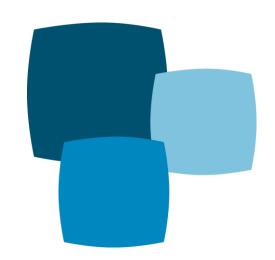


A Comparison of the Food and Beverage Processing and **Manufacturing Sectors in Canada:**

Highlights from the 2009 and 2012 Survey of Innovation and Business Strategies

Manufacturing and Life Sciences Branch (MLSB)

April 2015





Overview



- The purpose of this deck is to analyze the responses to the 2012 Survey of Innovation and Business Strategy (SIBS) for the food & beverage processing sectors.
- Our analysis will provide intelligence on the food & beverage processing sectors, as well as benchmark performance relative to the manufacturing sector as a whole.
- Please note that estimates bolded in red should be used with caution as their associated data quality indicator is "E", which represents estimates with the highest standard error allowed to be published (between 7.50% and 14.99%).
- This deck is arranged as follows:
 - What is SIBS? Introduction to the Survey
 - Background Context: Profile of the Food & Beverage Processing Sector
 - > 2009-2012 SIBS: Key Questions Answered under the following themes
 - Competition, Management Practices and Business Strategies
 - Global Value Chains
 - Innovation
 - Conclusion

What is SIBS?



- SIBS is a joint project undertaken by Industry Canada, Department of Foreign Affairs,
 Trade and Development, and Statistics Canada.
- The 2012 SIBS is the second wave of the survey. The questions remained the same as those from the original 2009 survey.
 - ➤ The target population was Canadian enterprises with at least 20 employees and \$250,000 in revenue.
 - ➤ The sample size was increased from 6,233 in 2009 to 7,818 enterprises in 2012 to ensure the representativeness of five Canadian regions: Atlantic, Quebec, Ontario, Alberta and other.
 - The survey response rate was 60%.
 - Firms are classified based on the number of employees as being either small (20-99), medium (100-249) or large (250+).

More information about SIBS can be found at:

http://www.ic.gc.ca/eic/site/eas-aes.nsf/eng/h_ra02301.html



Profile: The Food and Beverage Processing Sector in Canada

(Based on Statistics Canada data)

Industry Profile

- The Food & Beverage Processing (FBP) sector consists of establishments that transform raw agricultural commodities and semi-processed food products into a broad range of food and beverage products ready for consumption or for further processing.
- The largest Canadian FBP sub-sectors in terms of shipments are the meat; dairy; beverages; grain and oilseeds; and bakery and tortilla processing industries.
- Other large sub-sectors include fruit and vegetable preserving and specialty foods, animal food, sugar and confectionary, as well as fish and seafood.
- From 2001 to 2014, employment declined slightly in the food and beverage manufacturing sector. The FBP sector went from 262,081 jobs in 2001 to 246,450 jobs in 2014, a decrease of 6%. 83% of the jobs lost in this time period were food processing jobs while the other 17% were beverage processing jobs.

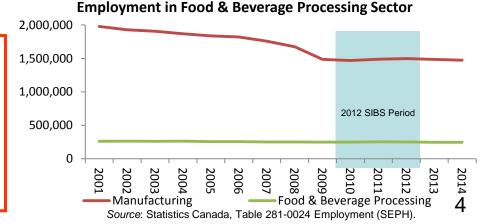
Summary Box:

Employment in the food and beverage processing sector remained relatively stable from 2001 to 2014 while 25% of jobs in the manufacturing sector were lost.

Statistical Comparison			
2014	FBP	Manufacturing	FBP % Share of Manufacturing
Employment	246,450	1,473,655	17%
Real GDP in Millions In 2007 Chained Dollars	\$27,538	\$173,267	16%
Number of Employer Establishments	6,552	51,485	13%
Sales of Goods Manufactured in CDN Millions	\$105,495	\$621,687	17%
Exports in CDN Millions	\$27,799	\$318,180	9%

Source: Statistics Canada, Table 281-0024 Employment (SEPH), Table 379-0031 Real GDP, Table 551-0006 Establishments with employees, Table 304-0014 Sales. Trade Data Online Domestic Exports.

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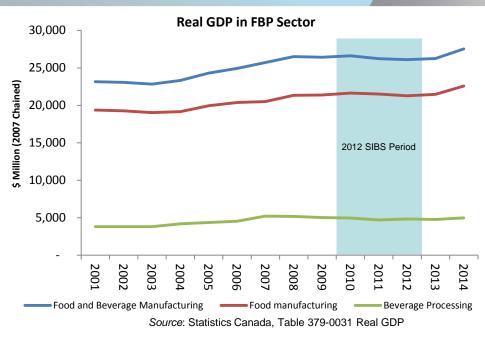


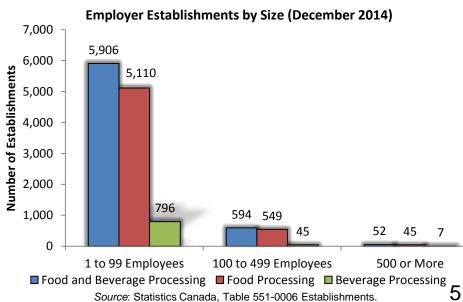
Industry Profile: GDP and Employer Establishments



- Compared to other manufacturing sectors, the Canadian food and beverage processing sector was mildly affected by the economic downturn.
 - Real GDP in the food and beverage sector increased by 4% between 2008 (\$26.5 billion) and 2014 (\$27.5 billion) or a 1% compound annual growth rate (CAGR).
- In June 2014, there were 6,552 employer establishments (plants) with at least one employee in the food and beverage processing sector.
 - The largest share of plants were located in Ontario (35.1%), followed by Quebec (23.7%) and British Columbia (17.3%).

The FBP sector was marginally affected by the 2008-09 recession since the demand for FBP products is constant.

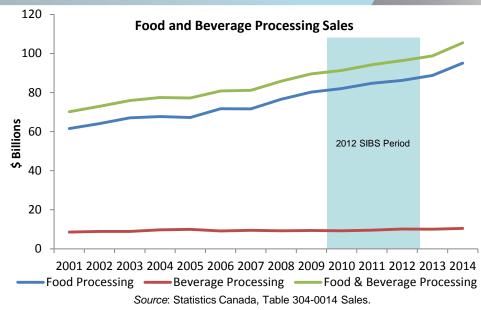


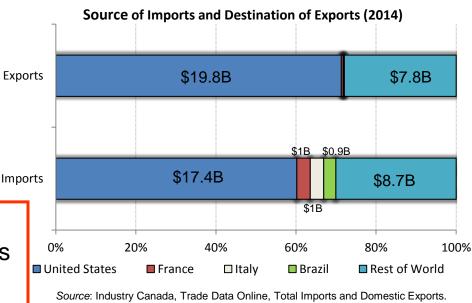


Industry Profile: Sales and Trade

- FBP Sales increased by 10.5% between 2007-2009 and the sector was largely unaffected by the recession. Sales in 2014 amounted to \$105 Billion.
- In 2014, imports of FBP products into Canada totalled \$29 billion, up from \$14.9 billion in 2009.
 - \$17.4 billion came from the United States (60.2%), \$1 billion from France (3.4%), \$1 billion (3.4%) from Italy, and \$0.9 billion (3%) from Brazil.
- While exports accounted for \$27.8 billion, up from \$9.3 billion in 2009.
 - 71.3% of the value of domestic exports went to the U.S., and no other country received greater than 6% (Japan) of Canadian exports.

