THE DEVELOPMENT OF MANAGEMENT STRATEGY BY THEORY FOCUSED PLANNING

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Abstract:

The research done for this article is following the elaboration of a moldable model on the actual economic context, in which there are considered continuous learning elements on facts and commercial niches, evaluating a business starting from causality diagram and structuring its processes. Analyzing the evolution of a business and on the market in which they are deploying their activity through quantitative and qualitative measurement methods focused on trends.

Testing hypotheses and business suppositions that are the main engine of theory focused on planning, a model of creating a strategic management process that will be developed in this article.

Keywords: cause diagram, strategic experiment, output, theory focused planning, trend

JEL Classification: Q_{42}

Introduction

In a liquid fast changes and insecure environment can make structural planning (physics and chemistry) to be without sense. Planning is crucial for strategic experiments because it creates the learning context (Delmar, F., Shane, S., 2003, pp. 1165-1185). Classical planning has a low efficiency because this isn't molded on the test case that is wanted to be solved. Planning as a result of implemented research that underestimates the level of incertitude in the business process and a venture capital approach is too simple (Brews, P., Hunt, M., 1999, pp. 889-913). Is it working?

It is known the idea that each individual has his own way and dynamics to learn, this fact must be considered for creating the right planning method. This method must make managers to assume the production cycle, redefining the theoretical and prediction methods and the evolution and prediction factor must rely on *trends* (Barringer, B., Bluedorn, A., 1999, pp. 421-444).

The task of managing a strategy experiment can look like flying an experimental plane, but the difficulty level is different because the strategic experiment has two main ways of approach: first approach, similar to flying a plane which is an individual activity, while managing corporations is done by management teams, the second approach is linked to the type of feedback received, for flying planes is instant while in management, the feedback is postponed for weeks, months, quarters or years.

For this, the leaders of strategic experiments must do more than just predict, they must share with their colleagues and hold them connected until the forecasted results are shaped. In this moment, leaders must re-examine the predictions and theories supposed as true.

For an individual to create theories or predictions in a chronological and logical systemic way, he must have some skills which prove to be crucial, because without them he cannot open and maintain a healthy discussion on financial results of the managed business. Each member of the management team has his own theory on how it is needed to react in some cases and what outputs can be obtained, this way each one can interpret differently the obtained results. If these results cannot be presented clear and objective, then these become impossible to interpret. Self interest, power thirst and momentum influence are wasting the learning opportunities.

Almost a decade ago, Chris Trimble (professor at Tuck Dartmouth School of Business) and Vijay Govindarajan (professor at Harvard Business School) have created a way of approach and a set of tools that assimilate all the variables in the life-cycle of a corporation or a product; they named the system as: Theory-focused planning – TFP (2005, pp. 149-181). The TFP system is of great volume from the information perspective, but not complex, having immediate actionability. The creators used this system in developing New York Times Digital and on other corporations, and their boards of directors (Govindarajan, V., Trimble, C., 2005, pp. 149-181). The structure of the system has at its foundation the development of a start-up, which gets a rapid growth and reaches a targeted profitability rate, this exercise having a three year implementing deadline. To see the discrepancies between classical planning systems and the TFP system this exercise is for the first time deployed through a classical planning system (this having a 80% failure probability) and after the initial round it is deployed through the TFP system (with a rate of success of 80%).

The strength of TFP is the ability to create an idea vector on the tested strategic experiment, a vector that relies on theories, presumptions, predictions and outputs. The failure of TFP is founded on the responsibility as a main factor in maintaining a position in the corporation, this intra-corporation decision factors have the tendency to hide the bad news and the plans that are

out of direction; they must be considered responsible for learning (speed, stringency and discipline of TFP).

For offering a theory as a solution there are two aspects that must be followed:

- building the theory;
- testing the theory.

The theory must be built and tested at least in a mental plan. Fast learning is possible when the created theory is divided on components that can be tested separately. To be proven to have maximum efficiency these components must be measured in a quantitative way. In the building of a theory we need a measurable model for the performance reached by the business.

