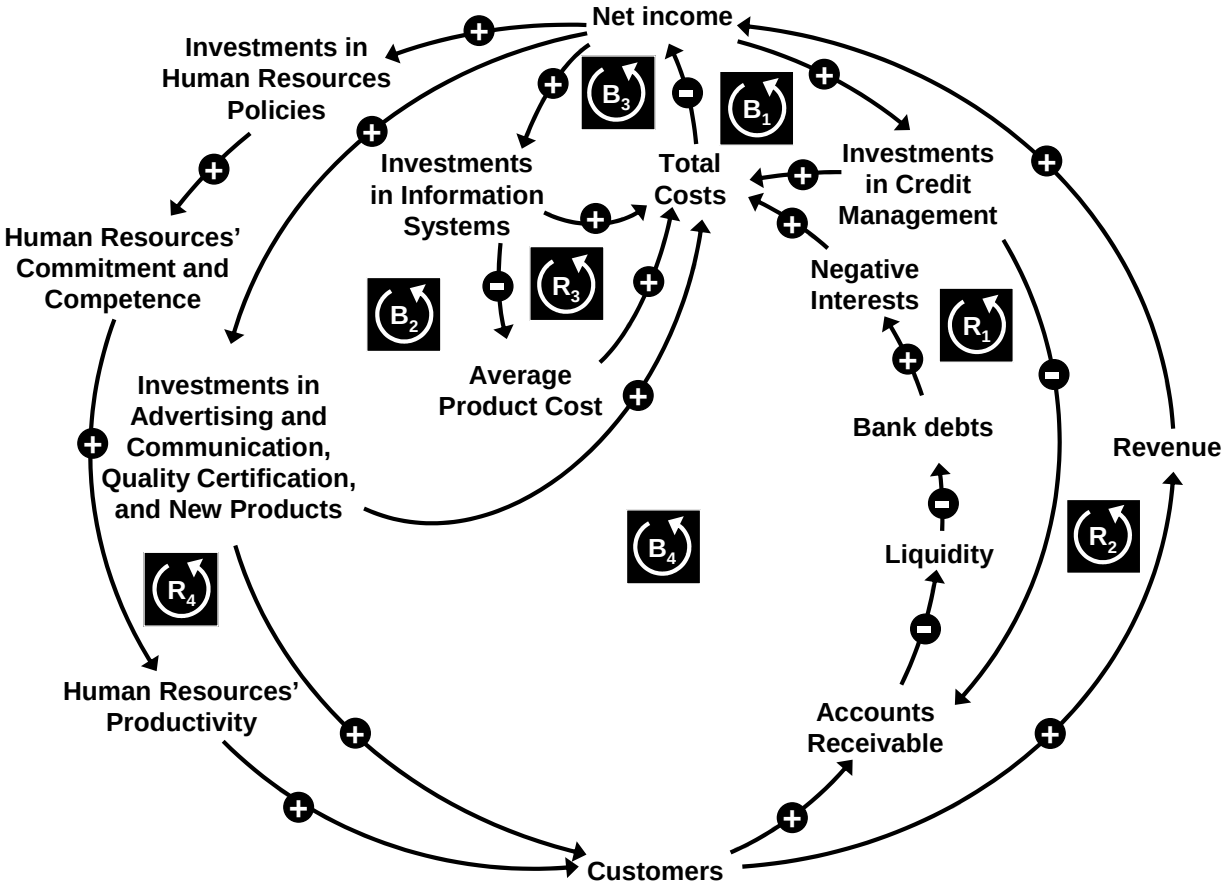

Figure 2: the causal loops diagram emerging from the BSC strategy description

On the basis of the financial perspective policies, an investment in credit management should reduce accounts receivable. This would lead to an increase of company liquidity and, hence, to a reduction of bank debts. As a consequence, the negative interests should reduce as well as costs, implying an improvement of net income that can further invested in credit management (loop R1). However, the investment costs to improve credit management increase company total costs, with a negative effect on net income and, thus, on the economic resources that can be invested in credit management (loop B1).
With regards to the customer perspective policies, an investment in advertising and communication, quality certification and new products launch should increase the customers base, the operating revenue and, hence, the net income that can be further devoted to these commercial policies (loop R2). Also these policies increase company total costs, determining a reduction of the net income that can be invested in the customer perspective policies (loop B2).
Regarding the internal processes perspective, an investment in information systems should allow the management to better control production and commercial processes with the aim to reduce the average product cost. All conditions being equals, this should reduce company total costs and increase the net income that can be further invested in information systems (loop R3). The related investments costs reduces the net income and, as a consequence, the budget to continue improving the information system (loop B3).
In the learning and growth perspective, investments in human resources are planned in order to increase personnel commitment and competence. These investments should determine an increase in human resources' productivity that would enlarge the customers base, with positive effects on revenue and the net income that can be further devoted to such policies (loop R4). Indeed, on the one hand, an increase in sales agents' productivity facilitates the acquisition of new customers and the loyalty process of existing customers. On the other hand, an increase in workers' productivity improves production capacity and, hence, the volume of bottles of wine that can be sell. As well as the other policies, the investment costs increase company total costs balancing the policy benefits. Furthermore, both commercial and human resources policies increase the customers base and, consequently, the volume of accounts receivable, since the company uses to grant its clients to pay their purchases with a certain delay. This has a negative effect on company liquidity, increasing bank debts and negative interests, which augment total costs and reduce the net income that can be further invested in such policies (loop B4).