Canada has a trade surplus with it's primary trading partner, the U.S. This also contributes to the overall declining trade deficit in the food and beverage processing sector.







2012 SIBS: Key Questions & Answers

(Based on responses to the survey)



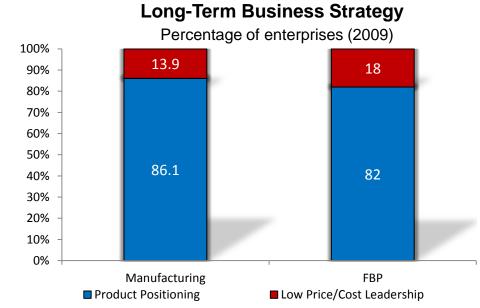
Competition, Management Practices and Business Strategies

Which long-term business strategy is most important?

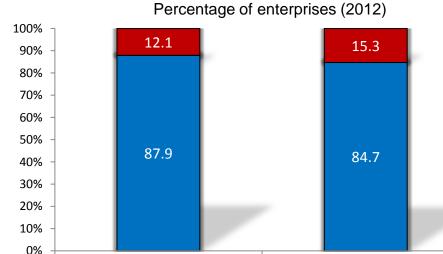


What is the main focus for long-term business strategies?

- In 2009, most firms had long-term business strategies focused on product positioning (e.g., branding, market share and improving product features/benefits) rather than on low price or cost leadership.
- From 2009 to 2012, the percentage of firms in the food and beverage processing sector that focused on product positioning grew by almost 3 percentage points from 82% to 84.7%.







Manufacturing

■ Product Positioning

FRP

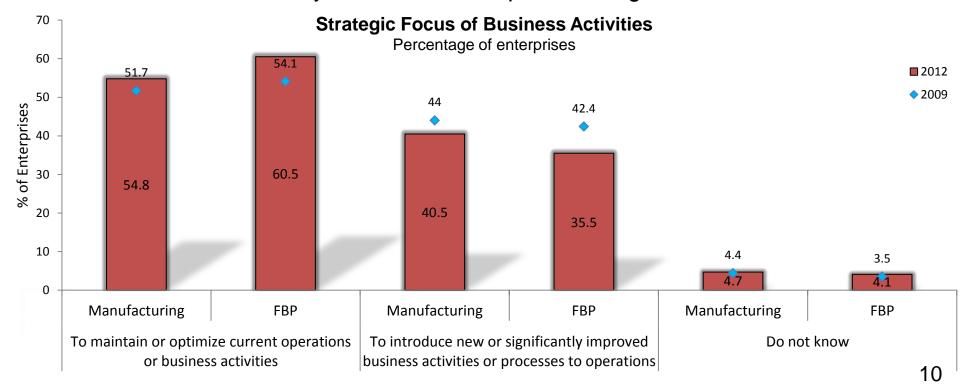
■ Low Price/Cost Leadership

What is the strategic focus for operations and business activities?



What is the main long-term focus for operations and business activities?

- In 2009 and in 2012, maintaining or optimizing current operations and business activities was the most cited focus for the manufacturing and FBP sectors, with both sectors having more than half of their enterprises sharing that focus.
- From 2009 to 2012, the FBP and manufacturing sectors both saw a decline in enterprises focused on introducing new or significantly improved business activities as the manufacturing sector saw a 3.5% decline of enterprises having this focus while the FBP sector saw nearly 7% of FBP enterprises losing this focus from 2009-2012.

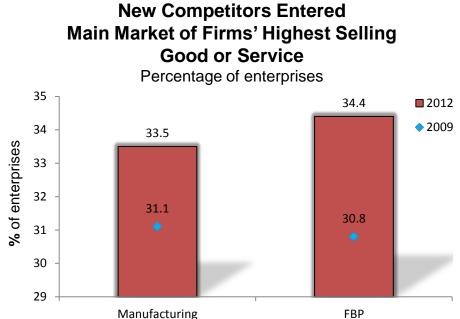


Did new competitors enter the main market of firms' highest

selling good or service?

Did firms witness new competitors entering their main markets?

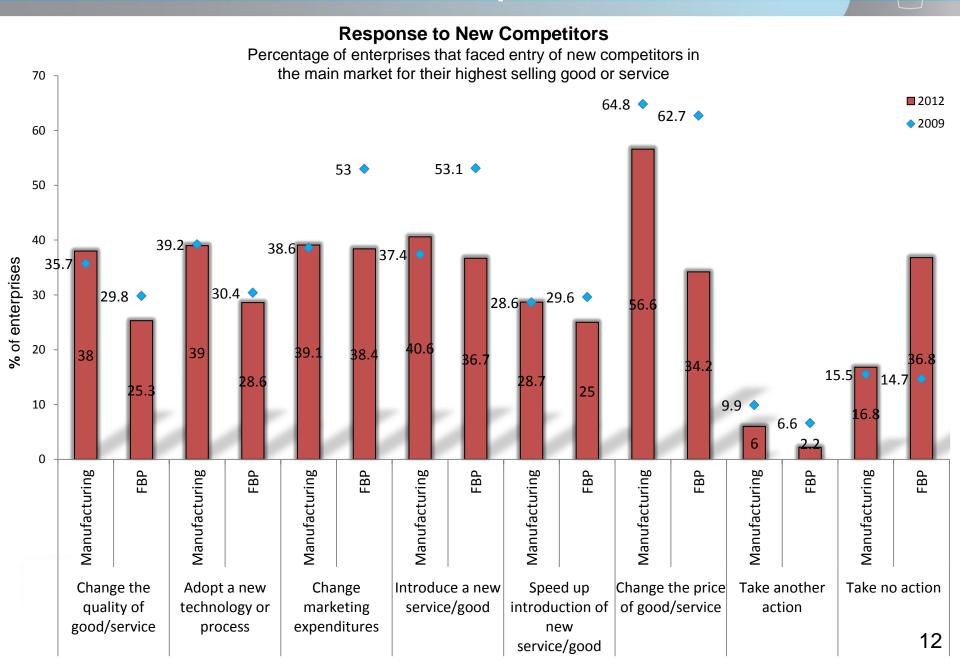
From 2009 to 2012, the percentage of firms witnessing new competition entering the main market for their highest selling good or service had increased in food and beverage processing sector as well as for the entire manufacturing sector.



How did firms react to this new competition?

- In 2009, the overwhelming response in the FBP sector and in the overall manufacturing sector was to change the price of their good or service. Introducing a new product/service and changing marketing expenditures was also a common response for FBP firms reacting to new competition.
- In 2012, the FBP sector became increasingly apathetic towards increased competition with a rise in the percentage of firms that decided not to take any action. This was not reflective of the manufacturing sector as a whole as changing the price of their good/service was still the most common response for the manufacturing sector.

How did firms react to new competition in their main market?





