

## The Next Big Thing in Business: A Complete Web-based Trading Platform

“Visa, it’s everywhere you want to be.” That’s the familiar slogan for the Visa card. Almost everyone I know has one, and it’s the way I pay for many of the things I buy. But what is a Visa card, anyway, and how did it come to be such an important part of our lives and the global financial landscape? There was a time not so long ago when most purchases were paid for using paper currency, or by check—and not so long before that they were paid for using gold or silver coins. It is in the nature of things to evolve, to change form, and to adapt to new conditions. So it is with money—or to be more precise, “payment media” and exchange systems. It hardly makes sense to use the word “money” anymore given its muddled meaning and careless usage, which derive from the successive transformations that have taken place in the realm of exchange, banking, and finance. As we’ve shown, money today is not what it used to be, and tomorrow . . . well, tomorrow we won’t use money at all.

### The Convenience of Cards

A Visa card may be either a *credit card* or a *debit card*. I have one of each. If the former, the card-issuing bank allows the card holder to make purchases and cash withdrawals against a line of credit, i.e., the bank will “lend” the cardholder enough money (up to some limit) to pay for their purchases or cash advances. Most card issuers provide a grace period within which no interest is charged on purchase balances, but if a balance is carried beyond the current billing period, the cardholder must pay interest on that balance at rates which are usually somewhere around 18–20 percent, but some card-issuing banks may charge rates approaching 30 percent—and if one is late in making a payment, the bank may impose a penalty as well as raise the interest rates on remaining balances.

A debit card, on the other hand, works like a check. The cardholder must

already have money in his or her account. Purchases and cash withdrawals are charged immediately against the balance in the cardholder's account. In either case, a Visa card allows the holder to pay for purchases made at millions of businesses scattered all around the world. In short, Visa is a self-described "global payment system." Visa (along with its sister, MasterCard, and a few lesser card systems) has been enormously successful, and provides great convenience to the cardholder. I do quite a bit of international travel and it is remarkable that I can walk up to a hole in the wall in most any country of the world, insert a piece of plastic, and get some slips of paper that allow me to acquire whatever I might need for my sustenance and comfort.

Visa cards and MasterCards are issued by banks that, while they may compete with one another to some extent for your business, also cooperate together as members of a financial services cartel to make their common business extremely profitable. While the card payment system provides a great deal in the way of convenience, it has (as presently structured) a major downside for the user and for the economy as a whole. We've already described the dysfunctional nature of the political money system; the fact that it is inequitable, unstable, unsustainable, and overly expensive. As part of that system, credit cards and debit cards simply provide new ways of using the political debt-money that banks create by making loans.

Further, while they are more efficient than checks, the use of cards is much more expensive to the users (both consumers and merchants) than they need to be. While service providers deserve to earn a fair profit, the privileged status which the banks enjoy limits competition and makes the emergence of other payment systems difficult. We've already mentioned the high rates of interest that cardholders must pay on outstanding balances, but there is also a charge to the merchants—who typically pay 3 percent or more on the amount of each transaction involving a card. That is a business cost that must ultimately be passed on to the consumer. People with low incomes, or those who lack a solid credit history, may have difficulty gaining access to credit cards or be required to pay higher rates of interest.

### **Improving the Exchange Process—Challenge and Opportunity**

We can do better. While there has been recurrent debate about reforming the system of money and banking by new legislation and political initiatives,

improvement is much more likely to come through private, voluntary, free-market approaches that apply technological and business innovation. The implementation of such systems provides both a transformational advance for civilization and a huge market opportunity for entrepreneurs. Imagine a democratically structured global payment system operated in the interests of the general welfare with membership open to all, in which the exchange medium is abundant and readily available to mediate as much trading as people need to do, and which provides each member with an interest-free line of credit. This is more than a pipe dream. Such a system is entirely feasible using well established principles and procedures of sound money and banking. Like so many other reasonable things, the main obstacles to implementation have been political, not technical. However, recent social and technological developments provide the means by which those obstacles may be overcome.

As we proceed to consider emerging technologies and their expected impact upon money and the exchange process, it is useful to recapitulate some essential points that were made earlier.

- The primary role of money is to serve as a medium of exchange.
- Money is nothing more than credit.
- Current methods of allocating and managing credit are neither optimal nor sustainable.
- New methods that are more effective, efficient, and equitable are already available and are being profitably applied.
- Complementary currencies and credit clearing exchanges can be established by community groups, NGOs, entrepreneurs, business associations, and municipal and regional governments.