TFP relies on a creation algorithm in eight stages, in the first six stages is found the building of the theory and in the last two stages it is tested and revised.

1. Stage 1. Describing the business model

To start the building of the theory it must be understood how the strategic experiment works. An efficient approach method for the first stage is designed through two ways: a cause-effect supposition on taken measures and their output and followed by the measurement of the duration of the "taken measure – output" cycle.

1.1. Cause-effect suppositions. An efficient tool for communicating cause-effect suppositions is the "causality diagram", this having at its foundation a representation system of the taken measure and its output, this diagram includes the causal connection between them Figure no. 1.

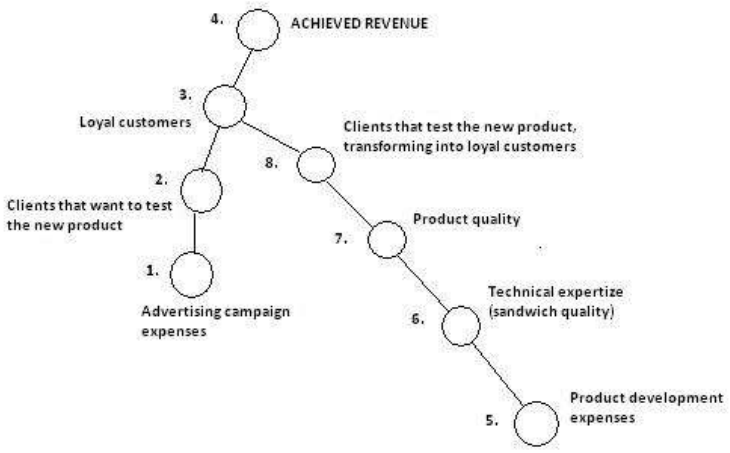


Figure 1. Causality diagram (cause - efect type)

Source: Govindarajan, V., Trimble, C., 2005, p. 153

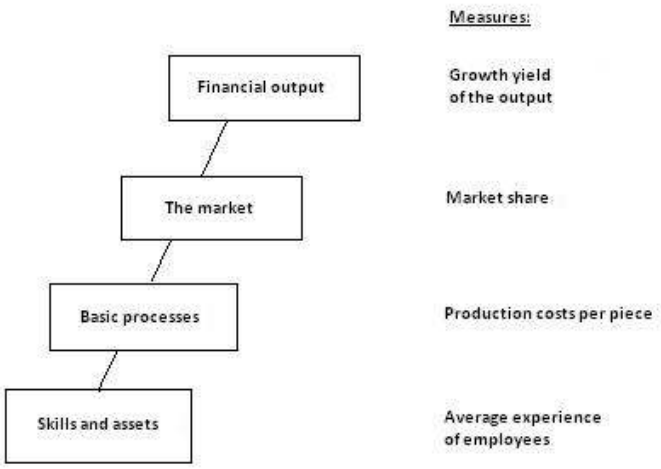
The causality diagram can be branched based on the output, through the causal chains. In creating a general-theory on the strategic experiment, the taken measures have its foundation on the budget constraint and the output is measured in revenue or income.

Describing causal chains for strategic experiments includes a guessing work too. The presumptions created must be clear, concise and to present better alternatives, with high productivity rates. The causal chains aren't isolated. These represent interactions between other chains. In the causality diagram it is presented an observed model in the framework of executive components of the corporation, as an example: converting the testing of a new fast food product (a sandwich) in exposing it on the market, to the general public (the impact of the actions are described through the causal chain 5-6-7-8-3).