Global Value Chains

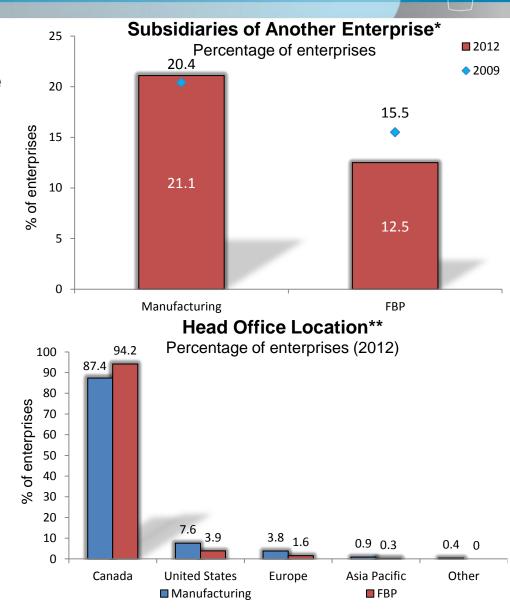
Are there many subsidiaries and where do firms locate their head office?

Are there many subsidiaries in the manufacturing, and food and beverage processing sectors?

 In both 2009 and 2012, the manufacturing sector had a larger share of subsidiaries than in the food and beverage processing sector.

Where are head offices located?

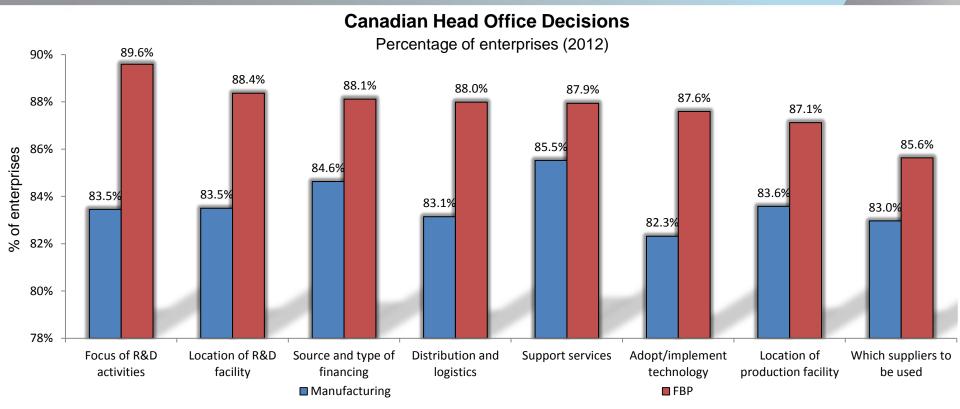
• In 2012, most enterprises (87% or greater) that were operating in Canada's manufacturing, and food & beverage processing sectors had head offices in Canada. For large enterprises, only 53% had head offices in Canada for the manufacturing sector while a vast majority of large FBP enterprises (71%) had head offices in Canada.



^{*}Subsidiaries are firms that are either partly or wholly owned by another company and can be foreign or domestically owned. **If a foreign parent company exists, there can be both foreign and Canadian head offices. Subsidiaries often have a head office in their host country. Hence, head office location does not necessarily represent firm origin of ownership, but rather tells us there is a Canadian entity with decision making capabilities.

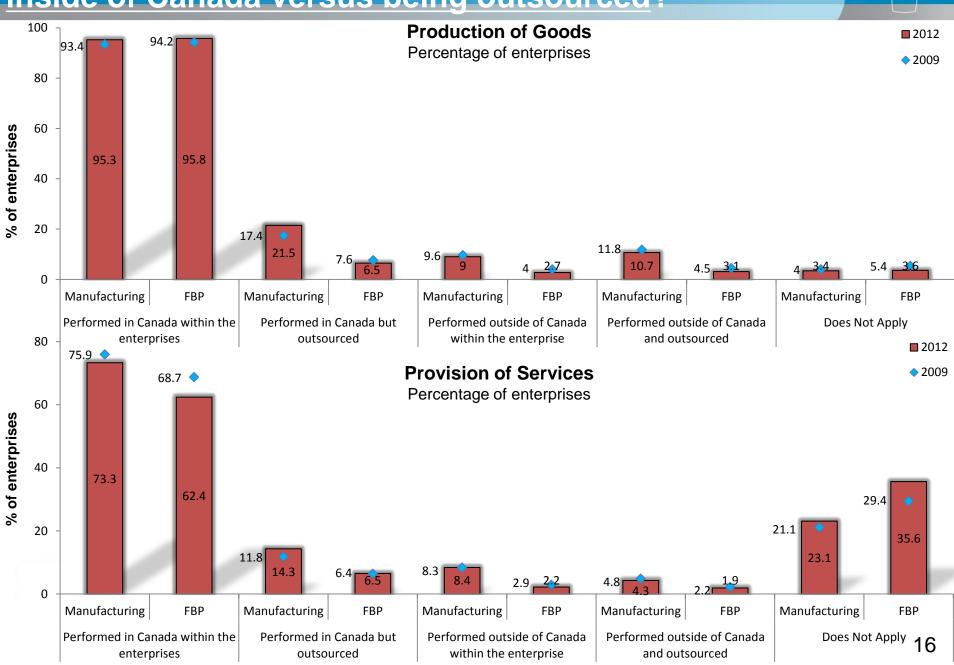
Which decisions are made by the Canadian head office?



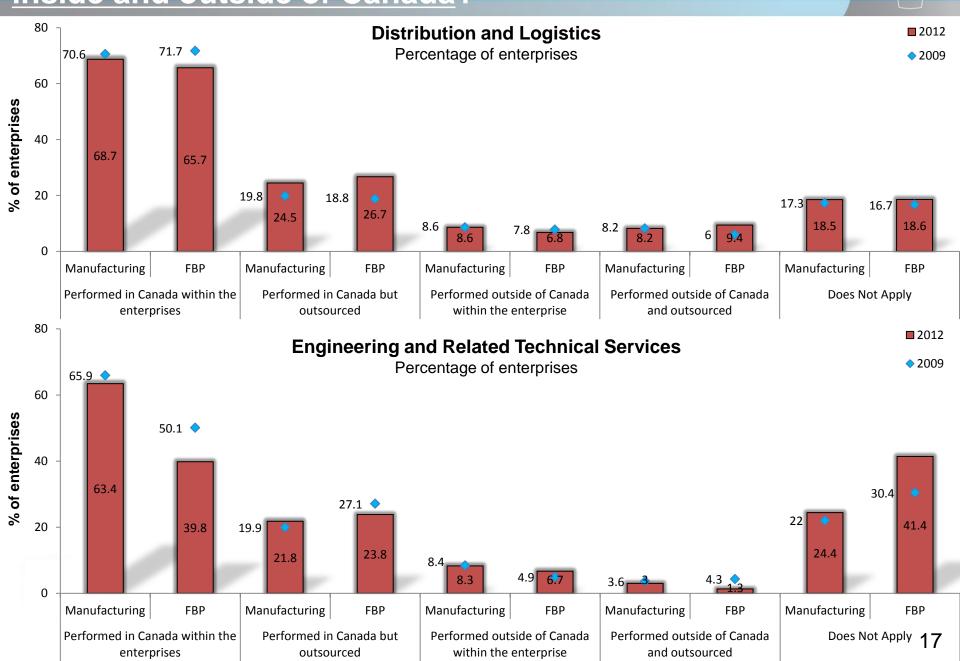


- In 2012, the vast majority of decisions (83% to 90%) were made by the Canadian head office for the manufacturing, and food & beverage processing sectors.
- Decisions pertaining to the focus & location of R&D facilities were most often made by the Canadian head office for FBP firms.
- More Canadian head office decisions were made among FBP firms across all categories of decision-making than manufacturing firms.

