What is innovation, really?

Our public policies designed to increase innovation aren’t working – and this is because we confuse “innovation” with “invention.” The terms are actually very different. Invention can be defined as “creation or discovery of something new to the world,” often producer-driven, following an inventor’s curiosity or expertise. While new, inventions may not have any real use. Innovation is customer-driven, providing a new product or process that adds value to somebody’s life. Innovations improve economic or social well-being.

Innovations are often built from inventions. Mobile telephony required cellular technology and the Internet expanded after the invention of fibre-optic technology. But inventions don’t always lead to innovation. And even then, it often takes a long time. For example, the U.S. National Research Council found that the average time from invention to market exceeded 20 years for communications and computer technologies.

Innovation creates value in several ways, such as enabling consumers to do something that had been impossible or difficult, or at a lower cost, either by delivering the same benefits as existing offerings, but at a lower price, or by maintaining the price but reducing the overall costs of use.

Canada’s global leaders provide excellent examples:

Four Seasons Hotels gained the customer insight that “luxury” for guests didn’t mean grand architecture and decor – the prevailing approach in the industry – but rather service that made them feel like they were special. Acting on this insight, the hotel chain has achieved the highest ratings and customer loyalty in the industry.

Harlequin, the world’s leading publisher of romance fiction, realized that by relentlessly standardizing its books’ page count and size, it could achieve printing costs well below the competition. Harlequin could ship its books in identical boxes and display them uniformly on retailers’ shelves. It also developed mail-order book clubs for their most loyal readers, lowering distribution costs.

Many may be surprised to learn that McCain’s biggest business is not their branded consumer products, but rather selling French fries to restaurants and other food service outlets. McCain’s major innovation helped save considerable labour costs for food service operators because they no longer have to peel, cut and fry potatoes from scratch.

Manulife, one of the world’s five largest life insurance companies, assembled the technology and developed business processes to create its Manulife One account, enabling homeowners to optimize the use of their excess cash to reduce their mortgage or credit card debt, thus allowing significant interest savings. In addition, Manulife used its experience with individual and group RRSPs to become a global leader in more consumer-friendly retirement savings products.
Sadly, federal and provincial policies have done little to fuel the type of innovation that made these companies world leaders. Public policy assumes that if a scientist working in a laboratory or an R&D department discovers something new, that is innovation. But that is invention.

Without policy improvements, our governments’ current approaches will continue to do little to help inventors better understand consumers and we will keep spending billions of dollars financing invention with little innovation to show for it.

There are notable examples of success in our governments’ innovation policy: R&D support helped Nortel create the world’s first fully digital network communications switch, the DMS 100. And certainly, R&D support helped Research In Motion invent and improve Canada’s most important technology product, the BlackBerry. But these successes also resulted from deep awareness of customer needs and innovative distribution strategies.

The bottom line is that Canada will not progress on innovation until our policies focus broadly on innovation rather than narrowly on invention.

If we want more innovation, public policy can help in four ways:

Designing innovative educational programs connecting inventors who care about innovation with business people wanting to transform inventions into consumer-relevant innovations. These programs would also involve innovation financiers; public funding could even be available for winning innovations.

Ensuring that we develop both the hard science skills and “softer” skills that enhance communication, consumer understanding and team building.

Recognizing that necessity is the mother of both invention and innovation – and ensuring that our markets are intensely competitive to pressure our firms to look for ways to add consumer value to their products and processes.

Broadening our financing of innovation within existing companies. For example, we should loosen the definition of “fundable R&D,” which is currently far too tight. None of the success stories described above would have qualified for financing of the innovations that made them world leaders.

By embracing innovation in these four and other ways, public policy can enable a vibrant 21st century economy for Canadians.

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