

Exploring Oregon's Native Hardwood Industry: How Manufacturers Source and Synthesize Information

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Outline

1. Oregon's Hardwood Story
2. Theoretical Background
3. Study Structure & Methods
4. Preliminary Results
 - a) Features of the Hardwood Industry
 - b) Relationships are Key
 - c) Process Development
5. Future Work



Red alder

The Hardwoods

- Oregon is heavily softwood dominated
- Hardwoods cover ~11% of the landbase
- Often riparian associated



Hardwood Policy

- Early policies assumed less historical hardwood presence
- They provide ecological, cultural, and resilience value to the landscape
- Hardwood material is often a byproduct of other processes

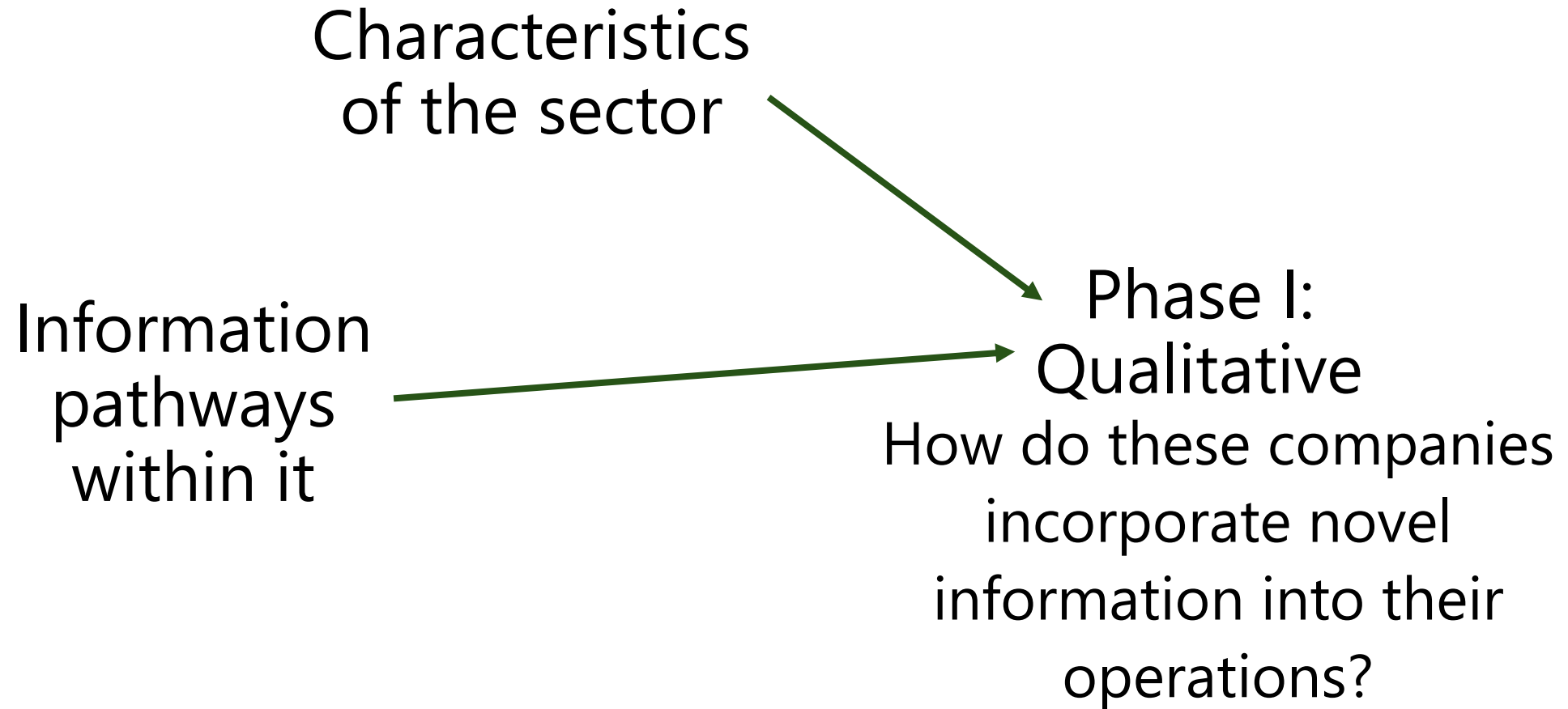


Oregon white oak

Theoretical Background

- Innovation in Wood Products (Kahn, 2018; Hansen et al. 2015; Weiss et al. 2021)
- Organizational Learning (Figueiredo 2002)
- Absorptive Capacity (Cohen & Levinthal 1990)

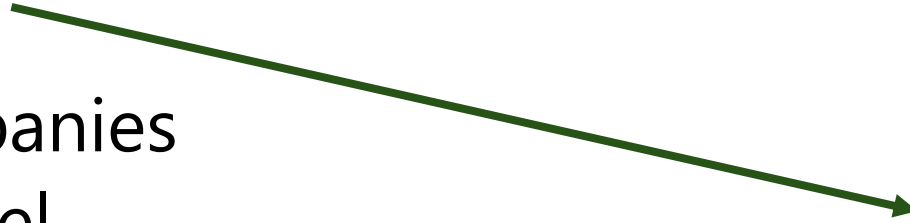
Research Methods



Research Methods

Phase I: Qualitative

How do these companies
incorporate novel
information into their
operations?