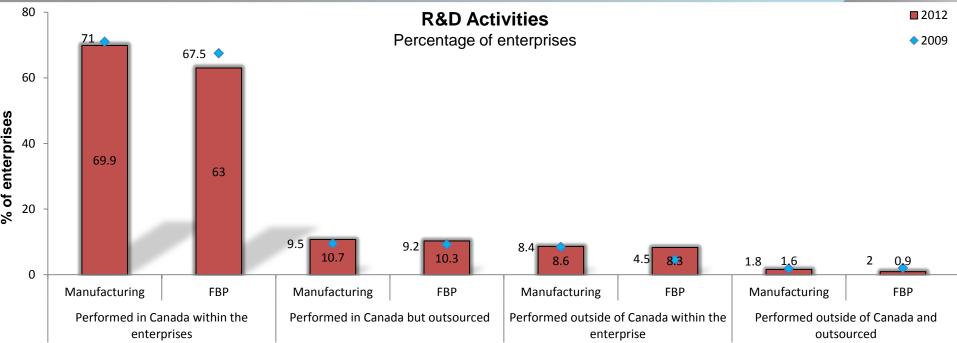
Which of the following business activities were undertaken inside of Canada versus being outsourced?



Which of the following business activities were undertaken inside and outside of Canada?



Which of the following business activities were undertaken inside and outside of Canada?



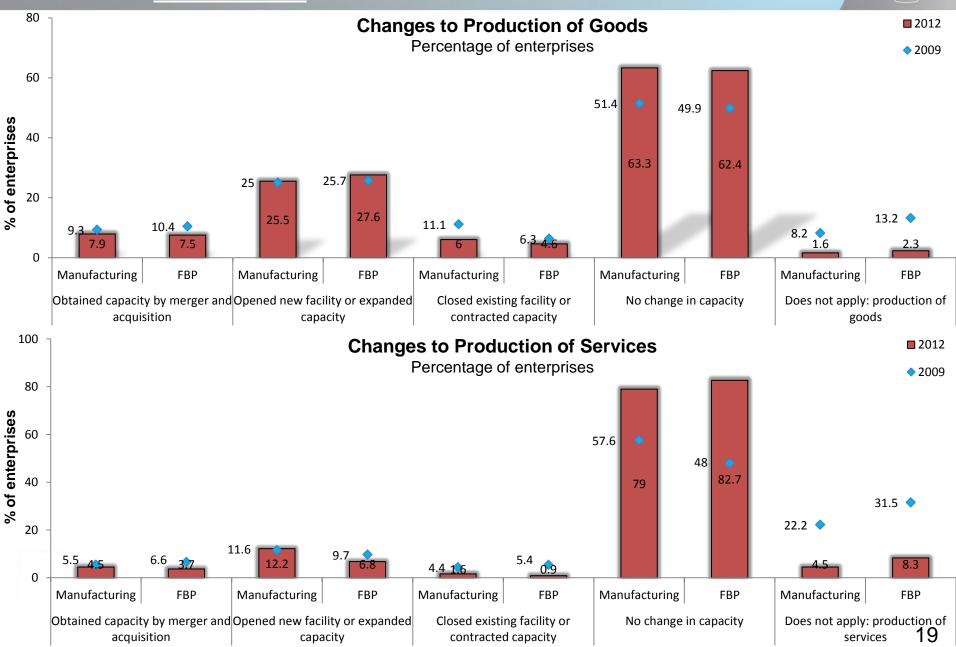
Where did firms conduct most of their business activities?

- In 2009 and 2012, most enterprises operating in the Canadian manufacturing, and food & beverage processing sectors performed all types of business activities within the enterprise in Canada.
- The majority of firms produce at least some of their goods in-house for all business, R&D, and technical activities.
- Overall, firms operating in the Canadian food and beverage processing sector conduct less engineering and related technical services in-house than those in the manufacturing sector.

Which of the following changes occurred to business

activities in Canada?

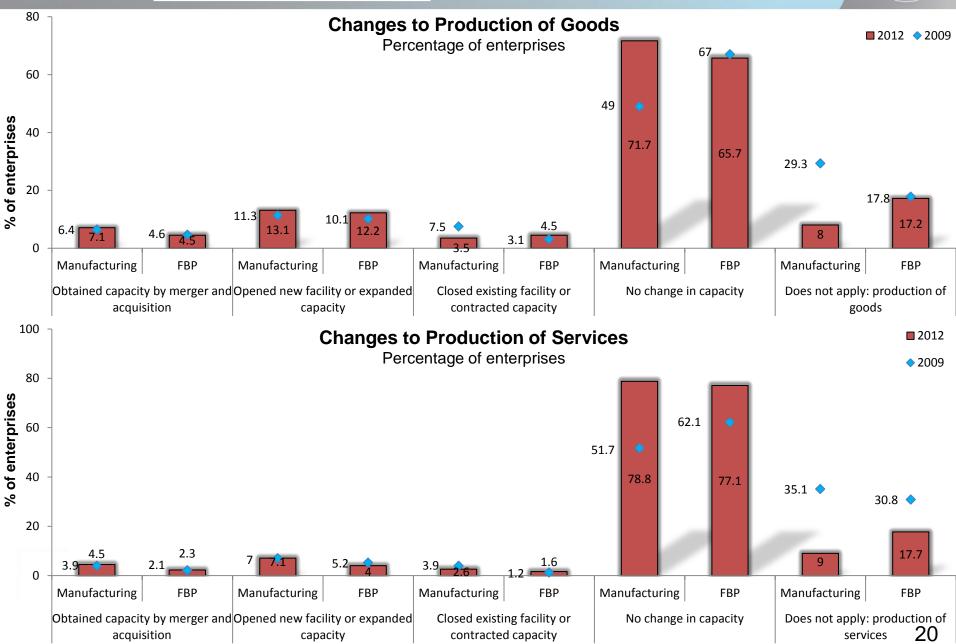




Which of the following changes occurred to business

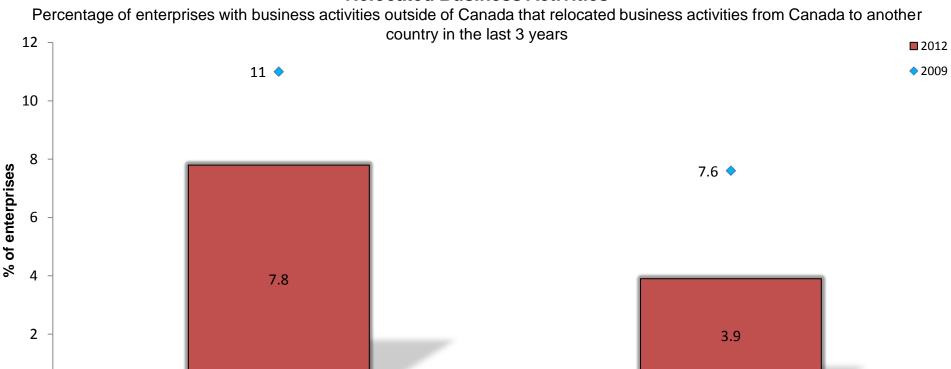
activities outside of Canada?





