5 Scenario analysis of turn around and back stop strategies as open system simulation (OSS)

5.1 Scenario simulation as an instrument of strategic Controlling

The scenario technique is often used as an addition to the normal, qualitative and quantitative prognosis techniques, such as exponential smoothing, decomposition methods, regression analysis, or the S-curve method. Those methods base on the extrapolation of past data into future. Scenario techniques are here applied for the preparation and support of decisions. Moreover, it aims at revealing the future development of the object of analysis basing on alternative environmental conditions. The main difference of scenario analysis and traditional prognosis techniques is the deliberate acceptance of insecurity about the correctness of future-orientated, managerial decisions. Prognoses in the sense of trend extrapolation over time-spans of up to ten years suggest a completely clear and definite line of development to the decision makers on which complex company strategies can be built.

If, however, those strategies including various operational consequences are once initiated, a strategic turn around becomes nearly impossible when decisive misprognoses were made. Thus, company crises can occur, if, e.g., for the serving of a specific strategic market segment, fixed cost intensive special machines have been bought, long-term supply contracts have been made and the necessary distribution structures have been established before recognising that the prognosticated supply quantities cannot be realised at all. Scenario techniques do not attempt to "compute uncertain data certain" as prognosis does, but accepts uncertainty in order to understand it in a next step and to integrate it into strategy considerations. Scenario simulation is carried through in the following steps:

1. definition of the field of analysis,
2. identification of critical influencing figures of the analysis object,
3. design of alternative scenarios in dependency on the different development of the influencing figures,
4. introduction and impact-analysis of significant interference figures,
5. derivation of adequate, scenario-supported business unit strategies,
6. selection of a business unit strategy by quantitative criteria, and
7. generation of flexible back-step strategies as a security equivalent.

The two following examples explain how scenario simulation can be used for the support of investment decisions.
5.2 Open system simulation when investments into a new hotel are planned

The example explains an alternative scenario planning in the sense of an open system simulation (OSS) with the possibilities of changing to a substitutional strategy or the partly exit of the planned company activity (back-stop strategy). Be the planning of a new hotel building in an attractive city location the starting point. Alternative analysis objects can be for example, the flexible technical design of vehicles (e.g., lorries) and aeroplanes (e.g., transport planes) for both military and civil purposes. Previous efficiency prognoses are likely to be mostly positive. The development of different parameters not considered before can lead to an impairing of quality of those prognoses, and to a too early fixing of a strategy which can finally proves wrong. The project-specific field of analysis in this example is the development of the demand for hotel beds. A decisive influencing figure on the development of this demand is, for example, the activities taken by competitors. Thus, the possibility that within the next 15-20 years further hotels can be built at the planned site has to be integrated into the investment consideration. Those hotels could possibly all aim at the same market segment as regards price and quality.

As a consequence, the target of the scenario simulation is to develop options for a flexible strategic Controlling enabling the realisation of turn around and back-stop strategies basing on a basic or original strategy.

Due to this purpose, three principal strategic alternatives, are developed:

- **full-flexible original strategy:**
  
  \[
  \text{SA} := \text{building of hotel rooms with the strategic option for the rebuilding into apartments}
  \]
  
  \[= \text{entrance strategy (basic strategy)}
  \]

- **half-flexible derivative strategy**
  
  \[
  \text{SB} := \text{rent of hotel rooms as apartments}
  \]
  
  \[= \text{turn-around strategy}
  \]

The turn around strategy \(\text{SB}\) can also be an entrance strategy in the case of being the first investment decision, here, however, it is to be understood as follower strategy of \(\text{SA}\). Strategy \(\text{SB}\) is classified as half-flexible because it can be such revised, if necessary, that in future planning periods the apartment can be changed back into hotel rooms in the case of an increasing demand.

- **Inflexible derivative strategy:**
  
  \[
  \text{Sc} := \text{sale of apartments as owner-occupied flats}
  \]
  
  \[= \text{exit strategy}
  \]

Strategy \(\text{Sc}\) is inflexible because the repurchase of apartments and rent (\(\text{SB}\)) or even a change back into hotel rooms (\(\text{SA}\)) is economically not very recommendable.