### **Significant Trends and “Disruptive Technologies”**

In his book *The Innovator’s Dilemma*, Clayton Christensen contrasts two types of technologies—“sustaining technologies” and “disruptive technologies.” He uses a broad definition of technology, saying that “Technology . . . means the processes by which an organization transforms labor, capital, materials, and information into products and services of greater value.” By this definition, technology includes marketing, distribution, investment, managerial



processes, as well as design and production. This makes his concepts quite applicable to our present subject.

Christensen's technological dichotomy is reminiscent of Thomas Kuhn's distinction between "ordinary science" and "revolutionary science," which also seems relevant. Ordinary science is "tradition-preserving," while revolutionary science is "tradition-shattering." Mark Buchanan's account makes this distinction: "In normal scientific work, theories are extended, observations are made more accurate, and understanding grows by a process of accumulation. A scientific revolution, on the other hand, involves throwing out cherished ideas and replacing them with new ones; scientists come to see the world in a different light."<sup>159</sup>

Likewise, sustaining technologies are comprised of improvements to established ways of doing things that enhance the position of dominant companies, while disruptive technologies consist of new approaches that, in Christensen's words, "Bring to market a very different value proposition than had been available previously." They typically "underperform established products in mainstream markets. But they have other features that a few fringe (and generally new) customers value."<sup>160</sup> While disruptive technologies may underperform in the short run, they often have the potential to eventually dislodge established technologies and dominant companies. Among the numerous examples is that of digital photography. Initially, digital photography was greatly inferior to the established technology of chemicals and film, but there were a few applications where it was "good enough" and found a sufficient market to support its further development. Eventually, digital photography became the norm and companies that had been dominant in the field of imaging were dislodged from that position.

## **Strengths and Vulnerabilities of Political Money and Conventional Banking**

In order to comprehend the points of vulnerability of political monies, we must be aware of the main features that have made them so dominant in the market.

- They are universally accepted within wide national, continental, or even global domains.
- Inertia—the public is habituated to their use.

- Political monies are easily exchanged for one another through well organized foreign exchange currency markets and widespread money change offices and kiosks.
- General lack of viable alternatives for mediating exchange.
- The intensive support and protection they obtain from national governments.
- Their true costs and “side effects” are obscured and not widely recognized.

But despite these enormous advantages, they also have inherent weaknesses and vulnerabilities that we have already described. As Christensen points out, dominant companies often “overshoot their markets.” This makes them vulnerable to displacement for a number of reasons.

- Their focus is mainly on continuing improvement of established products or services.
- They eventually give established customers more than they need or are willing to pay for.
- They often overplay their dominant position and overexploit their customers.

Others simply become complacent, ossified, or unresponsive to developments and the demands of both established and emerging markets.

Remember that the credit card companies are actually consortia of banks. It is the banks that issue the cards, and the banks that reap the profits. The credit card industry is dominated by two major brands, Visa and MasterCard. The banks that participate as members of this duopoly, while engaging in some limited competition with one another to attract cardholders, have cooperated to raise interest rates, add fees upon fees, and gradually add more stringent clauses to the cardholder agreements. All of this has made them ever more exploitative of users, especially those who are caught in the “debt trap” and who carry a balance from month to month and are sometimes late in making a payment.

Christensen observes that dominant companies often ignore or try to suppress disruptive technologies. This has been particularly true in the case of money and alternative credit institutions. Whenever competing currencies have appeared, the power of government has been used to quash them. The

successful Great Depression–era currencies in Wörgl and Schwanenkirchen are but two among numerous such examples.<sup>161</sup> The Swiss WIR, described earlier, is one notable exception that seemed (for a while at least) to have somehow slipped through and been allowed to subsist.

Finally, if dominant companies ever do adopt the new technology, they are usually too late to be competitive with nimble start-ups. Banks especially should be expected to be very late in adopting technologies that will create a wholly different, more competitive economic and financial playing field.

### **From Disruptive to Sustaining—Moving Upmarket**

If exchange alternatives are to gain a foothold within such a protected (for the banks) milieu, they will need to first find small niche markets where their special qualities are recognized and valued. As performance improvements are achieved, they will be able to attract more of a mainstream market. This has already been happening for some time in both the grassroots and commercial sectors. In the former, the attraction has been mainly ideological. Complementary currency and exchange has been seen as a means for achieving social justice, economic equity, local self-determination, and environmental restoration. Most grassroots initiatives have tried to incorporate features that promote such ideals. In a few cases, like Argentina, the impetus has been more practical, as we've already described. Within the commercial sector, the features that have been most highlighted are the ability of trade exchange membership to mobilize the excess capacity of members in the face of scarce official money by providing a supplemental medium of exchange (credit), and the marketing advantage that comes from preferred access to the membership base. In both cases, a strategic approach will need to be taken to avoid the legal and regulatory minefields that have been laid to inhibit market advances from newcomers to the field of exchange services. Since the usefulness and marketability of credit clearing services is determined by both the scale and scope of the network, it would seem essential that critical mass must be quickly achieved. That goal necessitates that all levels of the supply chain must be included from as early on in the process as possible. But how does one recruit participants into an emerging network?

