

A Demand-Side View of Incumbent Inertia and Performance

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Cite as:

Bohlmann Jonathan, Stanko Michael, Spanjol Jelena (2020), A Demand-Side View of Incumbent Inertia and Performance. *Proceedings of the European Marketing Academy*, 49th, (63212)

Paper from the 49th Annual EMAC Conference, Budapest, May 26-29, 2020.



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Incumbents are often, but not always, posited to suffer from inertia, making them slow to respond to market opportunities. Supply-side studies of incumbent inertia (factors internal to the firm) are more prevalent than those on demand-side factors, which relate to a firm's customers and may explain incumbent advantages. We introduce a framework for a demand-side view of incumbent inertia, recognizing how the supply- and demand-side factors interrelate. On the one hand, incumbents learn and develop various routines and assets (supply-side factors) that influence their product strategies, typically reflecting inertia and incremental innovation. At the same time, customers learn about the benefits of products in the market, forming preferences that may reflect switching costs and network externalities (demand-side factors). Our framework considers both the demand- and supply-side factors, allowing a more comprehensive perspective of incumbent strategies and performance.

Keywords: Demand-side inertia, incumbent strategies, incumbent performance

Track: Marketing Strategy & Theory

1. Introduction

Strategies (and their effectiveness) of incumbent firms have received considerable research attention. Factors that affect incumbent performance and survival are managerially relevant, to say the least, and examples of disadvantaged incumbents are widespread. Not all incumbents fail or perform poorly, and mixed findings on incumbent (dis)advantages continue to motivate additional research. For example, incumbents are thought to be incremental in their new product introductions, but this is not always the case. In addition, the organizational processes and asset advantages that help (or hinder) incumbent performance and innovation continue to be studied because the inherent trade-offs for short- versus long-term success are not well understood (Atuahene-Gima 2005; Stanko, Bohlmann, and Molina-Castillo 2013). The causes and effects of incumbent inertia still contain open questions.

A more comprehensive view is necessary. Supply-side mechanisms internal to the firm constitute the bulk of prior research, often demonstrating incumbent inertia. However, this ignores how behaviors and preferences of customers (demand-side factors) affect incumbents. We bring the demand-side perspective into focus via a framework that not only explicitly considers various demand-side factors, but also recognizes how the supply- and demand-side factors interrelate. We draw on the various learning mechanisms that influence incumbent decisions, and the decisions of their customers. Incumbents learn and develop routines and assets that influence their strategies, typically reflecting inertia and incremental innovation. At the same time, customers learn about the benefits of products in the market and form preferences that relate to the various demand-side factors. In our new framework, the supply- and demand-side effects interrelate to comprehensively address the strategic decisions of incumbent firms and any inertia that may limit incumbent performance.

We see three primary contributions to integrating a demand-side learning perspective into the extant literature on incumbent inertia. First, our demand-side perspective recognizes the strategic incentives arising from customer behaviors, offering a needed complement to the supply-side factors. Second, we state a series of propositions that specify important demand-side effects and, importantly, their relationships with supply-side inertia factors. Third, our framework allows us to examine strategic implications for incumbent firms in a more comprehensive manner than allowed by only a supply-side focus. Our aim is to develop a framework and propositions that create novel insights into incumbent inertia.

Three primary supply-side causes of incumbent inertia include: (1) lock-in of specialized assets, (2) fear of cannibalization, and (3) inflexibility of organizational routines.

Demand-side dynamics are also relevant, since customer preferences may vary over time as more products are introduced with varying benefits. Despite past acknowledgement of the demand side to incumbent inertia, research on demand-side factors remains sparse (Priem, Li, and Carr 2012). Lieberman and Montgomery (1998) identify three “less widely recognized” factors existing “at the level of the customer” (p. 1113): (1) customer preference formation, (2) customer switching costs, and (3) network externalities. A single unifying theory of incumbent inertia has been elusive since supply- and demand-side characteristics are usually treated separately. However, a learning perspective may help clarify research gaps, since both supply- and demand-side dynamics involve forms of learning.