What percentage of enterprises relocated business activities from Canada to another country in the last 3 years?





What percentage of enterprises relocated business activities?

Manufacturing

0

 Manufacturing firms were more likely to relocate business activities from Canada to another country in the last 3 years than FBP firms.

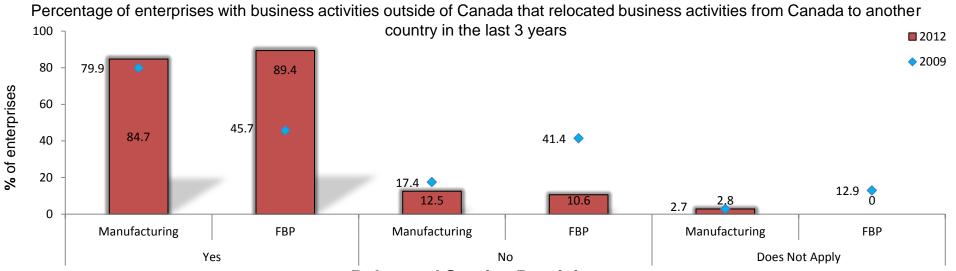
FBP

 Manufacturing firms experienced a 3.2% decline from 2009 to 2012 in relocated business activities from Canada to elsewhere while FBP firms experienced a decline of 2.7% over the same time period.

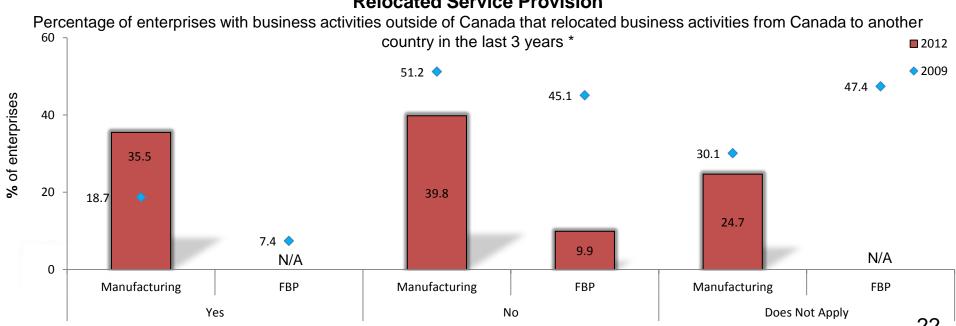
Did firms relocate goods production or service provision from

Canada to another country?

Relocated Goods Production

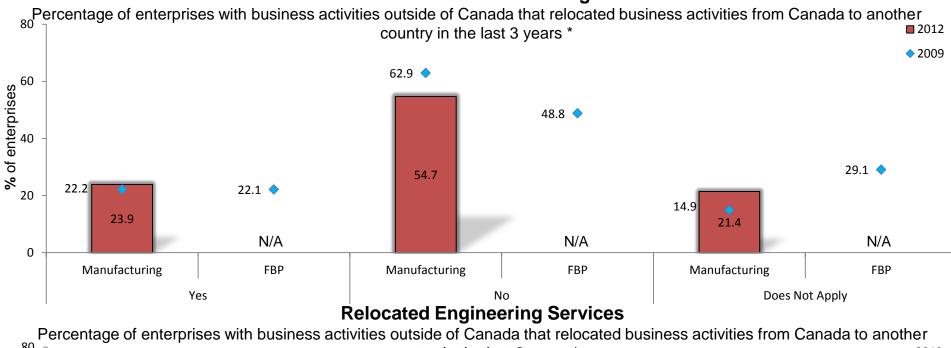


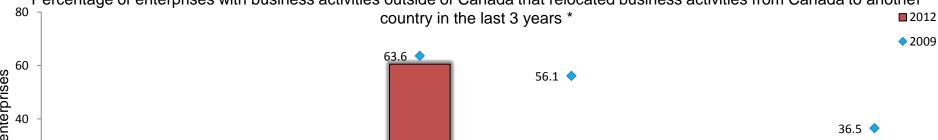
Relocated Service Provision

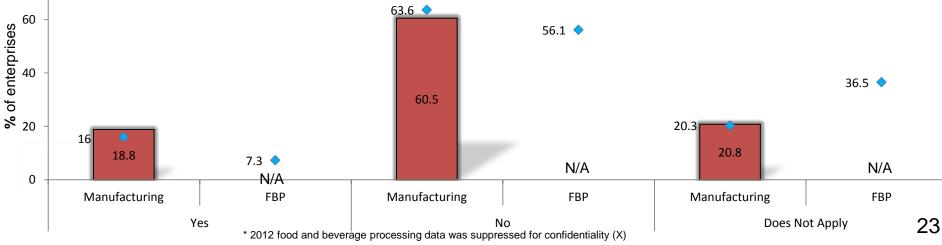


Did firms relocate distribution and logistics or engineering services from Canada to another country?

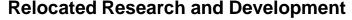


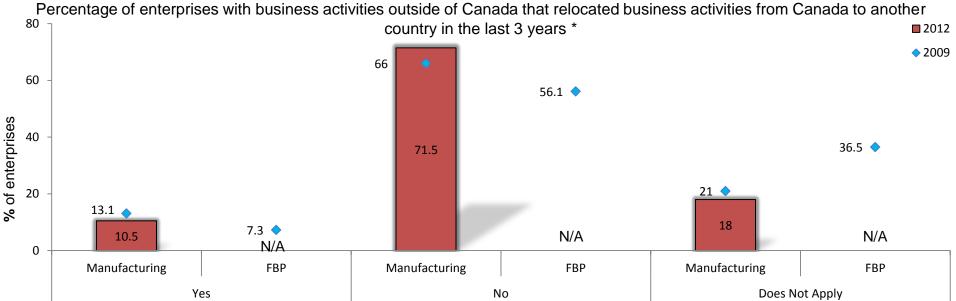






Did firms relocate research and development from Canada to another country?



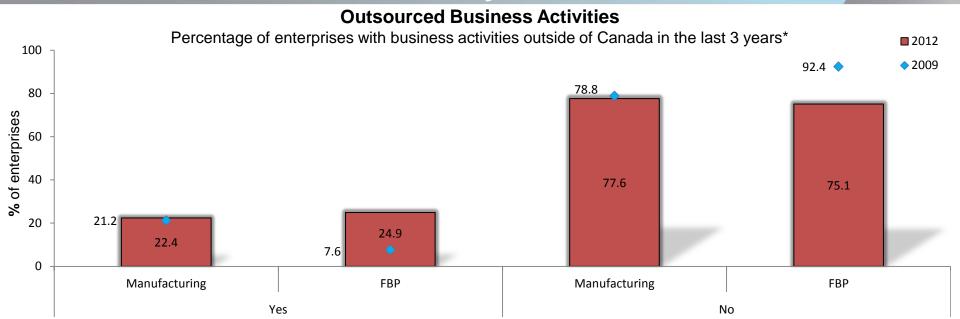


^{* 2012} food and beverage processing data was suppressed for confidentiality (X)

Which activities did firms relocate offshore?