The beginning is one of the hardest components of creating a cause-effect diagram. To create a process with automatic deployment are found some components for fusing off the process: firstly, it is needed to focus the process on one department of the corporation (marketing, research & development, etc.) and illustrating it through simple suppositions on how spending influence the income; secondly, not to create constraints by eliminating direct quantitative measurement, these being measured in the next stage; thirdly, it is observed that many causal chains follow the same general model. Starting from spending decisions, they go through many

measurement methods, measurement grounded on competences or assets, through the core business and through the market (Figure no. 2), before finishing the diagram by shaping a financial output, 5-6-7-8-3-4 cycle (Figure no. 1), represents the described sequence in the above terms. Some causal chains concentrate on some parts of the model. For example, marketing expenses can be directly interconnected with the output from the market and the financial output, without a clear identifying of the components or the basic processes.

Figure 2. The common model of causal chains



Source: Govindarajan, V., Trimble, C., 2005, p. 154

Influence or causality (cause-effect type) diagrams can become very large from the informational perspective. To avoid this fact it is preferable to observe only the important elements, those elements that clearly and structural show how it works and how it is expected that the business should work. For maximum efficiency it is preferable to draw the causal-effect links that capture the behaviour component of the competition, to this we can add the decision links (non-pecuniary) with an important role, for example: establishing the price.

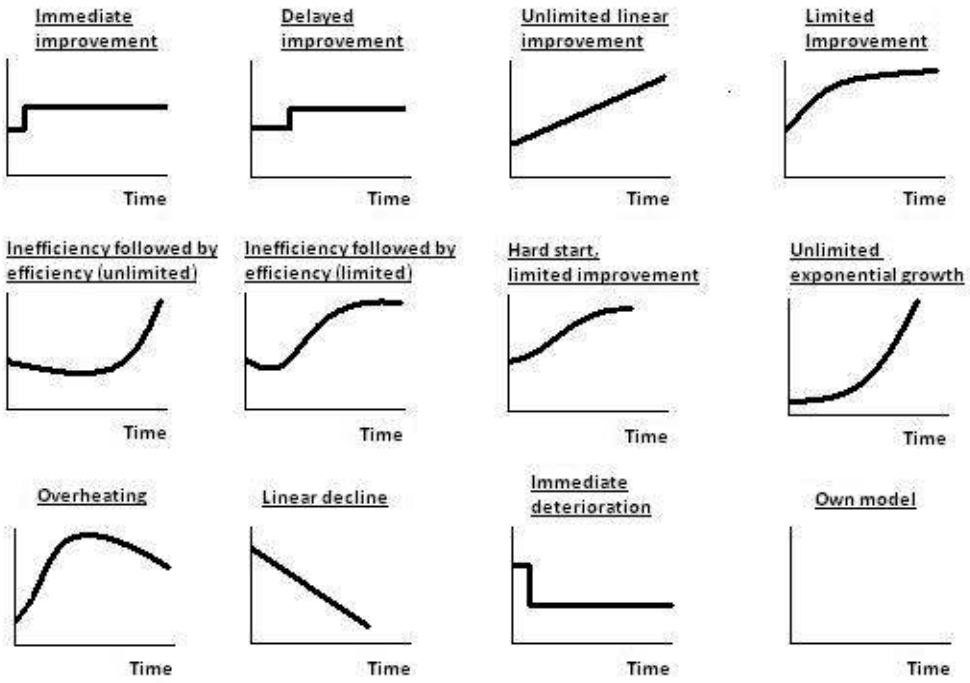
To create an inferior econometric error it is desirable to insert at a small level the "main unknowns": theoretical elements that if they are proven to be incorrect, can alter or ruin the

model. These unknowns are needed to be guessed because in the sixth stage these will be evaluated.

1.2. How long does it take? After the theory was created it can be used to make predictions. These are made through many steps that are followed. There cannot be made forecasts until there isn't created and implemented an action plan, which on TFP relies on budget lines, these cannot be tested without having a set of goals, but goals can not materialize without testing the feasibility in time of the main idea of the business.

These suppositions need initial hypothesis on the periods between cause and effect, in other words, at a certain taken measure it must be analyzed what trend we'll have until the completion of the output, how it will behave in time, stressing this way the idea that the trend of an output is an information that is worth more than the output itself. The measurement of the trend is needed to be in a qualitative way, built on an axis that contains time and achieved output. Qualitative modelling of the trend is based on the fact that it isn't important the accuracy of the prediction but the graphic shape of it. (Figure no. 3).