As it has been pointed out in the previous paragraphs, in the learning and growth perspective the management plans to apply the goal setting practice in order to improve personnel' performance. In the following section, it will be described the cause and effect relationships between the key variables of the goal setting practice adopted by the organization.

4.3 The Causal Loop Diagram of a Model of Goal Dynamics in Organizations

Goal setting practice described in the CLD depicted in figure 3 represents a deeper analysis of the human resources policies indicated in the CLD described in figure 2.

4.3.1 R_1: Growth through Traditional Performance

Traditional performance plays an important role in affecting worker's performance. Since traditional performance refers to the workers' beliefs about their past performance, it's hypothesized that these beliefs influence the workers' perception about the probability to reach goals that are more difficult than the past ones (Barlas & Yasarcan 2008, Forrester 1975, Senge, 1990, Sterman 2000). As suggested in other paper, *traditional performance* is interpreted as fixed variable during the operational period, where its values don't change during the whole goal setting operations period (Ceresia, 2009b).
Barlas & Yasarcan (2008) suggest considering an intangible variable called "implicit goal", which refers to an undeclared goal that the workers seek, despite the stated goal has been expressly assigned to them. Since this model represents commercial activities of a company, *implicit goal*

affects positively *customer order rate*. The more the *customer order rate* increase, the more the *order queue* rise and as consequence, more products are shipped (obviously, if the *maximum shipment capacity* variable don't act as a constraint), increasing the value of the *products sales* stock.

4.3.2 R_2: Growth by Stated Goal

Stated goal variable is interpreted as fixed variable during the operational period. Accordingly with MbO theory, managers set the goals (*stated goals*) before the start of the operational period, and they don't change these goals during it. Sometime may occurs that, due to unpredictable events that can affect organizational performance, the management decides to reassign new goals to the workers, but maximally once a year and, anyway, this is more an exception than a rule. So, *stated goal* variable is interpreted as a fixed variable during the operational period, and its value changes only by the effects of the management goal setting policies.

