

Increasing the Profitability and Competitiveness of Ontario's Potato Industry



GEORGE MITGES AND ASSOCIATES INC.



“It has been a wonderful experience being involved in the Ontario Fresh Potatoes project and working with George Mitges, the Ontario Potato Board, and VCM International. I firmly believe that the data from the project will help steer the industry in the right direction, and I am looking forward to applying it to our farm's operations.” (Trevor Downey – President, Downey Farms)

In collaboration with the Ontario Potato Board, Loblaw Companies Limited, and Downey Farms, the Value Chain Management Centre and George Mitges & Associates sought to identify how Ontario's fresh potato industry can increase its competitiveness and profitability.

Headline Findings

- Increased collaboration between researchers, producers and marketers would enable Ontario's fresh potato industry to increase its profitability and competitiveness, through utilizing their resources more effectively to respond to changing consumer demands.
- Ontario consumers lack an informed perspective of potatoes from a health and convenience perspective, along with which varieties are best suited to specific uses.
- Ontario's fresh potato industry could benefit from emulating marketing initiatives that have been implemented by other jurisdictions.
- Legislation limits the extent to which Ontario's fresh potato industry can capture value by communicating the health and nutritional benefits of fresh potatoes to consumers.

The views expressed in this report are the views of the Value Chain Management Centre and George Mitges and Associates, and do not necessarily reflect those of Agriculture and Agri-Food Canada.

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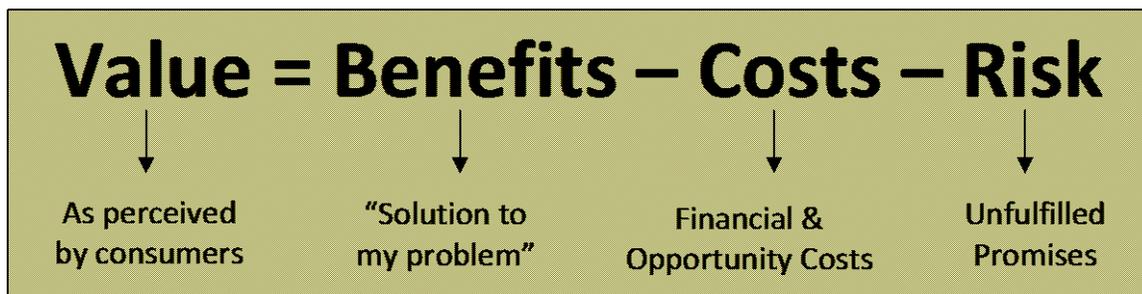
Research Methodology

The study comprised three interconnected activities. A review of potato marketing practices occurring in South Africa, the UK, Australia, New Zealand, and the US sought to identify approaches and formats that could be emulated in Ontario. The international review influenced the design and delivery of a detailed study into 1,053 Ontario consumers' attitudes towards potatoes and their purchasing habits when buying fresh potatoes. The third activity, a high level value chain analysis, involved interviewing twelve industry experts to identify opportunities to reduce costs or increase revenues throughout the process of producing, packing, distributing, and marketing Ontario grown potatoes.

The consumer research is statistically significant to the Ontario population, with a confidence level of 95% and a confidence interval of 3.4. It provides insights that will enable industry to make more informed decisions than previously possible. While results from the value chain analysis did not involve the measurement of operations to establish their effectiveness and efficiency, that many of the findings are supported by the review of international initiatives and the consumer research strengthens their validity.

Consumer Research

Fearne¹ (2009) states that the value proposition consumers equate to a specific product is shaped by three overriding factors: benefits, costs and risk.



In relation to potatoes, the perceived benefits, costs and risk include

- **Benefits:** pleasurable eating experience compared to alternative products, a convenient food item and solution, or a healthy food choice;
- **Costs:** price per pack (or weight if buying loose) compared to alternative products, value associated with overall meal occasion, chance of giving up a tastier or more functional product, chance of wasted product and money if quality is poor; and

¹ Fearne, Andrew (2009). *Building competitiveness through value chain management: The role of consumer insight*; Dunhumbly Academy of Consumer Research, Kent Business School, University of Kent

- Risk: expectations are not met, leading to disappointment and the potential that the consumer(s) will choose an alternative product in the future or decide only to purchase potatoes when offered at a reduced price.

To accurately determine the drivers of behaviour and values that Ontario consumers equate with Ontario grown fresh potatoes versus alternative products (i.e., pasta, rice, sweet potatoes, and quinoa), along with attributes for which they are willing to pay, the research was conducted in two distinct phases. The first phase, an online scoping study involving 218 respondents and conducted in May 2013, was designed to identify consumers' overall attitudes towards fresh potatoes. It explored their present knowledge about potatoes from the perspective of being a meal ingredient, and what assumptions have most influence on determining their purchasing behaviour.

