

THE WARMWARE GAP

Just when you think that you finally understand all of the keywords in the microcomputer lexicon somebody coins a new word ending in "-ware." Words like "hardware", "software", and "firmware" may have been in your vocabulary for sometime, but "warmware" may be new to many people. In the very near future manufacturers, software publishers, distributors, dealers, and end-users will be spending more time discussing, debating, and demanding warmware than either hardware or software. Indeed, survival at every point in the distribution channel may hinge on the quality of warmware that is promised and/or delivered.

In a presentation at COMDEX/EUROPE last fall, industry executive H. E. James Finke, President of Internetwork, Inc., coined the term "warmware." Mr. Finke, in coining the term, thus moved beyond the industry's traditional concern with "support," "hand-holding" and "user-friendly" interfaces to take note of a whole new dimension brought into the picture by the emerging mass market of entry level users. This new kind of customer demands (and therefore should get) "warmware" built into the system at every level -- in the hardware and software itself, at the retail level, and later, in actual day to day use, at place of work or in the home. The distance between talking about how grand it would be to establish the perfect warmware interface for every product available to end-users and the actual installation of that warmware interface can be called the "warmware gap."

If warmware is so important to the industry, then it may be difficult to understand why there should be such a thing as the warmware gap. The answer to the why of the warmware gap question is the same at every level in the computer distribution channel, and that answer is that there is no such thing as free warmware. But, who pays and how much warmware is sufficient in an already highly price competitive industry? The answer to that question might be easier to establish if there was a better understanding of what makes up a quality warmware interface.

Ideally, the warmware interface should be installed at every level in the distribution channel, but complications arise when diminishing margins at every level begin to pinch out efforts to support a warmware interface. For those caught treading water in a distribution channel without a well anchored support system (warmware) it may be increasingly difficult to stay afloat. Fortunately, or unfortunately, (it depends on your outlook and vantage point) a weak or missing warmware interface has an impact on everyone in a particular distribution channel from producer through distributor/dealer right on down to the ultimate end-user because to be effective the warmware interface must be installed at each point the product changes hands. To compound the situation further one must also understand that the warmware interface must be bi-directional in that information on the nature of the end-users' needs must be communicated back up the distribution channel through dealer/distributor to the producer.

When an end-user shops for price of hardware and software alone two things generally happen. First, the end-user is usually able to find someone that will sacrifice margin for sales volume. The end-user may shop a "special" in a computer store or take a chance on a mail-order house, but the end-user can usually find a way to get the lowest prices on hardware and software available. Second, the end-user will discover that nothing is lost in shopping price alone as long as everything goes well and everything works as advertised. In other words, sooner or later, the end-user will learn that Murphy's Law applies to computers just like everything else. At that point the end-user will also learn just how much warmware was included with the hardware and software. In most cases the end-user learns too late that when prices and margins are shaved to the bone there is no room left for much in the way of a warmware interface, and another microcomputer horror story about "bad" hardware and software is written.

By now it should be apparent that a properly installed warmware interface will promote end-user confidence and satisfaction in both hardware and software as well as prevent a great deal of end-user dismay. It should also be apparent that the value of that warmware interface is worth any reasonable expense. It may be apparent that while installation of a warmware interface may work its way downstream to the end-user the demand for that interface generally works its way upstream from the end-user.

Sadly, the microcomputer industry is in a stage of its development where the mass marketing "experts" have gained a substantial hold on the distribution channels, and everything that goes into or comes out of those channels. The emphasis is increasingly turning to marketing plans that put sales volume and margin ahead of such things as concern for the warmware interface. Everyday something "new" and/or "better" is announced in the microcomputer industry, but most end-users' fail to realize that most of the people selling microcomputers know next to nothing about not only the hardware and software they sell (let alone competing products on the market) but also the actual needs of their targeted prospects. Quite literally the blind are leading the blind, often with costly mistakes. The term shakeout is used more and more frequently in reference to a company that was not able to read the needs and wants of the market.

The industry shakeout effects the end-user because very often a company will go under because it failed to include the cost of a warmware interface in its overall marketing plan. When one company fails the end-user is left with one less source for warmware. When a distribution channel for a product begins to crumble the end-user may see sources for warmware disappear until there is virtually nobody left to provide the warmware interface.

It is clearly acknowledged that the demand for microcomputers will continue to expand for many many years, and that the microcomputer will increasingly become a standard fixture in everyday life. For the relative short-run it is clear that there will be a great deal of new products coming onto the market. It is less clear how responsive the industry can be in such a dynamic atmosphere because the pressure to be responsive will be generated at both ends of all distribution channels. Hardware and software producers will want to keep up with the demand, and will have to install mechanisms (warmware interface) to ensure that the right signals are being sent to product designers. End-users will have to become increasingly vocal on their specific needs and be willing to pay the price to ensure that the correct signals are transmitted upstream through the distribution channel to producers (warmware interface). In the middle the dealers and distributors must be willing to include the cost of evaluating not only the end-users' needs but also the cost of communicating those needs to producers as products are tested and evaluated (warmware interface).

Installation of the warmware interface may be the biggest challenge of the decade. The task of convincing the end-user that the cost of support (warmware) must be included in the price of a system may be as difficult as the task of convincing Sales Managers that emphasis on sales volume at the expense of warmware is short-sighted. Sales Managers must learn that today's sales volume may be tomorrow's red ink. Perhaps the biggest task in the process of establishing the warmware interface will be in the identification of those dealers and distributors in the middle that are qualified to provide the important middle connection in the distribution channel. Once qualified dealers and distributors are identified both the producers and end-users must encourage full utilization of the warmware interface through those established dealers and distributors and avoid the temptation to seek either "paper" profits or "false" savings.