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Value Creation in Farmer-Driven Marketing Channels: The Case of Murrellen Pork

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Successful value creation requires not only exploiting productivity gaps but also pursuing the opportunity gaps that technological innovation and changing customer preferences provide. However, the pursuit of opportunity gaps requires firms to refocus their energies toward developing new, innovative, and flexible marketing processes and architectures in which the necessary skills, resources, and core competencies, whether within or outside the firm's boundaries, can be combined. The establishment of flexible modular architectures is not a trivial task; it requires an understanding of the critical processes and constraints driving innovation within a chain. The adoption of modular architectures can provide opportunities to create greater product variety, introduce technologically improved products, bring products to market more quickly, and undertake initiatives more easily than before. This paper applies a conceptual framework developed in Gow et al. (2002) to explain how livestock producers can exploit opportunity-gap initiatives through the development and use of flexible and modular chain architectures. The case of a New Zealand pork producer who restructured his farming operation to match consumer requirements provides empirical support.

The livestock industry has traditionally been viewed as a commodity-driven business where farmers are price takers. Hence there has been a heavy emphasis within the sector on exploiting “productivity gaps”—optimizing performance through operating efficiencies—as the key to unlocking greater profitability or value (Prahalad 1993; Gow et al. 2002). The New Zealand pastoral sector has been extremely effective in achieving this: stocking rates per hectare and lambing rates per ewe have steadily increased since the beginning of last century. However, increasing “value” is not confined to closing the “productivity gap.” It also concerns identifying, exploiting, and expanding the “opportunity gap”—exploiting opportunities for new product, market, or business development (Prahalad 1993). Traditionally, livestock producers have struggled

to recognise and exploit these “value” opportunities, as they lay outside the traditional boundaries and required farmers to stretch beyond their current resources, redirecting their energies toward the development of new strategic intent and innovative marketing processes that would enable them to access the requisite skills, resources, and capabilities necessary to succeed. The successful creation of long-term value requires that farmers develop marketing processes that allow them to exploit not only the productivity gaps but also the opportunity gaps that technological innovation and changing customer preferences provide. This paper applies a conceptual framework developed in Gow et al. (2002) to explain how livestock producers can exploit opportunity-gap initiatives through the development and use of flexible and credible chain relationships. The case of a New Zealand pork producer who restructured his farming operation to match consumer requirements provides empirical support.

Value Creation and the Pursuit of Opportunity Gaps

Traditionally, value creation and firm growth has been viewed as most successfully achieved through incremental innovations matching existing resources with current opportunities. However, Prahalad (1993) disagrees, arguing that long-term value creation requires that firms rethink the ways that they compete, continually challenging the or-

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ganization to develop new competitive advantages and competitive space.

Historically, the livestock industry has created value by strategically focusing on becoming more efficient, or what Prahalad (1993) terms the *performance gap*. This is justifiable, since more efficient management of quality, costs, cycle time, logistics, and productivity should lead to greater profitability. However, it is obvious that performance-gap improvements have a finite limit. Thus in order to create additional value and increase business profitability the livestock industry needs to not only focus on the performance gap, but simultaneously they also need to seek and identify new business and market opportunities. Prahalad (1993) refers to this process as actively managing the *opportunity gap*. Hence a necessary condition to ensure long-term value creation is the redeployment of funds created by productivity increases towards new business and market opportunities (Prahalad 1993). The difficulty within the livestock industry is that firms tend to be overly focused on productivity-gap initiatives while in the myopic pursuit of short-term profits, thereby ultimately sacrificing any long-term value-creation opportunities.

The exploitation of potential opportunity gaps requires firms to refocus their energies toward developing new, innovative, and flexible marketing processes in which the necessary skills, resources, and core competencies, whether within or outside the firms boundaries, can be combined (Gow et al. 2002). This process begins with the establishment of a new “strategic intent” or aspiration level for the firm, which creates not only an obsession at all levels and functions of the organization to achieve the specified goal or goals, but also, by design, creates a “misfit” between aspirations and current resources and core competencies (Prahalad 1993). Consequently, to achieve a new strategic intent, firms are required not only to identify, cultivate, and exploit their existing core competencies and resources (Prahalad and Hamel 1990) but also to leverage their existing intra-firm resources against those of others to develop new core competencies (Prahalad 1993).