The second phase of the consumer research saw a more in-depth study involving 835 respondents. To maximize its demographic reach and strengthen the validity of the findings, the study used a combination of in-store intercept interviews and online surveys. Conducted in late June and early July, an important element of this study was to identify for which attributes associated with fresh potatoes were segments of the consumer population willing to pay, and why. It also sought to identify how different segments of the market compare fresh potatoes with competing carbohydrates.

Shown below, Table 1 describes the extent to which the consumer market is segmented, with distinct socio-demographic and attitudinal differences existing between the three segments of fresh potato consumers that together comprise 84 percent of respondents. The remaining 16 percent of the population is fragmented. Primarily due to nutrition or health related concerns, some of these respondents choose not to consume potatoes at all.

Table 1: Consumer segmentation for fresh potatoes

	Time Starved, Health Conscious (39%)	Convenience (31%)	Health & Wellness (14%)	Sample Average
Demographics				
Gender: Female %	73%	70%	80%	72%
Age	Equally split between under and over 50 years	Youngest group, with least incidence of over 50 years	Highest incidence of seniors	23% under 35 years 44% over 50 years
Household size	Most likely to have more than one child living at home	Most likely to have one child living at home	Most likely to live alone	59% have no children in HH
Education	Match the sample average	Highest incidence of university and postgraduates	Lowest incidence of high school and college educated	41% high school / college 59% university / postgrad
Cultural background	Match the sample average	Most likely to be born in Canada	Least likely to be born in Canada	73% born in Canada
View of potatoes vs. alternative carbs	Most likely to agree that potatoes are convenient, satisfying	Least likely to consider potatoes “easy to prepare”	Most likely to choose “other” carbs as favourite	Bread is favourite carb, followed by potatoes, rice, and pasta

For almost all consumers, price is not a primary determinant of whether to buy fresh potatoes. Anecdotal and unprompted evidence gathered during the intercept research found that approximately 20 percent of Canadian shoppers stated that they do not know the price for potatoes. This supports UK findings, which stated that half of all shoppers do not know how much they pay for potatoes when they have just bought them. This applies across all retail formats and is similar across all life stages.

Important differences identified between the three segments include

1. Health & Wellness (14%)

- The smallest of the three segments
- Highest incidence of women
- Most likely to live alone
- Most likely to have been born overseas, with a European background

- Purchases of carbohydrates driven by health related factors, which leads them to prefer alternative carbs such as whole grains and quinoa over potatoes
- Have strong feelings towards choosing food for reasons related to nutrition and health. So while price conscious, they are amongst the most willing to pay for attributes with which they strongly empathize from a health perspective
 - Above average interest in concept products, such as low glycemic index potatoes
- Most likely to have been born outside of Canada

2. Convenience (31%)

- The youngest group, most likely to have two or more children at home
- Well educated with above average incidence of university and postgraduates
- Least knowledgeable about potatoes, including how to prepare with ease
- Driven by convenience and satisfaction, leads to their being most willing to pay for certain attributes, such as potatoes differentiated by taste and functionality
- Fewer than 50 percent believe that potatoes are easy to prepare in numerous ways when compared to alternative carbs such as pasta and rice
- Fewer than a quarter strongly believe that potatoes are healthy or nutritious

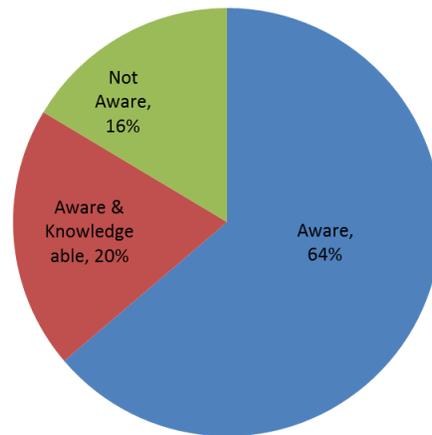
3. Time Starved, Health Conscious (39%)

- Largest, oldest, and most educated of the three segments
- The most positive about potatoes, though the majority remain uninformed about the key benefits of potatoes relating to health, nutrition and freshness
- The most affluent of the three segments, though also the most price sensitive when it comes to buying loose potatoes
- Seek experience, leading to willingness to pay for mini potatoes and functionality, such as suitability for use

The descriptive names of these segments “Time Starved, Health Conscious”, “Convenience Driven”, and “Health and Wellness” epitomize the key challenges facing the potato industry. Potatoes have an image problem. The majority of the population like potatoes and view them as offering good value for money. They do not however perceive potatoes to be healthy or convenient. Nor do most consumers understand the differences relating to potato varieties. Consumers are generally uneducated about which variety to choose when preparing specific recipes, which leads to dissatisfaction due to the potatoes not having met their expectations.

The extent to which consumers lack knowledge about the suitability of different varieties of potato is illustrated below in Figure 1.

