

# Limitations of universal management models in the development of high value-added (HVA) bio-business

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## Introduction

### Relevance of the research:

The management models and concepts that the business applies in its activities determine the decision-making process, work organization and other operating principles. In businesses with complex or specific activities, such as high value-added (APV) bio-business, traditional management models are not appropriate in all cases.

**Aim of the research:** to reveal why traditional management models are not always applied in the development of HVA bio-business and what requirements are placed on the management system, that could be able to apply in the development of HVA bio-business.

**Theoretical background:** bio-business differs from traditional business in that it usually has a longer product development process, that can take several years. Long-term product development makes bio-business risky, also requires ongoing research and production funding, IP protection, patenting (Tatsaff and Clifford, 2019). An organization's management system can consist of many structural elements: a functional position or a management task, that require technology to manage. The operation and survival of a business in the market depends on optimization, creation and development of operating mechanisms in a competitive environment (Gerasimov and Gerasimov, 2015). Such long and complex process as bio-business require appropriate business strategies and management models.

## Methodology

The research consist of scientific articles, EU strategic, legal documents, reports and programs, methodologies, statistics, and other documents analysis, related to the aspects of bio-business management models.

## Results

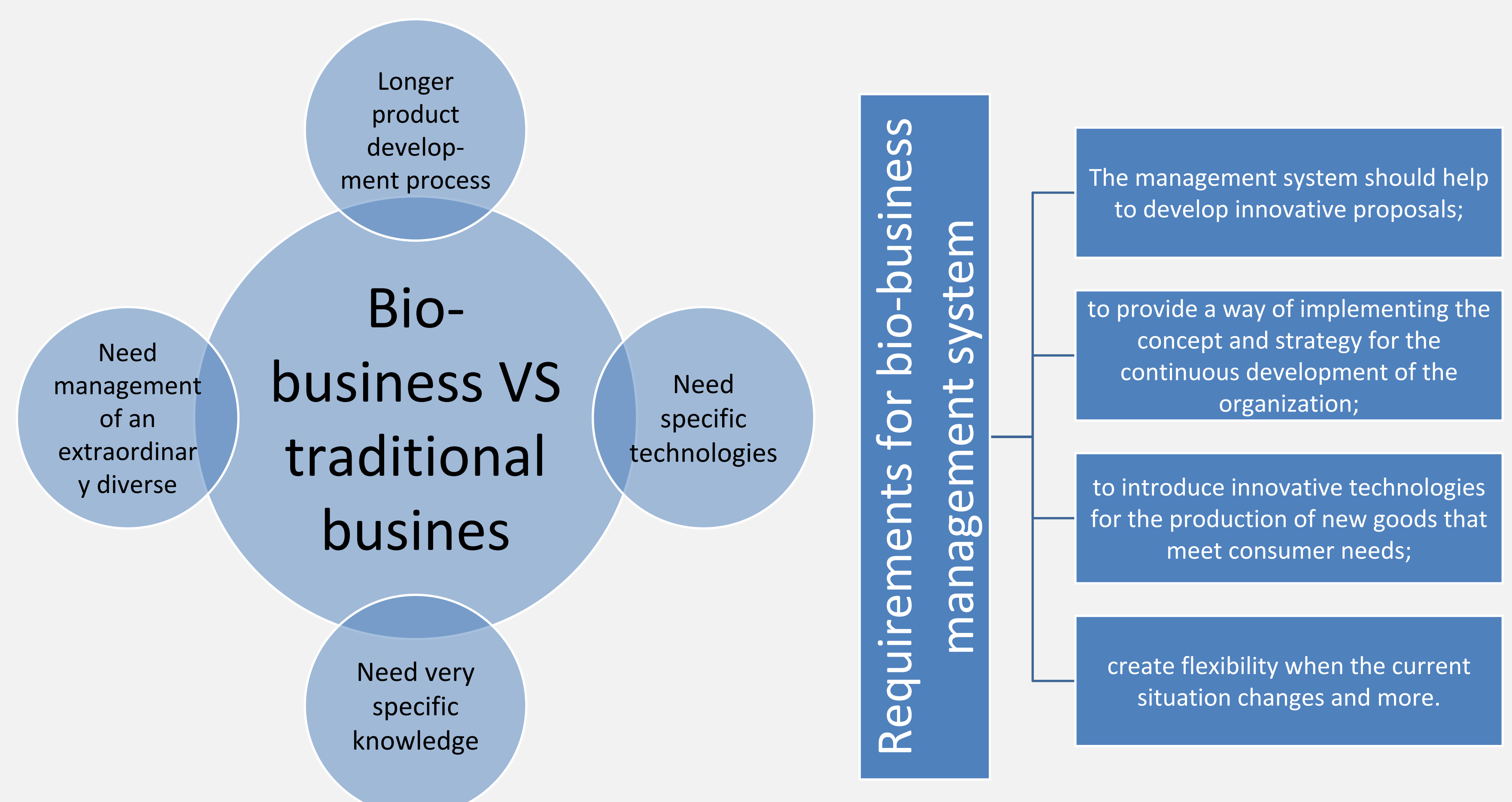
### How the biotechnology business differs from traditional businesses?

In particular, the bio-industry is based on the constant transformation of scientific progress into promising commercial technologies, services or products. The biotechnology industry can therefore be understood as 'science businesses' that is very different from traditional ones in terms of the need for higher education. The development of such business must not have a life-threatening effect, must result in extremely strict documentation of technologies, goods and services. „Science - the product“ life cycle also requires the management of an extraordinary diverse (Gunn et al., 2013).

### Why it is difficult to adapt existing models of management systems?

Existing management models for business development focus mostly on business processes, but too little attention is paid to functional elements (Gerasimov and Gerasimov, 2015).

Every business is unique, making it difficult to choose a universal management model. Therefore, the management model must be adapted to the size of the company, the nature of economic activity, and the external environment. Today's biotechnology industry also needs to take a more disciplined approach to management processes that transcend traditional organizational boundaries (Terziovski and Morgan, 2006).



## Main conclusions

The bio-business needs to be managed from idea generation to commercialization, so traditional management methods need to be replaced by new collaborative methods that are conducive to knowledge, transcends organizational boundaries and shares information with organizational partners.

The emergence of new biotechnologies and the abundance of scientific knowledge pose new challenges for bio-business managers. They need to acquire new knowledge and skills, understand how to manage business that do not has to adapt to traditional management processes.