Framework for the design of Competency-Oriented Business Simulations (COBS)

Christian K. Karl

INTRODUCTION

The primary motive frequently mentioned in the context of the conceptualization of business simulations is the general aim of promoting the cognitive and affective learning. Objectives of business simulations are, e.g., the advancement of social aptitudes or the pooling of arguments and facts to reach the best possible result. These examples demonstrate that a business simulation in general furthers certain competencies indeed, but it is not taken into consideration whether it complies with the current professional needs of the target group.

OBJECTIVE

In view of this, business simulations achieve high relevance in the context of the current discussions on competencies and their acquisition. However, within the current developments an appropriate basis is needed to increase the quality of business simulation concepts in general. Therefore, business simulations have to gain orientation towards valid and reliably developed, target group-oriented models of competency.

METHODS

A successful formal development approach for simulation games (Lynch & Tunstall,2008) has been extended in order to integrate a competency orientation into business simulations:

- Definition of competency-oriented requirements,
- Identification of target groups and potentially available competencies,
- Specification of tangible teaching and learning objectives on basis of competence models,
- Realization with an orientation towards target groups and competencies,
- Recording and evaluation of competencies.

Core element of the development framework is the formulation of competency models. A six-stage Framework for the Development of Competency Models (FDCM) was developed by the author. It was devised in the style of the Delphi method (Sackman, 1974) and, respectively, the Cooke method (Aspinall, 2010).

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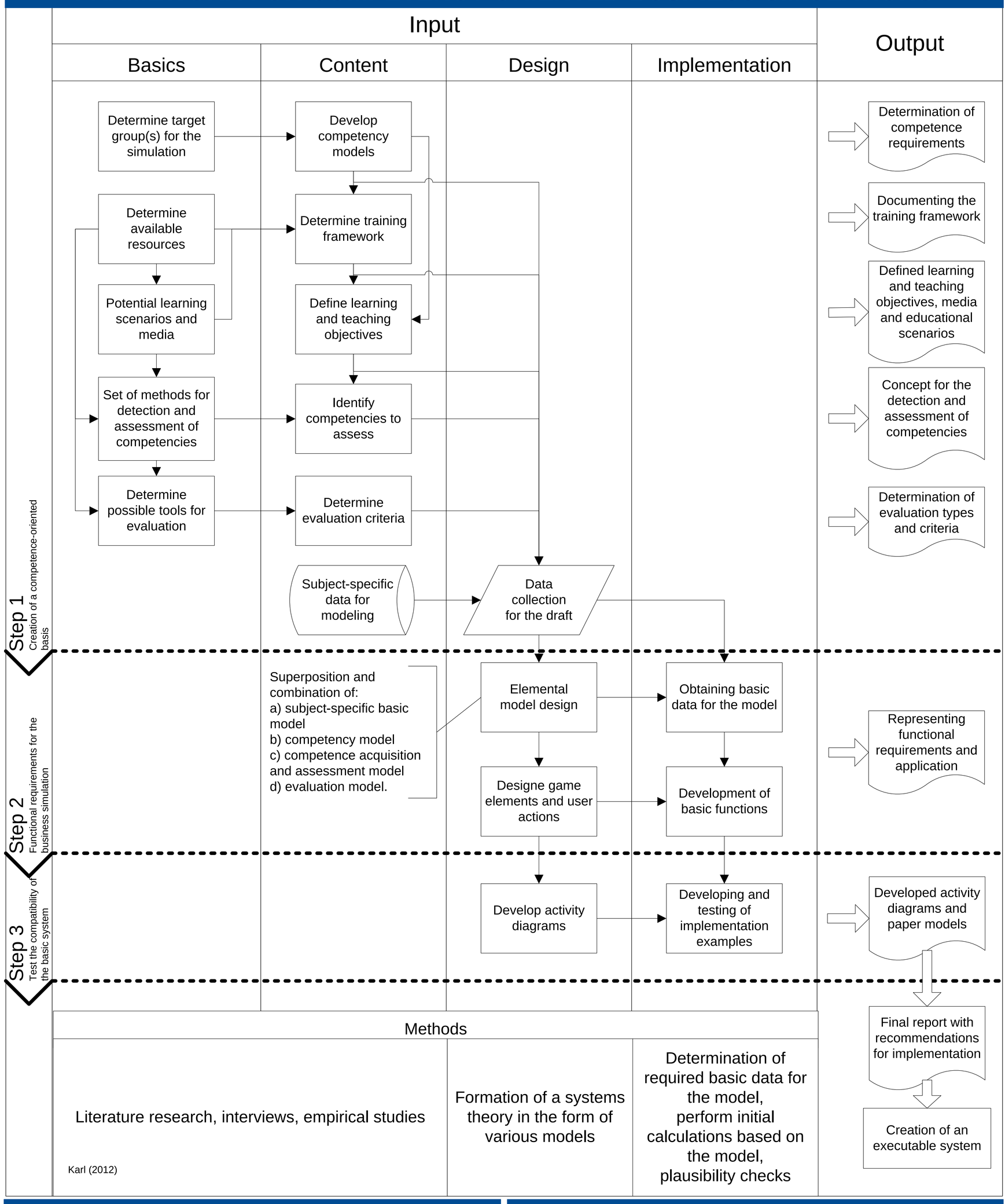
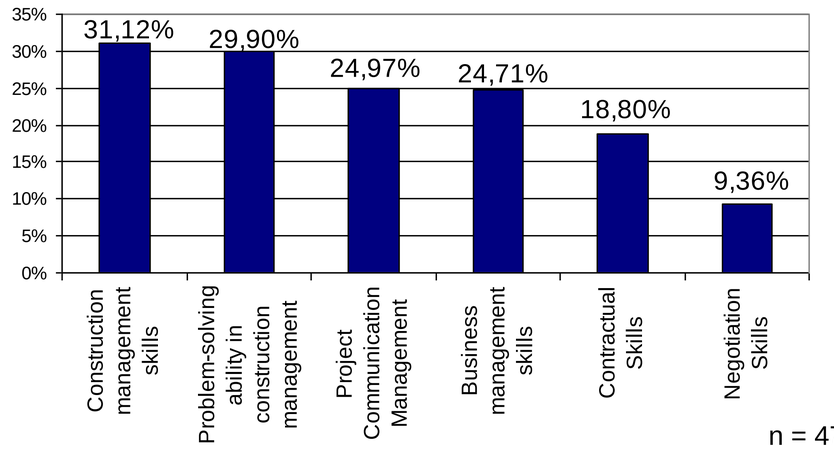