Figure 1: Consumers' Knowledge of Potato Varieties and Their Use



Taken from the scoping study, Figure 1 shows that the majority of respondents (64%) know that certain varieties of potato are more suited to specific uses than others (e.g., mashing vs. boiling vs. baking). They do not, however, consider themselves sufficiently familiar with the varieties and options on offer to make informed purchasing decisions. It should, therefore, not come as a surprise that the research validated that opportunities exist to capture value by providing consumers with greater information on the functionality of specific varieties and formats for specific meal occasions. The 20 percent of consumers who are knowledgeable about potato varieties, including their use and preparation, are mainly aged 50 and older. That it is younger consumers who are least aware of varieties and their uses is a long-term issue that industry must address.

Willingness to Pay

The willingness to pay study identified the attributes for which segments of the population are prepared to pay. They include potatoes differentiated by appearance, taste, information provided on the bag or at point of sale, and fit for use. While the exact amount differs by whether packaged or loose — the meal occasion for which the potatoes are being purchased, the variety, and sizing — a sizeable percentage of the population are willing to pay between 54 percent more than the lowest price given for loose and 64 percent more than the lowest price given for packaged mini potatoes. The lowest prices used in the survey were \$1.49/lb loose and 2.79 for a 2lb bag of mini potatoes. The PowerPoint entitled “Ontario Fresh Potatoes” describes the willingness to pay study in greater detail.

International Initiatives

Capturing added value by addressing this gap in consumer demands and improving consumers' perceptions of fresh potatoes has been the primary driver of numerous successful marketing initiatives undertaken elsewhere in the world. In the UK, ongoing integrated marketing initiatives are considered successful because the declining consumption rate for fresh potatoes has slowed. Three examples that could be replicated with relative ease in Ontario are shown below in Table 2. The first is the different price points associated with packaging format, quality, and product information sold by Sainsbury's, a major UK retailer.

Table 2: Selection of Potato Products from Sainsbury's, UK (2013)

 <p>Cost £2.95 GBP</p>	<ul style="list-style-type: none"> • Variety clearly identified with "Great for mash and roasts" • Creamy and fluffy • The British flag is part of the packaging and is on the front as well • Key health claims on front (Source of Fibre, Source of Vit. B6) • Store brand. Variety and specific region on front in white panel 	 <p>Cost £2.55 GBP</p>	<ul style="list-style-type: none"> • "For great family meals" • Easy and versatile • The British flag is part of the packaging and is on the front as well • Key health claims on front in green (Source of Fibre, Source of Vit. B6) • Store brand. Variety and specific region on front in white panel
 <p>Cost £1.32 GBP</p>	<ul style="list-style-type: none"> • Baking potatoes "Great for jackets" • Fluffy with crispy skins • The British flag is part of the packaging and is on the front as well • Key health claims on front in green (i.e., Source of Folic Acid, Source of Vitamin C, High in Vitamin B6) • Store brand. Variety and specific region on front in white panel 	 <p>Cost £1.19 GBP</p>	<p>Basic (Value) Offer</p> <ul style="list-style-type: none"> • "No lookers, beautiful mashed" • A looker is a blemish/eye

Source: www.sainsburys.co.uk, downloaded September 2013

The second is a Point of Sale display from Australian retailer, Coles. The display features a recipe contained in the monthly Coles magazine, and is displayed in front of the relevant variety of potatoes. This type of merchandizing is designed to create an experience for the consumer that extends beyond the purchase decision, thereby enhancing the potatoes' overall value.

Figure 2: Australian Point of Sale Example, 2013



The third example is an industry-wide program from South Africa. Called “Join the Potato Nation,”² the primary purpose of the initiative is to increase the perceived value of potatoes by informing consumers about why they are a healthy food option. Promotions extend to sponsoring marathons where potatoes (rather than pasta or bananas) are provided to runners ahead of the event for the carbohydrate content and at the finish line for the potassium content.



A specific example of such a race is “Comrades Marathon,”³ an ultra-marathon that starts in Durban and finishes 54 miles later in Pietermaritzburg. They promote and serve potato snacks or meals, with boiled salted potatoes being the sustenance of choice for runners along the route.

² <http://www.facebook.com/PotatoNation?fref=ts>

³ www.comrades.com

The promotion highlights that the reasons why runners should consume potatoes include that they are easily digestible, high in good carbohydrates, and the additional salt provides needed electrolytes. North American ultra-marathons also serve baked potatoes and potato chips, though races or the potato industry's involvement is not promoted to the same extent, nor directly connected to a national consumer-targeted program.

Ontario's wider potato industry could apply lessons learned from these and other international initiatives. A more detailed review of international initiatives is contained in the report titled "Review of International Fresh Potato Research, Promotion and Marketing Initiatives."

Value Chain Analysis

Ontario has innovative potato suppliers that have established a differentiated presence in the market, and are working with retailers to increase the value of potatoes from a consumer perspective. The purpose of the value chain analysis was to acquire an informed perspective of the ability and motivation of Ontario's fresh potato industry to capture market opportunities identified in the consumer research. Ten managers and experts from industry participated in the study, which encompassed two rounds of interviews. Respondents included producers, marketers/packers, retailers, and industry advocates. Most of the respondents are knowledgeable about the Ontario, Canadian and the international fresh potato industry. Questions that guided the discussions included the following: What are the industry's current capabilities? What factors are having the greatest impact on the fresh potato industry's profitability and competitiveness? How does the competitiveness of Ontario's potato industry compare against that of its primary competitors, and why? What challenges must be addressed before current resources can be used more effectively? It also sought to identify from where along the value chain do the root causes that impact industry's competitiveness emanate, and why. To protect respondents' confidentiality only aggregated results are presented below.