The Marketing Processes and Competency Alignment

When changes in the underlying business environment occur, such as the introduction of new technologies or changes in consumer tastes and preferences, it becomes imperative that firms not only use their existing core competencies but also access and develop new internal and external competencies. This allows them to quickly and efficiently respond with new procedures or product innovations and thus create value (Gow et al. 2002). Robertson and Langlois (1995) refer to this process as the “marketing process” and define it as the set of activities through which organizations can identify and exploit opportunities to provide for consumers needs. The marketing process achieves this through the development of a range of technological systems or core competencies that allow firms to identify consumers’ needs and then apply the appropriate technological means to create and deliver specific products that better meet these needs. Within this context, technology can broadly be viewed as all tangible and intangible assets, human skills, and organizational capabilities involved in creating and realizing products, including product designs, production processes, and distribution channels. As Sanchez (1999) notes, “the technological systems used in the marketing process create an institutional context that strongly influences the pace and direction of change in markets and technology” (p. 92).

The problem, however, is that path dependencies and switching costs often make it very costly for the incumbent firm to change their marketing processes, because of the cost of acquisition and disposal of firm specific assets (Arthur 1988); hence, firms often accumulate excessive stocks of expensive assets that provide little value in terms of the necessary capabilities to create value in the future. Furthermore, Leonard-Barton (1992) argues that a firm’s core competencies may in one instance provide them with competitive advantage, yet on the other hand act as core rigidities restricting the firm’s progress into areas of new business development. A mismatch may occur between the environmental requirements and the core competencies that a firm possesses—the values, skills, managerial systems, and technical systems that have been successful in the past may become inappropriate

knowledge sets in the new situation (Leonard-Barton 1992). This is precisely what Prahalad and Bettis (1986) refer to as the dominant logic of the firm: in situations of change, firms often implement inappropriate responses due to this dominant logic, thereby propelling the firm more deeply into an adverse situation, when in fact survival is dependent on the development of a new logic or appropriate competencies.

The very essence of competencies is that they often include an intangible component such as the tacit knowledge of personnel; this makes them difficult to imitate or trade in the marketplace unless purchased as a complete firm, unit, or sub-unit. These core competencies develop slowly over time; thus any effort at replication will at best also take time but may still ultimately be elusive, even for insiders (Teece et al. 1997). Prahalad and Bettis (1986) believe that before a new set of competencies can be developed a process of unlearning must take place whereby firms eliminate old logics to make way for new mental maps. In effect, they must first reverse down the existing learning curve to enable them to proceed up another (Bettis and Prahalad 1995). This confronts firms with a difficult issue: in order to exploit the opportunity gap and realize their strategic intent by expansion into unfamiliar markets, products, processes or technologies, firms need to adopt flexible marketing processes that provide access to the necessary competencies for progression while simultaneously reducing the risk of failure, thereby maximizing potential gain.

Researchers often recommend that new business-development activities should be bounded by the firm's core competencies, since the more unfamiliar the innovation the more difficult it is for firms to succeed, as they do not have the competencies required to exploit the innovation (Afuah 1998). However, this can be extremely constraining. Alternatively, we argue that when new business opportunities lie beyond a firm's core competencies the firm may be better off cooperating with another firm that already possesses these competencies rather than going it alone, and the further an innovation lies from the base (core) capabilities of the firm, the more the firm should look outside its boundaries for assistance (Afuah 1998; Gow et al. 2002).

Modular Architectures

Moving beyond the boundaries of the firm to collaborate with those value-chain partners most competent in a particular field may appear to be an easy strategy for securing the required competencies. However, firms are often unable to dismantle their previous chain relationships. This requires the adoption of a flexible modular architecture that allows for any value-chain component to be freely replaced or reorganized within the existing bounds while causing minimal disruption to current economic activity. There is an important distinction made between the value chain¹ as a whole—the system—and the value chain in its parts—the components²—that underscores the idea that successful chain development requires two types of knowledge. “First, it requires component knowledge or knowledge about each of the core [competencies] and the way in which they are implemented in a particular component.” Second, it requires architectural knowledge or “knowledge about the ways in which the components are integrated and linked together into a coherent whole” (Henderson and Clark 1990, 11). It is the recognition of this distinction between architectural and component knowledge, or between the components themselves and the links between them that provides important insights into the ways in which innovations in value chains may be facilitated or retarded (Henderson and Clark 1990).