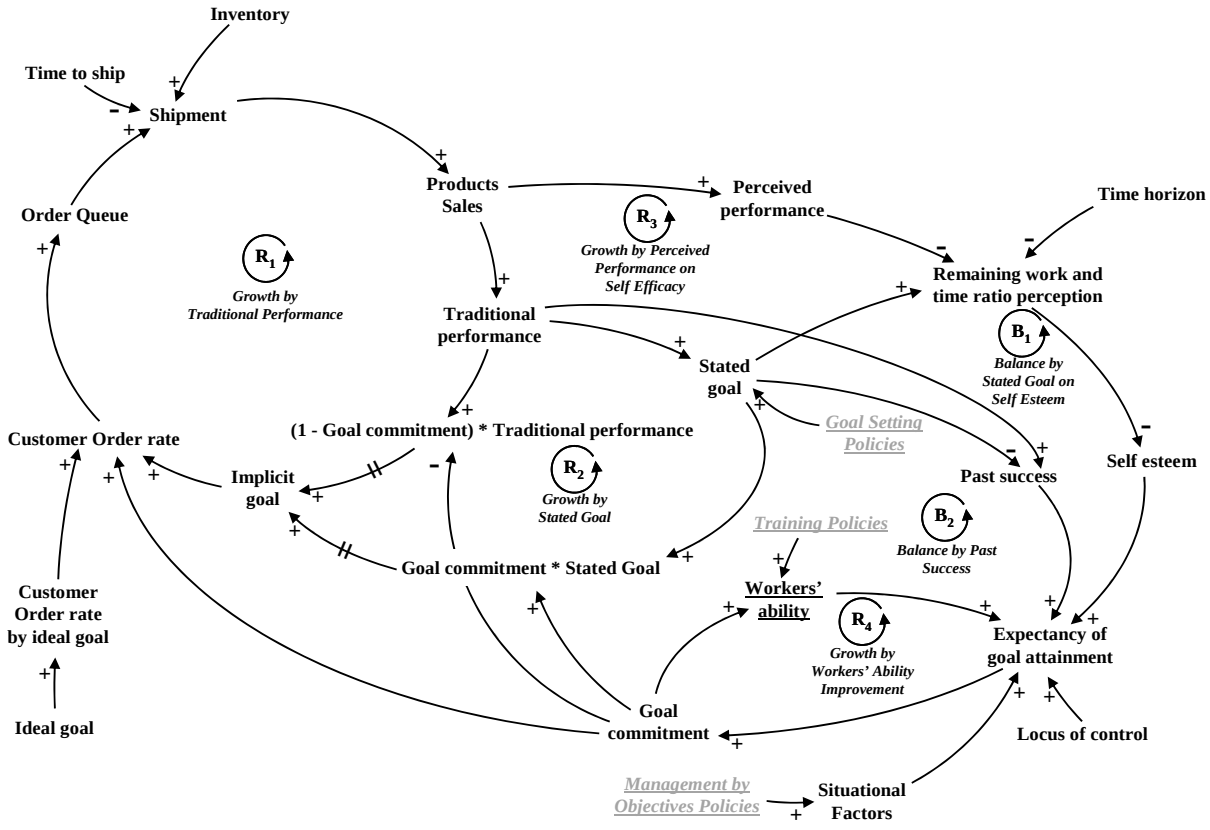

Figure 3: The Causal Loop Diagram of the Model of Goal Dynamics in Organizations.

4.3.3 R_2: Growth by Perceived Performance on Self Esteem

In this feedback loop we can observe that *perceived performance* is a function of *products sales*. Perceived performance is an immediate psychological perception of products sales quantities changing over time, even if this perception can not correspond to the real data which the perception refers, due to the lack of products sales quantities company reports in every timestep.

Going ahead to the feedback loop, *perceived performance* negatively affects *remaining work and time ratio perception* that, in turn, negatively affects workers' *self-esteem*. In accordance with Expectancy Theory of the antecedents of goal commitment (Hollenbeck & Klein, 1987), *self-esteem* is positively related with *expectancy of goal attainment* and therefore, with *goal commitment*. Then g*oal commitment* affects *customer order rate,* as it has been already explained. revious section.

4.3.4 R_4: Growth by Workers' Ability Improvement

Some scholars underline that goal commitment speed up the ability acquisition process of workers (Seijts & Latham, 2001). A high level of goal commitment accelerates the processes of acquisition of the specific skills, fundamental for the accomplishment of particular tasks. Since, *goal commitment* is positively linked with *workers' ability*, which positively affects the *expectancy of goal attainment.*

4.3.5 B_1: Balance by Stated Goal on Self Esteem

In this feedback loop the *stated goal* positively affects the *remaining work and time ratio perception*. Then the more the *remaining work and time ratio perception* increases, the more *self esteem* decreases. Some researches underline that the higher self-confidence that characterizes high-self-esteem workers is associated with high-perceived probabilities for reaching difficult goals. In an empirical research, Hall & Foster, (1977) shown that high self-esteem is associated with the choice of high goal levels. In accordance with these evidences, the more *self esteem* increases, the more *expectancy of goal attainment* rises. All the variables of this feedback have been described in the previous subsections.