Presented below in Table 3 are findings on how the competitiveness of Ontario's fresh potato industry compares to jurisdictions against which it competes for market share. The findings were produced from asking respondents to rank on a scale of 1 to 10 the relative importance of specific factors (A) for profiting from the production, marketing, and retailing of potatoes. Respondents were then asked to rank the performance of the differing potato producing regions to deliver on each factor, again on a scale of 1 to 10. In each case: 1 represented minimal importance or capability, 10 represented significant importance or capability. The results show respondents' assessment of the identified regions' overall performance (B), along with each region's comparative performance (C).

Table 1: Comparison of Potato Producing Regions Ability to Perform Against Key Business Factors

Competitiveness Matrix							
	A	B	C	C	C	C	C
Factor Researched	Importance*	Satisfaction with Supplier Performance (Across All Countries)	Ontario	Manitoba	PEI	Quebec	Idaho / USA
Dependability of supply, quality and volume	9.5	7.3	Good	Good	Mediocre	Mediocre	Very good
Committed/reliable chain suppliers	9.0	8.0	Good	Good	Moderate	Moderate	Good
Ability to translate consumer preferences into new products	8.5	7.0	Moderate	Moderate	Moderate	Poor	Very good
Ability to capture value by communicating with consumers	8.5	5.5	Moderate	Moderate	Good	Moderate	Excellent
Size/consistency of size	8.0	7.0	Mediocre	Mediocre	Mediocre	Mediocre	Good
Different or unique packaging formats	8.0	5.0	Moderate	Good	Good	Good	Very good
Cost of supply	8.0	7.8	Mediocre	Moderate	Moderate	Moderate	Moderate
Taste	8.0	6.0	Moderate	Mediocre	Moderate	Moderate	Very good
Marketing support (i.e., consumer research)	8.0	7.0	Poor	Moderate	Moderate	Moderate	Good
Category management (i.e., Planograms, POS material)	8.0	7.0	Poor	Moderate	Moderate	Moderate	Good

Legend	
Excellent	Excellent
Very good	Very good
Good	Good
Moderate	Moderate
Mediocre	Mediocre
Poor	Poor

It is important to note that the ranking for each producing region is comparative, meaning that “Moderate”, “Mediocre” or “Poor” does not mean that all the suppliers from a particular region are terrible. It reflects that the overall performance of suppliers from a particular region under perform in relation to competing regions.

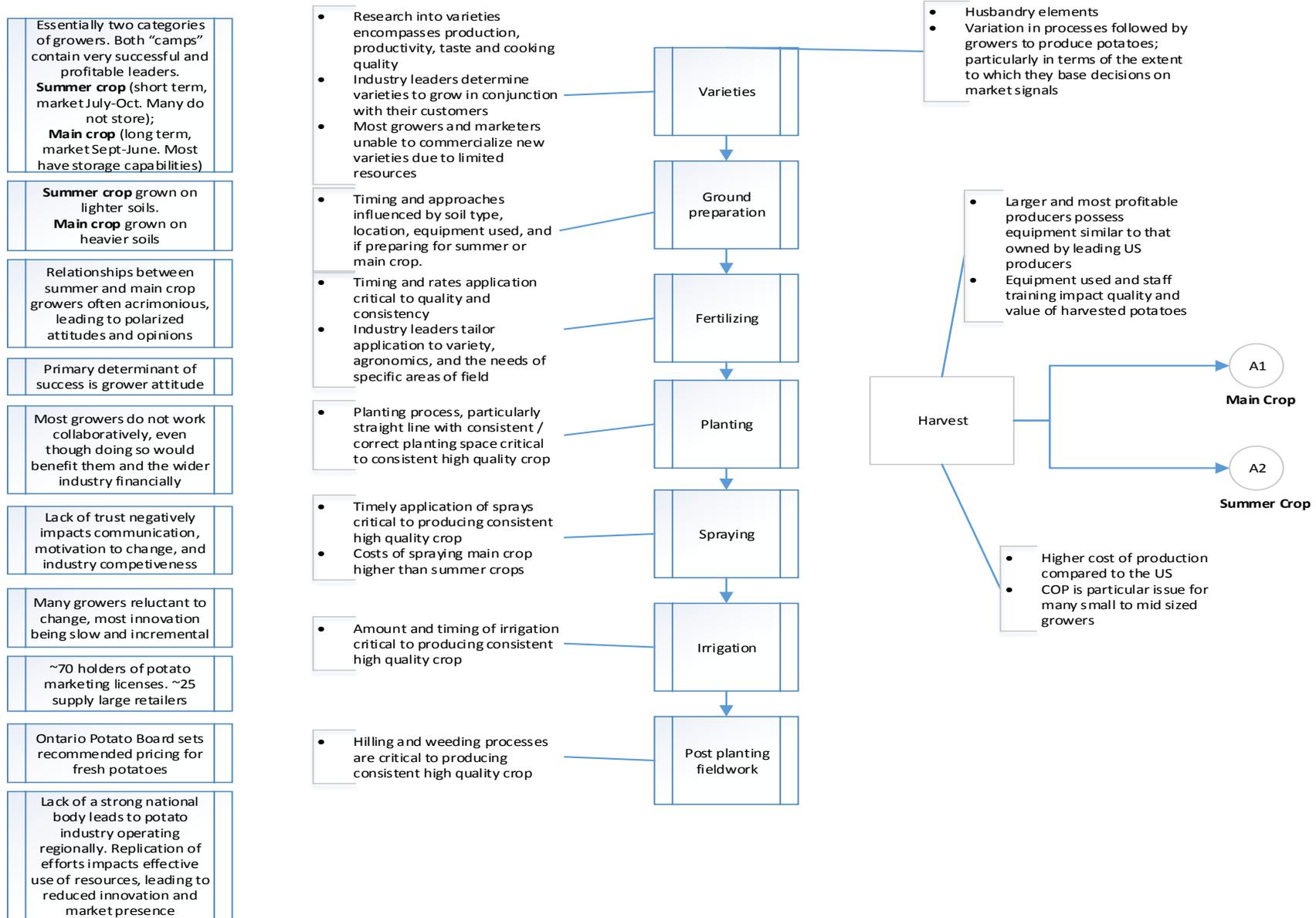
The results show that Idaho (US) is perceived to be the most competitive of the regions researched, particularly with regards the factors identified as most important to industry’s (and therefore businesses’) success. Overall, Ontario and Manitoba scored better than PEI or Quebec. Ontario scored best on “dependability of supply” and “committed/reliable chain partners,” but scored the

