Improving Supply Chains: Lessons from Innovation

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Joel Wooten
1. **Profit model**
   How you make money

2. **Network**
   How you connect with others to create value

3. **Structure**
   How you organize and align your talent and assets

4. **Process**
   How you use your signature methods to do your work

5. **Product performance**
   How you develop distinguishing features and functionality

6. **Product system**
   How you create complementary products and services

7. **Service**
   How you support and amplify the value of your offerings

8. **Channel**
   How you deliver your offerings to your customers

9. **Brand**
   How you represent your offerings and business

10. **Customer engagement**
    How you foster compelling interactions

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**Doblin group, *Ten Types of Innovation***
WE ARE VERY DIFFERENT IN TWO WAYS:

1. We Create Our Own Designs
2. We Sell Directly to You
Lesson 1: Innovation ‘chords’ outperform notes
Lesson 2: Supply chain innovations create huge value
Examples of supply chain innovations

1) **The Toyota Production System**
   
   Foundation of lean manufacturing and continuous improvement (kaizen).

2) **Continuous Replenishment (P&G)**
   
   P&G first implemented with Schnuck’s Markets in St. Louis, with dramatic reductions in inventories and stock-outs thanks to orders based on sales data. Legendary 1998 meeting with Sam Walton helped catapult Wal-Mart past Kmart (an early, limited adopter).

3) **Standardized Ocean Shipping Containers**
   
   Implemented by port of New Jersey in 1956, before which there was no standard way to ship products.

4) **Computerized Real-Time Tracking (FedEx)**
   
   Outfitted drivers with handheld scanners, providing real-time location tracking and stressing the idea that information was as important as the package itself.
Innovation tournaments
Innovation Tournaments (Terwiesch and Ulrich)

500 “pitches”

3-5 years
$50-200 million

1 new feature film
10,000 newly discovered compounds
8-12 years
$500-1,000 million
1 new drug
Innovation Tournaments

Terwiesch and Ulrich

All Values Normalized Relative to 1 Launch

Number of Opportunities

Innovation Phase

(nomenclature varies by industry)

Launch

Profits

Pharma
Movies
Venture Capital
Industrial
Consumer
Lever 1: Create more ideas

Number of opportunities generated

Quality of the best opportunity generated

(1 = terrible, 10 = amazing)

Innovation Tournaments (Terwiesch and Ulrich)
Lever 1: Create more ideas

Lever 2: Create better ideas

Opportunities from top 25% of submitters

Quality Rating
(1 = terrible, 10 = amazing)

Count

Innovation Tournaments (Terwiesch and Ulrich)
Lever 3: Increase the variance of the idea quality

Quality of output

Innovation Tournaments (Terwiesch and Ulrich)
Lever 3: Increase the variance of the idea quality
Methods for identifying opportunities

- Personal pain point
- Problem scanning
- Analogy identification

Additional methods: de-commoditize an industry, drive an innovation down market, functional decomposition, etc. 

*Innovation Tournaments* (Terwiesch and Ulrich)
Summary

- Innovation isn’t just for products – supply chain innovation drives huge value
- Innovation chords outperform notes
- Innovation requires different tools to succeed. Tournaments are one approach...
  - Create more ideas
  - Create better ideas
  - Increase the variance of ideas
- Opportunities can be identified through a variety of methods
  - Personal pain point
  - Problem scanning
  - Analogy identification