

Jihočeská univerzita
v Českých Budějovicích
University of South Bohemia
in České Budějovice

Information Systems Strategy and Management

BUSINESS INFORMATICS - CONCEPTS AND
COMPONENTS, DEVELOPMENT STAGES, AND VARIANTS
OF BUSINESS INFORMATICS SOLUTIONS



EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY

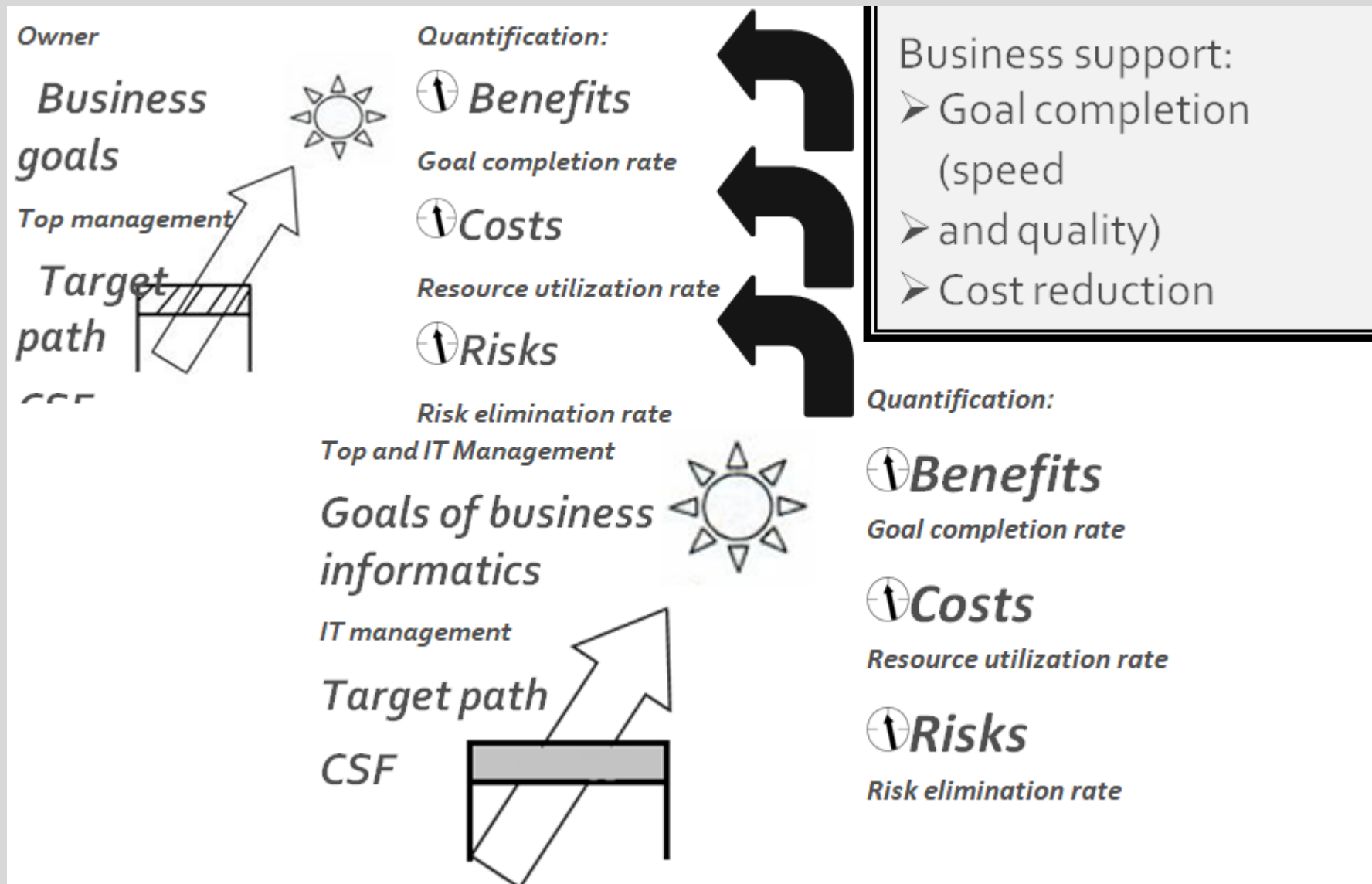
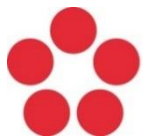
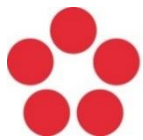


Figure 2-1 Business informatics mission- (Voříšek k. , 2015)



Business informatics use, consume, or value a variety of internal (in-house) and external resources. They are broken down into four categories:

- People,
- Data,
- Application software,
- Technological infrastructure for developing and running applications and for storing and transferring data.