RESULTS

Based on the FDCM a generic competency model has been created. Two business simulations for education and further training in the construction industry were designed:

- Construction Giant (board-based)
- Chameleon (online-based)

The board-based business simulation was successfully evaluated in two sessions.



CONCLUSIONS

The presented development framework is a tool for designers of competency-oriented business simulations that allows the easy integration of occupationally demanded competency standards into business simulation models.

Beyond this, the framework also offers the extraordinary advantage of modular and expandable business simulations, which are suitable for a significant number of user groups.

Consequently, business simulation designers will be in the position to address one or more competencies with one model only.

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DEVELOPMENT FRAMEWORK FOR THE DESIGN OF COMPETENCY MODELS

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METHOD

The six-stage competence development scheme is modeled on the approach of the Delphi technique (Sackman,1974) and the Cooke method (Aspinall,2010). Quantitative methods of empirical social research are integrated to warrant the collection and analysis of an objective and relevant set of occupationally competencies.

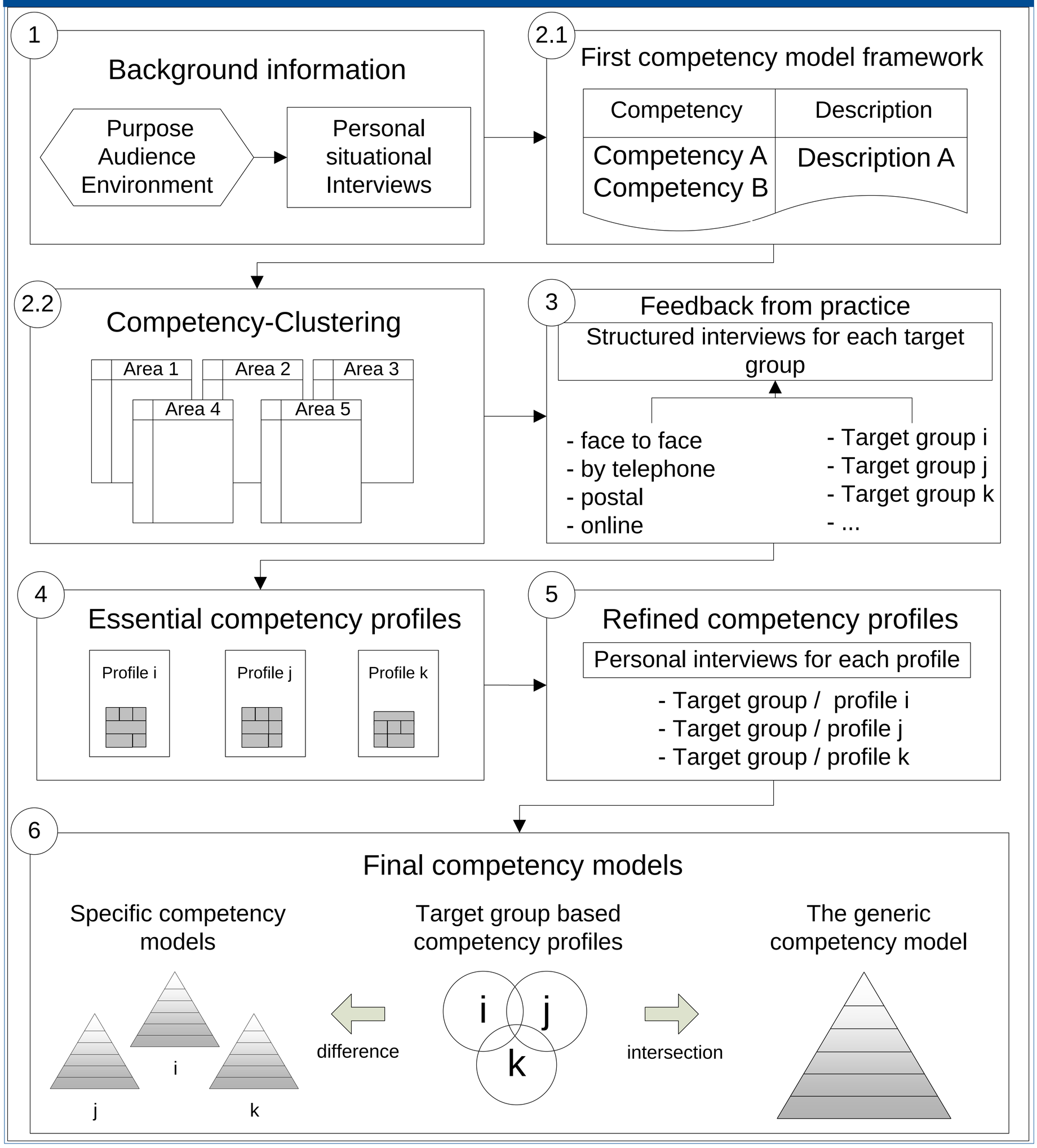
RESULTS

Based on a survey within the construction business in Germany, different competency models for various sectors and career levels have been developed. From these, a generic competency model has been compiled.

CONCLUSIONS

Business simulations based on competency models are highly flexible in terms of the target group as well as on the learning progress within the game. The inclusion of competency models also provides a valid basis for the choice of appropriate assessment methods and instruments. The presented principles provide a structured process based on scientific methods, which are readily applicable in practice. It has the exceptional advantage to develop modular and extensible business simulations, which are applicable for a variety of audiences.

DEVELOPMENT FRAMEWORK FOR THE DESIGN OF COMPETENCY MODELS



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