



## Siemens Healthcare Consulting Case study of a general hospital

Producing a business plan for establishing  
a cardiac cath lab

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## Challenge

As part of a strategic realignment, a general hospital in Bavaria, Germany is planning on installing a heart catheterization laboratory. The intent is to expand its cardiology service spectrum with invasive cardiological diagnostics and therapy. A consulting team from Siemens Healthcare developed a comprehensive and detailed business plan for this investment project.

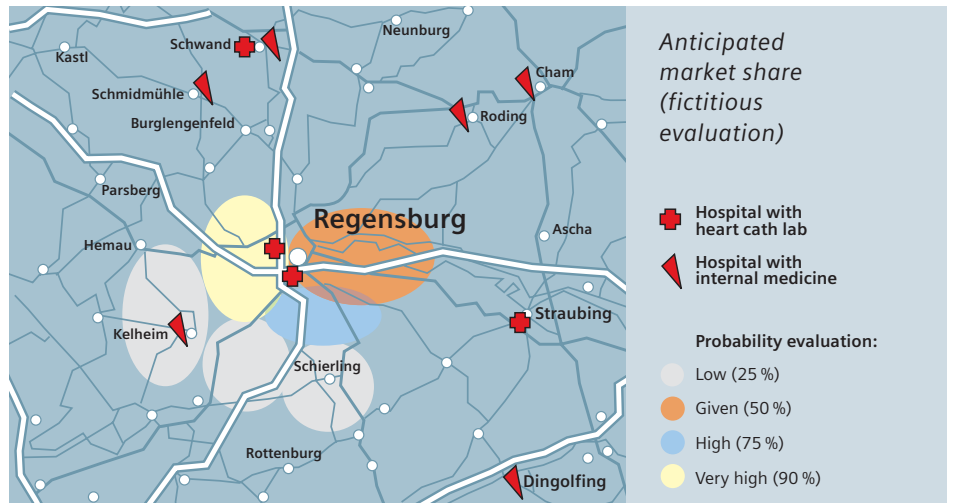
## Procedure and results

The following aspects were evaluated to provide the customer with the necessary decision-making tools:

- Market potential and competitive situation
- Planned service spectrum and required service volume
- Required personnel, infrastructure, and technological resources
- Cash flow calculation and determination of time of amortization
- Risk evaluation of the project

## Market and competitive analysis

The Siemens consultants performed a regional market and competitive analysis. The focus here was on identifying the



market to be addressed and the competition. The competition's geographical distance from the hospital, catchment area, as well as respective service spectrum and service volumes were all evaluated. Displaying the competitors' options for action was part of the analysis.

## Potential

To estimate the expected service volumes, the Siemens consultants created a forecasting model that analyzes the development in the number of procedures in invasive cardiology (separated

