IT Tools and their Use in Strategy Creation in Respect of Economic Results of a Company

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Abstract

Purpose of the article: The article analyzes the current state of information technology in terms of their use in a strategy creation of a company in relation to monitoring the economic results of a company. It investigates, identifies and evaluates the overall situation of the concept and principles of these tools, their effectiveness in drawing up the strategy and strategic company goals, the ability to perform a variety of economic analysis without the need of a complex operation and understanding, but also for an effective evaluation of data for a planning support, management and deciding of management components, leading to the overall success of a company. The reason for this monitoring is a considerable difference between strategic company planning and its real results.
Methodology/methods: In terms of methodology, the literature review of the current state of the issue has been used. – Primary: interviews, observations, expert estimation. – Secondary: evaluation of the data from the database of IS, documentation of seminars. – Quantitative Research: mapping the orientation of the issue, the confrontation with the theory. – Qualitative research: projective, structured interview (by users and suppliers).
Scientific aim: The main aim of the work is to solve the problems of management and evaluation of the economic process in respect of information technology tools in connection with the formation of corporate strategy and monitoring of financial results of the company. The reason for selecting of the above-mentioned issue is the fact that information technology resources are currently not used in the creation of corporate strategy, specifically in the area of economic goals.
Findings: To describe the situation in the region and to clearly define the basic problems used as a basis for the use of IT support tools in creation of corporate strategy, namely economic goals and the use of feedback of information support tools for assessing the economic results of the company. To identify individual problems and compare them with the perception of this issue at the level of professionals in science and information technology.
Conclusions: Based on the evaluation of information support used for creation of economic objectives within the corporate strategy and the use of factors of an economic evaluation of the company, to define the issue of the application of these instruments by both users and suppliers.

Keywords: Information System, Management, Process, Analysis, Reporting, Business Indicators

JEL Classification: M15, M21

Introduction

The whole issue of using the tools of information support for the creation of corporate strategy in respect of evaluating the economic results of the company is to be divided into several views. Prior to that, it is necessary to describe more thoroughly the reason which has prompted this article. Based on observations and partly on experience, there is a considerable discrepancy between the defined strategic goals and actual achievements in a large number of firms on the Czech market. Given the very broad range of possible strategic objectives, this article focuses on the economic objectives of the company, as a part of corporate strategy. This is also a reason for another part of the title of the article, *i.e.* the use of a system for evaluating the economic results of the company and its use in compiling economic targets of corporate strategy.

From the perspective of the economy and economic department employees across all levels of management, the requirements for economic evaluation are rather clear. This issue is adequately described and its history as well as a list of recent publications would take a lot of pages. Another view is directed to the area of information technology, which should be a tool for ensuring the availability of the required data from the economy, for the creation of the economic goals of the company as a part of corporate strategy and their correct and timely use.

At this stage, there is a fundamental contradiction in the perception of the possibility of using the tools of information support in the creation of economic goals within the strategic goals of the company and at the same time using the system for evaluating the economic results of the company. This article aims to describe the situation in the region and to clearly define the intersection of these points. The aim is not to define and discuss the topic of strategic planning as such, or part of moving towards economic (financial) targets.

1. What are the tools of information support useful in creating of economic objectives of a company in the context of corporate strategy in respect of evaluation of the economic results of the company

1.1 Tools for the creation of corporate strategy and its implementation

Quality strategies and strategic planning are one of the cornerstones of long-term corporate prosperity. A tool for the creation of a global business strategy and its use in an everyday practice is a strategic management system. It‘s not however a separate mechanism, it only is a function of the standard management system. Generally, the management system is a set of rules, which may or may not be supported by information and communication technologies (Vrana, Richta, 2005). It allows collecting of cognitive information, its analysis and modeling of potential future development options, formalized decision-making and distribution of decision-making information. The quality of the strategy is not in the noble declarations and chivalrous intentions, but in allowing people inside the company and in its surroundings to effectively work and survive, prosper in the long term (Milichovský, Solčanský, Sychrová, 2011). It is certain that for the preparation, formulation and publication of global business strategy, there are more or less complex and successful methodologies and procedures. There are tools and utilities that may turn work somewhat easier. But the main part of the work must be paid by workers of the company responsible for such activities (Antell, 2004).