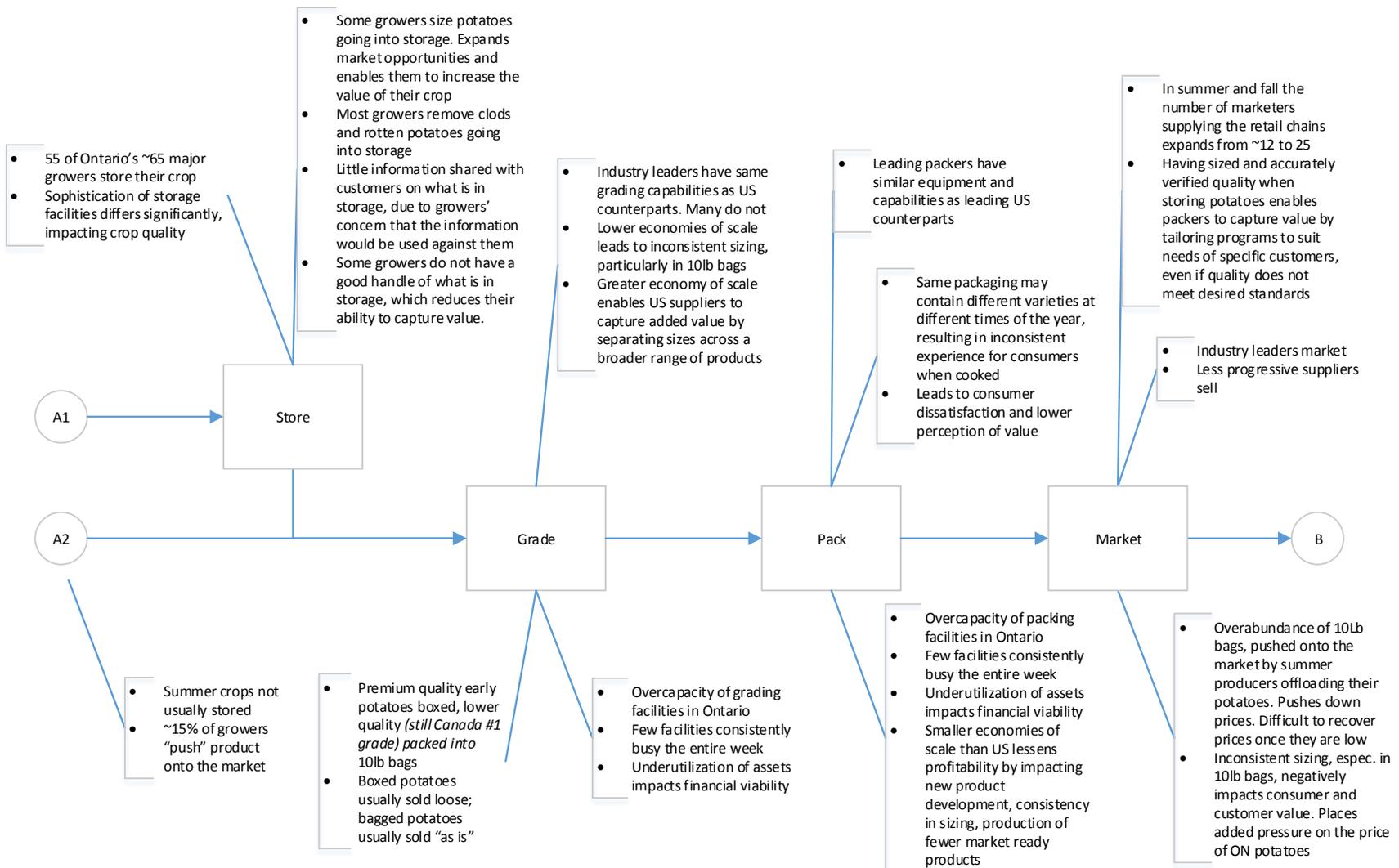
least on “Different or unique packaging formats,” “Cost of Supply,” “Consumer Marketing Support,” and “Category Management.” That none of the regions scored particularly well on “Providing different or unique packaging formats,” “Ability to capture value by communicating with consumers,” and “Taste” (all of which are important to consumers), illustrates the extent of opportunities that exist for Ontario’s fresh potato industry to reposition itself in the market.

