

Sustainable Prosperity Now! Awakening a Green Revolution of the Heart

This essay has three goals: (1) to distinguish an emerging global economy of *Sustainable Prosperity*¹ with its attendant social solutions and business opportunities; (2) to suggest innovations in money and economics that can accelerate sustainable global economic development; and (3) to offer holistic² strategies that can align the private, public, and nonprofit sectors for the common good.

Buds blossom in the spring from their own inner callings. Similarly, the human race is birthing an era of global peace, prosperity and sustainable living. For such is the deep inner longing of every human heart and soul.

Consider that the global economy is rapidly transitioning from a dominant mode of financial competition, economic inequality, and compulsive consumerism to an era of economic cooperation, universal prosperity, and joyful living. Just imagine:

The year is 2015, the third anniversary of the *Sustainable Prosperity Global Alliance*:

- the birthright of every human being is healthy and plentiful food, safe drinking water, clean air, and cultural respect, as well as quality housing, education, and healthcare;
- across the globe, diverse eco-villages showcase the best that new technologies, urban and rural lifestyles, and sustainable-living practices have to offer;
- war and terrorism have been replaced by worldwide campaigns for economic development where students earn a college education through two year stints in a new Global Peace Corps;
- workplaces, communities, and families reflect caring and supportive relationships;
- technological advances have created an average workweek of 10 hours across the planet, while everyone enjoys life-long learning, productive labor, and leisure;
- the environment flourishes as a result of sustainable business and sustainable living practices.

Notice your reaction to this possibility. Was it eagerness, amusement, disbelief or annoyance? Did it seem possible, perhaps, yet not within a mere decade?

¹ Sustainable Prosperity denotes a culturally appropriate, environmentally sensitive and universally high standard of living and quality of life, based upon state-of-the-art technologies and the judicious use of materials and renewable energy sources.

² Holistic solutions to social and economic challenges recognize that humans are physical, intellectual, emotional and spiritual beings with a profound relationship to nature and, therefore, not primarily consumers.

Everything described above is already technologically and economically feasible. A high quality of life for the planet's entire human population would require a mere fraction of the material resources that are currently being extracted, processed, transported, consumed, and discarded. Most elements of a high quality of life use relatively few material resources (setting aside, for now, the fact that *nurturing relationships and leisure time* are decisive ingredients in a high quality of life). (Wann, 2007)

Consider that food can be produced sustainably and is itself an abundant, renewable resource. Notice that shelter and clothing can be produced primarily from abundant, renewable resources. Now consider the material composition of these elements of the good life: education and healthcare; artistic, cultural and recreational activities; travel and cultural exchange; religious and spiritual pursuits. All require relatively modest material resources. These essentials of a high quality of life are based, for the most part, on human activity — itself an abundant, renewable resource — and on nearly unlimited reserves of human physical, intellectual, emotional and spiritual capital.

Awaking to New Economic Realities Each and every day, advances in technology and human ingenuity lead to the production and distribution of more and better goods and services requiring ever fewer materials and ever less energy, labor and capital.³ (Toffler, 1980) These never-ending economic improvements could easily produce a continuous, across-the-board improvement in the quality life for every person on the planet. Such gains in efficiency and productivity could also lead to ever-shorter working hours and ever-less damage to our natural environment. Since these are not the results we observe, we might ask ourselves: Into what *economic black hole* are the massive productivity gains of the high-tech global economy disappearing?

Clearly, millions of people in non-industrialized countries have demonstrated an ability to develop needed job skills to prosper in the global economy. Certainly, a handful of millionaires and billionaires in the world are not consuming enough food, housing, healthcare, education and leisure activities to make these things unavailable to others who need them. Why should there be unmet needs for any of the basic necessities of life anywhere on the planet as we enter the 21st Century?

Across-the-board economic progress on a global scale is a reasonable expectation from continuous improvements in business and social assets: technology; labor skill and management know-how; use of raw materials and energy; and our infrastructures for finance, communication and transportation. Instead, the quality of life for individuals, families and communities tends to rise and fall with the ups and downs in local, regional and national economies.

It is a common belief that the laws and cycles, which govern our economic system, are beyond our human capacity to control. Perhaps we can slightly adjust outcomes by tweaking the system; but unfortunately, our boom and bust cycles, inflation and recession, poverty and unemployment, stock-market declines and crashes, outsourcing of jobs, global famine and disease — are all phenomena beyond our control. This viewpoint, however, overlooks the fact that the economy is *our own invention*. As well, it

³ Compare an early computer the size of a small building to today's far more powerful laptop device or an old-fashioned telephone system composed of cable and switching stations — relying on thousands of employees — to a modern telecommunications satellite and automated system.