- In 2009 and 2012, the production of goods was the business activity that was relocated by the most firms.
- Aside from the production of goods, the majority of firms did not relocate business activities from Canada to another country.
- From 2009 and 2012, there was a decline in the share of firms in the manufacturing sector that relocate R&D from Canada to another country.

Did firms outsource (contract out) any business activities from Canada to another country?



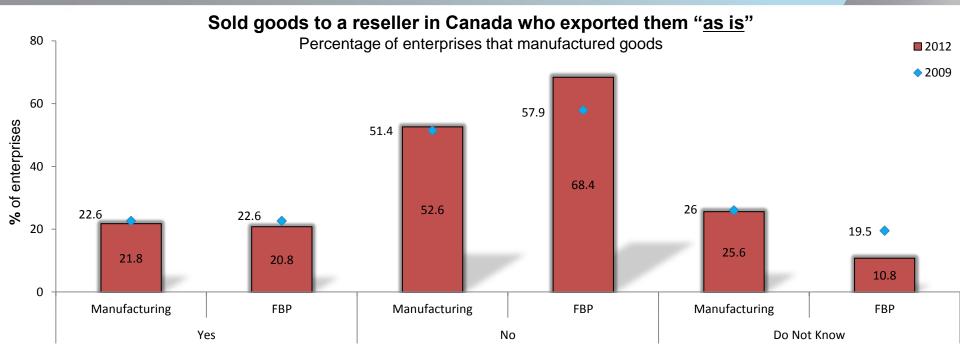
Did firms contract out any business activities to companies offshore?

- In 2009 and 2012, the majority (75% to 79%) of enterprises operating in the Canadian manufacturing, and food & beverage processing sectors did not contract out business activities from Canada to another country.
- However, from 2009 to 2012, the share of firms outsourcing business activities to a company outside of Canada increased in both the manufacturing and food & beverage processing sectors
- In 2012, most commonly outsourced business activities pertained to goods production (62.7%), distribution and logistics (33.4%), services production (30.3%).

25

Did firms sell goods to a firm that exported them?



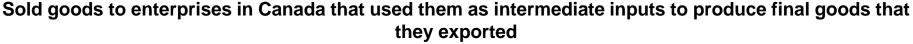


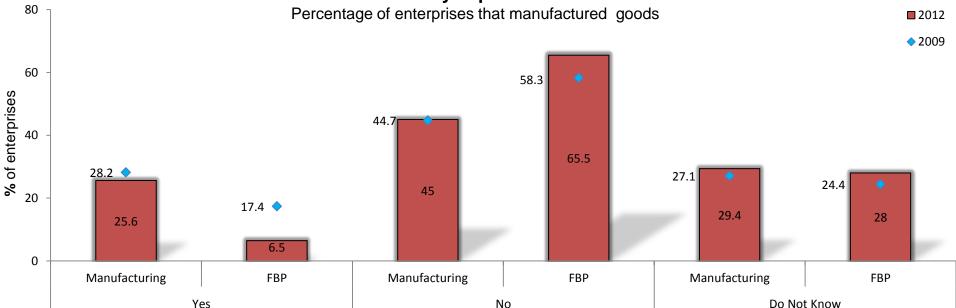
Did firms sell their goods to a middle man who exported them?

- In 2009 and 2012, the majority (from 51% to 68%) of enterprises operating in the Canadian manufacturing, and food & beverage processing sectors did not sell their goods to a reseller for export.
- From 2009 to 2012, the share of firms in the manufacturing and food & beverage processing sectors that did not sell their goods to a reseller increased.
- Firms in the food & beverage processing sector were less likely to sell their goods to a reseller in Canada than firms in the overall manufacturing sector.

Did firms sell inputs used in the production of final goods in

Canada that were then exported?



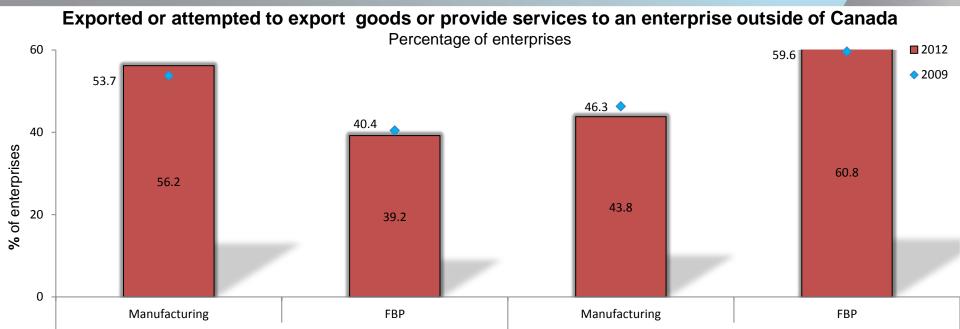


Did firms sell intermediate inputs to other firms that produced a final good for export?

- In 2009 and 2012, the majority (from 45% to 66%) of enterprises operating in the Canadian manufacturing, and food & beverage processing sectors did not sell their goods to enterprises in Canada that would use them as intermediate input to production of final goods for export.
- In 2012, only 7% of FBP firms sold goods to another enterprise in Canada which used these inputs to produce final goods compared to 26% of manufacturing firms.27

Did firms in the food & beverage sector export?



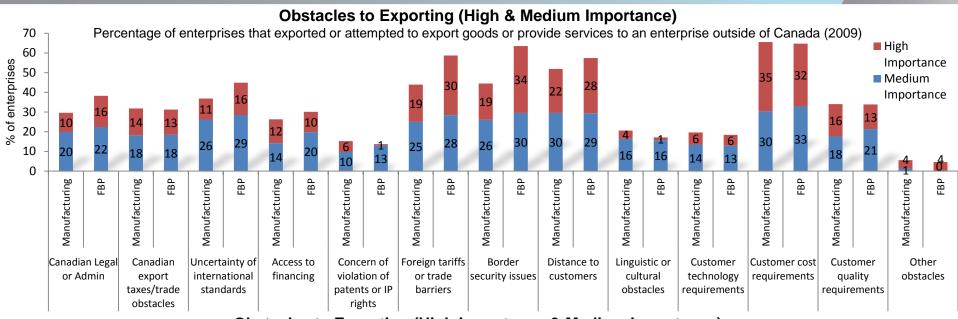


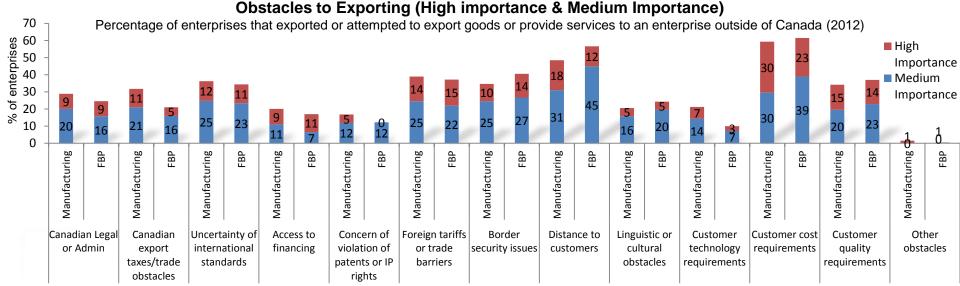
Are firms in the food and beverage processing sectors export oriented?