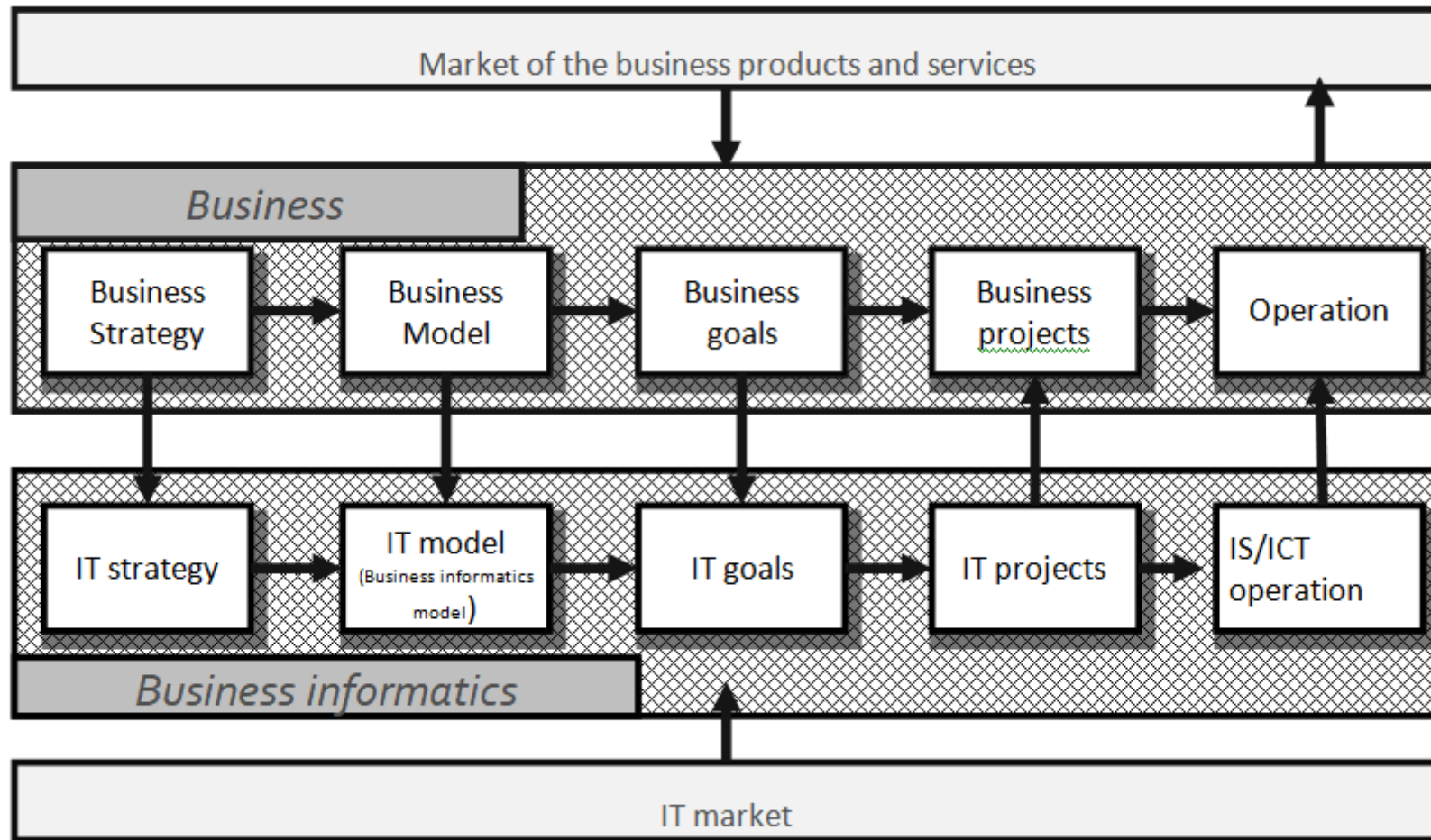
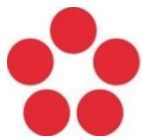
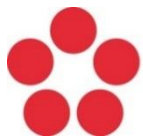