2. A Learning Perspective for a New Incumbent Inertia Framework

Learning is an important underlying process in both supply- and demand-side factors. Organizations learn how to better utilize assets, implement routines, and understand customers as they become more experienced in a given product-market. On the demand side, customers learn about preferred products based on usage experiences and information available in the market. Importantly, these learning experiences influence incumbent decisions (resource allocation, market entry, etc.) and customer decisions (which products to buy, and when). A learning perspective therefore emphasizes the need to jointly consider supply- and demand-side factors, and reflects the type of dynamic process inherent in the formation of incumbent inertia (Bohlmann, Spanjol, Qualls, and Rosa 2013).

Through a learning-based perspective, we elaborate on the inertia factors and their potential interactions in developing our framework, highlighting implications for incumbent (dis)advantage. A comprehensive perspective may suggest incumbent strategies that differ from supply-sided inertia prescriptions. Our new framework of incumbent inertia and performance, Figure 1, highlights the demand-side factors. We first succinctly state the demand-side factors’ main effects on incumbent innovation and performance (P1 - P3), then discuss propositions that convey important interactions among the inertia factors (P4 - P8) and strategic implications (P9 and P10).

Incumbents can mold the cost structures and expectations of customers, and once doing so it will be less likely to take actions which counter these expectations. Over time, preference formation favoring an incumbent may generate brand-based advantages. Brand equity persists even through times of technological turbulence and industry shakeups. Switching costs, faced by customers who switch products or brands, are often portrayed in terms of brand loyalty effects (Wernerfelt 1991). Behavioral or psychological effects generate

perceived switching costs as customer preferences form around currently-used incumbent brands. However, switching costs of various forms can be a powerful incentive for incumbents to focus on current strategies and customers to cultivate such advantages. Network externalities are similar to switching costs in that both involve value from compatibility, either from one purchase to the next (switching costs) or from the purchases of other customers (network externalities). Network externalities and the installed base affect incumbent strategies and customer adoption decisions (Fuentelsaz, Garrido, and Maicas 2015). Customers may recognize the potential benefits of a new product or technology, but are afraid to be the first to switch given the costs and uncertainties of doing so.

