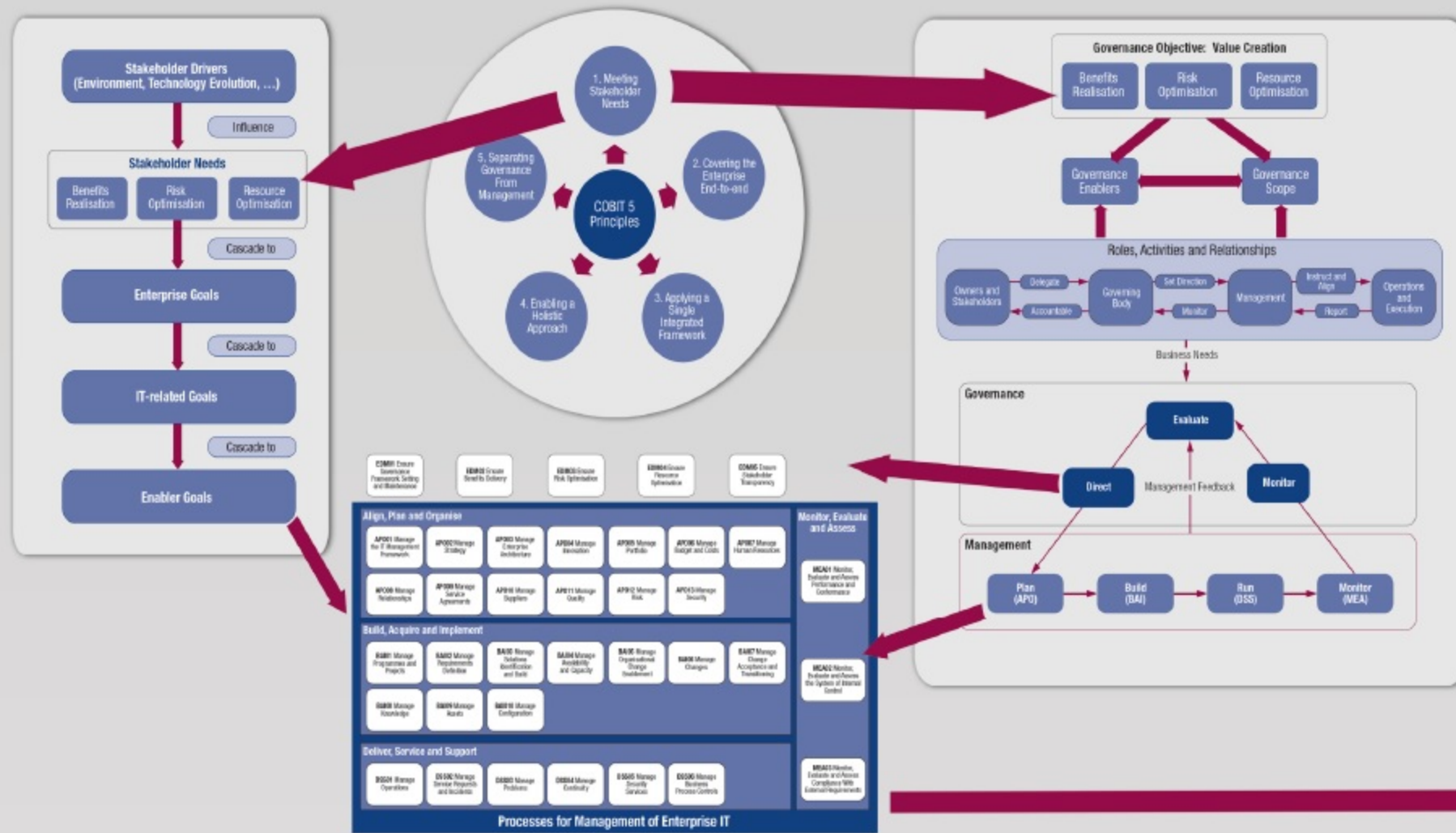


The COBIT 5 Visualization Prototype

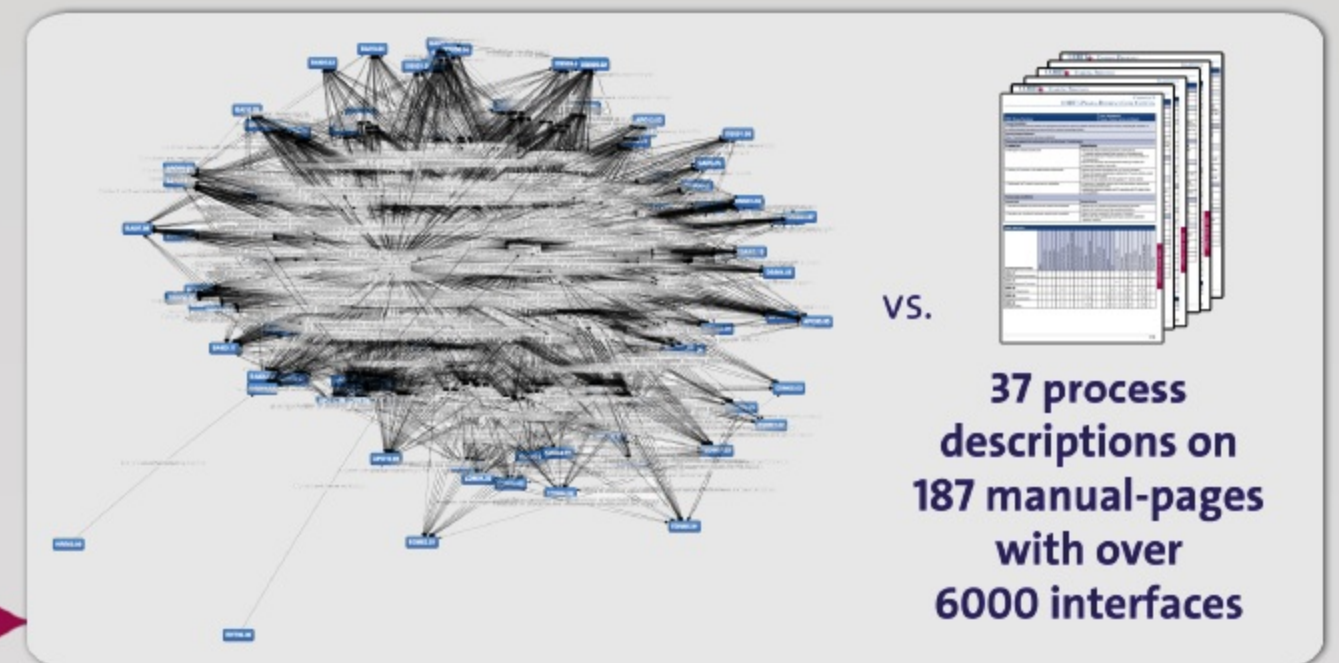
A Visualization Approach for Reducing the Perceived Complexity of COBIT 5

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Logical Structure of COBIT 5



Strong Complexity Problem on the Process and Practices/ Interface Level for Governance and Management of Enterprise IT



Data Presentation with the COBIT 5 Visualization Prototype: Examples

MEA 03.04 Management Practice:
Identify external compliance requirements

BAI 02.03 Management Practice:
Manage requirements risk

APO 01.01.: Activities

Pictures above show the user interface of the prototype:
 The main components are the graphical representation of the process/practices interfaces between each other, while on the right hand side (in the current state of development) the original data is represented. The top bar offers filtering option for selecting the intended process.
 Future versions will include a customized representation of the original data, as well as multi-process display and selection filters.

Research Goals:

COBIT 5 is positioned in the market as a de-facto standard for enterprise governance of IT. Relevant literature and management experience, however, indicate that the adoption of the framework is challenging due to its perceived complexity.

We present a software prototype aiming to promote the understanding of COBIT 5, its components and their relationships by means of information visualization, thus facilitating its usage and adoption in scientific and practical context. The evaluation of our artifact is based on two hypotheses (increase in speed for information retrieval and completeness of extracted information) and consists of two phases (multiple explorative focus groups for utility and usability, as well as laboratory experiments for testing the effectiveness and improvement of our prototype).

COBIT 5 and its associated suite of products is a large, multifaceted and complex set of guidance. The framework is systematically designed to encompass the complete investment life-cycle, with both governance and management aspects. The perceived complexity gives rise to the need for research on COBIT 5 as an artifact. As indicated by De Haes et al. [1], there is a need to investigate the design and internal consistency of COBIT 5, or lack thereof. The COBIT 5 Visualization Prototype developed in the context of this paper can be leveraged in more analytical research programs to check for internal consistency and embedded design patterns in COBIT 5. Furthermore, the prototype is estimated to leverage the adoption of COBIT 5 in practice.

Specifically, we seek to address the difficulty of the implementation and transformation of existing environments, which already have implemented COBIT 5. The potential of our idea and its implementation was approved by experienced network members, from academia and practice, of the institutions involved in this paper.

It has to be noted that comparable approaches on visualization of the COBIT 5 knowledge base have not been made yet. A reconfirmation was obtained by direct correspondence with ISACA. In conclusion, our artifact and its instantiation can be truly considered a novelty and highly innovative from a practical point of view.

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