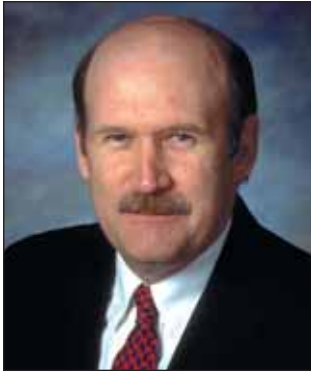


How Do We Focus Our Scarce Research Dollars



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Canadian companies need to think carefully about how they spend research and development dollars in the current economic environment.

On a country level, we often hear that Canada's combined government and corporate R&D spending is less than other OECD countries. We also hear that we need to accelerate government spending as a percentage of GDP and corporate spending as a percentage of revenue. For years, Nortel was Canada's corporate gold standard – our biggest R&D spender by a large margin. Now that it has been dismantled as a stand-alone company, where will we stand as a country when measured against others? With R&D intensive companies outside of Canada accelerating their spending, will Canada continue to tumble down the ranks of innovation-based economies?

Canadian companies have to be smarter about their development spending. There are calls for companies to fund basic research in Canada, but that can only be accomplished with a sustainable business model through which new products are created to meet market needs on a continued basis. Nortel spent money on R&D, but was it spent wisely? This is just the kind of question we must ask as we navigate

increasingly uncertain terrain.

If companies have a replicable new product introduction model, then the taxes they pay, directly and indirectly, can be channelled by government into fundamental research. Companies can also fund researchers who advance their strategic objectives. In the process, both will form a sustainable economic value-creation model that keeps Canada in the ranks of innovation leaders.

At SMART Technologies in 1987, for example, we were developing a new product for new markets. Sometimes called a Blue Ocean Strategy, this approach resulted in many subsequent opportunities to create products and solutions that our customers value. Because we took a long-term view, we created a global distribution network that now means our new product ideas can be vetted and moved through our channel with greater certainty and speed than our competition.

This advantage, which was built and refined as part of our corporate strategy over the past 20 years, has resulted in SMART shipping more interactive whiteboards than all other manufacturers combined. When measured by its R&D efficiency? metrics such as gross profit divided by R&D expenses? SMART is twice as efficient at delivering great products than other high growth technology companies. We have succeeded to this degree by cultivating a deep relationship with and understanding of our markets, combining that with our R&D expertise and delivering a suite of products that meets customer needs.

The debate in Canada over R&D spending will continue. Governments will continue to fund basic research on a selective basis. University researchers will continue to promote the funding of curiosity-based research. But managers of corporate R&D programs need to

be more selective in driving development that produces the best products for global markets. Canadian companies need to be as efficient in their R&D spending as they are with their marketing budgets or operational spending. If they are, it is possible to succeed from a Canadian base of operations.

With the demise of Nortel, we need to examine what business models work and what the new models need to be. Can successful companies like Research in Motion and SMART Technologies be replicated? These companies are category share leaders because they have relentlessly pursued a long-term vision based on customers, and they have built the partnerships and infrastructure to address their needs.

There are direct ties between the development efforts of these two companies and the raft of new products that are released each year for their respective markets. These companies have been around for a while and will continue to be as they maintain their focus on customers. In SMART's case, we have found that we can spend 4-5% on R&D as a percentage of revenue and still grow total product sales more than 25% per year.

By taking this approach, our company continues to provide key knowledge-based products and services to customers around the world. SMART will be a receptor organization for university graduates who want to stay in Canada and solve difficult product-oriented problems. We will fund targeted research projects. From tax dollars generated by our value-creation process, the Canadian government can fund a variety of needed R&D programs.

By understanding our respective roles and obligations in the economic value-creation process, we can create Canadian-based organizations that are truly sustainable and valued in the global context.