- In 2009 and 2012, firms in the food & beverage processing sector were less export oriented than the manufacturing sector as a whole.
- From 2009 to 2012, the percentage of enterprises that exported or attempted to export increased in the manufacturing sector but there was a slight decrease in the food & beverage processing sector.
 - In 2012, the majority of enterprises in Canada's manufacturing sector had exported or attempted to export, while the opposite was true for the food & beverage processing sector.

What were the largest obstacles to exporting?







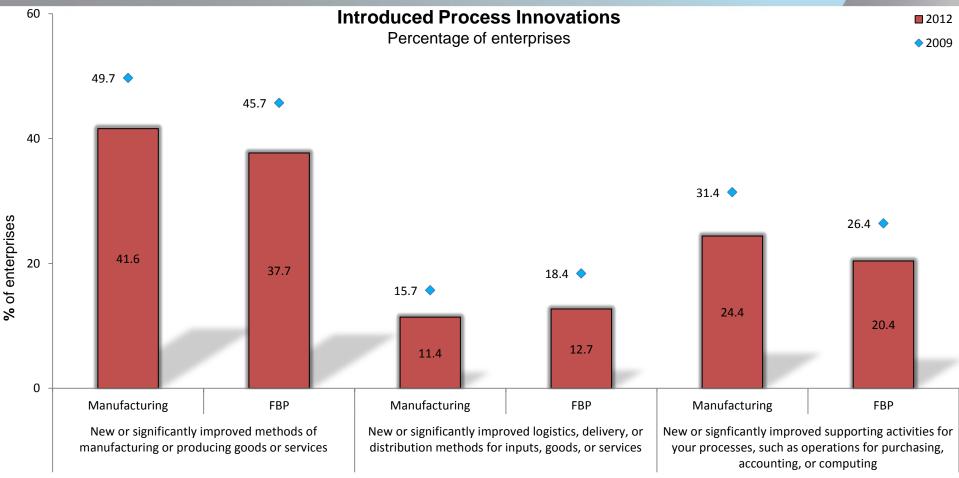
In 2009 and 2012, customer cost requirements, distance to customers, border security issues, and foreign tariffs and trade barriers were the largest obstacles for both the manufacturing and FBP sectors.



Innovation

Did firms introduce process innovations?

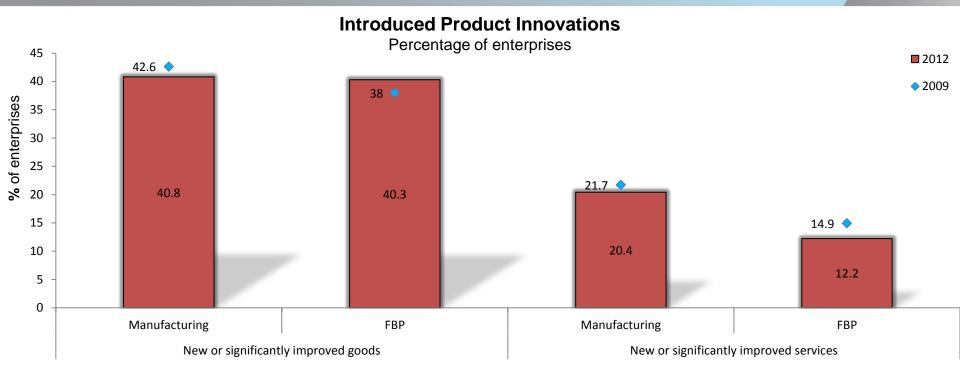




Which type of process innovation was most widely introduced?

 In 2009 and 2012, the highest percentage of firms in the manufacturing, and food & beverage processing sectors had introduced new or significantly improved methods of manufacturing or producing goods or services than any other process innovation.

Did firms introduce product (good or service) innovations?

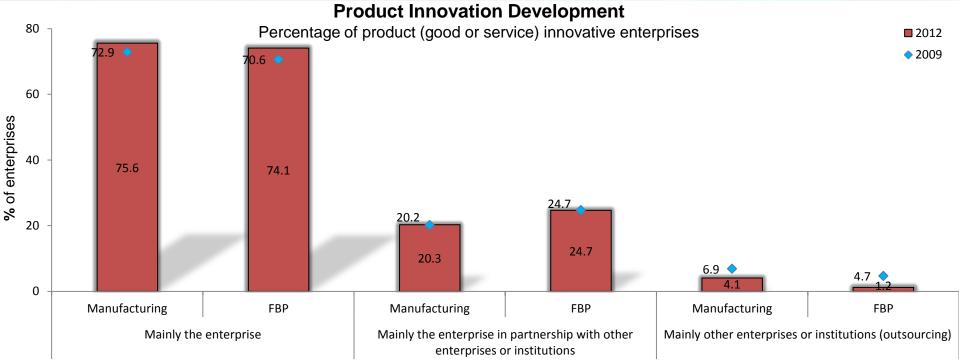


Which type of product innovation was most widely introduced?

- In 2009 and 2012, a large number (from 38% to 43%) of enterprises operating in the Canadian manufacturing, and food & beverage processing sectors introduced new or significantly improved goods.
- From 2009 to 2012, the percentage of firms that introduced new or significantly improved goods grew in the food & beverage processing sector, but fell for services.
- The percentage of enterprises that introduced new or significantly improved goods fell in the manufacturing sector as well as falling for services.

Who developed these product innovations?





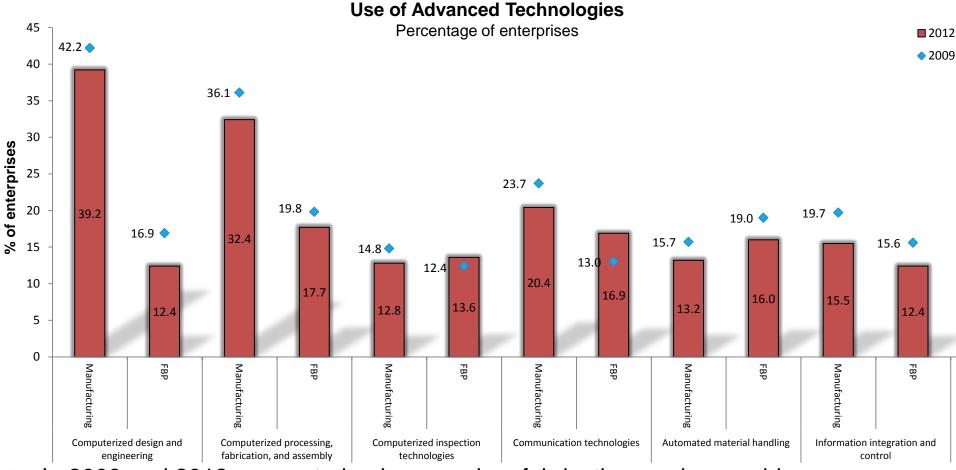
Who developed these good or service innovations?

- In 2009 and 2012, the majority (71% to 76%) of enterprises operating in the Canadian manufacturing, and food & beverage processing sectors had developed product innovations mainly within the enterprise.
- From 2009 to 2012, the share of firms that developed their product innovations inhouse grew in the manufacturing and food & beverage processing sectors.
- The share of firms developing product innovations mainly with other enterprises fell; while the share of firms collaborating with other firms or institutions remained the same for both sectors.

