

ELECTRONIC COMMERCE AND THE STATE OF GEORGIA

Executive Summary

What exactly *is* “electronic commerce”? For some, it is an extension of the earlier electronic data interchange (EDI), where firms forged proprietary computer networks among trading their partners. For others, it is simply doing business over the Internet and, by extension, intranets and extranets. Although presently dominated by business-to-business transactions, the success of such companies as Amazon.com has given rise to business-to-consumer and even consumer-to-consumer (e.g., e-Bay) activities. Some e-commerce products have become entirely digital — there is no “physical” product. An example of this is music in the new MP3 format.

Some claim that e-commerce is merely “old wine in new bottles,” a new name for a number of computer-based applications that have been around for some time. Although this is maybe true, it misses the point. The magnitude and the variety of these e-commerce innovations do violence to the word “merely.” Estimates of the total volume of e-commerce activities vary widely. The U.S. Government Working Group on Electronic Commerce estimates next year’s e-commerce volume at over \$300 billion in the U.S. alone. Forrester Research estimates annual revenues of \$1.3 trillion by the following year. Already Cisco Systems is doing a billion dollars of business *every month* over the Internet.

The growth of e-commerce, and information technology (IT) more broadly, has had a corresponding effect on employment, both good and bad. In 1997 (the most recent figures), workers employed in IT-producing industries earned \$53,000 per year compared with the economy-wide average of \$30,000. This huge difference is caused mainly by the shortage of skilled IT workers, which has bid up salaries, a condition which is not likely to improve for some time. By one estimate, there are currently over a third of a million unfilled IT jobs in the nation, and nearly twenty thousand in Georgia alone.

The IT industry, which plays a central role in the development and conduct of e-commerce, presently accounts for about eight percent of the U.S. GDP, while contributing 53 percent of the nation’s real economic growth. Rapidly falling prices for all types of information technology have lowered the overall rate of inflation in the nation by an average of 0.7 percentage points a year.

However, as the growth of e-commerce accelerates, some are being left behind. A “digital divide” between the haves and the have-nots in e-commerce is occurring. Rural and inner city areas are lagging in comparison to major metropolitan areas like Atlanta. White households are more than twice as likely to have home Internet access than African-Americans or Hispanic Americans. This digital divide is troubling and must be addressed.

Against this backdrop, how does the State of Georgia stand, both nationally and in the South and Southeast region? In terms of total IT workers, Georgia stands fourth in the region (after Texas, Virginia, and Florida) and ninth nationally. It is projected to have the highest growth rate in the region and second nationally in the period 1996-2006. In terms of numbers of jobs (again 1996-2006), with a projection of 5,560 new IT jobs annually, Georgia ranks third in the region (after Texas and Virginia) and fifth nationally. Finally, in terms of IT worker intensity (i.e., share of the total state labor market), Georgia ranks second regionally and ninth nationally. As for cities, Atlanta ranks second regionally and eighth nationally as the most “wired” city (i.e., percentage of e-commerce penetration).

But the news is not all good. Statewide penetration of households with telephone and computers is in the bottom third nationally and in the bottom half for Internet access. While Atlanta is among the nation’s leaders, the rest of the State is lagging behind. This is another example of the digital divide mentioned above. The growth of IT jobs is also problematic. While an estimated 5,560 new jobs are being created annually, less than 2,000 IT graduates are being produced annually by the entire University System of Georgia. A continuation of this shortfall will cause e-commerce jobs to be lost to other states — or even other countries.

What then should the State do? In Chapter 4 of this report, the strengths and weaknesses and opportunities and threats (SWOT) of the State with regards to e-commerce are analyzed, and specific policy recommendations made. Briefly, they fall into two categories: e-commerce-based activities that will enable State Government to function more effectively and thereby serve the State in a more cost-efficient manner, and Government initiatives that would encourage the private sector to locate and/or expand their e-commerce activities within the State.

In support of the first set of recommendations, it is argued that the State Government should act as a showcase for advanced e-commerce activities. Not only would such undertakings improve the functioning of state agencies, but they would serve as a highly visible indication of the importance which the State places on e-commerce activity.

As for the private sector, in addition to incentives for firms to locate and expand their operations here, there is a critical need to expand the production of IT-trained workers. Both the Department of Technical and Adult Education (DTAE) and the University System of Georgia (USG) need to gear up with both more faculty and expanded facilities to meet this demand. Legislative and administrative initiatives will be required to address these challenges.