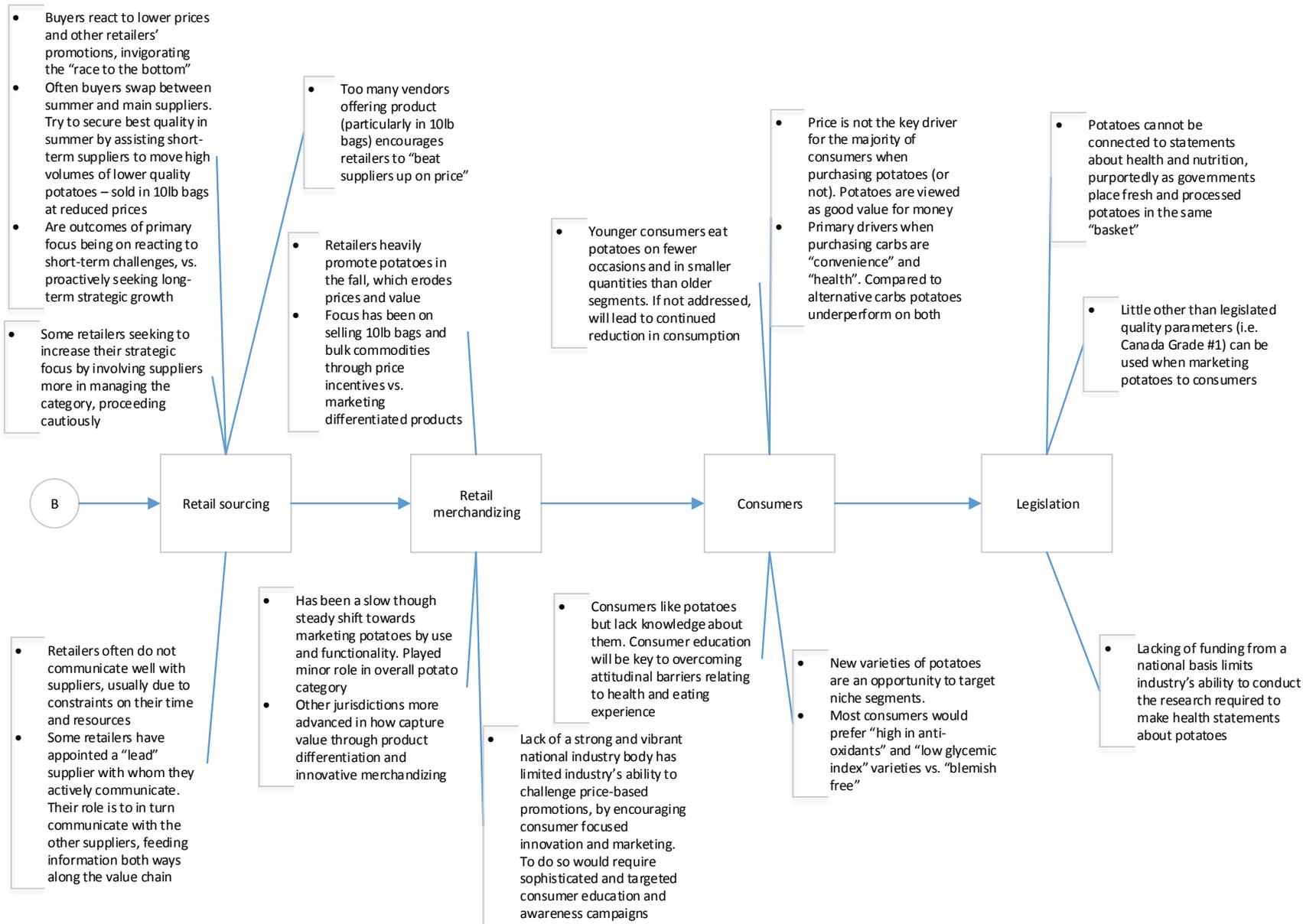
The industry consultations also enabled the development of a value chain process map. Presented below in Figure 3, the value chain map was developed by analyzing respondents’ views on factors impacting the competitiveness and profitability of Ontario’s fresh potato industry. The map details the source of issues impacting the competitiveness of Ontario’s fresh potato industry, where opportunities exist to improve performance, and why. It was finalized by asking respondents to review a draft map, and to refute or validate the findings.