We must also work with an objective of how to turn of global corporate strategy into everyday use. Notably, the strategy in any organization pervades all activities regardless of whether and how it is formulated (Thomas, Maurice, 2012). If, however, there is a stark contrast between reality and proclamations, it is one of the major frustrating factors. It is not enough to formulate senior thesis, th*e.g.*obal corporate strategy is necessary to develop into implementation strategies and tune the interactions between different activities and objectives, where may either be syn*e.g.*stic effects and also significant differences. Non-formalized strategy is almost impossible to develop. Given the subject matter, it is necessary to further define to the part of corporate strategy, which focuses on enterprise’s economic objectives (Baumohl, 2012).

Strategic financial plan covers a key position in the system of function plans. Implementation of the various functional plans requires the expenditure of certain sources from which the most important are the financial resources. The demands on the limited financial resources are reflected in the financial plan in the form of debt levels, liquidity situation *etc.* This plan provides essential information for the correction of certain functional plans (*e.g.* withdrawal or postponement of certain investment projects with impacts on production plan, business plan *etc.*). If we are „conservative“, the basic components of the strategic financial plan consists of profit and loss,

balance sheet and cash flows, as well as the profit distribution plan, capital budget and the budget of external financing (Novotný *et al.*, 2010). The starting point for the creation of this plan is the financial strategy of the company, which determines the appropriate capital structure, the amount of working capital, dividend policy, ways of using available funds and the selection criteria for the evaluation of investment projects. In addition to the financial strategy, it is necessary while creating a strategic financial plan to respect the fundamental strategic objective, which should be an increase of the company value, as well as reciprocal links of this plan to other functional plans and last but not least, the results of the financial analysis for the past several years preceding the planned period (Brancato, 1995).

Economic perspective then answers the question of what values must financial indicators achieve to get for example the desired return of assets. Kaplan and Norton in principle do not question and do not reduce the importance of traditional financial indicators. They in contrast emphasize the fact that only in mutual functional connection with other non-financial indicators have the financial indicators their interpretive meaning (Pavelková, Knápková, Friedel, 2007). Timely and accurate financial data will always be a priority, and managers must within their powers to ensure that this data is available and correspond to the reality and to the very essence of the strategic plan. The problem of now is an asymmetrical and thus unbalanced view of the importance of financial data compared with the marginalized non-financial indicators (Grünwald, Holečková, 2007). In this connection, it is recommended to include into the analysis system some other indicators linked to the financial data, such as valuing (Risk Assessment) or a revenue-cost analytic models (cost-benefit analysis) (Newnan, Eschenbach, Lavelle, 2004). On the basis of the issue, we ask the question: Are there tools of information support useful in creating economic objectives of the company in respect of evaluating the economic results?

1.2 View of IT on the support tools for the creation of business strategy and system for evaluating economic results of the company

Thanks to the introduction of various new technologies and innovative products and services, there are significant changes in companies themselves. An integral part of the changes have become new approaches to management. Both of these*.g.*idelines change and in many cases provide a condition the means of information and communication technologies (Synek, Kopkáně, Kubálková, 2009). The strategic objective of building and managing enterprise information system is to support the*.g.*owth of performance and values of the organization. Of course, the integral part of this information system is a hardware and software infrastructure that makes efficient automated processing of data into interpretable and understandable form (Bébr, Doucek, 2005). Enterprise information systems can be classified according to their practical application, *i.e.* in conformity with offer of suppliers and in compliance with the requirements for business process management. Crucial for the classification of these systems is so called holistic-process view. According to holistic--classification process, the corporate information system consists of the following parts:

1. **ERP** (*ERP – Enterprise Resource Planning*) system focused on the management of internal business processes (Wagner, Monk, 2008).
2. **CRM** (*CRM – Customer Relationship Management*) system serving processes directed to customers.
3. **SCM** (*SCM – Supply Chain Management*) system managing the supply chain (may include APS system, which is used for advanced planning and scheduling).
4. **MIS** (*MIS – Management Information System*), a system that collects data from ERP, CRM, APS / SCM, as well as from external sources and then provides information for decision making, corporate management (Stair, Reynolds, 2011). All of these systems (ERP, CRM, SCM) belong into one category, which are collectively referred to as BI (*Business Intelligence*) and serve financial, business and further analysis or support the preparation of business plans.
5. **EIS** (*Executive Information System*) systems to support senior management are largely determined by senior management of the company and key executives of the company. They ensure appropriate linkages and processing data from both the enterprise database management information systems (MIS), from expert databases and other data sources (Watson, Houdeshel, Rainer, 1996).