Path dependences driven by productivity-gap initiatives often, however, result in the development of very static, inflexible, and efficiency-driven architectures. Consequently, the establishment of flexible modular supply chains is not a trivial task; it requires an understanding of the critical processes or constraints driving innovation within a value chain. Modular product, process, and knowledge architectures are however now being adopted in a growing number of market situations to provide the required market flexibility and responsiveness

¹ Note that the value chain may be made of one or more components that may be located in one or more firms; the actual observable value-chain structure will depend greatly upon the location of the requisite core competencies.

² We define the components as a distinct portion of a business unit, firm, or value chain that embodies a core competency or design role and performs a well-defined function.

(Sanchez 1999). These architectures are having a significant affect on the “technologically determined economics of the marketing process” (p. 92). They are changing the way that different components in the marketing process interact with each other, and thus altering the underlying technological “deep structure” of the marketing process. This is leading to numerous innovations and changes in the marketing process with respect to product strategies, organizational forms, and market dynamics. These new modular marketing processes are altering many of the previously held underlying assertions about what is “technologically feasible and cost effective in identifying consumer preferences and designing, producing, distributing, and supporting products to serve [consumer] preferences” (p.92). These new architectures are providing a basis to “create greater product variety, introduce technologically improved products more rapidly, bring new products to market more quickly, and undertake these initiatives at lower cost than ever before” (p. 92).

Modular architectures thus provide firms with strategic flexibility by allowing the substitution of individual components to offer different functionalities, attributes, and performance levels. However, depending on the path dependencies of the architecture the benefits of strategic flexibility may only accrue to the firm or component controlling the product-design process. This helps explain why we often observe firms internalizing a majority of the processes and components in an attempt to capture the majority of the value created. Value creation thus requires the adoption of a modular-chain architecture designed to minimize the necessary levels of investment in separate components while concurrently attempting to maximize the value captured through controlling the key core competencies, and recognizing the access and process limitations to the component attributes of each chain party.

Farmer-Driven Marketing Process Innovation: The Case of Murrellen Pork

In the following section we discuss how a New Zealand (NZ) farmer, Murray Battersby, has been able to successfully develop an innovative marketing channel within a highly competitive domestic livestock sector based upon limited financial re-

sources and intensive relationship-management initiatives.

Strong price competition from Australian and Canadian imports during the 1990s led to large numbers of domestic NZ producers exiting the industry after enduring successive years of losses. Murray Battersby, the owner of a now highly regarded gourmet pork brand in NZ, took a different approach to this adversity. Having been part of the industry for three decades, his operation had experienced a number of environmental shocks and operating changes, from the high levels of government protection in the late 1970s through the deregulation of the NZ economy in the early 1980s and operational changes from breeding to breeding and finishing and to solely finishing in the early 1990s. Change was neither unfamiliar nor threatening to the Battersbys.

When they initially switched to being solely a finishing operation they were not aligned with any particular breeder or processing facility. They purchased their weaners on the spot market and sold the finished pigs to the processor at the schedule prices of the day. This, however, posed major problems when slaughter space or the supply of weaners was restricted. In response, the Battersbys entered a process/marketing contract for their pigs with Freshpork, a large NZ pork integrator. The arrangement's success prompted them to contract with Freshpork for the supply of their weaners, too. The production contract allowed them to avoid the risks of the spot market. The supply contract guaranteed the number, liveweight, and health status of each weekly batch of pigs. The Battersbys felt that buying and selling their pigs through the same organization would also give them a priority for processing space.

