DECLASSIFIED = DÉCLASSÉ
EXTERNAL AFFAIRS = AFFAIRES EXTÉRIEURES

industries. This international expertise has developed as a result of a strong domestic demand for these services. At present developmental work is underway in Canada on French language software which is regarded as having good export potential.

The **data processing** sector is less suited to the export market due to the high fixed cost of establishing a processing firm overseas and the fact that demand for these services is just emerging in many countries. Further, this sector is undergoing a reorientation in the domestic market in an attempt to meet the changing demands of clients and with some exceptions is unlikely to enter the export market in the near future.

While no tariff barriers are imposed on trade in computer services, there are a number of potential non-tariff barriers. These include social policy issues/privacy and access to data, procurement policies, copyright laws, regulation, taxation and enhanced telecommunication services. However, these non-tariff barriers are not critical to the competitiveness of the industry at present.

c) Technological Factors

The international computer industry is continually experiencing rapid technological change. The Canadian industry benefits from this by adapting new technology to new applications. At present a major reorientation of the domestic industry is occuring as a result of the convergence of three technologies: computing, telecommunications and office and industry automation. These linkages will increase demand for **professional services** and **modified software** in order to integrate existing and new technology. The convergence of the three technologies will also have a profound impact on the **processing services sector** as businesses are now moving towards more complex integrated electronic offices where the data processing previously contracted out to **processing firms** can be undertaken in-house.

On a technological level, the **processing services**, **professional services and software** sub-sectors are presently at par with the United States and advanced relative to most other countries. However, with the rapid advances being made in areas such as Artificial Intelligence (AI), the industry is moving towards a new technological era. Indications are that Japan will probably lead the world in the development of AI, followed by the United States. To date Canada's industrial activity in this field is fairly limited, mainly because this technology is still in the infancy of commercial applications. However, private and public sector interest in using AI products and/or conducting research in this area is growing. There are some dozen Canadian firms actively involved in AI, while several federal departments and agencies have initiated AI research activities. The linkage between government and university research efforts, and industry requires further encouragement and development to ensure the new technology is applied in industry.

d) Other Factors

According to industry officials, Canadian firms are at a competitive disadvantage vis-à-vis U.S. firms as a result of higher costs for imported hardware and telecommunications. This area requires further analysis to determine the extent and impact of the apparent cost differentials.