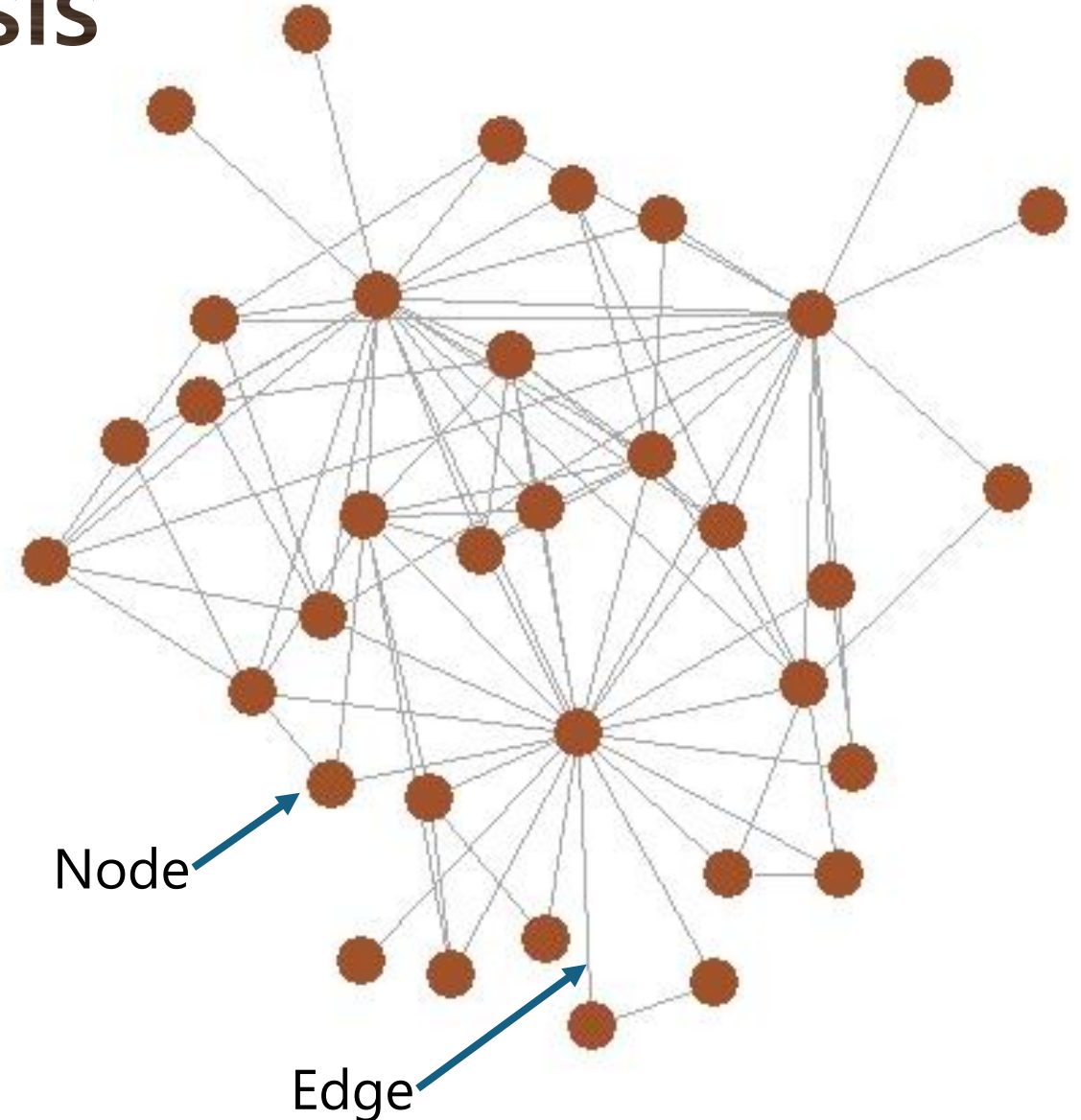


Phase II:
Social Network
Analysis
Where do they
source information?

Social Network Analysis

(Scott & Carrington, 2011)

- Analyzing organization of actors in a social system
- Assumes actors make meaningful decisions based on context
- Represents actors as nodes and relationships as edges





Bigleaf maple

Kleekhoot Gold West Coast

Findings

Features of the Hardwood Sector

- Wide variation
- Relatively low tech
- Push and pull of supply
- Value-added manufacturing

“It's a **scrappy, diverse** from A to Z group of businesses.”

“From forest to log, log to rough green lumber, green lumber to dry lumber, dry lumber to secondary or tertiary processing, that last step is where the **greatest value add** is.”

Madrone

West Wind Hardwood

Relationships are Key

"He's just **out there talking** to all the log sellers, all the loggers, anybody that knows anybody."

- Chatty sector
- Willing to share information
- Connections to knowledge resources in Eastern US
- Training suppliers

Tanoak

Relationships are Key

“We wrote our own rules.
I **have to educate** all the
loggers and foresters that I
work with to buy logs- this is
how we do it, this is how it
makes sense.”

Tanoak

- Chatty sector
- Willing to share information
- Connections to knowledge resources in Eastern US
- Training suppliers

Process Development

- Minimal published technical information
- Reliance on in-house experimentation and development
- Synthesis of information across sources

"I've learned the **questions to ask** from talking to other people. But I didn't get the answers."

"There's not many people in the west that have the skill set or ability to dry the Oregon hardwoods. And I think that's **one of the big downfalls.**"

Summary & Future Work

- Sector based around a byproduct
- Shows in the operations, relationship building, and approach to challenges
- Phase I is ongoing, Phase II will begin in the summer/fall

Thank you

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