

Global-Footprint-Design

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Abstract:

The majority of producing enterprises has production capacities in foreign countries. Besides individual projects to shift production, the optimum of the site structures comes to the foreground. This optimum is company specific and means to find the right "Global Footprint" or in other words, to find the right value-add structure and distribution.

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The majority of companies are still planning further production and assembly capacity abroad. By now, next to isolated relocation projects, the search for an optimum between the interaction of different locations and the organizational structure has moved into the foreground. This optimum is specific to each company and means to find the right “Global Footprint”, in other words, finding the right structure and allocation to add value.

The Internationalization of Adding Value

The motivation to distribute capacity over two locations can be separated into two main motives. Firstly, companies try to achieve cost benefits for labor-intensive value adding processes in cheap labor markets and thus increase their competitiveness through a combined costing approach of multiple locations. Secondly, new market opportunities are utilized and new clients and markets tapped by this approach. This second approach especially supports the growth of a company into new markets such as Asia. Often regarded as one and the same by the public, a self-supporting internationalization movement has developed. Suppliers without Eastern European plants, for example, are often suspected by their clients to not fully have unlocked all cost saving potentials.

A careless managing of the consequences of internationalization carries many traps. For example, the demands of labor skills and processes at the new sites can easily be underestimated. Successful global players possess clear standards that ensure the interaction of value chains and the operative business between sites. A production structure is developed that does not simply optimize one single location, but that develops synergies and advantages through task allocation across locations for the entire value chain. Internationalization continues to hold the negative effect of increasing complexity. An n th complexity dimension is added in terms of the coordination across multiple countries, languages, currencies, and time zones by distributing production capacity/competencies, the leadership team and supporting functions, and the interaction of R&D across multiple locations. This shift between centralized and decentralized accountability and value chain allocation as well as the allowed degree of freedom has to be mastered.

As a result processes are created in disarray and with inefficiencies because of redundancies and missing alignment within the organizations. It is thus necessary to have a clear distribution and allocation of the depth, breadth, and intensity of value-adding processes (Fig. 1). The performance depth describes the number of covered steps adding value, the performance breadth covers the range of activities on each respective level and the performance intensity covers the strength of the respective activities.

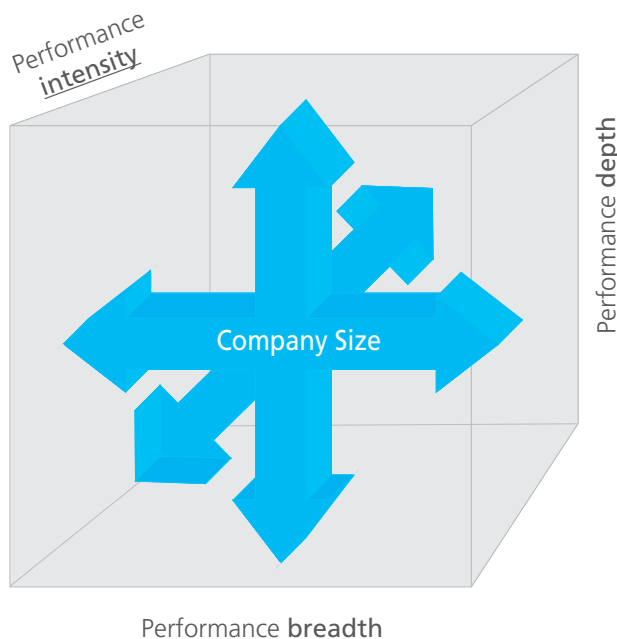


Figure. 1: Value-adding dimensions

Design of the Global Footprint

The design of the Global Footprint highlights the consolidation of foreign activities in order to create a base for sustainable and profitable growth through elimination of inefficiencies. The goal is the development of an optimal economical concept of the value chain distribution in the global production network and to uncover additional benefits and synergy potentials in the light of global competition through the skilled design of the global production network. Thus, the “Global Footprint” comprises a central element of a global production strategy such as the selection of an appropriate concept for the long-term physical distribution of production competencies, capacities, and resources to existing and new company locations.