For technology of decision support, there are not defined the boundaries of the individual systems. These limits should not be confused with the integration of different systems. Integration is currently still one of the main topics in the world of information technology, since it is necessary to use the standards, unified data and other elements aimed at the entire IT infrastructure (Voříšek, 2002). To a certain extent, the business intelligence (BI) tools are mentioned by systems for performance evaluation and

by decision support systems, including support for the creation of strategic goals. In this case, it would be appropriate to think of BI rather as a method for utilizing specific methods, based on which the outputs can be constructed into suitable for optimum use (Boyer *et al.*, 2010).

BI system is not possible to be considered to be the cornerstone of tools to support the creation of corporate strategy and performance evaluation of enterprise. It is not a magic spell to solve all the problems in this area. It is necessary to mention the management information system (MIS), whose function is due to the current reality rather underestimated. A situation where even MS Excel can satisfy to some extent the role of a management information system with the support of tools for creating business strategy is nothing reprehensible. If the application is used purposefully and outputs are effective and meet the requirements of executives, it is a better solution than the costly system for unused complexity and inefficiency of its outputs (Wade, Recardo, 2001). This situation, for example by reporting tools, we meet in practice very often.

If we are to define the basic tools to support part of business strategy in respect of economic results of the company, the foundation of the entire system are the correct data sources. And in this part it is ideal to include processing methods and principles of BI. Another part of this software is the tool for data presentation with the necessity of today's software such as is their openness. Due to the feedback on the proper presentation of data to determine the correct values in creating economic goals, it is necessary to integrate these tools for systems evaluation of economic results of the company. From their results, it is necessary to properly check the values set for the next period. The use of mathematical and statistical methods is logical for these calculations (Myers, Hulks, Wiggins, 2012).

2. Methods to be used in the primary Research

A small number of respondents and the focus on quality allows research consultant to collect most of the data personally, apart from quantitative studies, where the number of interviews is too high for one person to make them. One of the str*e.g.*hs of qualitative research is the researcher's ability to creatively transform information into results. In addition, a small number of respondents allow more open questions than in quantitative research. Furthermore, the answers can be responded by additions. Such open questioning is a valuable source of information.

The evaluation of the research will involve the application of inductive methods and the use of deductive way of finding reality. By this combination will be able to summarize and clarify th*e.g.*neral facts on the basis of empirical research results, especially using an inductive statistic. To refine these results and findings of others, previously unexplored connections, will apply selected methods and techniques of qualitative research (*e.g.* a method of generating). One of the fundamental problems of each of the research is how to ensure that the results are credible and reliable. Therefore, it is important to evaluate its validity and reliability. To evaluate the both elements, statistical methods and qualitative formulation (justification) of conclusions will be used (King, 2012).

2.1 Determination of scientific merit

Out of public awareness is considerable incompleteness of resources evident and awareness of tools to support the creation of business strategy in respect of evaluating the economic results of the company. Information support is defined at the interface between tools for decision support and data mining for marketing purposes, *i.e.* the software on the principle of BI, or management information system, whose position is captured rather as a part of enterprise information systems, or reporting tool. The benefit of this work is to determine the use of IP tools in the creation of corporate strategy, namely economic goals. Findings whether these IP tools are available on the market, whether they are used in practice, and whether these tools are use rating system for economic results of the company, as well as other system, for the basis of feedback of its functionality.

3. Own Research

3.1 Analysis of the results of quantitative research A

A total of 21 suppliers have been contacted, of whom 18 have returned questionnaires (return *i.e.* 92.6%). This sample corresponds almost to offer the Czech market with systems for evaluating economic results of the company relevant to the investigated companies. Questioning took place in June, 2014.

3.1.1 Characteristics of research A

Investigated area: Offer of support systems of business strategy in respect of evaluating the economic results of the company.
Scope: Czech Republic
Respondents: Suppliers of Information Systems
Number of respondents: 21

The aim of this research has been to analyze the current state of the offer of system functionalities for creating the business strategy in respect of evaluating the economic results of the company. Further to describe how these are to the used standard functionalities adjusted the products offered on the

Czech market. Within these objectives and their links have been three main areas of questioning presented to respondents that focus on the functionality of the systems in the field of information support for the area of information support in setting up economic targets and systems integration in these areas. The last area of questioning focuses on feedback, respecting information support systems for evaluating the economic results of the company.

