FUD – A Marketing Strategy in the Computer Industry

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The past two decades have seen a massive expansion of the computer industry's marketplace, with the customer base expanding to include academic, government, business and home users. This might be expected to have as effect the creation of a great deal of competition among the organisations that now provide hardware, software and services in the industry. However, it appears that today's marketplace is dominated by few such figures and, in some areas more than others, gives strong indications that monopolies have arisen.

This essay will attempt to look into one of the factors that have contributed to the formation and maintenance of monopolies in the computer industry. Such a factor is a notorious strategy used as a marketing tool by many organisations, including market leaders, known by the acronym FUD.

FUD stands for "Fear, Uncertainty and Doubt", a term first used by Gene Amdahl, a computer pioneer, in the mid-seventies. Amdahl left a lead engineer post in IBM to form his own company, and used the term to describe the aggressive marketing strategy employed by IBM to thwart customers from choosing Amdahl Corporation's products. In his own words, "FUD is the fear, uncertainty, and doubt that IBM sales people instill in the minds of potential customers who might be considering [Amdahl] products". The idea behind this policy is to emphasise that IBM, being the market leader, would be the safest choice in terms of quality, reliability and support. This, of course, seems reasonable but is not always true. A good example is that Amdahl started making much smaller and faster computers, compatible with IBM's, at a better price than IBM. This came as a surprising threat to IBM, who had unquestionable control of the mainframe computer market in 1975. Having inferior products, it was only a matter of time before it resorted to FUD tactics in order to protect its effective monopoly. A well-known catchphrase from the seventies that demonstrates this quite well is "Nobody ever got fired for buying IBM". Therefore, the message is that since everybody is buying IBM, the switch to another company would surely be unsafe or unreasonable. Thus, FUD is all about the promotion of inferior or overpriced products by casting shadows of doubt on the competition's product.

To continue with the story of Amdahl Corporation, in 1976 it seemed very likely that it could conquer a large share of the mainframe marketplace, and was selling systems featuring the V-6 processor which was much faster than IBM's counterpart. However, in 1977 IBM stepped up its marketing campaign by introducing a new form of FUD: the announcement of yet undeveloped products that will be better than what the competition presently has to offer. This is termed "vapourware" because there is no tangible evidence of the existence of such a product, other than the company's announcement.   In conjunction with conventional FUD tactics, it helps slow the momentum of the competitor's product because the product being announced has the double benefit of being the "safe" choice, as it is made by the originators of FUD as well as being presented as "better". Clearly, no evidence of comparison between it and the existing competition can be presented, as it does not exist yet. This prompts many people to think of this practice as unethical. IBM's strategy proved successful, as when this processor (the 3033) came out in 1987, it was in fact inferior to Amdahl's competing V-6 but still managed to outsell it.

Moving on to the eighties, we see IBM continuing to sell inferior and more expensive hardware, finding a new market in home computers. This niche market had expanded, by that time, into the order of many thousands of users and had quite advanced technology

to offer, with 16-bit processors and good sound and video quality. However, just because IBM was the biggest (and thus "safest choice", in FUD terms) company in the industry, it moved from offering an expensive, bare-bones system that could not compete in terms of technology (the IBM PC) to eliminating virtually any competition by the mid-late eighties.

Irwin (1998) emphasises "the power of FUD" in managing to strongly influence the public's opinion on certain matters. One of the most obvious cases of circulation of unfounded rumours in this timeframe is concerned with Amstrad's PC clones. Having a new design philosophy, Amstrad decided to alter the PC by simplifying its design and reducing its power consumption. As a result, they were able to remove the power supply from the main case and feed it with power from the monitor instead. This eliminated the need for a cooling fan in the main case and consequently made Amstrads quieter than all other PCs. As Amstrad also happened to make the lowest-priced PCs in the marketplace, it was only a matter of time before anti-Amstrad FUD came along. Thus, unsubstantiated rumours such as that Amstrads overheated and malfunctioned as a result of not having a cooling fan, forced Amstrad to install -useless- fans in their machines where there was no power supply to be found. This illustrates how powerful FUD tactics are because they caused Amstrad to give up one of its advantages over the rest of the market just to alleviate the impression of unreliability it had been smeared with.

Another FUD effort, that might be better remembered, as well as more historically important in the evolution of today's status quo in the computing marketplace, took place in the "war" between DR-DOS and MS-DOS. Digital Research offered its version of the (then-standard for the PC) Disk Operating System with lots of additional features compared to Microsoft's equivalent offering (MS-DOS). It also happened to be more affordable, spurring Microsoft's first FUD campaign. It manifested itself in quite subtle places, such as error messages when you tried to install Microsoft's Windows over DR-DOS, warning of incompatibilities for which there was in fact no evidence. Vapourware tactics also came into effect, when Microsoft then announced its future MS-DOS 6, promising to deliver more than DR-DOS. Later, Microsoft turned the tables and used FUD against its greatest proponent up to then, IBM itself. A good example is that IBM's OS/2 operating system did not run correctly under any hardware except IBM's own, which is untrue. In the end, the public preferred the inferior –16 bits as opposed to 32 and non-multithreaded– Microsoft Windows 3.1 to OS/2, starting Microsoft's near-total domination of the operating system market.