The methodology behind the design of the Global Footprint comprises three elements. Initially, during the analysis phase, a top-down market and client analysis is conducted and competency demands are examined to derive an appropriate company strategy. As a second element of the analysis phase, the production facilities are analyzed with regards to their processes and production costs, as well as their existing competencies. The third part comprises in its synthesis the

alignment of the top-down and bottom-up view to reach the fit of a Global Footprint (Fig. 2).

Top-Down Analysis. Initially the role of the site is derived from the company strategy. The analysis starts with an examination of the company environment. In addition, this view is complemented by a strength and weaknesses profile and the deduction of core products and processes, which differentiate the company from the competition or lead to a significant cost advantage. This internal and external view allows for the qualitative evaluation of products and processes and thus, the definition of necessary core competencies. As a result the core technologies, processes, and products are defined for the company and the necessary capacities of the individual processes identified (Fig. 3).

Bottom-up Analysis. The approach consists of the identification of a characteristic product. Within the scope of a product analysis the product and production program are examined. With this foundation reference products are defined that will serve as a base for further analysis. Additionally, the core production process steps are examined on a representative basis. The focus lies on direct production processes, up- and down-stream production processes, as well as sup-

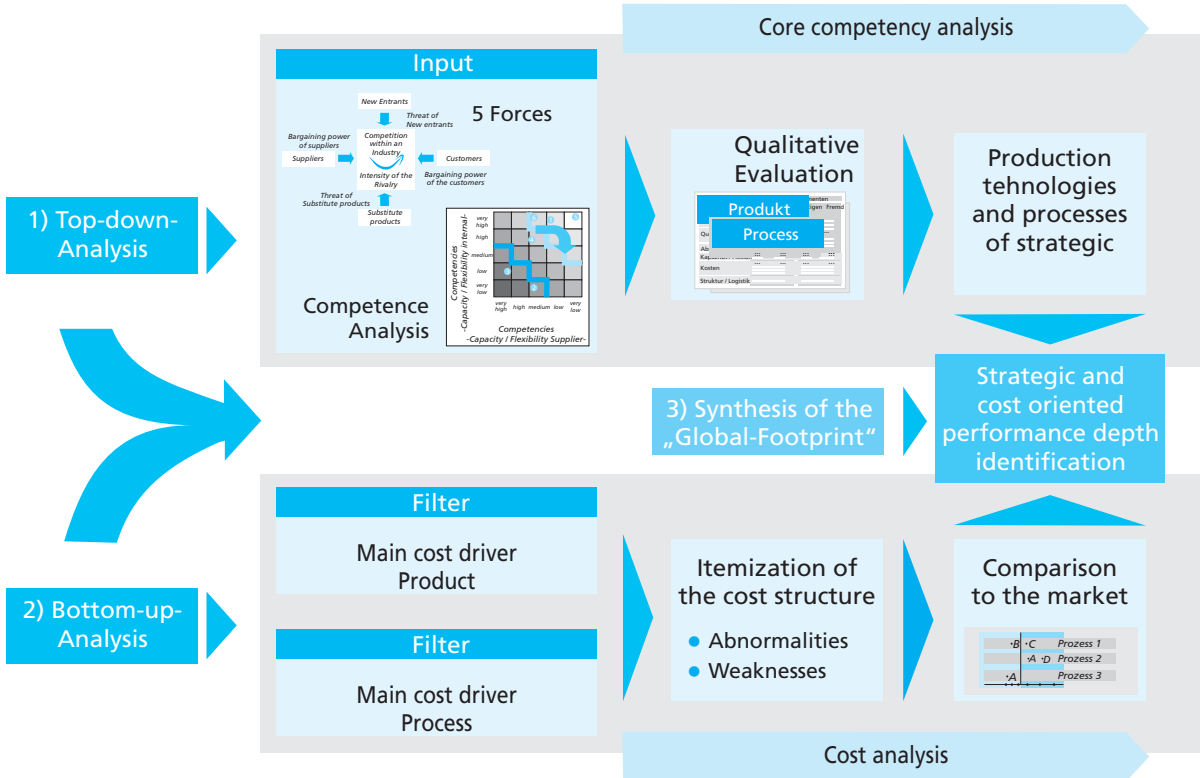


Figure. 2: Methodology for the Global-Footprint-Design

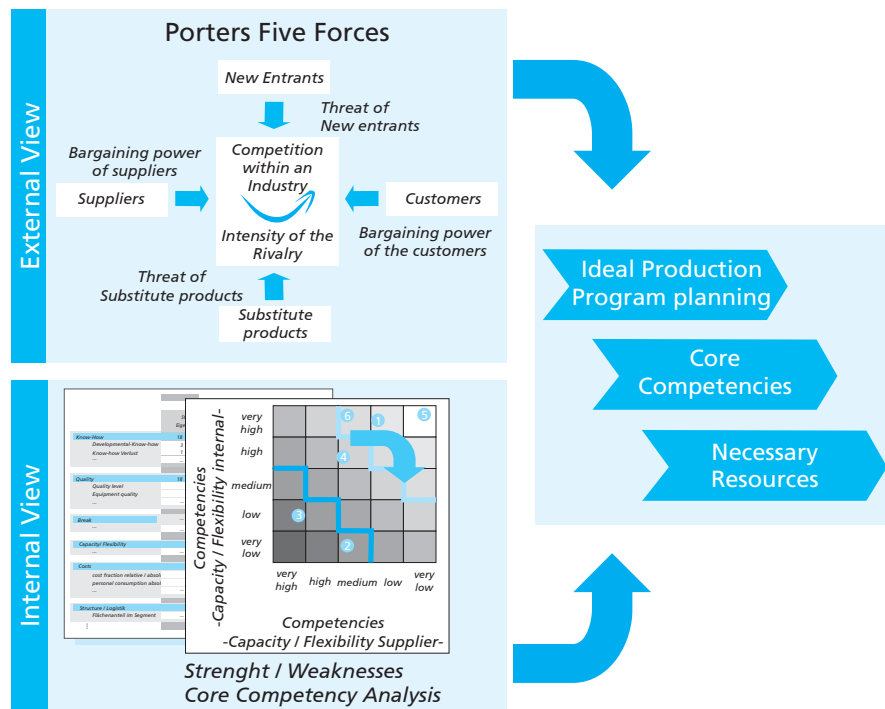


Figure 3: Top-down Analysis (Figure

porting production processes. As a next step process related cost structures and payroll costs as part of fixed costs have to be determined. With consideration of the cost drivers, now a cost analysis for internal and external comparison has to be performed noting abnormalities and weaknesses of the location.