Figure 3. The importance of the graphic shape of the trend



Source: Govindarajan, V., Trimble, C., 2005, p. 158

The basic hypotheses are needed because they show the effect in time of the cause-effect suppositions for each variable: if a variable would have a doubled budget and the rest of the variables would remain constant what would happen during time. From this approach would result trend graphics for an isolated response.

In the economic gearing not everything remains constant. The purpose is that to observe the time gaps between cause and effect. This way it is created an intuitive model which proves in time to be very valuable, especially when it is forecasted for the strategic experiment as a whole, having all the factors included.

2. Stage 2. Identifying the measurement model

In the past years the concern for measuring innovation, a qualitative variable that is desired to be measured quantitavely. It cannot be created a standard quantitative measurement model because innovation is niched and specified on a restraining order by what is wanted to be obtained, having an underlined character of uniquely.

Measurement is important because the developed relations in the causality diagrams are composed by undemonstrated hypothesis, these being evaluated through demonstrating the existence or not of the causality relation.

In the causality diagrams we can measure total or marginal utilities through which it can be demonstrated consumers satisfaction, but in other variables that can be demonstrated we can use qualitative methods, these being the adequate solutions for underlining variables influences. The qualitative and quantitative measurements are necessary, but the most important are trends (having a main qualitative component and a secondary quantitative one). These influence especially the technical expertise, which we can consider to be a success factor to show how a business works.

It is preferable that when it is desired to demonstrate the validity of a theory to use a quantitative method instead of a qualitative one, this way it can exemplify through the "product quality" dynamic as a qualitative variable measured in a quantitative way. It is preferred to quantitatively measure each component from the beginning of the causal chains, representing in a more pronounced way the budget influence facing obtained revenues, with how much a variable from the theoretical model is near to the ground of the causal chain that much is easier to validate parts of the announced theory.

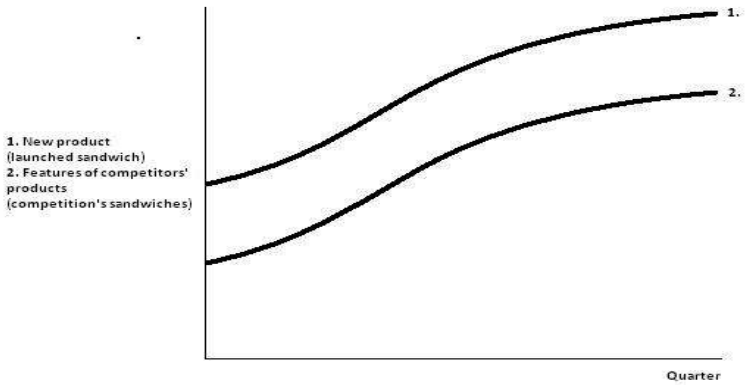
This stage is completed when it is created a set of valid practices for the created causality diagram (Kaplan, R., Norton, D., 1996).

3. Stage 3. Establishing goals

In this stage the goals or the best solutions obtained by the management team shaped on some optimistic, but realistic scenarios. Depending on evolution trends obtained there can be shaped the suppositions of the management team for determining the goals by realistic presumptions on competitors and on competition itself, for example: if a competitor has the same business and assets structure as the corporation itself we suppose that he will follow the same development opportunities.

The main goal of this stage is to establish success criteria on short term for each endogenous variable (inter-corporative system) and exogenous variable (the marketplace for the good or service offered by the corporation), to which it is added the early signalling of obtained success or failure (by accelerating gains or limiting losses) Here the outlining of the trend graphic (qualitative variable) is based on the relation between assigned budget and delivered goal through trend. Trends that show assumed goals are expressed by comparison with alternative scenarios, with which we can illustrate through a start-up that wants to offer more products than its competitors already on the market, its trend (the products that are offered) is compared with the one of the competition (Figure no. 4).

