

# United states government's role assignment



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Technology united States has been playing a dominant role In the computer Industry In the world ever since the advent of computer. The key reasons why united States government support for the computer Industry was able to produce remarkable results was that the government's function was always clear-cut, constantly making adjustment according to the industrial development, improving funding mechanism and management. During 1976 toll 995, government funding toward computer science and related technological research increased from \$1 80 million to \$960 lion.

In 1972, government spending on computer related study and electrical engineering was less than \$1 billion, but which mounted up to \$1. 7 billion in 1995, accounting for 7% of total federal government spending. Therefore, we can safely say that computer industry In particular, owe its existence to the government. Since World War II, the federal government has been a steadfast supporter of computer technology. The U. S. Army and Navy, both needing fast ways to solve the differential equations they needed to alma long-range guns, funded major research projects.

The Army effort, at the university of Pennsylvania, yielded MANIAC. The top engineers on the project, J. Presser Cocker and John Macaulay started their own company which built the first " private" commercial computer, UNIVAC. ( Williston) The US federal government long-term investment has profound influence in basic research in computer technology. Direct funding of large-scale projects is risky in terms of its commercial outcome and the long term training of staff who can work with and support new computer structures that will have broadly based applicability. Bell) Therefore, long-term research needs steady and dependable financial support. As for companies within

computer industry, playing-it-close-to-the-vest strategy is often adopted. Fortunately, US government stepped up and filled the niche In providing research fund. For example, while government-sponsored computer artificial Intelligence research began In the early ass's, the first speech recognition computer was not created until 1997.

Similarly, The us Defense fund was allocated to finance three-dimensional imaging technique and visualization in the ass's. However, the initial technologically reliable products were not launched until the ass's. Sufficient federal funding warrants a stable and consistent research environment for large number of electrical engineering majors, computer science graduate students and of course, excellent researchers, all of whom forms the cornerstone of the entire industry and enhances the sustainability for its future development.

From 1985 to 1995, among the top computer research entities in the US, like MIT, Carnegie Mellon and US Berkeley, about 56% of students majoring computer science and electrical engineering received financial aid from federal government and over 80% of PhD students were funded In the form of a stipend, talon and health Insurance. Moreover, Federal Government never relents on making contribution to offering university research facilities. For one thing, federal government promotes the computing devices of universities were funded by National Science Foundation in the ass's. During 1981 to 1996, this number rose up to 65%.

For the record, this number once peaked at 83% in 1985. In addition, federal government plays a leading role in evildoing high performance computing

device and constructing comprehensive network. On one hand, it is doubtful that modern supercomputers would exist had government not financed their development down to the present. For instance, IBM now sells Blue Gene systems commercially, but the initial units were built for the Department of Energy's national labs. On another, with the development of network technology, government intensified its efforts to increase funding for the network.

Since 1973, NSF set out on a scientific network, providing \$ 600, 000 to \$ 750, 000 a year or university researchers to establish comprehensive computer network. Last but not least, federal government focused its fund on promoting technology centralization. Funds were often made available to commercially promising project proposed by prominent laboratory. For example, IBM first proposed the idea of relational database, but IBM management was concerned that relational database might pose a threat to its existing products, so no further input was made to ORDERS.

Not long after that, NFG helped US Berkeley deepen the concept and ultimately successfully rolled out ORDERS. Not to detract the ingenuity of commercial firms striving to push their boundaries in the leading edge of high-tech industry, just let us not overlook the integral part played by the government. Conclusion As other nations become more socially advanced and technologically sophisticated, it's predictable that they should take a larger share of high-tech industry such as computers. However, in my own forecast and those of real experts, US dominant position in computer industry would not diminish any time in the near future.

With computerized components pervading all of the new, high-tech military Neap systems, government support is on the upswing again. "( Stretcher) Norms Cited ell, Gordon. " Government Role in Technical Computing: Lessons from the United Stretcher, Susan. " The effects of military and other government spending on the computer industry: the early years. " Rand. Rand Corporation, 27 July, 2012. Web. 24 November. 2013. Williston, Steve. " It's Not Just the Internet: How Government Built the Computer Industry. " Technicians. Tech. Pinions, 25 July, 2012. Web. 21 November. 2013.