Suppliers of information systems in research A belong according to the specifications of the European Commission, especially in the category of small businesses. According to the size of turnover (up to 220 mil. CZK) represents 58.7% of all contractors and number of employees (50 employees) moves representation of small businesses in the amount of 48%. Medium-sized companies occupy the second position and only part suppliers covered by both classifications within the category of large companies. An important criteria for the selection of the information system, is the ability to solve problems controlling processes in all areas of the value chain. For this reason, such organizations often choose their supplier by industry solution and references in the field.

3.2 Analysis of the results of quantitative research B

A total of 9 companies have been approached – users, of which 9 have been returned the questionnaires (return is 100%). Questioning took place in June, 2014.

3.2.1 Characteristics of research B

Investigated area: the range and quality of systems supply for the support of business strategy creation in respect of evaluating the economic results of the company.
Scope: Czech Republic
Respondents: users of information technology for the creation of corporate strategy
Number of respondents: 9

The aim of this part of the research has been to analyze the current state of the use of tools for support of the creation of business strategy in respect to the economic process systems for evaluating the economic results of the company and its position in Czech, production and business organizations. Further to determine what functionalities of the system for support of the creation of enterprise strategies are commonly used and which ones can be classified as specific. Next to ascertain the actual situation on th*e.g.*ound in this area compared with the recommended activities and instruments according to the theoretical foundations. The research B aimed at users of these systems is designed to compare the results of interviews with the theoretical foundations of information support tools for the business strategy creation with feedback of economical process for assessing the economic results, and compare the functionality of these systems to the current offer on the Czech market. Respondents have been given two basic areas of questioning focused on the current state of the IP system for support of the creation of company strategy and utilization of system functionality. The targets of this qualitative research have been nine users of the systems for evaluating the economic results of the company. According to the specificities of the European Commission at the size of turnover five users are in the category of small businesses (up to 220 mil. CZK), two in the category of medium-sized (up to 1400 CZK mil.) and two in the category of large companies (over 1400 CZK mil.).

4. Discussion

4.1 Current Status of the offer of tools for creating the enterprise strategy in respect of evaluation of economic results of the company

Based on the current state of the issue, there have been selected the main areas of evaluation in the context of information support tools for the creation of business strategy, which were the subject of the next section written questioning.

The largest representation in the area of support for the creation of the strategy was in the product support of these tools. As the component of the offer of tools for support the creation of strategy for the company stated these functionalities 66.5% system suppliers. Two information systems solve these areas only partially. Moreover, it is apparent that the functionalities for support the creation of business strategy are offered at the same time as decision support systems, or systems for tracking performance data of the company. The results show that this real and specified functionality and tools for support the company‘s strategy is not currently set as a standard part of the offer. Only 2 systems are covered by this functionality.

The second part of quantitative questioning has been focused on the own tools for strategic planning in the field of economic goals. For standard offer

of system in this area can be considered the possibility to compile and print all financial statements (balance sheet, income statement, cash flow statement, statement of equity) for the enterprise as a whole. A similar outcome is for the opportunity of setting up and printing the financial statements for the business units (*e.g.* centers) and the selected time period (*e.g.* a week, month, *etc.*). From the user's perspective, especially the managers themselves, it is undoubtedly advantageous to offer customization options and the addition of new configurations with automatic updates on all accounts. In five systems, however, we would search in vain for this function and another *e.g.*t are solved only partially. Custom support tool for the creation of a financial plan based on data obtained from history is not part of the offer. Respectively, there has been in two cases the possibility to build prognosis of support resources. Both systems are at the *e.g.* of economic and managerial. Integration with other information systems of the company was resolved in 71% of the product, but the range of integration tools, and compatibility with industry standards is at a medium level.

The last part of the quantitative questioning has been focused on the use of feedback tools to support the creation of enterprise strategy, thus retrieve data from history and reintegration into the calculation of the design of individual items within the compilation of economic business objectives. In 59% of the products, the detention was incorporated.