Figure 2-2 Relationship between the key areas and business and IT management tools - (Voříšek k. , 2015)



Business Informatics Resources

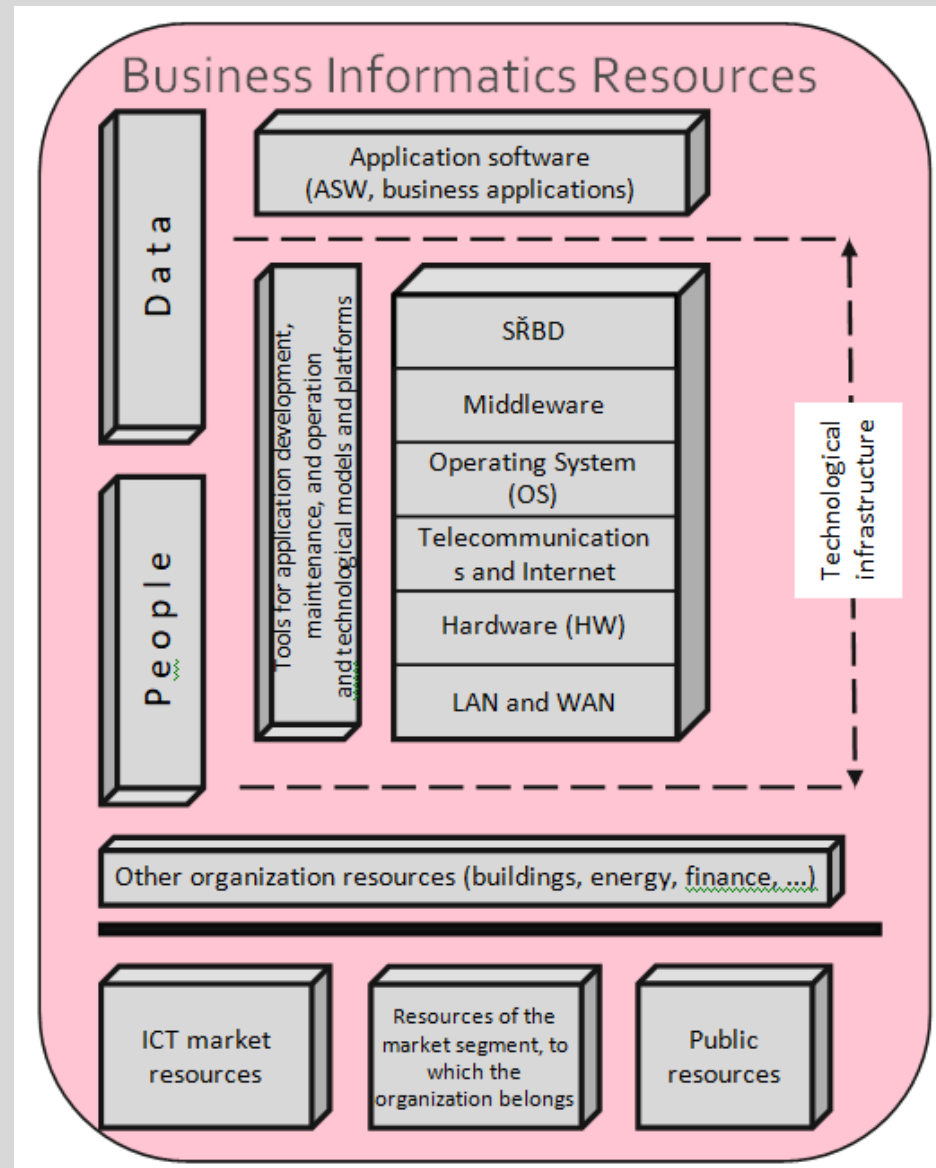
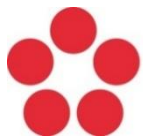


Figure 2-3 Business informatics resources - (Voříšek k. , 2015)