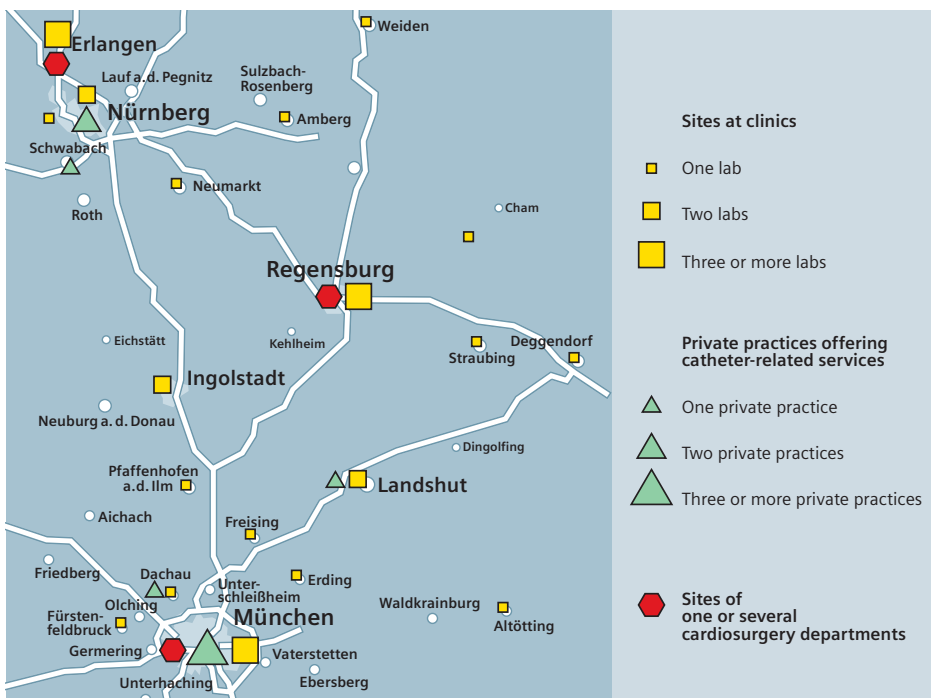
into diagnostic and therapeutic aspects) in Germany, and extrapolates it into the future. In addition, an analysis of the catchment area weighted to the community level was performed. In this case, qualitative aspects such as the flow of referrals and conditions relating to infrastructure were considered. By comparing the knowledge obtained from the market and competitive analysis as well as the forecast model, the potential for the intended customer location was determined. The expected DRG revenue is derived from the number of procedures calculated.

## Investment expenditures and ongoing costs

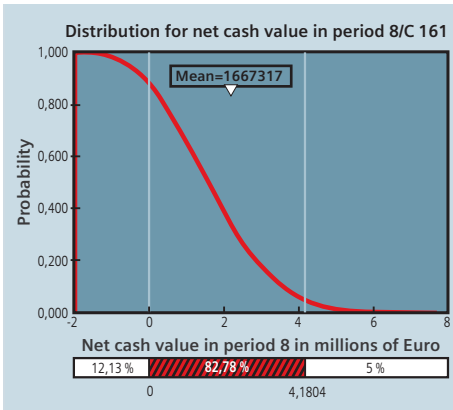
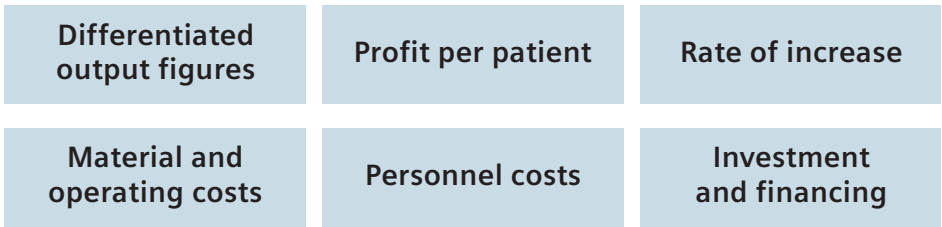
Determination of the requirements regarding personnel, technology, and space were also part of the project. The change required was determined by comparing the resources needed with those already in house. The amount of investment required for capital equipment and construction, as well as ongoing personnel and overhead costs, were assessed.