From the conducted structured interviews between **suppliers** of system for support the company strategy in respect of assessment of economic performance of the company, the following are the main general conclusions:

- Suppliers are able in terms of the implementation and development to deprogram and to adapt information systems to meet the demands of tools for creating economic objectives within the strategy of the company in respect of systems evaluation of economic results of the company under the terms of the customer, including specific custom solutions (if they are not a part of the standard system settings).
- Currently, there is not a described tool a normal part of the for managing the economy of Czech businesses, and therefore also to a lesser extent represented in the offer of systems.

There are several products on the market dedicated to the promotion and planning of strategic and specific objectives based on analytical methods. They are offered separately, integration is not fully resolved, and orientation is rather to sell other professional services related to implementation.

4.2 Current Status of tools for creating enterprise strategy in respect of evaluating the economic results of the company in the Czech enterprises

The use of tools for creating enterprise strategy all users secured through information systems (IS) economic and managerial type. There were three companies other than Czech IS that had other system-oriented processes, BI and MIS. One of them was even Slovak and two international accounting standards. All surveyed companies use internal accounting. The most common way of a management of inter-company accounting were analytical accounts to financial accounting. This method is used by five

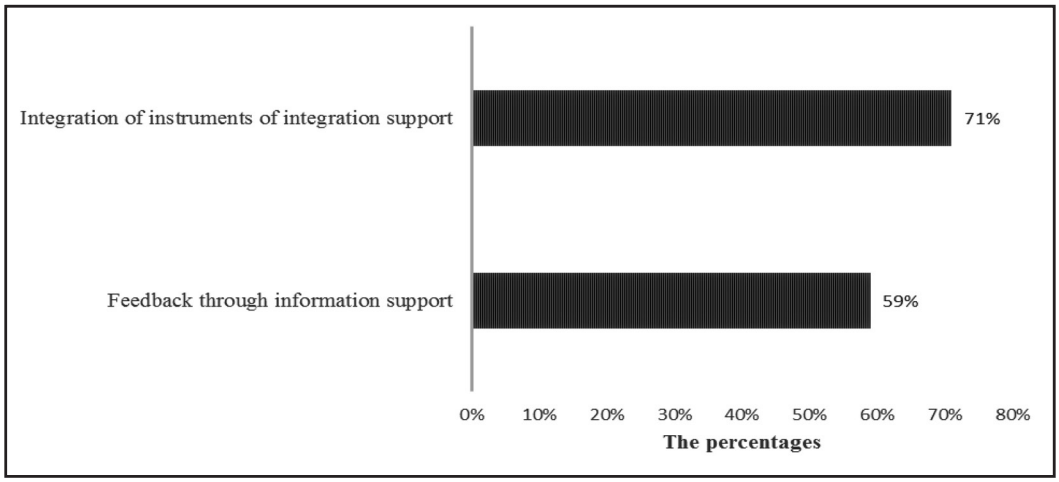

Figure 1. Information support tools for creating business strategy. Source: Author's own study.

out of nine organizations. Analytical breakdown of accounts in financial accounting is a suitable tool for the initial analysis, decision making and planning for the centre or the entire company. In the area of budgeting, 7 out of 9 periodically (usually annually) prepare their enterprise budgets, *i.e.* planned balance sheet, income and cash flow. The remaining two users almost do not plan at all. Only four companies are compiled in-house or investment budgets. If we look at the supply side systems for evaluating economic results of the company, we find that all suppliers of research offer the possibility to build internal budgets. Yet, as you can see, the customers do not use this option. Most often it was represented by the so-called. fixed budget, in four organizations. Another three users compile a flexible budget, mostly by sales volume. The check of the fulfillment of these budgets is done differently – weekly, monthly or semi-annually. The present results indicate that companies consider in terms of its operational management to be sufficient only budget planning for the business as a whole. None of these companies have integrated and fully operational tool for support of the strategy cretion, economic objectives, resource data from the information system as a basis for value creation.