## The Emergence of a Complete Web-based Trading Platform

Over the past decade, commerce has been increasingly migrating onto the World Wide Web. Barring some major catastrophe that would disrupt our information and communications infrastructure, that trend is sure to continue accompanied by ever-greater functionality and additional services. If there is such a thing as a “monetary science,” it is presently undergoing a revolution—and the technologies that are arising from it are sure to bring about enormous changes. Compared to conventional money and banking, the complete Web-based trading platform we will describe here will achieve the innovative potential that Christensen writes about.

Within my own lifetime, I have seen a number of companies that were so entrenched in their industries and so much in control of their markets that it was unthinkable that they might ever be dislodged from their position of dominance. This was especially true in the fields of computers, telecommunications, and photography. Yet many of those companies have either ceased to exist or have been eclipsed by others that developed and marketed what seemed initially to be inferior technologies.

In the early 1980s I was working as a consultant with a company on projects that required a considerable amount of statistical analysis. We had been buying time (at some considerable expense) on a university mainframe computer, and had to put up with long turnaround times. It began to seem sensible to consider acquiring a computer system that would enable us to do that work in-house. Among the proposals that were submitted to us was one from DEC (Digital Equipment Company) for a multistation minicomputer. This was at the time when desktop microcomputers were just beginning to provide some significant computing power, and local area networks (LANs) were becoming a real possibility. Fortunately, we realized that the DEC system and other minicomputers would soon become obsolete. We decided instead to acquire one of the new AT-type microcomputers, thinking that it could serve our immediate needs and be networked with other similar computers, if needed, later on. That solution did prove to be quite satisfactory for our purposes, and at a small fraction of the price we would have paid for the obsolescent minicomputer. DEC was not nimble enough to adapt to the fast-changing computer technologies and market conditions. It made an early foray into the microcomputer market with the DEC Rainbow desktop machine, but it was overly expensive and not “IBM-compatible.” Where is DEC today? An interesting analysis of

DEC's failure to succeed in the personal computer market is provided by Christensen.<sup>162</sup> He notes that DEC had all the necessary resources to succeed but their processes and values did not permit them to effectively compete in that market. IBM, Eastman Kodak, and Xerox are still viable companies, but they are nowhere near as dominant in their industries as they once were.

The entrenched position of the money and banking establishment far exceeds that of any single company or other kind of cartel. Its position, as we have described, has been established and sustained through political privilege and the suppression of competition rather than by the quality and value of the services it provides. Given that situation, is there any chance that new technologies might enable the emergence of significant exchange alternatives? I think there is. The U.S. Postal Service enjoys a monopoly in the delivery of mail, but that did not stop the massive shift to newer, faster, electronic communications channels like fax, text messaging, e-mail, instant chat, and Internet file transfers. Now voice-over-Internet is mounting a similar challenge to telephone and cable companies.

What are the “disruptive technologies” that are emerging within the realm of money and banking?

- Direct credit-clearing among buyers and sellers
- The use of the Internet to create Web-based marketplaces
- Transparency in Web-based accounting, information, and exchange systems
- Strong identity verification
- Secure encryption of information over the Internet
- Social networking
- Reputation ratings of vendors and buyers that are continually updated and available on-demand
- The reemergence of mutual companies, coresponsibility, and localized Web-based markets


It is not any of these individually but *all of them in combination* that will, I believe, result in structures that will provide superior performance in mediating the exchange process. Worsening economic and financial conditions, such as those experienced in 2007 and 2008, will create enhanced market opportunities for this sort of nonpolitical trading platform, and will assure their eventual implementation and wide acceptance.



## Essential Components of the Web-based Trading Platform

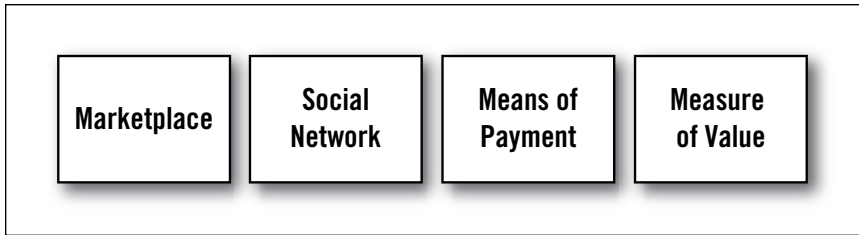
Management guru Peter Drucker has expounded the following “law”—*profits migrate to the supplier of the missing component necessary to complete the system*. What system are we talking about, and what is needed to complete it? It is what I call a *complete Web-based trading platform*, and it requires these four basic components.