The majority of issues cited on the map were described by respondents as stemming from the management approaches employed by Ontario producers and marketers. For example, a lack of collaboration between producers and a tradition of packers’ pushing undifferentiated 10lb bags of potatoes onto the market pushes prices down every fall. The same lack of collaboration has led to many underutilized packing operations and unnecessarily high costs of production. Summer crop growers can make good returns on pristine early potatoes sold in cartons, though their profitability is also impacted by the annual push of selling large volumes of potatoes in 10lb bags and underutilized packing facilities. These practices result in neither producers, packers, nor retailers fully benefiting from the production, grading, packing, and marketing of Ontario grown potatoes. The additional revenue and cost reductions that could be generated through the involved businesses working together more collaboratively are significant.

Figure 3: Value Chain Process Map

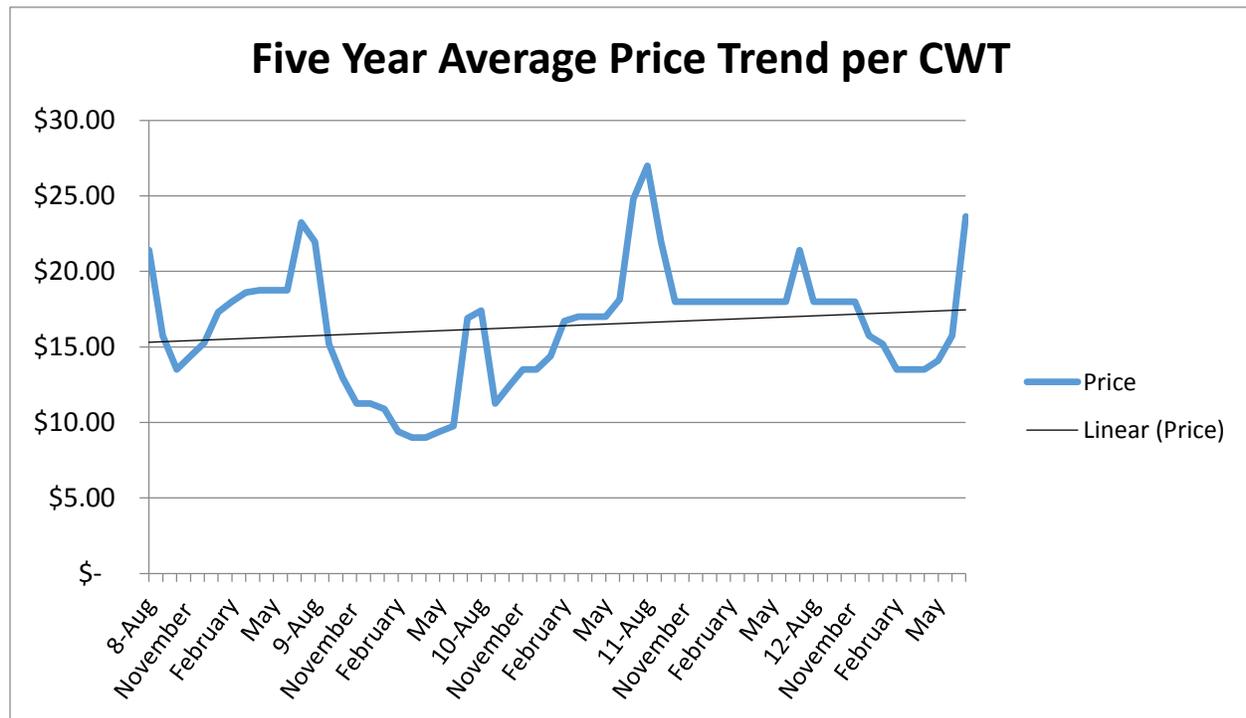






The extent to which a lack of collaboration between producers, marketers and their customers impacts potato prices is shown below in Figure 4. The graph presents the fresh market prices, per Cwt, for Ontario potatoes over a 58-month period of time: August 2008 to May 2013. Every year in July and August prices jump to varying degrees. This is followed by an often acute fall during September and October, as main crop farmers come onto the market and summer producers are seeking to disperse themselves of 10lb bags of undifferentiated, inconsistently sized potatoes. The issue that impacts the competitiveness of Ontario’s fresh potato industry is not the linear trend, which generally tracks the rate of inflation. The issue that impacts industry is the fluctuation in price. This is its Achilles heel.