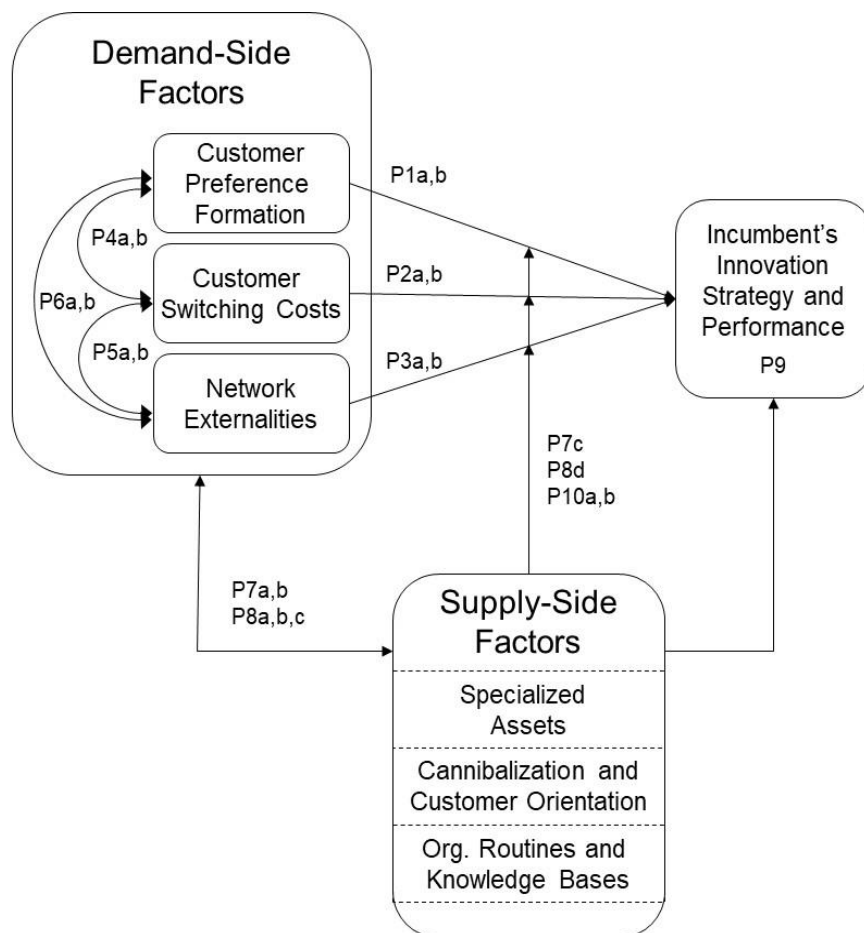


Figure 1: Incumbent Inertia Framework Linking Demand- and Supply-Side Factors

Research Proposition 1:

- a) Early entrant incumbents possess performance advantages due to customer preference formation; the effect is greater under initially ambiguous preferences.
- b) Brand-based advantages from customer preference formation create a stronger incumbent performance benefit; the effect is larger under greater technological turbulence.

Research Proposition 2:

- a) *The effects of customer switching costs on an incumbent's performance are positive, but diminish over time.*
- b) *Higher customer switching costs result in more incremental innovation by the incumbent.*

Research Proposition 3:

- a) *The effects of network externalities on an incumbent's performance and innovation are more negative for higher rates of market growth.*
- b) *The effects of network externalities on an incumbent's performance and innovation are more positive for both a greater size of the installed base and a greater extent of the installed base's fear of being stranded with older technology.*

3. Demand-side Factor Interactions

Since psychological switching costs often “lock in” a customer to the currently used product, more dominant incumbents will be favored. Higher switching costs may prompt customers to remain with the firm longer, allowing opportunity to increase customer loyalty over time. Incumbents may pursue new customers and try to achieve lock-in via switching costs (Villas-Boas 2015), or take advantage of a broad product line that can satisfy evolving customer needs (Chen and Hitt 2002). Innovativeness may offer more benefits to the firm if it enjoys greater switching costs (Stanko, et al. 2013). Network externalities are linked to switching costs and preference formation. When new products are difficult to evaluate, early adopters may hold a disproportionately large influence as later adopters copy their actions as sufficient evidence of product benefits (Choi 1997). Building an early market share lead may thus help incumbent advantage through establishing brand loyalty and developing an installed base that grows and influences future adopters (Fuentelsaz, et al. 2015).

Research Proposition 4:

- a) *The more an incumbent benefits from the effects of customer preference formation, the higher the incumbent's brand-based switching costs.*
- b) *The positive relationship between customer preference formation and brand-based switching costs strengthens for the incumbent over time under broader product lines.*

Research Proposition 5:

- a) *Stronger network effects lead to higher switching costs towards the incumbent.*
- b) *The effect between network effects and switching costs is positively moderated by an incumbent's larger installed base acquired more quickly, and greater customer uncertainty of product benefits.*

Research Proposition 6:

- a) *Stronger network effects lead to increased customer preference formation towards the incumbent.*
- b) *The effect between network effects and preference formation is positively moderated by an incumbent's larger installed base acquired more quickly, and greater customer uncertainty of product benefits.*

4. Interrelationships of Demand- and Supply-side Factors

We now explore possible demand- and supply-side interrelationships based on a learning perspective. How a firm learns about customer needs is a critical contributor to incumbent innovation. Greater information provision from customers may increase responsiveness to needs, although innovativeness may suffer. Demand-side factors such as preference formation, brand strength, and switching costs accumulate to the incumbent's current products. As this generates repeat purchases, incumbents have less strategic incentive to orient themselves to new and uncertain markets that may jeopardize current sales. Willingness to cannibalize and customer orientation thus interact with customer preference formation and switching costs. Although incumbents may try to achieve early lock-in of new customers (Villas-Boas 2015), greater switching costs may incentivize more incremental product innovation through an increase in existing customer orientation.