1. A marketplace
2. A social network
3. A means of payment
4. A measure of value or pricing unit

There are already numerous Web-based marketplaces—eBay, Amazon, and Craigslist, to name just a few—and there are numerous social networks—Facebook, Friendster, LinkedIn, MySpace, the Living Directory, and so on. But what about payment systems? And what about measures of value? This is where gaps remain. Yes, PayPal is a payment system of sorts—but it only allows the transfer of the same old bank-created debt-money. The only real advantage it provides is in enabling you to pay an online vendor without the risk of revealing to them your credit card or debit card information. PayPal plays the role of a trusted intermediary. That is a useful service but it does not provide a true alternative payment system. PayPal could conceivably become a credit clearing service if it were to allocate interest-free lines of credit to some or all of its account holders. 

With regard to value measures, we have numerous ones (like dollars, euros, pounds, and yen) but each is a political unit, the value of which is dependent upon the policies of their respective government or central bank issuer. These are the very measures that are unstable and problematic. But before proceeding with that line, let us consider each of the four components a bit more fully.

A *marketplace* is a “space” where buyers and sellers come together to display their offerings, express their needs and wants, and negotiate the terms of trade. It need not be a physical space, as we see with the emergence of marketplaces on the Web. It is important to recognize that there are marketplaces that bring businesses together with consumers (B2C), marketplaces that specialize in business to business transactions (B2B), and some that enable all types—B2C, B2B, and even C2C.



**Figure 17.1** *The Four Essential Components of a Complete Web-based Trading Platform*

A *social network* enables participants to make themselves known to one another and to communicate more effectively. It allows one to establish their identity online, to post their credentials, and to provide other information for others to see. It also can track correspondence and behavior within the network, establishing one's reputation and enabling an impersonal medium to serve as a tool for building a matrix of trusting relationships than can lead to collaboration and coordinated action on many levels.<sup>163</sup> Social networks are enabling an inherently impersonal medium to become an effective tool for forging very personal relationships across all sorts of boundaries.

A *means of payment* facilitates the exchange process and transcends the barter limitation of coincidental wants and needs. Possible payment media include

- official money,
- private currencies, and
- direct clearing of traders' credits and debits.

Everyone understands the use of official money as a means of payment. Thus far, Web-based payment systems have been mainly limited to the transfer of conventional bank-created money from one party to another. It does not usually occur to people that there might be any other payment possibility. But private currencies have a long history and have often served the payment function, especially during times of financial malfunction and economic distress like the Great Depression of the 1930s. We have already discussed a number of such payment possibilities.

A *measure of value* enables comparison in the marketplace of the values of distinctly different kinds of goods, services, and contracts—including financial claims. In times past, values and prices were expressed in terms of some standard commodities, most notably a specified amount of gold or silver. As

described earlier, those value measures were obliterated by legal tender laws that made the various national currencies both the means of payment and the measure of value. At some point, legal tender laws will be abolished. In the meantime, buyers and sellers can adopt some nonpolitical measures of value to use in pricing their goods and services for sale.

### **Completing the Web-based Trading Platform**

Recalling Drucker's Law, we propose that the missing components that are needed to complete the edifice of a complete Web-based trading platform are (1) a means of payment that utilizes no political currency as a payment medium and (2) a concrete, objective, universal measure of value that provides a unit of account that is independent of all national currency units. Of these, the first is more critical; the second can be temporarily deferred, as we discussed in Chapter 9.

What we propose as the innovative means of payment is direct credit clearing, which has already been described. And what we propose as the objective measure of value is a composite commodity standard such as that described in my earlier book, *Money and Debt: A Solution to the Global Crisis*,<sup>164</sup> and summarized in Appendix B. These missing components need to be properly integrated with an online marketplace and adequate social networking tools. When these things are accomplished, the trading platform becomes an integrated milieu that subsumes the functions of both a marketplace *and a bank*.

Who are the dominant players in Web-based commerce today? Will eBay or Amazon be able to exploit this opportunity, or will it be some nimble start-up that is still fluid enough to develop the necessary internal processes, lean enough to accept the small initial returns, and venturesome enough to develop new markets? The past three decades have seen great progress in the development of private commercial "barter" or trade exchanges that provide direct credit clearing among their business members. These and other historical examples provide adequate proof of concept. Optimizing their design, putting all the pieces together, and taking these networks to scale are the remaining tasks that will revolutionize money and banking and enable the evolution of civilization toward greater peace, prosperity, and sustainability.