

# 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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# Luiz H. N. Gondim Moreira

## **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
- Current: VP, Head of Technology LATAM

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# AGENDA

Session I – Questions

Session II – Method

Session III – Definitions

Session IV - Conclusions

# Session I – Key Characteristics



Interdependencies among entities in ecosystem

Ecosystem entities exhibit multilateral interdependence rather than hierarchical governance



Complementarities between entities

Complementarities in production and consumption domains enable ecosystem functioning



Diverse viewpoints

Business, innovation and platform ecosystems provide different lenses into ecosystem functioning

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 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



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



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.

# Session III – Ecosystem Dimensions



## 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



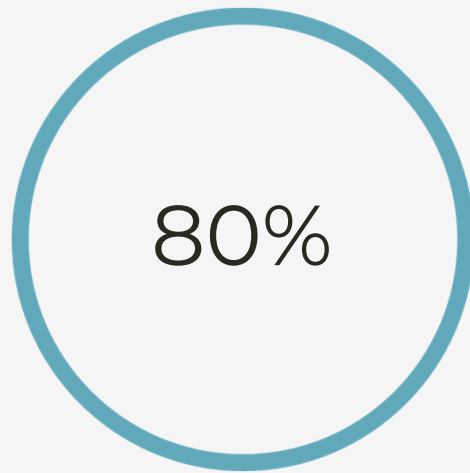
## Platform ecosystems

Investigates how players organize themselves in relation to a platform

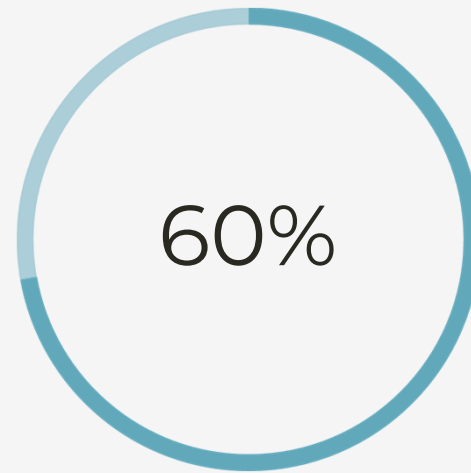
Ecosystem research can be categorized into three broad focus areas.

# Session III – Business vs. Innovation Ecosystems

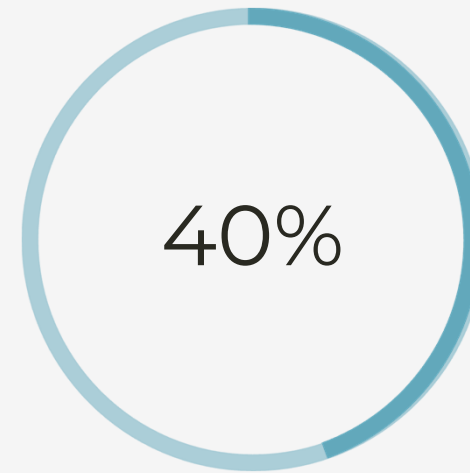
Comparison of focus areas



Company interactions



Customer needs



Collaboration



Innovation

## 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.

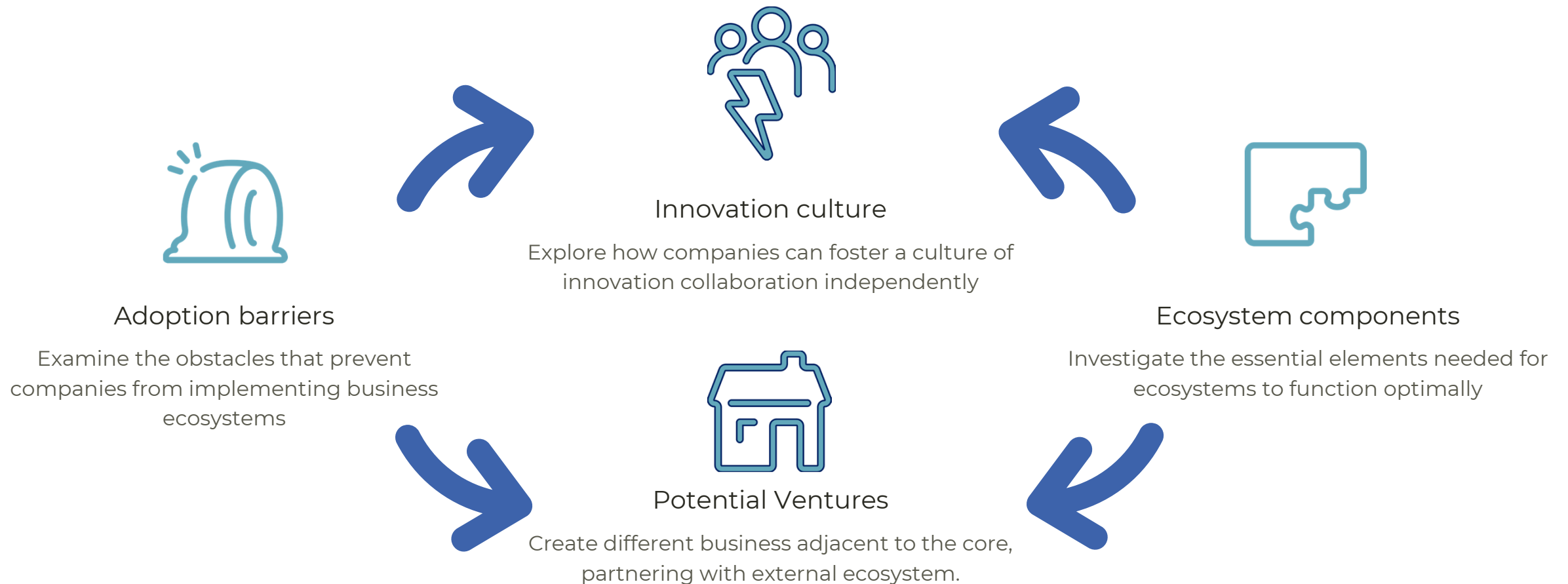




## Session IV – Conclusions

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.

# Session IV – Future Work



Future research can provide valuable insights into business ecosystems by examining adoption barriers, innovation culture, and key components.