4.3.6 B_2: Balance by Past Success

Future goals are higher following success than when following failure. This premise well explains the meaning of this feedback. *Past success* is affected positively by *traditional performance* and negatively by *stated goal*. The more *past success* increase, the more *expectancy of goal attainment* rises.

4.4 The company Dynamic Balanced Scorecard

On the basis of the CLD analysis, the company BSC information has been embedded in a SD model in order to build a DBSC that could support the management in testing the designed strategy.

With this purpose, four sub-models have been created, one for each BSC perspective, which interact with each other according to the feedback structure described in the CLD analysis.

In the financial sub-model, the company income statement, balance sheet and cash flow statement are analysed and calculated on the base of costs and revenues deriving from the other company sub-systems. This should support the managment in assessing the designed strategy also froma a financial point of view. Whithin this sub-model the credit management policy is described.

In the customer sub-model, the commercial policies are examined. On the base of the assigned goals the sales agents sell the company wine to customers, which are inclined to buy it on the base of product price, quality, advertising and external communication activities.

In the internal processes sub-model, the production process is described, from the purchase of grapes to the production of bottles of wine. The effect of the investement in information systems on produciton efficicency is also analysed.

In the learning and growth perspective, the goal setting practice is deeply investigated. Based on literature and on the information gathered in the wine company, the difference between the assigned goal and the implicit goal and how this influnces personnel motivation and committment is described.

In figure 4, the four sub-models strucutre is portrayed. In this figure, the more representative causal links between the four sub-models are illustrated. In particular, the financial sub-model is influenced by the costs generated in the other company sub-systems. For example, as illustrated in the above figure, the grapes costs and the wine products costs defined in the internal process sub-model are some of the elements of the operating costs that determine the net income, which is included in the financial sub-model. As well as the production rate, which stems from the internal process sector, defines the changes in final products inventories that influence the net income.

Another input of the financial sub-model is given by the revenue flow, which is calculated in the customer sector.
The financial sub-model influences the other sub-systems' policies. In fact, in the financial sector are determined the budgets that can be devoted to the investments in human resources, in machineries, and in advertising and communication.
The customer sub-model inputs derive from, other than the financial sector, the learning and growth sub-system, where the goals for sales agents and workers are defined according to the goal setting practice, and the internal processes sub-model, where the final products inventory, which influences sales, are determined.

