“Apple® today announced it has sold a record-breaking nine million new iPhone 5s and iPhone 5c models, just three days after the launch of the new iPhones.”

— Apple press release, September 23, 2013

Strategists call the successful launch of new, game-changing products like the iPhone “innovation shocks.” An innovation shock arises when the specific combination of an innovative product or service leads to a rapid rise in demand in that product or service category. It rocks an entire industry, leaving rival firms scrambling to figure out how to respond. Should rival firms faced with this follower’s dilemma try to imitate, reposition, exit, or enter the market in response to an innovation shock? It’s a dilemma that is faced by firms across all industries but that had attracted little research attention before this study.

To understand why a firm would choose to imitate, reposition, exit, or enter a market after the introduction of an innovation shock design (ISD), the researchers examined past ISDs and responses in the early US auto industry. They found rival firms choose to imitate a new blockbuster product for three reasons:

1. To capture a portion of new-found revenue
2. To compete head-to-head with the innovator and take advantage of time needed to adjust supply chain operations and production
3. To prevent the innovator from gaining a long-term competitive advantage

Some firms choose to reposition away from the ISD to avoid decreased consumer demand. If an alternative position exists with adequate demand, firms might consider this a safer option. Exiting the market is an option for firms that cannot compete with the ISD or find differentiated niche positioning. Or, a firm can choose to enter the market if the ISD will create enough new revenue for new firms to enter and compete.

The researchers found that the response a competitor or potential competitor chooses in reaction to an ISD depends on the firm’s comparative adjustment costs. These costs include the total cost and risk of moving from an existing position to imitating, differentiating by repositioning distant from the innovation, exiting the category, or entering the category.

Comparative adjustment costs are defined as the costs to adjust from one market position to another and fall into three categories:

1. Internal resources, knowledge, and capabilities
   The broader the breadth of these assets, the lower the adjustment costs will be to adapt to an innovation shock.

2. Internal organization, structure, and incentives
   Costs of adjustment might increase if a firm is unable to support new ventures due to hierarchical organization or inadequate flexibility with incentives.

3. Relationship with external partners such as suppliers, buyers, and regulators
   A firm can have low adjustment costs if it is not locked into long-term contracts with suppliers (including employees) and buyers.

The study concludes that:

• Older firms are significantly less likely to exit the market after an innovation shock.
• Larger incumbents are no less likely than other rivals to reposition after an innovation shock.
• Incumbents with broader technical knowledge are more likely to successfully reposition after the innovation shock and focus on different segments.

“It’s difficult for firms to be prepared for innovation shocks,” says Professor Nickerson. “But knowing that comparative adjustment costs are key to the game, firms should invest in strategies such as research and development, tracking rival firms for possible acquisition, and pursuing patents to protect intellectual property as means to lower their comparative adjustment costs.”

**KEY TAKEAWAYS for Managers**

• When challenged by an innovation shock, rival firms have four options: imitate, reposition, exit the market, or enter the market.
• Comparative adjustment costs provide a tangible way to measure a firm’s strengths and abilities to mount a strategic response to an innovation shock.

**“Dominant Designs, Innovation Shocks, and the Follower’s Dilemma”**

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