Technology Infrastructure and Human Resources

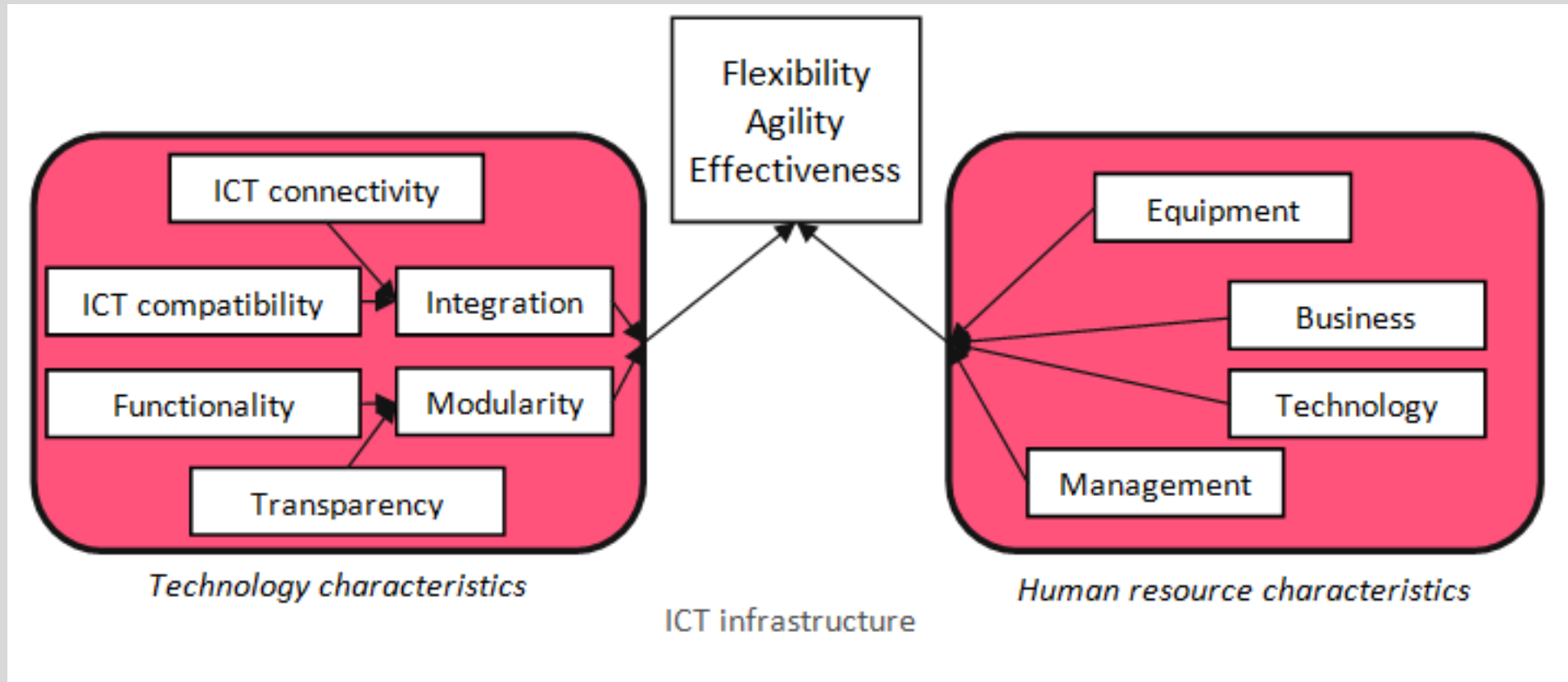
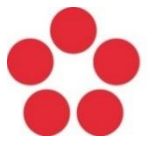


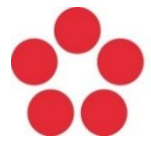
Figure 2-4 Technology infrastructure characteristics - (Voříšek k. , 2015)



Technology Infrastructure and Human Resources

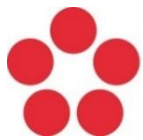
For technological sources, these are:

- The ability to be integrated into a larger unit. Integration can be expressed as:
 - The ability of the technology to be interconnected with other technology, whether inside or outside of the organization, and
 - The level of compatibility (mutual compatibility and tolerance) of the integrated components
- The level of modularity of technologies, i.e. the degree of eligibility to change and extend without negative impacts on the whole. Modularity can be characterized with:
 - The functionality that the technology component offers, and
 - The extent, to which the component is transparent to

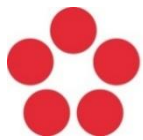


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Development Stages and Variants of Business Informatics Solutions



- Utilization of ICT in the business practice has developed for approximately fifty years.
- In the course of this development, computers and their applications have penetrated deeper and deeper and in the increasing extent into the business activities and business processes.
- The individual development stages brought new business effects, but also new problems in management of business informatics.