Another dynamic interaction between supply- and demand-side effects on incumbent inertia comes about from brand loyalty effects accruing to incumbents. Stronger brands can see an increased consumer response from a more innovative new product (Sinapuelas, Wang, and Bohlmann 2015). Whether brand loyalty will enhance or diminish incumbent inertia depends critically on the firm's willingness to cannibalize.

Research Proposition 7:

- a) *Customer preference formation that accrues to the incumbent's benefit will increase the incumbent's mainstream customer orientation and decrease its willingness to cannibalize.*
- b) *Customer switching costs that accrue to the incumbent's benefit will increase the incumbent's mainstream customer orientation and decrease its willingness to cannibalize.*
- c) *Customer preference formation and switching costs based on brand loyalty that accrue to the incumbent's benefit will increase (decrease) incumbent innovation under higher (lower) willingness to cannibalize.*

Specialized assets, routines, and knowledge bases also interact with preference formation and switching costs. Assets and capabilities determine the mechanisms whereby

the incumbent influences customer preferences and switching costs. If such efforts are successful, the incumbent will likely continue its current path. This further reduces the incentive or effectiveness of any organizational learning activities such that the firm may become more focused on its current markets and capabilities. Exploiting current knowledge and skills benefits incremental product innovation (Atuahene-Gima 2005) which strengthens brand effects and aids customer preference formation. Potential relationships between network externalities and supply-side factors are also likely to be complex. A greater network externality effect may motivate an incumbent to reduce willingness to cannibalize and foster a current customer orientation to reap benefits from its installed base. Specialized assets and routines may be further developed to better exploit network-related sales.

Research Proposition 8:

- a) *Customer preference formation that accrues to the incumbent's benefit will reinforce the incumbent's current specialized assets, routines, and knowledge bases over time.*
- b) *Customer switching costs that accrue to the incumbent's benefit will reinforce the incumbent's current specialized assets, routines, and knowledge bases over time.*
- c) *Stronger network externality effects will increase mainstream customer orientation, reduce willingness to cannibalize, and reinforce current specialized assets, routines, and knowledge over time.*
- d) *Customer preference formation and network effects that accrue to the incumbent's benefit will over time decrease incumbent innovation under stronger specialized assets, routines, and knowledge bases.*

5. Strategic Implications for Incumbent Firms

Our discussion indicates that supply-side factors carry many dangers to incumbent performance, while some demand-side factors may work in the incumbent's favor, at least for a time. While incumbents may welcome growth via network effects, it may render an incumbent firm unable to escape a current customer orientation as it struggles to satisfy existing demand. Rapid changes may also make learning more difficult for the incumbent, such that it will take longer for any potential benefits to be realized.

Research Proposition 9: *The more quickly an individual supply- or demand-side inertia factor changes over time, the greater the discrepancy between its effects on an incumbent's short-term and long-term performance.*

The strategic implications of our framework, Table 1, illustrate that failing to include demand-side factors provides an inadequate lens on incumbent performance or strategies. The

table depicts likely incumbent performance under different levels of demand- and supply-side inertia, and notes managerial recommendations that could help an incumbent avert inertia downfalls. An incumbent faces high supply-side inertia if it possesses relatively high levels of specialized assets, established routines, knowledge bases, current customer orientation, and fear of cannibalization. Incumbents facing high supply-side inertia likely struggle to change deeply entrenched behaviors within the organization. An incumbent faces high demand-side inertia if network externalities and switching costs are relatively strong and customer preference formation favors the incumbent’s products. Table 1 depicts substantial differences in incumbent performance across inertia conditions, with variations in incumbent strategies that managers could utilize to enhance advantages or mitigate disadvantages.