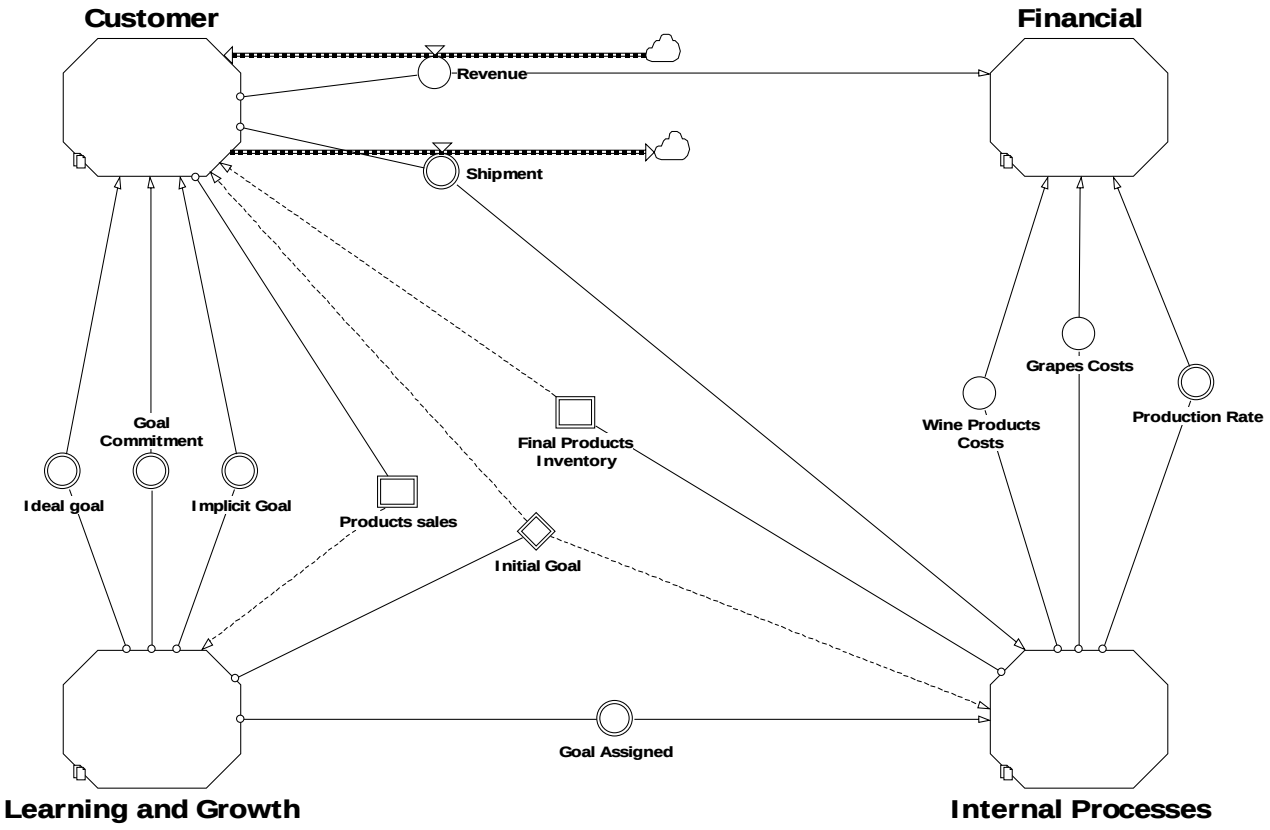

Figure 4: The four sub-models strucutre used to build the company DBSC

The customer sub-model affects the internal process sector through the shipment flow, which depletes the final products inventory determing the necessity to produce more wine. Furthermore, it influnces the learning and growth sub-model by the stock of product sales that represents the traditional company performance to which the goal setting system refers in order to fix company goals.
Finally, the internal process sub-model is also influenced by the laerning and growth sector, since the production objectives are determined by the goal setting system and the workers' productivity is affected by their competence and motivation.

5. The scenario analysis

Based on the insights from the meetings with the company's management, two main scenarios have been identified and analysed through the developed SD model.
The SD model covers a period of four years (2009 – 2014) articulated in five different operational periods. The following are the two different scenarios analyzed.

5.1 Scenario 1 (base run)

The first scenario (base run) is based on the management of the three main directional levers as described in table 2. The results of the goal seeking behaviour generated by the model are traced in figure 6. As shown in figure 6, during the five operational periods (2009 – 2014) the value of the products sales quantity corresponds to the value of the implicit goal, and both these values are always lower than the stated goal value.

Table 2. Value of directional levers as managed by company

	30/12/2009	30/12/2010	30/12/2011	30/12/2012	30/12/2013
Goal Setting	10 %	10 %	10 %	10 %	10 %
MbO[1]	0,3	0,3	0,3	0,3	0,3
Training[2]	0,3	0,3	0,3	0,3	0,3