Alternative solutions for the distribution of value-adding depth and breadth for the different site (site scenarios) are developed by consolidating the results. For the resulting production concepts a rough estimate of the needed processes and resources for each location is produced. This estimate serves as the basis for the qualitative and monetary evaluation of the different alternatives leading to rational decision making.

Characteristics of a Global-Footprint

After performing the methodology, and allocating the extent of added value to potential (new) production sites, the location distribution, which is in practice often grown out of opportunities, can be reorganized and used to create synergies.

The in the Global Footprint defined project results are in practice differentiated with regard to the autonomy, the resemblance and the strategic role of production facilities. Autonomy corresponds to the freedoms of

choices for production and IT systems as well as the influence certain plants have on the product. A local development process accommodates for local market specifications to be met but carries the risk of eroding know-how and economies of scale due to nationally diverging component designs. This predicament can be counteracted by installing adequate organizational differentiation, for example by separating central units to develop essential technologies and decentralized application development units to adjust the product for the local market.

Decisive for the right allocation of capacities and resources is the targeted similarity of the plants. It should be differentiated between a so-called “complementary strategy” and a “redundancy strategy”. The complementary strategy relies on a local deployment of products, processes, and resources mostly based on individual location advantages. The redundancy strategy, on the other hand, pushes the excessive standardization of product composition, processes, and resources to utilize comprehensive learning and flexibility advantages. A well established compromise is the specification of product and production standards by the headquarters along with the right to make recommendations by the subsidiaries. This way global economies of scales and learning effects are secured without forgoing local specialization. Lastly, different sites may assume different strategic roles in the overall