When facing financial pressure from imported pork that was being sold for a price beneath their production costs, it was the Battersbys' strong relationship with Freshpork that provided them with new opportunities. The Battersbys decided they needed to differentiate their product from the market in an attempt to realize additional value for what they felt was a superior food product. This began with getting PQIP accreditation³. They spent three

³ PQIP is the NZ Pork Industry Board's equivalent of ISO accreditation and is independently audited by the Ministry of Agriculture and Fisheries (MAF).

years, from 1994 to 1997, bringing their operation up to the compliance standard. However, they didn't just want a piece of paper saying they were supplying a good product—they wanted to be sure that their product was in fact superior to what New Zealanders had become accustomed to regarding as pork. The most widespread problem in pig meat is PSE (Pale Soft Exudative Pork), where low pH in the meat causes "bone taint" due to curing problem from high water retention. A pH level above 5.8 is the internationally recognized level for quality pork. The Battersbys set out to ensure that all of their pork met this standard. After some initial problems, Murray gained the support of the NZ Pork Industry Board and Freshpork in establishing a quality pork program. As part of this program Freshpork agreed to pH test all of his pigs free of charge at the time of slaughter.

In developing the program, Murray identified the key factors along the production process and marketing channel that could detract from meat quality and worked to eliminate them. The largest contributor to low pH is high stress immediately prior to slaughter; thus transportation of the pigs to the processor was a critical issue. They located a transporter willing to cooperate in an agreement whereby the same truck and driver would transport the pigs along a specified route at the same time and day every week with only their stock on board. Over the ensuing six months, four different routes to the processing plant were tested, each monitored with an electronic shock logger. The best route was chosen based upon the resulting pH levels in the pork. In addition, Freshpork agreed to reserve a booking at the plants loading ramp so that the Battersbys' pigs were slaughtered immediately upon arrival without having to wait on the truck. The truck and its driver also gained PQIP accreditation.

The results were outstanding. Freshpork quickly recognised the pork was of superior quality and thus happily worked with Murray to gain PQIP accreditation up to and including the processing plant. However, this was not enough for the Battersbys to command a premium for their pigs over Freshpork's other suppliers. They would have to market the pork themselves. So in 1999 the Battersbys established the Murrellen Pork brand. Freshpork were in full support of the venture and for a toll processing fee of ten cents per kilogram

agreed to pH test, process, and package as many of the Battersby's pigs under their Murrellen Pork brand as they could sell each week.

Murray set an even higher standard for the pork that was to be sold under the new brand—the pH had to be between 6.0 and 6.9; otherwise it would be sold through the traditional channels into the supermarket trade. They directly marketed to butcher shops in Christchurch, NZ at a sizeable premium above schedule price. The pork was marketed as whole carcasses; this way they avoided the problem of having to shift the poorer cuts. The onus fell on the butcher to adjust his pricing balance across the carcass. Over time Murrellen Pork worked with the refrigerated-meat transporter and retailers to ensure that every component of the supply chain was PQIP accredited, a first for any producer in New Zealand. Since its humble beginnings of one pig per week, the enterprise has expanded over the past three years to where 38 pigs are being sold under the Murrellen Pork brand every week. The production process has improved to the point that 96% of the 11,000 pigs that have been slaughtered since the monitoring began have had a pH level above 5.8. Murrellen pork now has outlets in four of the major centers of NZ. One example of the extra business that Murrellen Pork has generated is the first butcher who aligned with them. Before stocking Murrellen Pork this outlet was selling two pigs per week; they now sell twelve Murrellen Pork pigs per week at the premium rate.

Such is the strength of Battersby's relationship with Freshpork that they allow him to use their refrigerated transport system at the same discounted rate they receive due to their large throughput. Freshpork even provides a specialist pig veterinarian to make monthly visits to the piggery at very reasonable rates and veterinarian products at heavily discounted rates.

Conclusions

The successful creation of long-term value requires that farmers not only exploit productivity-gap initiatives but that they also pursue opportunity-gap initiatives that technological innovation and changing customer preferences provide. The pursuit of potential opportunity gaps, however, requires that firms refocus their energies toward developing new, innovative, and flexible marketing processes in

which the necessary skills, resources, and core competencies, whether within or outside the firms boundaries, can be combined. The establishment of flexible modular architectures is not a trivial task; it requires an understanding of the critical processes and constraints driving innovation within a chain. The adoption of modular architectures can provide opportunities to create greater product variety, introduce technologically improved products, bring products to market more quickly, and undertake initiatives more easily than before. This paper applies a conceptual framework developed in Gow et al. (2002) to explain how livestock producers can exploit opportunity-gap initiatives through the development and use of flexible and modular chain architectures. The case of Murrellen pork shows that with the right strategic intent and modular architecture, farmers can successfully pursue opportunity gaps.

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