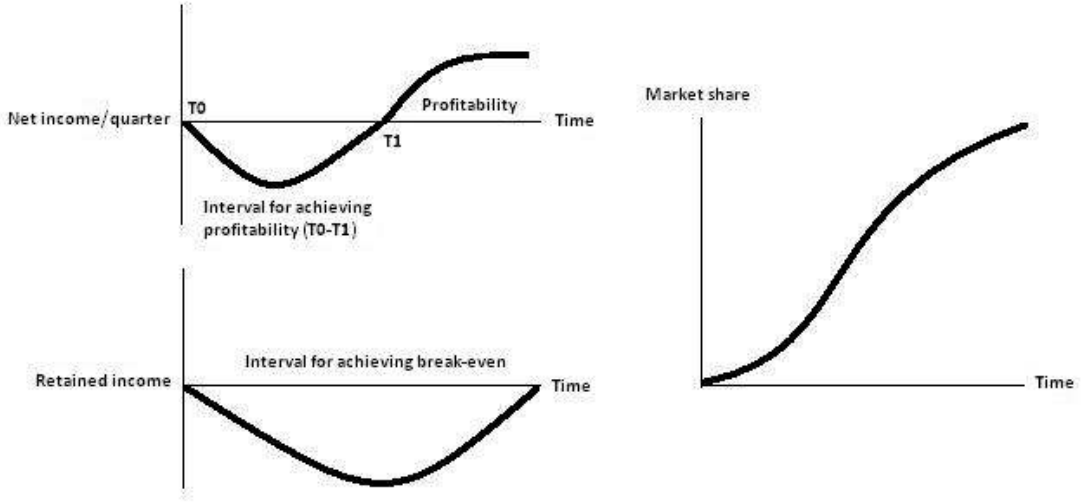
Figure 4. Goal'trends comparison



Source: Govindarajan, V., Trimble, C., 2005, p. 163

Some general goals are applied to all start-ups, like S-curves for market growth and the loss/T0 and profitability/T1 influences (*Figure no. 5*). These goals represented through trend lines must be discussed from the ideas that show market growth, what time interval must be taken into account, to what limit must be losses assumed and what distribution model of losses through time must be implemented.

Figure 5. Standard graphics for start-ups



Source: Govindarajan, V., Trimble, C., 2005, p. 164

4. Stage 4. Tracing rules for expenses

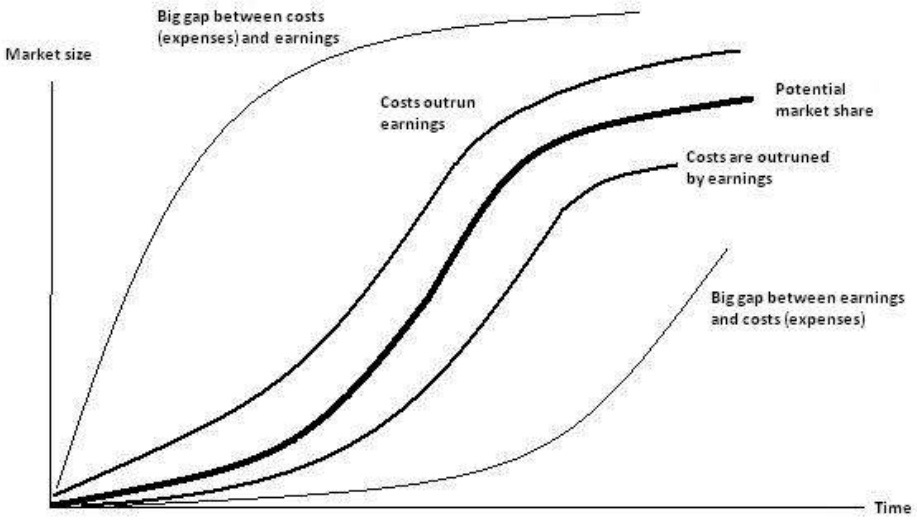
Managers from mature corporations on the market have the tendency to budget every aspect of deployed projects. The calculation model of the costs for a project is based on budgeting initial costs of preparation and conducting the project plan, after which are prioritized the components of the plan and are scaled depending on the available time.

