

The Ongoing Process of Building a Theory of Disruption

Authors: Clayton M. Christensen
2006

Presented by: Marcela Naves C. Ribeiro



EAD-5871 – Economics of Industrial Innovation – May 29, 2019

The Central Idea

- An examination of the theory of disruptive innovation;
- Recounts the development of the theory of disruption and the process by which it is being built;
- A case study about the theory-building process.

focus

The Central Idea

- An examination of the theory of disruptive innovation;
- Recounts the development of the theory of disruption and the process by which it is being built;
- A case study about the theory-building process.

Concept

Building the Theory of Disruption

• Step 1: Observation

– Initial research on the history of the disk-drive industry;

– Build a database (complete census) of:

- All components and technologies in every disk-drive model ever announced by any company in the world between 1976 and 1992;
- The revenue histories of every disk-drive company;
- The market shares of each competitor by product segment

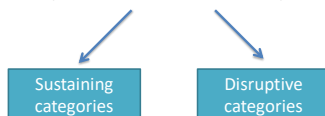


classification

Building the Theory of Disruption

• Step 2: Classification

– Classification of the innumerable technologies in the history of the disk-drive industry into:



Needs of customers in the existing market;
Creating products that satisfy their predicted needs for the future.

Creates new markets separate to the mainstream;
Markets that are unknowable at the time of the technologies conception.

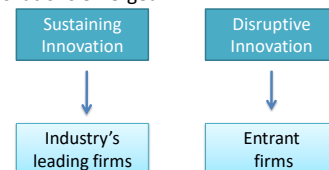
difference

Building the Theory of Disruption

• Step 3: Defining Relationships

– Industry's leading firms almost always triumphed in battles of sustaining innovation;

– Entrant firms typically triumphed when disruptive innovations emerged.



Normative theory

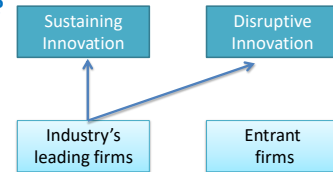
Building the Theory of Disruption

- **Step 4:** transition from descriptive to normative theory
 - about 1996
 - Interaction with Stanford professor Robert Burgelman
 - Managers prioritize investments that help them garner resources from customers and investors
 - Their firms are structured to generate profit, or they cannot survive.

Anomalies

Building the Theory of Disruption

- **Anomalies:**
 - something the theory could not explain;
 - incumbent leaders in their industries that had succeeded at disruption.
- **How?**



how

Building the Theory of Disruption

- **How the anomalies have succeeded?**
 - the leader had maintained its industry-leading position by:
 - Setting up an autonomous business unit;
 - Giving it unfettered freedom to forge a very different business model appropriate to the situation;
 - It was not a technology problem;
 - It was a **business model** problem.



anomalies

Building the Theory of Disruption

- **Anomalies**
 - The primary purpose of the theory building cycle is to seek anomalies, not to avoid them;
 - The discovery of an anomaly is the enabling step to less ambiguous description;
 - This is how theory is improved.

examples

Building the Theory of Disruption

- **Examples of Anomalies**
 - EMC Corporation took the high-end data storage business away from IBM in the 1990s with a different product architecture than IBM's.
 - Hewlett-Packard's laser jet printer business was a sustaining technology relative to the Epson, that dominate the market.
 - General Electric was an entrant in the jet revolution, and became very successful.

Resolve anomalies

Building the Theory of Disruption

- **Resolving Anomalies through Clearer Definitions:**
 - Identify anomalies;
 - Make definitions and measures more precise by:
 - refining the categories;
 - clarifying the mechanism of causality;
 - then improved the theory.

mistaken

Mistaken and Assumed Definitions

- Frame disruption along old lines:
 - “Will this technology become better than that technology?”
- Disruptive innovations do not necessarily improve to surpass the performance of the prior technology;
- They generally do not, and need not.
- Disruption entails a very different question:
 - “Whether the disruptive technology will improve to the point that it becomes good enough to be used in a given tier of the market?”

conclusion

Conclusion

- Accept and “argues” with some of the criticisms and suggestions from authors of other articles in this issue:
- “I have heard many people make the mistake of post hoc definition of disruptiveness, and I correct them whenever I hear it. If Danneels (2004) or Tellis (this issue) have ever read about or have heard me commit this error, I ask them to point out specifically where I have been so sloppy, and I will issue a letter of apology and retraction.”

conclusion

Conclusion

- If a subsequent researcher uncovers an anomaly to a prior scholar’s work, it represents triumph for both, It will allow them to articulate better theory.
- Within this description of theory building, the author attempt to recount the process by which the theory of disruptive innovation has been built to date.

end

ANY QUESTION?

Thank you.

EAD-5871 – Economics of Industrial Innovation – May 29, 2019