## Overall profitability analysis

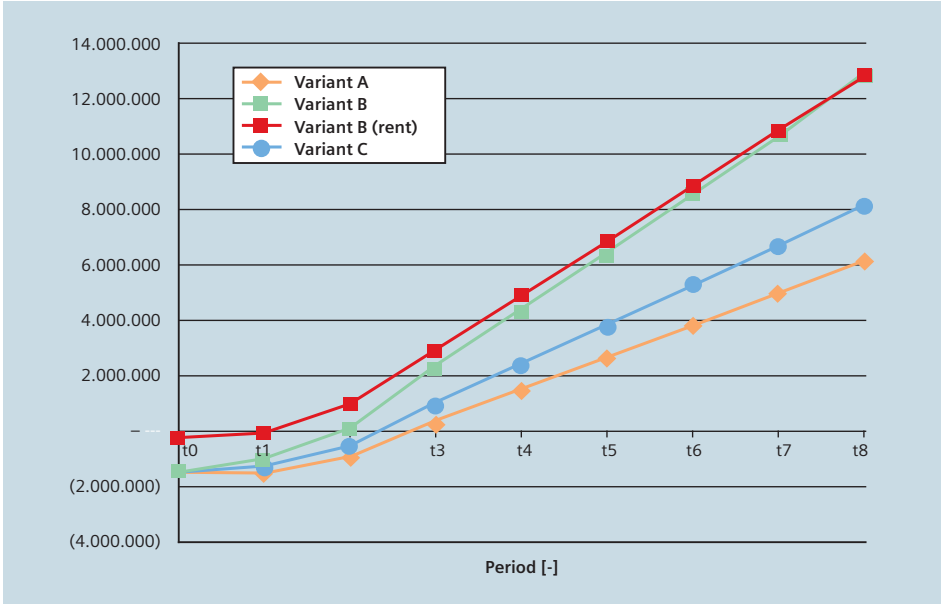
The Siemens consultants compared revenue and costs using a calculation model. This information, combined with a dynamic investment calculation allowed the team to determine the amortization period of the investment.



By way of example: heart cath labs in eastern Bavaria, Germany



The risk analysis quantifies the probability of positive results.



The rentability analysis for different scenarios determines the break-even (point)

### Qualitative analysis

Finally, a comprehensive qualitative assessment of the investment project was performed as part of a SWOT analysis.

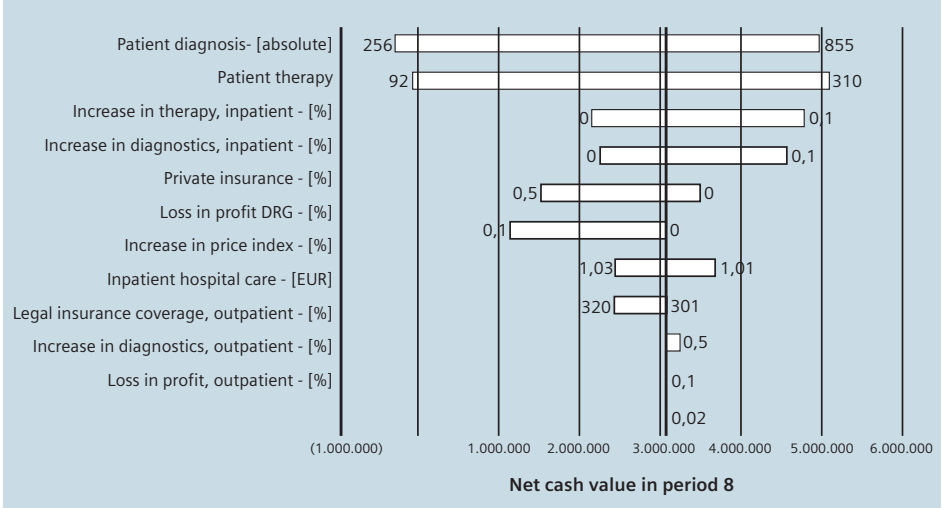
Strengths	Weaknesses
Opportunities	Threats

SWOT analysis as the tool for qualitative evaluation

Not only were strengths and weaknesses presented, but also recommendations were given on how to enhance strengths and reduce weaknesses. In addition, actions were evaluated that would enable risk reduction and the use of existing opportunities. Specific action options were assessed and recommended to ensure the success of the investment project.

### Risk assessment

An additional sensitivity and risk analysis was performed to provide the customer with the necessary decision-making tools.



The sensitivity analysis identifies the decisive levers of rentability.

### Customer benefits

The report by the Siemens consultants made the investment project transparent for the customer in terms of profitability, risks, and opportunities. The business plan was an important instrument in the customer's decision-making process and for approval of the investment by the customer's financial backer.

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