Figure 4: Five-year Price Trend for Fresh Ontario Potatoes



Once prices are low, unless an event such as an industry-wide shortage occurs, it is difficult to increase prices again until the early crop is harvested the following summer. To remain competitive in a commodity centric market, with few differentiated products that appeal to consumers compared to competing carbohydrates, retailers follow the downward price trend to differing degrees. This exacerbates the issue. It also plays a role in sustaining the adversity that exists between the two groups of growers, which is primarily due to the disorderly marketing of the summer crop disrupting pricing long after the crop has been harvested and sold. This results in polarized attitudes and the lack of a solid foundation upon which to develop solutions that would lead to a more competitive and profitable industry.

In the words of a producer and industry advocate, “The current situation is predominantly a farmer made problem. Retailers react to prices offered by Ontario suppliers, particularly in late summer and early fall.” The challenge is to encourage retailers to step off the annual price cycle, by fostering closer strategic and consumer-oriented relationships between them and businesses operating in the Ontario fresh potato industry. Adopting more holistic and strategic approaches to the production and marketing of fresh potatoes would enable Ontario’s industry to become more profitable and competitive. It would also enable the industry to more effectively compete against US producers, many of whom possess economies of scale that enable them to more readily deliver against key business requirements better than Canadian competitors.

Recommendations

The following recommendations suggest how Ontario’s (and Canada’s) fresh potato industry can establish the capabilities required to increase its profitability by reducing costs and improving the management capabilities of businesses from “gate to plate.”

The research identified that Ontario’s fresh potato industry has enormous opportunities that are presently not being realized. For example, regardless of whether a producer’s primary focus is the summer or main crop, financial performance is impacted by how the disorderly marketing of summer versus main crop negatively impacts the overall potato category’s value. The unintended consequences of the resulting low margins include an inability to invest in the development of new products and commercialize new varieties. It also polarizes attitudes, which discourages the collaboration required to enable Ontario’s fresh potato industry to compete more effectively against alternative carbohydrates (pasta, rice, etc.) and competing jurisdictions. It also lessens industry’s ability to mount the industry-wide communication programs that have benefited the fresh potato industries of countries as diverse as the UK, New Zealand, Australia, the United States, and South Africa.

Listed below are recommendations that can be acted upon to establish a more competitive and profitable fresh potato industry in Ontario.

Test the effectiveness of merchandizing techniques identified during the international review of potato marketing practices and appear suited to Ontario’s fresh potato market.

The development of point of sale information, which communicates the attributes the research identified consumers most readily seek, and innovative in-store formats could be tested with relatively little cost. Where possible these efforts should be delivered in conjunction with other delivery channels, such as retail magazines and associated websites. The same approaches and avenues could be used to address incorrect assumptions about the nutrition and convenience of fresh potatoes which drive consumers’ behaviour.

Encourage the development of closer strategic relationships between the producers and marketers of summer and main crop potatoes.

Fostering more effective communication between summer and main crop producers is critical to fostering more collaboration across the fresh potato industry. The present situation, with two groups of producers at loggerheads with each other, creates unintended consequences that impact the profitability and competitiveness of the entire industry.

Strategically invest in quality management and marketing training initiatives.

Ontario's fresh potato industry largely sells what it has produced. It does not proactively market by identifying what attributes and services are desired by the involved businesses' target markets, then behave accordingly. Encouraging a shift in industry practices is best achieved by influencing changes in the attitudes and skills of the involved businesses, which could be achieved through the development of appropriate materials and delivery mechanisms.

Demonstrate the commercial opportunities of adopting effective value chain management approaches to how summer and main crop potatoes are produced and marketed.

An action-research project, which tests the benefits that can be realized from adopting a systems-based approach to the production, packing, distribution, and marketing of fresh potatoes, would help foster a more collaborative industry through illustrating what can be achieved by businesses working together to reduce costs and increase revenues in ways that would otherwise not be possible.

Establish a robust national group that possesses the resources to mount an effective consumer campaign, focusing on the convenience and health aspects of potatoes.

Those jurisdictions that have developed effective consumer campaigns, resulting in increased consumption of potatoes and consumers' exhibiting a willingness to purchase value added products, have a strong national industry group that is responsible for undertaking pre-competitive initiatives. The lack of such a group in Canada appears to be an important reason for why the domestic industry is less market orientated than those of (for example) New Zealand, UK, the US, South Africa, and Australia.

Establish the basis and means to communicate nutritional information on fresh potatoes to consumers.

The ability to effectively market products from a customer and consumer perspective is critical to the success of any business or industry. The same national group identified above would have the ability to address the combination of legislation and regulation-related factors that impact Ontario and the wider Canadian fresh potato industry's ability to communicate the nutritional attributes of fresh potatoes to the extent that has occurred in other jurisdictions. It would be achieved through combining current resources, along with a check-off on imported potatoes, to undertake the necessary nutritional research and analysis.