Supply Chain Support and Support of Communication with Partners

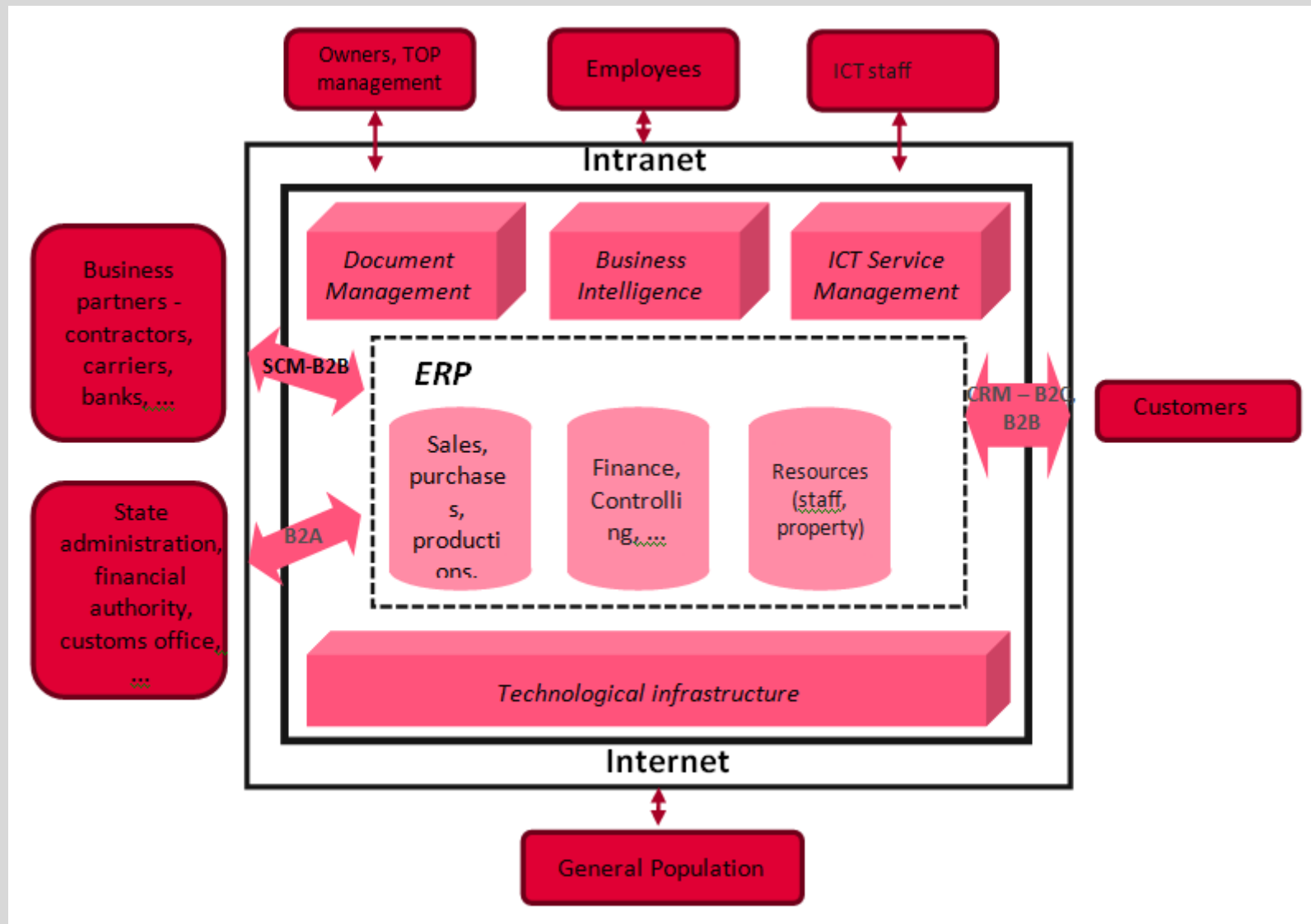
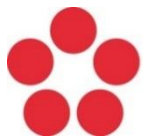


Figure 2-5 Typical structure of the current business IS - (Voříšek k. , 2015)



