Ecosystems in Business

A systematic literature review of ecosystems and its dimensions. An introductory overview of business, innovation and platform ecosystems and how they enable value creation.

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**Academic background:**

- Bachelor of Arts, Data Processing at FATEC
- Postgraduate, Computer Science at Catholica Santos
- MBA, Global Economy at Business School of São Paulo & Rotman School
- MBA, Business Administration at INSPER & Columbia University
- Professional Executive Education at MIT

**Executive background:**

- 2018 – 2020: Global CTO Z-Tech (part of AB-InBev)
- 2020 – 2022: Global VP Technology Innovation AB-InBev
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AGENDA

Session I – Questions
Session II – Method
Session III – Definitions
Session IV - Conclusions
Ecosystems are characterized by interdependencies, complementarities and diverse perspectives that shape their structure and functioning.
Session I – Research Questions

How has ecosystem been defined in business?
The review examines how previous studies have defined the concept of ecosystem in a business context.

What are the core similarities between ecosystem terms?
The review identifies common themes in definitions of terms like business ecosystem, digital ecosystem, platform ecosystem etc.

The review aims to clarify the definition and core aspects of the ecosystem concept in business through a systematic literature review.
Session II – Methodology & Search Strategy

Searched 3 major databases
ACM Digital Library, IEEE Xplore, ScienceDirect (Elsevier) were searched

Used search terms related to innovation and business ecosystems
Search terms included "innovation", "decentralized innovation", "regional innovation systems", and "digital business strategy"

Filtered results
Only included English language articles published online after 2015

A systematic search strategy was used to identify relevant studies on ecosystem definitions from major academic databases.
Session II – Study Selection

- **Database search**
  Yielded 3726 initial studies from ACM Digital Library, IEEE Xplore, and ScienceDirect

- **Screening titles**
  Removed 1571 studies based on title relevance

- **Screening abstracts**
  Removed 1769 more studies based on abstract relevance

- **Removing duplicates**
  Eliminated 803 duplicate studies

- **Studies selected**
  83 studies remained for full review

The current study aims to examine how ecosystem and its related terms have been defined by previous researchers.
Session II – Quality Assessment

• 6 quality assessment criteria
  Studies were evaluated on 6 criteria related to ecosystem definitions, peer review, research methods, context description, explanation of results, and relevance to business

• Ecosystem definitions
  Studies provided clear definitions of ecosystem or related terms

• Peer reviewed
  Studies underwent peer review process

• Research-based
  Studies presented original research findings, not just opinions

• Context described
  Studies provided adequate context for research

• Results explained
  Studies clearly explained research findings

• Business relevance
  Studies were relevant to business ecosystems
Session III – Ecosystem Definitions

Business ecosystems refer to a group of actors economically connected to produce valuable goods and services.

Defined as a group of actors economically connected to produce valuable goods and services to customers.

Digital ecosystems focus on interconnected businesses utilizing digital technology to generate products/services.

Defined as interconnected businesses with shared interest to utilize digital technology to generate products or services.

Digital platform ecosystems facilitate combining processes, technology, actors, interests for new services/products.

Defined as the context that facilitates combining different processes, technology, actors, and interests to create new services or products.

Innovation ecosystems allow adaptation for sustainable transition and transformation.

Defined as the processes that allow the adaptation needed for sustainable transition and transformation of a context.

The definitions focus on the interconnectedness and shared interests of different entities to produce value through collaboration.
Ecosystem research can be categorized into three broad focus areas.

**Business ecosystems**
Emphasizes the relationship between enterprises and their surrounding environment.

**Innovation ecosystems**
Revolves on the concept of innovation and the actors that support it.

**Platform ecosystems**
Investigates how players organize themselves in relation to a platform.
Session III – Business vs. Innovation Ecosystems

Comparison of focus areas

- **Company interactions**: 80%
- **Customer needs**: 60%
- **Collaboration**: 40%
- **Innovation**: 20%
Session IV – Key Findings

This literature review found that ecosystem refers to an interdependent network focused on value creation. Related terms like digital ecosystem, business ecosystem, and innovation ecosystem highlight different contexts but share core similarities around collaboration, interaction, and innovation.
Session IV – Conclusions

The systematic literature review summarized definitions and core aspects of business ecosystems from previous studies. Further synthesis of these findings is needed to develop a unified framework that brings clarity to this concept.
Future research can provide valuable insights into business ecosystems by examining adoption barriers, innovation culture, and key components.