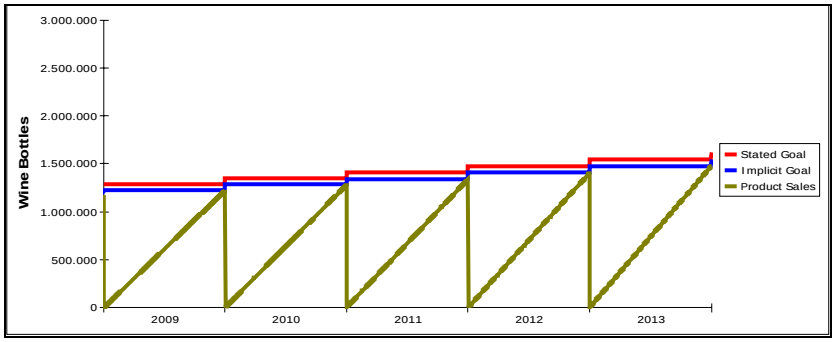

Figure 5. Goal seeking behavior generated by the model (scenario 1)

5.2 Scenario 2

The second scenario is based on the management of the three main directional levers as described in table 3. The results of the goal seeking behaviour generated by the model are traced in figure 7.

As shown in figure 6, during the first operational periods (2009) the value of the products sales quantity corresponds to the value of the implicit goal, and both these values are lower than the stated goal value. During the second and third operational period (2010-2011) the value of the products sales quantity is higher than the value of the implicit goal and the stated goal value. This phenomenon refers to the Bass's theory, that underlines that if the management adopts a transformational leadership approach, this can enhance the workers' motivation and produce a "performance beyond expectations" phenomenon, (Bass, 1985). That is, if managers consciously use human resource management practices, workers can reach goals and levels stretching far beyond their own expectations. This behaviour has been deeply described by Ceresia (2009b).

Table 3. Value of directional levers as managed by company

	30/12/2009	30/12/2010	30/12/2011	30/12/2012	30/12/2013
Goal Setting	10 %	10 %	10 %	10 %	10 %
MbO[3]	0,3	0,8	0,8	0,8	0,8
Training[4]	0,3	0,8	0,8	0,8	0,8

[1] *MbO variable is modelled as a constant that can vary between 0 (very poor management of MbO) and 1 (really good management of MbO).*

[2] *Training variable is modelled as a constant that can vary between 1 (no training activities) and 5 (very effective training activities).*

[3] *MbO variable is modelled as a constant that can vary between 0 (very poor management of MbO) and 1 (really good management of MbO).*

[4] *Training variable is modelled as a constant that can vary between 1 (no training activities) and 5 (very effective training activities).*

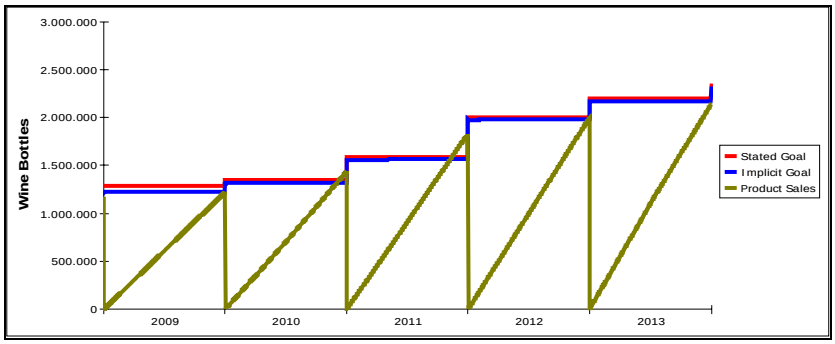

Figure 6. Goal seeking behavior generated by the model (scenario 2)

Finally, during the forth and fifth operational period (2012-2013) the value of the products sales quantity correspond to the value of the implicit goal and the stated goal value. This behaviour in the consequence of the company production capacity limits, that don't allow the management to set higher stated goal.

6. Conclusions

The present research constitutes a further effort in the development of a SD model for goal dynamics in organizations. In particular, the authors tried to combine the SD, BSC and Goal Setting approaches in order to develop a SD model that could support managers in designing systemicstrategies adopting monetary and non-monetary perspectives.
The analysed case study pointes out how the adoption of the DBSC, with a particular focus to the learning and growth perspective according to the Goal Setting practice, effectively helped the management of a wine company in evaluating the potential effects of alternative policies.

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