Development of ICT Service Supply Models

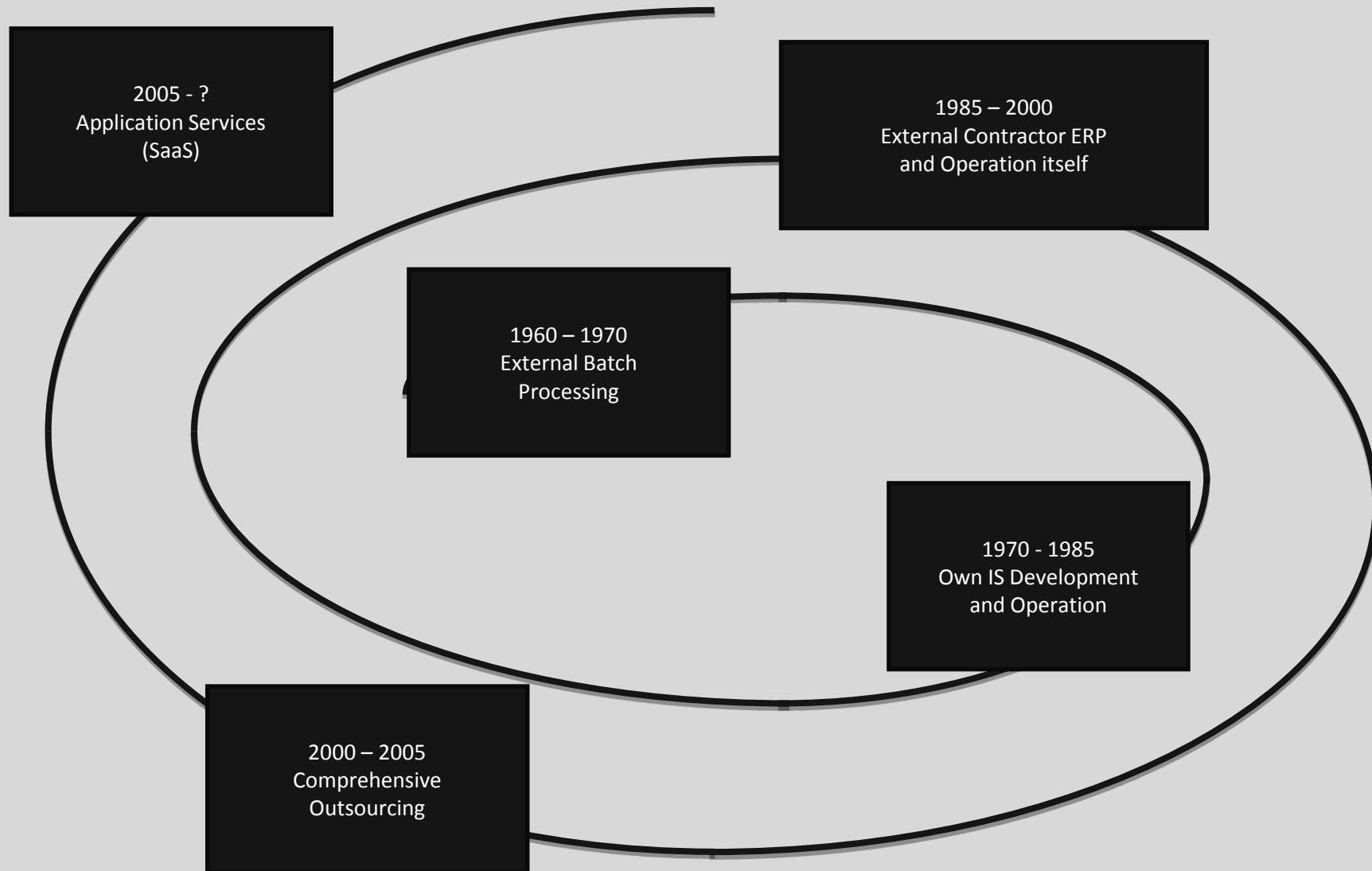
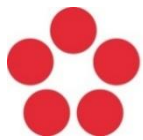


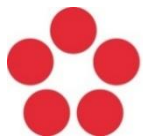
Figure 2-6 Development of ICT service supply models - (Voříšek k. , 2015)



ICT Service Supply Models - Summary

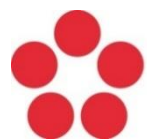
The development of the ICT services supply model represents a long way of the business on its way towards greater business informatics effectiveness. The goals of the businesses were similar at all times however, the solution forms differ. This mainly results from these factors:

- Current technology options - for example, the SaaS model was not possible at the time when there was no Internet and high-speed communications networks,
 - Current state of the ICT market - the traditional model was not possible at the time when the ERP systems did not exist; the SaaS could not have been used until there was a supply of specialized application service providers,
 - Up-to-date knowledge of the IS management methods
4. 2. 2019 - even if the external batch processing model already referenced ICT services and their management. ICT services



When developing a new IS software component, the business management must decide on how the new application will be developed or obtained. There are two alternatives:

- individual application software (IASW)
- type application software (TASW)
- a specific case of TASW is the open-source software (OSS).



