

13. The industry giant, Northern Telecom, devoted 13 per cent of its 1988 sales of US\$5.47 billion (C\$6.4 billion) to R&D.
14. The foundation for the development of ISDN in Canada has been laid by the widespread application of digital technology to Canada's telecommunications network. The implementation of ISDN in Canada is the subject of a recent report to the Department of Communications by a high level private sector advisory committee chaired by John Lawrence. See Communications Canada, *ISDN Canada: Report on ISDN Implementation in Canada*, March 1989. For a more technical discussion of ISDN and the contribution of Canadian firms to the development of the requisite technology see K. Chang and F. Leger, "The Development of ISDN Technology in Canada," *Americus Telecom Proceedings*, International Telecommunications Union (ITU), 1988, pp. 71-75.
15. Cecchini Report, p. 114.
16. The basic ideas employed here are drawn from David R. Ross, "Learning to Dominate," *Journal of Industrial Economics*, June 1986, pp. 337-354, and P. Dasgupta and J. Stiglitz, "Learning-by-Doing, Market Structure, and Industrial and Trade Policies," *Oxford Economic Papers*, vol. 40, 1988, pp. 246-268.
17. *Financial Times*, June 1, 2, 28, 1989.
18. Much will depend on the nature and applicability of the laws relating to intellectual property.
19. Even the individualistic-minded entrepreneur who does not want to work for someone else, still has the option of starting a new firm after sale of the preceding one. However, where the sale is to a foreign firm, there is the added problem that the sale may be distasteful to government policy makers wishing to maintain Canadian ownership, especially where foreign suppliers are already dominant. Nevertheless, an important determinant of whether a firm will enter an industry is its perceived ability to freely sell out at a favourable time and price.
20. However, ISDN does not eliminate all opportunities for national "creativity" designed to provide a degree of protection to national equipment suppliers. The choice of standard on which an ISDN network operates could be used to limit market access to a relatively few suppliers. However, the EC is building a common standard, which even if different from that in North America, nevertheless creates opportunities for non-EC firms that wish to enter into what will be a very large market.
21. *Financial Post*, September 13, 1989, p. 20.