Which advanced technologies (equipment or software)

did firms use?



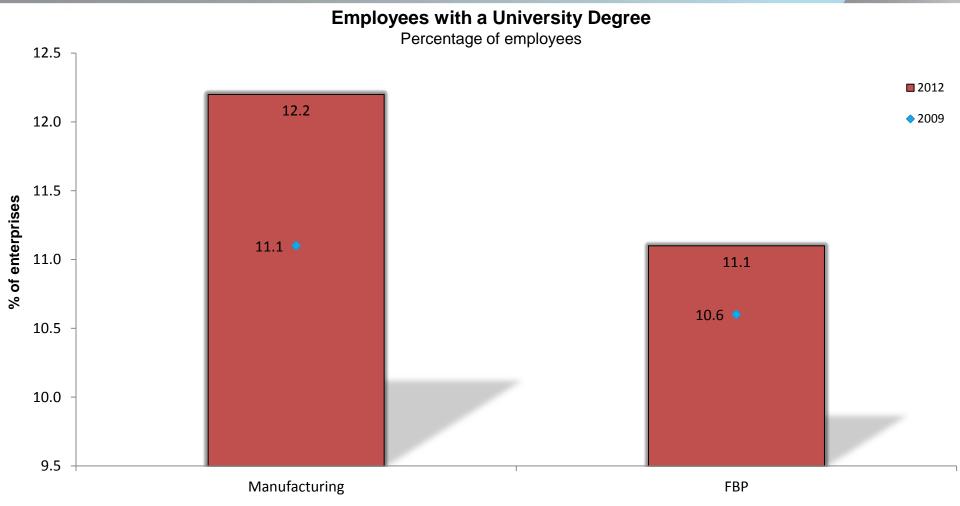


- In 2009 and 2012, computerized processing, fabrication, and assembly;
 communication technologies; and automated material handling were the most widely used advanced technologies for the food & beverage processing sector.
- For the manufacturing sector, computerized design and engineering along with computerized processing, fabrication, and assembly were by far the most widely used advanced technologies.

What percentage of employees have university

degrees?

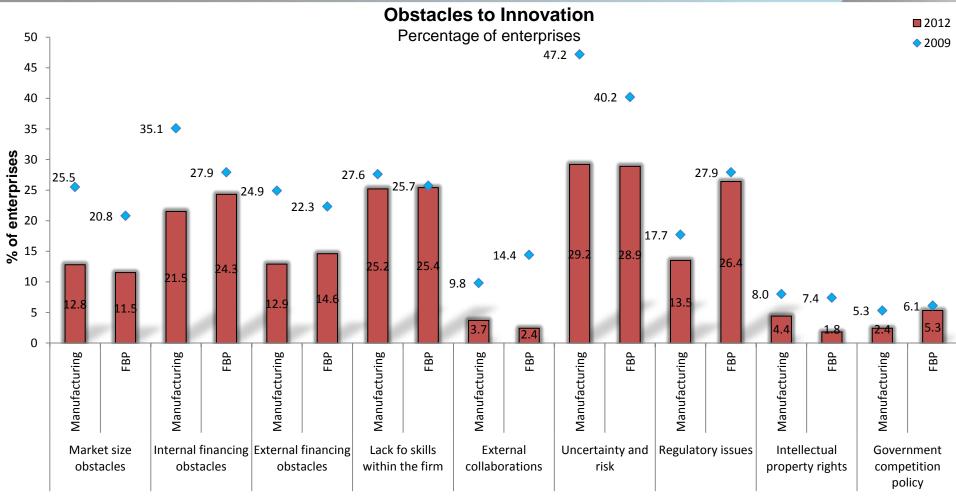




- From 2009 to 2012, the percentage of employees with a university degree grew by 1.1% in the manufacturing sector compared to just 0.5% for the FBP sector.
- The manufacturing sector had a slightly higher percentage of employees with a university degree than the FBP sector.

What were the main obstacles to innovation?

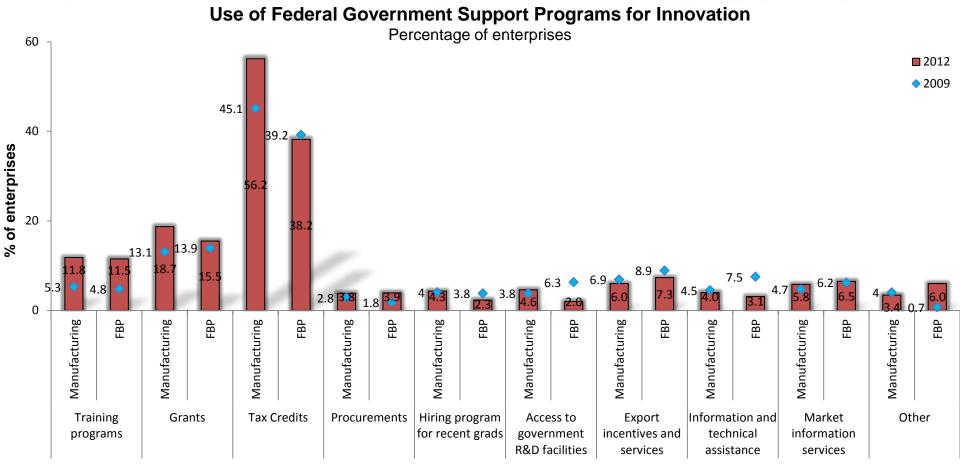




- In 2012, there were less enterprises facing obstacles to innovation across all categories of obstacles to innovation than in 2009.
- In 2009 and 2012, uncertainty and risk, regulatory issues, a lack of skills within the firm, and internal financing were the largest obstacles for both, the manufacturing and the FBP sectors.

Which forms of federal government support programs were most widely used for innovation?





Overall, which federal government programs did firms favour?

- In 2009 and 2012, the percentage of firms using tax credits was highest in both sectors, followed by grants and then training programs.
- The up-take of the remaining seven types of government support programs for innovation were all similar and ranging from 0% to 7%.

Conclusion



The second iteration of the survey answered a number of key questions about the Canadian food & beverage processing (FBP) manufacturing sector, with the most significant findings listed below:

- The majority of firms within the manufacturing sector responded to increased competition by changing the price of their good/service and while this was also the case for FBP firms in 2009, 2012 saw an increasing portion of FBP firms preferring to take no action to face increased competition.
- 2) There are less subsidiaries in the FBP sector than the manufacturing sector and it is also more likely for firms in the FBP sector to have their head office in Canada.
- Firms in the FBP sector are less likely to export goods or provide services to an enterprise outside of Canada compared to firms in the overall manufacturing sector.
- 4) FBP firms are twice as likely to have regulatory issues as an obstacle to innovation than the average firm in the manufacturing sector.
- 5) The use of advanced technologies is far more prevalent among firms in the manufacturing sector than the FBP sector and especially so in computerized design and engineering; computerized processing, fabrication, and assembly; and, communication technologies.
- 6) Firms in the FBP sector are less likely to introduce products and process innovations such as improved methods of producing goods/services, and introducing improved supporting activities for processes, and lastly, introducing new or significantly improved goods/services.
- 7) Tax credits and grants were by far the federal support programs for innovation that were most favoured by both, manufacturing and food & beverage processing firms. 38