Software Product Development Stages

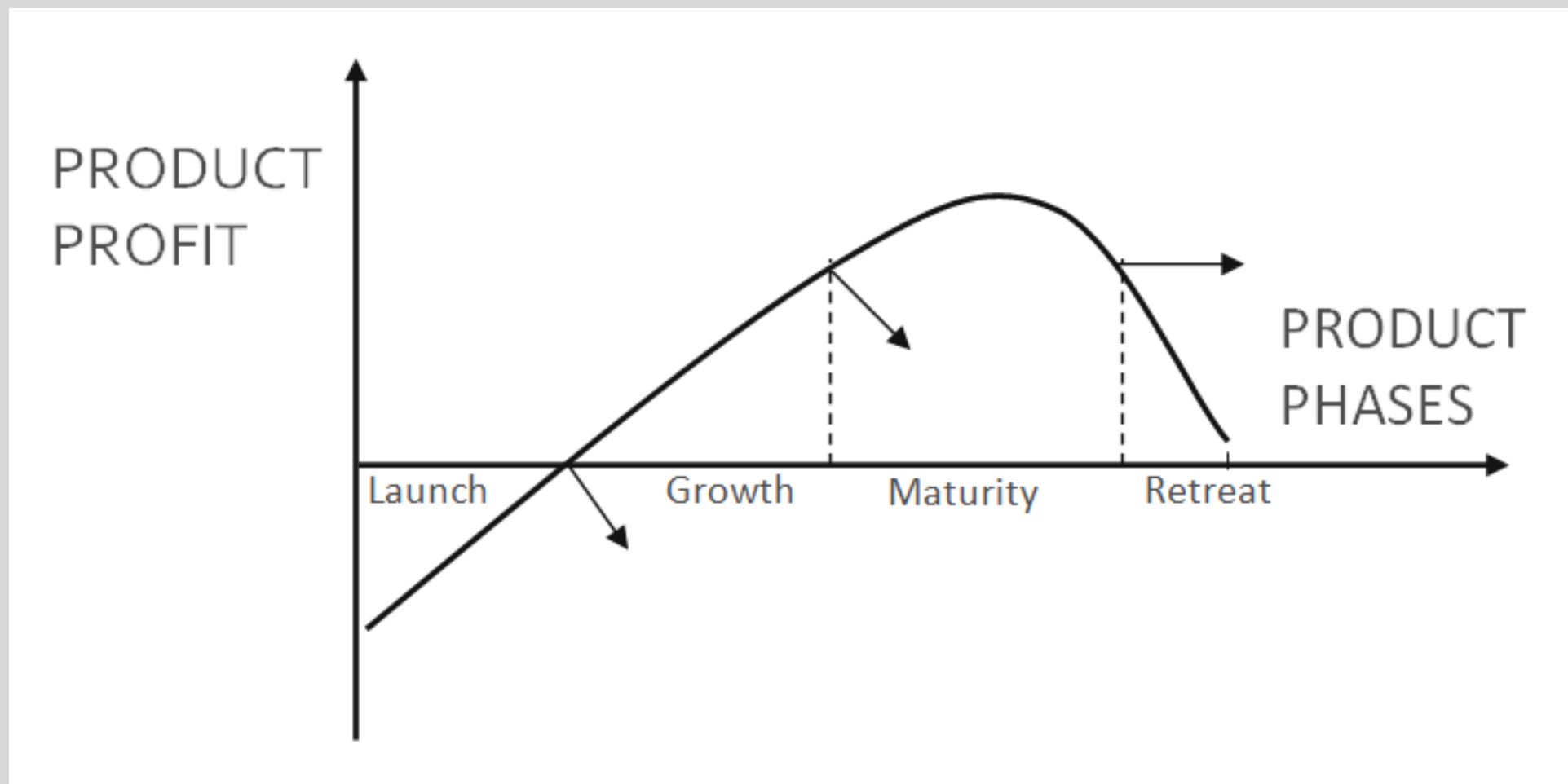


Figure 2-7 Software product development stages - (Voříšek k. , 2015)