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Information Warfare

The term Information Warfare is widely used in today's news. Often, it is misinterpreted and points to high-tech weapons which are used in mass armies.

Information Warfare is defined by: Actions taken to achieve information superiority by affecting adversary information, information-based processes, information systems, and computer-based networks while defending one's own information, information-based processes, information systems, and computer-based networks.

Conventional approaches to defensive information warfare (IW) focus primarily on physical security, electronic countermeasures and encryption techniques. These areas focus on preserving system availability and data secrecy. However, these areas control only a small subset of the range of impacts that information warfare attacks can have on information data quality attributes provided to users. For example, subtle changes to information timeliness, accuracy and credibility can have significant impact on military command and control yet pass undetected through standard computer security safeguards.

The history of warfare is described in three waves. During the agrarian revolution, warfare was fought by a warrior class based on information. With the industrial revolution, the war changed to mass destruction. Nation states used mass armies to protect and expand their societies through wars with high casualties. In the information age, warfare changes to Information War. The ultimate destructive capability is no longer mass destruction but critical data deletion. Information attacks with minimal casualties are characterizing the war. On the battlefield, information technology is still used today mainly to make weapons smarter and to minimize one's own casualties with providing the troops with third wave technology in second wave weapon system. Soft War is used to demoralize enemy troops by sending wrong information and morphed TV programs to them.

Possible Information Warfare Weapons are used (or could be used) by modern armies as well as by terrorists. They are for example:

· Computer Viruses and Worms, · Trojan Horses, · Logic Bombs, · Trap Doors, · Chipping, · Nano Machines and Microbes, · Electronic Jamming.

Information Warfare is developed by high-tech societies and armies. The Information Warfare weapons can only be used against an enemy which has also similar high-tech capabilities.