Table 1: Incumbent Strategies

	<i>Low Demand-Side Inertia</i>	<i>High Demand-Side Inertia</i>
<i>High Supply-Side Inertia</i>	<p><u>Performance Implications:</u> Apparent disadvantage. Incumbent is hampered by supply-side inertia without benefits of customer lock-in.</p> <p><u>Managerial Recommendations:</u> Experiment with novel, emerging, and pioneering technologies. Invest in rival technologies. Diversify knowledge bases and foster willingness to cannibalize.</p>	<p><u>Performance Implications:</u> Short term advantage due to customer lock-in, but prone to long-term threat of disruptive innovation.</p> <p><u>Managerial Recommendations:</u> Develop innovation incubator outside existing organization. Foster innovation partnerships. Avoid cannibalization phobia and a purely mainstream customer orientation.</p>
<i>Low Supply-Side Inertia</i>	<p><u>Performance Implications:</u> Uncertain. Incumbent is nimble, but customer loyalty hard to develop.</p> <p><u>Managerial Recommendations:</u> Build brand strength. Develop innovation leadership capabilities.</p>	<p><u>Performance Implications:</u> Advantage of customer lock-in, with ability to adapt long term.</p> <p><u>Managerial Recommendations:</u> Pursue multi-market diversification. Build future market focus.</p>

A high level of supply-side inertia need not be a disadvantage if the incumbent is also accruing advantages due to high demand-side factors. If the incumbent locks in valuable customers, specialized assets and routines can make the incumbent more efficient and effective at meeting the needs of a large installed customer base. This advantage may be short-lived if competitors can effectively engage in product improvements that cause a breakdown in the demand-based advantages. Guarding against this requires diligence against both cannibalization phobia and a mainstream customer orientation. This could mean the

incumbent's innovation efforts are best accomplished by an autonomous organization or partnership away from the influence of established routines and knowledge bases.

If the incumbent cannot benefit from customer lock-in due to a low level of demand-side inertia, supply-side inertia is often detrimental to performance. Several approaches can help managers in incumbent firms mitigate such supply-side disadvantages. Encouraging R&D projects which draw upon emerging technology outside of the firm's competence can establish new organizational routines and diversify the firm's knowledge base. Investing in rival technologies can also diversify the knowledge base and build acceptance to cannibalization. The managerial challenge in dealing with high levels of supply-side inertia is that implementing these strategies usually works against the firm's established resources, competencies and routines.

An incumbent with little demand- or supply-side inertia is not hampered in its ability to make swift changes as opportunities arise, but also lacks customer lock-in. Customer loyalty becomes hard to develop in this situation, so an incumbent will want to create a stronger bond to customers by investing in brand building. The incumbent may also develop organizational routines to achieve efficiencies and build up specific capabilities over time. The potential for an incumbent performance advantage exists, depending on whether assets and capabilities become beneficial over time and customer loyalty is earned.

Low supply-side inertia with high demand-side inertia enables the incumbent to benefit from customer lock-in and adapt to technological or market changes. This could generate performance advantages, particularly if demand-side benefits can be leveraged across several markets. It is important to examine new and potentially valuable market segments and be willing to cannibalize current products as new opportunities arise.

Performance implications in Table 1 can be summarized as follows:

Research Proposition 10:

- a) Incumbents will have high (low) performance under a combination of high (low) demand-side inertia and low (high) supply-side inertia conditions.*
- b) Incumbents will have high short-term performance but low long-term performance under a combination of high supply- and demand-side inertia conditions.*

In summary, the incumbent faces complex strategic tensions between the supply-side and demand-side factors of inertia. Assets and capabilities can benefit the incumbent as it builds switching costs or takes advantage of installed base externalities, but innovation may become incremental and willingness to cannibalize may decrease long-term. The managerial implications summarized in Table 1 deserve close scrutiny. Our incumbent inertia framework

and propositions create a starting point for a broader learning perspective that recognizes often overlooked demand-side dynamics and their interactions with supply-side factors.

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