The approach of this model by the perspective of a strategic experiment is based on shifting/expressing all unknown variables by their budgeted values and by the duration of creating-deploying-implementing them. This stage is similar with the one that establishes the

goals, but now are taken in consideration the qualitative values of the observed trends and not their numerical values.

4.1. Total expenses. We can start with an estimation of a total budget for a project until it becomes profitable. We take for example the fast-food market in Romania (2 billion Euros in the year 2010 (www.gandul.info) on which company X launches a fast-food restaurants chain that has forecasted to reach 10% from its total value when it will reach profitability, this means an achieved break-even at 200 million Euros. In that moment it is desired to know the linear allocation model of the amount designated as expenses, because if the allocation is done only based on the hope of income it is possible that optimal threshold of profitability (10% market share) or the market will shrink in value (under 2 billion Euros) and to consider the initial investment as lost. If it is waited for the shaping of an evolution trend of 10% market share and after this to make to massive investment it is possible that a competitor to capture from the market share of the new restaurants chain and then will intervene sustainability problems for the entire business. In Figure 6 are demonstrated alternative evolution models for expenses through time, this way are drawn the assumed risks through massive investments into a project with great failure chances (Boulding, W., Christen, M., 2001, pp. 20-21).

Figure 6. Allocated budget - market development stage synchronization



Source: Govindarajan, V., Trimble, C., 2005, p. 166

4.2. The application of the previous procedure to each function. It is estimated the moment when the business becomes profitable and creation and implementation expenses are distributed through time until the moment elected as optimal, after that the trend graphic is drawn, that it can be compared with the general expenses trend, which can be updated. Depending on the level of approximation of trends there must be created the presumption if the link between actual expenses, future profitability and reaching an optimal profitability point to be lagged or advanced, leading. For example we can take the development of a type of sandwich by the new fast-food restaurants chain: marketing expenses are lagging to the product development stage, this being easily observed in the causality diagram.

4.3. Estimation method of future expenses. The expenses level deployed on the components of the process in the moment of reaching profitability is hard to establish, but it can easily estimated through scale economic models. If at the beginning the corporation loses money, the model must follow two types of yields: the one of obtained incomes by the new service/product (given services by the restaurant/the produced sandwich), that must be bigger than the one of total expenses. A specific quantitative method is creating a table (Table no. 1) in which are compared the percentage growths of deployed expenses and of obtained incomes in T0 and T1. For example we can consider a scenario where we have a loss of 27% and through the differential effect of multiplication on departments versus the effect of multiplication of incomes, will result in T1 a profit of 31%.

Table no. 1

Projecting future profitability

Cost cathegory	**Current value (%)**	**Income growth (grows 20x)**	**Projected income (%)**
Sandwich production	50%	14x	35%
Operations	30%	10x	15%
Marketing	20%	8x	8%
Market research	2%	10x	1%
Sales	25%	8x	10%
Total expenses	127%		69%
Profit margin	-27%		31%

Model created through the TFP method for a chain of fast-food restaurants, similar to the structure of McDonalds.

5. Stage 5. Performance forecasting

After drawing the rules of expenses we can generate a complete set of predictions on performances, representing them through trend graphics on each component of the causality diagram, after which a general trend graph is traced, in which the initial trends are considered unified deviations of the deployed predictions. It is possible that a part of the initial predictions to be wrong because they were under the influence of informational asymmetry, this way they must *be revised.*

6. Stage 6. Identifying the main unknowns

Similar to testing an econometric model we have lots of suppositions and hypothesis that can prove to be wrong or can be influenced by the strategic experiment's model that it can invalidate.

