

Local development of systems software is almost negligible. The Malaysian Institute of Microelectronic Systems (MIMOS), a unit under the Prime Minister's Department, is the only body that is known to conduct some research on areas relating to systems software. The lack of emphasis on the local development of systems software at the Government level is a result of Malaysia's relative inexperience in applications of computer technology.

The major suppliers of systems software are usually the leading hardware vendors themselves such as IBM, NCR, Prime, Wang, Nixdorf, Olivetti and HP. Their software is often proprietary in that they are developed in-house by their overseas principals or licenced from foreign software houses. A typical example of the latter would be DOS, the standard operating system for a vast majority of PC's which is provided to vendors under licencing agreements from Microsoft of the U.S.A.. The local hardware vendors in turn provide systems software as part and parcel of their hardware package to end-users. In the case of mainframe and minicomputer systems software, these vendors usually encourage end-users to enter into licencing agreements, whereby support services and access to improvements in software are provided without additional costs, in lieu of monthly charges.

Similar licencing agreements are usually not available to the numerous PC retailing establishments that market IBM compatibles. Such agreements were never necessary prior to the implementation of the Copyright Act, 1987. The Act has changed this situation and Pericomp-Sistech Sdn. Bhd. is now the appointed distributor of the DOS operating system and all other Microsoft products in Malaysia.

One type of systems software attracting considerable attention is networking systems. The market potential is clearly recognised by major hardware vendors, who are promoting their own proprietary or licenced system. Examples are IBM (Token-Ring-Network), HP (HP AdvanceNet), Olivetti (Olinet), Wang (WangNet) and Prime (PrimeNet). These networking solutions provide connectivity between headquarters, regional and branch offices as well as between manufacturing, sales and administration departments located on the same site. Major Malaysian customers are currently the banks, the petroleum companies and the larger industrial concerns.

The PC-based Local-Area-Network (LAN) system is seen as a major growth product and the business sector is the major target market. Many competitors vie for market share however in this area in addition to the major hardware vendors, numerous PC-based computer establishments in Malaysian claim to have networking expertise. The more reputable ones however appear to be Mesiniaga Sdn. Bhd., (IBM's marketing agent); Microcomputer Centre Sdn. Bhd. (which specialise in Novell's Netware) and United Computer Sdn. Bhd. (which specialise in 3 Com products). The reputation of 3 Com and Novell, both U.S.-based PC LAN vendors, is well established locally. 3 Com is represented in Malaysia by Imagineering Sdn. Bhd. which distributes but does not install the products.