We can clearly see by now that FUD is not restricted to IBM, but is a commonplace tactic for a company that has the reputation, size or infrastructure to be able to spread FUD about others. That is the reason behind the expansion of the term to include all corporation-originated disinformation that finds use as a marketing tool and, in turn, aids the establishment and safeguarding of monopolies. An important step in the recognition of the contribution of FUD to the current state of affairs was taken in late October 1998, when Eric S. Raymond, a leading figure in the open-source software community, publicised a series of Microsoft internal memos, dubbed the "Halloween" Documents.

The Halloween Documents outline why open-source software is a threat to Microsoft's dominance, as it has many advantages to closed-source software and point the finger to the rise in popularity of the open-source operating system Linux as a good example. Discussion is also made of the possible ways to use FUD against open-source software. Some of those were later implemented, when Microsoft published a web page called "Linux Myths" which was basically a lot of collected FUD against Linux. After the untruth found in this page was pointed out and protests were made, the web page was immediately removed. The way that FUD operates, though, indicates that this might not have been enough to undo the harm that had already been done. Linux has, at various points in time, been called unsafe, slow, incompatible and other attributes, including that it manifests support of communism and aims to destroy capitalism in the computer

industry! In this case, the FUD is refuted by Microsoft itself, in admitting the superiority, in some respects, of Linux to its own operating systems within the Halloween Documents. These memos were acknowledged to be true by Microsoft, and the authors have been identified as Vinod Valloppillil and Josh Cohen, two Microsoft executives. The company, though, dismisses them as low-level engineering studies and not official company policy. Even if it is so, it appears quite worrying that FUD has so deep-seated support within the industry.

Let us now look at the basic building blocks of FUD as a strategy. As it aims to disorient the public in an attempt to shift opinion about products, it needs to bend the existing facts and leave the recipient with an impression that prompts one to imagine the rest of the imaginary case against the competition. That is why FUD originators usually exaggerate the weaknesses that the competitive product has, even resorting to the creation of benchmarks that judge their product to be better in some (usually obscure or trivial) respect or another. Another tactic, found at the heart of vapourware announcements, is the attempt to "spin" the competition's leading edge out of proportion. That is, to "deny" that they offer better products by announcing the capability to create even better products than them. A strategy that has recently been used is the association of the competitors with undesirable elements (e.g. IBM associating everyone else with insecure data and Microsoft associating open-source software with communism). The last resort, of course, is the utter fabrication of facts and figures, which is quite dangerous and entices litigation, if it is traceable back to the originating organisation.

Distraction of the public's attention is necessary in order for FUD to succeed, as stealth is central to its mission. If FUD is identifiable as FUD, then it has no longer the power to influence. A common method of distraction is the placement of FUD statements among two or more true facts, so that the untruth does not stand out but is better hidden. Another method is the posing of leading questions to the recipient of FUD. A well-written leading question, while usually not answerable, is useful as it implies its topic in the mind of the reader without actually offering any proof. A series of implications that can be the result of such questions turn against the end-users themselves. By attacking the end-users of a specific product (e.g. dismissing them as "17-year-old 'geeks'") one can also indirectly attack the product itself, while at the same time, associating one's own product with the opposite, attractive, kind of end-user. A good way to support FUD is to dismiss its critics as sworn enemies of the originators.

Finally, FUD can be very well disguised as an observer or reviewer's criticism. In this particular case, the repeater of FUD might not be aware of supporting a company's marketing campaign but may actually believe it to be true. There have been examples of journalists and benchmarking companies that have fallen prey to FUD campaigns.

To summarise, FUD can harm the credibility and reputation of its relatively innocent repeaters. It also harms progress in the industry, as it leads to fighting between organisations in order for them to secure dominance in the field. A good example is the argument between Netscape, Microsoft, and the World Wide Web Consortium (W3C) over the standards to be developed and supported for the Internet. Moreover, it further hampers progress in the field of computing, as the criticism exerted upon the targets is, in a staggering percentage of cases, invalid. There remains also the original reason that caused Amdahl to protest against FUD in the seventies, and that is the ease with which it can be used to protect monopolies.

So, in order to combat FUD, a few basic issues need to be dealt with. Firstly, the public, as well as everyone in the industry, needs to be made more aware of the situations developing in the world of computing. That involves computer-literacy as well, and so the person subjected to FUD will be less likely to fall prey to its claims. In doing that, one

needs to separate the repeaters from the originators of FUD so as to protect its victims. The best way to combat the untruths contained in FUD is the use of simple language to explain the true situations, as well as keeping a calm head. When someone appears to vigorously deny FUD, one creates the appearance that this FUD may indeed be true. Another possibility in the observer's mind might be that the person refuting the FUD may simply be looking after the interests of one of the competitors mentioned in it. And all of the above are the reasons why only hard facts should be used in the attempt to set things right in the aftermath of a FUD attack.

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