From the conducted structured interviews among users of tools for the support of the company‘s strategy in respect of assessment of the economic performance of the company the following are main general conclusions:

- The most important information of users in the use of tools for support the strategy of the company using the system for evaluating the performance of the company are mainly the following: a) costs associated with the purchase (or goods), b) revenues from sales, c) the total achieved profit for some time period, d) monitoring of the development trends.
- The users seldom rely solely on the information provided by the system, but complement them by their own long experience (*e.g.* cash-flow management, in deciding between production and purchasing, *etc.*).
- Evaluation of investments and other activities associated with the tools for planning support, which are available to users are conducted irregularly, in simplified form (without sophisticated methods), often intuitively and outside information system (*e.g.* In MS Excel).

4.3 Summary of key research results

- Tools for support the creation of business strategy should now be an integral and important part of supply systems for evaluating economic results of the company, but for the individual systems, there are sometimes large differences.
- The largest representation in the offer of contractors has an area of financial and internal accounting. The result corresponds to the identified data on the users‘ systems when using these functions in their management of the economy.
- The results show that users are convinced of the importance to use the tools for support the creation of corporate strategy and financial results, but in reality they do not often use it and, if so, in simplified form and irregularly.
- Most companies have a sophisticated system containing integrated tools for support the creation of corporate strategy. Some managers of companies

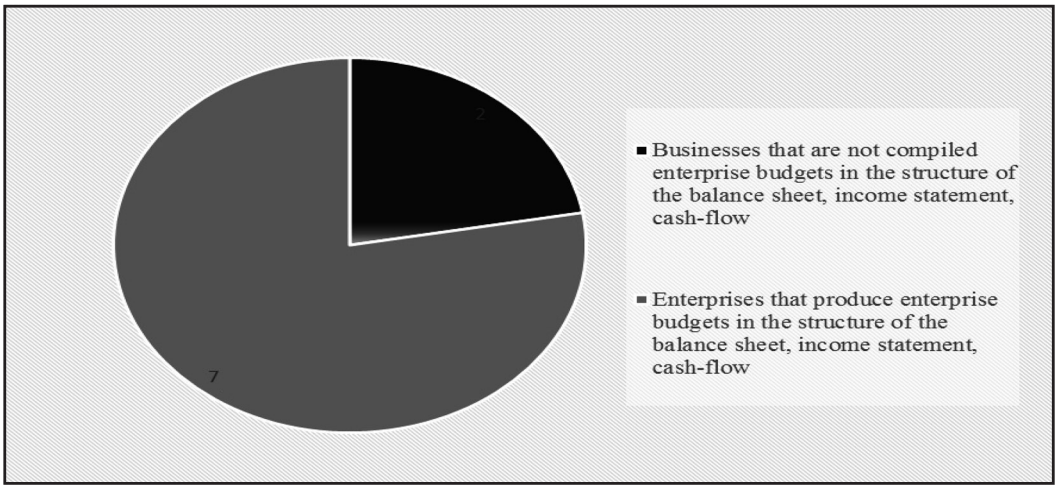

Figure 2. Use enterprise budgets business. Source: Author's own study.

themselves admit that the mentioned areas are not given serious attention.

- Tools for support of the creation of corporate strategy and financial goals of the company in respect of economic results of the company are not a normal part of the offer of economic systems or systems for evaluating the economic results of the company.
- While the implementation of economic systems and systems for assessing the economic results of the company, custom modifications to instruments in support of business strategy are not commonly done, only the parameterization of the standard system settings.

5. Conclusion

More and more companies face the question of acquiring adequate solutions for management decisions, enabling them to view and work with information that is essential for proper decision making when developing plans and business strategy. Economic information systems and support for the economic evaluation of the results help to solve problems of information and transaction systems, and create space for improving corporat*e.g.*vernance. They represent a strategy to work with information, are based on the delivery of information to the right hands in the right time, in the required format and undistorted form. These systems are primarily designed for support in the creation of business strategy and its individual parts. The main complication is that if the users of such tools want it, they must learn to use specialized software, in addition to which they have access usually only some departments (typically financial or analytical department). Based on the research of this issue was within article defined the result of research that shows a certain space on the market information systems. This gap is filled by only a few specific instruments in practice underutilized. Finally, you can surely determine the supplier of information systems oriented for processes regarding economic integration and development tools for support the creation of business strategy in these systems. In response to this situation, there will be accessible to the users a tool for creating truly realistic business strategies, economic targets and other parts of the business plan. Using these tools will then the output of these values in reality useful for real motivation, not like Star Wars that is very often seen in practice in corporate strategies and their parts.

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