THE TECHNO-FINANCE INDUSTRY

by Augusto C. Verzosa

Information technology is the strategic industry of this decade. I.T. has spawned so much change in internal business processes of organizations. It has redefined the playing field through competitive strategies previously impossible in the pre-I.T. era.

The industry most heavily impacted by information technology has been the finance industry. Paradoxically, while the roots of computer processing were the requirements for accurate financial reporting in the early years, the driving force behind today's newest financial services and products have been new developments in information technology. This symbiosis/synergy will intensify in a short time for good reason -- the two industries, information technology and finance, have actually converged and merged. The ancient dichotomy into these two distinct industries is giving way to a new paradigm -- the TECHNO-FINANCE INDUSTRY.

Is there really such a thing? It is easy to see I.T. as an implementor, even a strategic tool, of any industry. But can it (or has it already) become so fundamental to the life of an industry that it is virtually indistinguishable from the industry it was originally intended to support (as with the finance industry)?

The basic components of the finance industry are: exchange medium; financial products; financial services; financial transactions; nexus; and accounts. All these components are now part-technology in nature.

Exchange medium or money is now significantly in electronic form. Hard currency will die a natural death. It is being replaced by smart cards, credit/debit cards, ATM cards, etc.. Electronic cash will dominate and obliterate other forms since it is cheaper to produce, easier to secure, and easier to carry. In time, all forms of money will be information technology by-products.

Financial products cannot live without information technology. An insurance policy is simply an electronic record with a secondary hard copy document (a concession to the old days). Its premium, cash value, and other financial parameters are functions of complex mathematics done by computers using customer data, mortality tables, and company business parameters. A bank loan is again an electronic record representing a corporate liability -- without the record, it cannot exist in today's competitive banking environment since only computers can track accurately the evolution of the loan over time. This is true also for other asset/liability instruments such as securities. Derivatives have emerged as viable products because of the increasing power of computers and computer software supporting their complex administration.

Financial services are increasingly automated in nature. Withdrawals are now generally through ATM's. Balance and other account queries are via automated call processing systems that link the customer directly to the electronic database via telephones and PABX's. Even marketing, selling, and account-closing are done now either via private electronic networks or through Internet websites or Internet malls. Collection services are mostly automated now through credit cards and tellering systems. In the larger scope of financial transactions, a large proprtion are electronic processes among which are automatic generation of accounting entries and fund transfers. Even the stock market now has automatic processes that kick in under certain trading conditions.

Accounts, again, are electronic entities. In the final analysis, businesses take account data as truth. Complaints and inconsistencies go through a rigorous documentation exercise for proof which very often is a costly excercise for the customer. For better or for worse, as automation becomes more universal, the computer is the final authority on your financial condition.

Finally, the nexus concept no longer applies to financial activity (as most lawyers are painfully realizing) courtesy of the way the Internet has reshaped transaction execution across georaphical boundaries.

The effects of information technology on each component of the finance industry, in summary, are as follows:

1) The new medium of exchange is an information technology entity. Increasingly, money in other forms will disappear and become collectibles. Currency unification (as with the Euro) will further accelerate the process because of value standardization across borders.

2) Financial products are hybrids of financial engineering and electronic technology. The components are inseparable and mutually reinforce each other.

3) Cyberspace will increasingly assimilate all financial accounts, services, and transactions -- leaving little to other environments (only barter will survive elsewhere).

4) Finally, the concept of nexus for financial activity will disappear. This will throw all cross-boundary taxation norms and laws into disarray.

The merging of the finance industry and the I.T. industry into a single industry, the TECHNO-FINANCE industry will force new paradigms into business strategy:

1) New products and services must be conceptualized with both financial values and technology values in symbiosis and optimized for complementarity. For instance, credit cards and poor telecoms must not be packaged together.

2) Transactions and accounts must be made highly secure and reliable to encourage trust in the new cyberspace environment. The sanctions for electronic fraud and sabotage must be made very painful so that trust will be reinforced as cyberspace becomes universal. Reliability and availability must be heightened progressively to provide convenience and wean society out of the old dichotomy. Also, control must be confined to standards (as in the Internet) to prevent the emergence of a technogarchy.

3) The issue of convertiblity must be addressed through: standardization of technology exchange media (TEM - the new acronym for MONEY); prevention of value loss in value transfer (money doesn't lose value as it moves from one person/organization to another); universal acceptance of the media by businesses.

4) Since cyberspace is the new universal financial environment, financial managers, entrepeneurs, and customers must be intensely and rapidly educated on the nature of the new environment: the absence of nexus; the speed of transacting; and the elimination of paper.

The new TECHNO-FINANCE industry has come of age. It is an inevitable reality. Organizations must adjust their mindsets quickly to exploit its potentials for competitivenes or end up like traditonal money -- as collectibles/antiques. Customers must accept the reality and learn quickly to relieve their anxiety and protect themselves as well. Administrators of cyberspace TECHNO-FINANCE standards must nurture these to build universal trust (the worst scenario is an electronic monster you hate but are forced to build your business in or do business with). As electrum gave birth to money in ancient Lydia, silicon has married money and technology in our age.