Firstly we must consider the unknowns and exogenous variables that directly influence on the path to obtain profitability. The new information that had appeared must be inserted in the model and it must be reconfigured on the path to the optimal profitability point. In the unknowns that can influence the accuracy of the model are found the competition behaviour and market development. Not to dilute the model it is preferable that the number of errors must be limited to maximum two unknowns per budget component.

7. Stage 7. Discrepancies analysis between predictions and output

This stage moves the TFP from building the theory to testing it. The planning cycle must be a fast one, because it needs to have the same yield with the appearance of new available information. The comparison between predictions and outputs is done by comparing trends in the actual moment (T0); the past is taken in consideration (T-1) and the future moment (T1). To observe disparities between the actual trend (T0) and the one initial forecasted (T-1 the moment for forecasting T0) we arrive at one of two possible conclusions: the actual prediction wasn't realistic or the management team had an under-optimum business behaviour.

8. Stage 8. Revising the plan

Building the theoretical plan and its applicability are crowned with success in the moment when these are revised. It is possible that in the moment of revising the plan is needed to modify or test new causal chains, for this we have the next sequence of steps:

1. up-dating the business idea;
2. recalibrating the measurement model;
3. reconsidering the goals;
4. reevaluating expenses rules;
5. up-dating predictions;
6. up-dating the main unknowns.

The different vision from classical planning models

If conventional business-management models are known globally and have shown a low level of adaptation of consumer's requirements and the actual macroeconomic situation, we can underline the differences between classic models of planning and actual ones; these are the proactive analysis elements in efficient modelling from idea-to-theory evolution, to concept and implementation. These differences are:

1.Predictions are revisable. Classical planning sets predictions to fixed terms of one year, while TFP changes predictions during the appearance of the specific information.

2.Planning incorporates the main unknowns. The volume of incorporated unknowns by TFP is bigger than the ones introduced through classical planning, this way it has a bigger degree of reality compliance.

3.Predictions are made on the basics of developed theory. From this supposition we realize that theory is more important than predictions themselves. For mature corporations the past is as important as the future, because it balances the forecast with the reality.

4.Predictions are given by trends. Classical planning uses in a small amount trends as way of objective expressing, while the TFP uses compared trends (forecast versus what was accomplished).

5.Supervising performances including chronological deployment. Classical planning includes achieved outputs, while the TFP uses the comparison of predictions trends with outputs trends, including the chronological variable.

6.Revisions are frequent. Planning of the strategic experiment becomes more and more complex starting with the evolution of the corporation and the review component is included in the informational yield that is included in the planning cycle.

7.Plans don't include leading indicators. Classical planning covers a multitude of indicators, while TFP is based on leading indicators, these are valued through components that are situated on the basis of the causality diagrams, and these are the first indicators that show if a plan works or needs to be revised.

Conclusion

Because these differences are obvious, it is preferable that a TFP process must be considered as an alternative solution for the initial planning process for the main activity of a corporation, this can be allocated as a working method for a committee of the board of directors, with strategic implementation and business development, virtually being a parallel guidance model in adopting new solutions for the company and adapting some new strategic-managerial development methods.

Theory focused planning is an efficient method for recovering the existing gap in the strategic experiments field within a corporation.

The causality diagram communicates effectively how a corporation works as a whole, showing this way the whole framework of key employees from each department, to understand the effective creation and evolution process. Corroborating the causality diagram with the proposed business theory can show the businesses evolution and dynamics trend (low quality services at a low price versus high quality services at optimal prices).

To all analyzed components we add the work dynamics. New launched products based on an established business model (for example: the evolution of a product, especially software products, generation 1.0, 2.0,2.1 etc.) that are dynamically positioned in the causality diagram of the corporation have as a result a launching or withdrawal trend for a product or service (similar to Product Life Cycle Management). It can be considered that this theory focused planning process can be based on a system in which learning relations (into the management team), research-development relations (for achieving the initial goals and shaping future goals) and strategic relations (the board of directors shapes initial predictions on the mission and vision of the corporation, corroborated with the long term strategy for obtaining sustainable growth of the corporation).

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