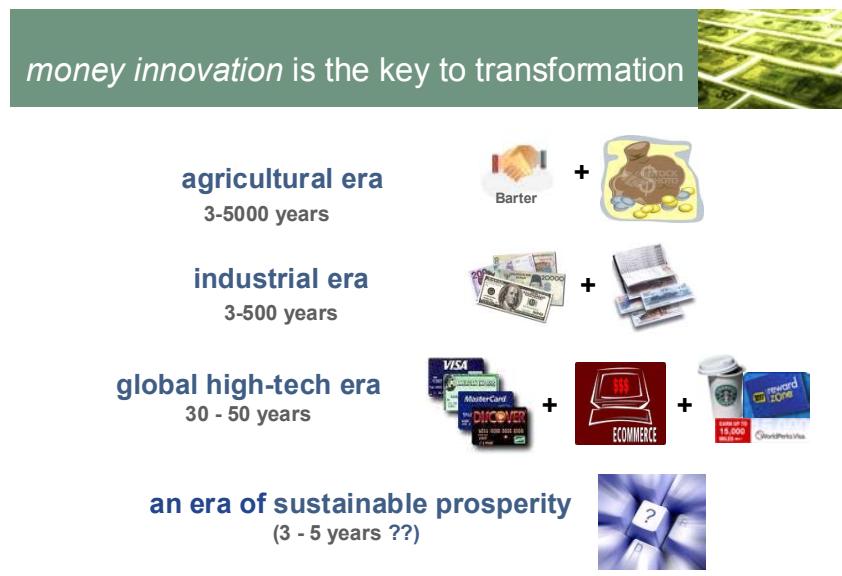
leaves us powerless victims in the face of enormous economic suffering that *no one* desires.

It is not just a matter of poverty, homelessness, famine and disease in the poor, non-industrialized nations. There are economic dislocations, financial problems facing healthcare and Social Security, persistent poverty, and unrelenting job stress in the industrialized, high-tech countries as well. A more accurate grasp of how our economic system actually operates would give us a much greater capacity to shape its course, offering improved outcomes for both human beings and our natural environment.

To give us a functioning economic theory, we thus need a new synthesis that simplifies—but so far there is no sign of it. And if no such synthesis emerges, we may be at the end of economic theory.

Peter Drucker
The New Realities

Money-innovation and the Next Economy There is an indisputable relationship between innovations in money and the progression of economic systems. As well, there is acceleration in the pace of evolution for both our money and our economic system:



The **agricultural era** developed over a period of **three to five thousand years**. Productivity improved and products diversified with the emergence of barter and early forms of money (shells, precious stones, gold and silver coins). The **industrial era** matured in a mere **three to five hundred years**, propelled by the emergence of paper currency and checks, and the growth of banking systems. Today's **global high-tech era** is maturing in an astounding **30 to 50 years**, spurred by electronic banking, credit cards, and e-commerce. (Adaptation of Russell, 1993)

It is not difficult to imagine that a new economic era — turbocharged by the next innovation in money and payment platforms — could suddenly be upon us due to the rapid pace of innovation and global adoption in modern business. This chapter refers to the emerging economic era as “*Sustainable Prosperity*.” In non-economic language, it could be termed an era of *global peace and cultural appreciation*; an era of *universal human development*; or an era of *spiritual renaissance*.

Three Awakenings provide new vision and strategies for rapid and sustainable global economic development. The term “Awakenings” is used because we often awaken to things that are already present, yet not in our consciousness. Such is the case with *Sustainable Prosperity*; all of the needed resources are already at hand, but exist below the level of our collective consciousness.

At defined moments in history, seemingly intractable beliefs and institutions are often rapidly transformed. The millennia-old practice of chattel slavery ended in the United States in the course of a five-year Civil War. The 3000-year-old paradigm of “man will never fly” was shattered in eight seconds and 120 feet at Kitty Hawk in 1903.

Environmental issues have surfaced at the center of business and social concerns in a mere decade.

The Three Awakenings:

- “*Sustainable Prosperity*” is already replacing “Scarce Resources and Unlimited Wants and Needs”⁴ as the foundation for modern economics and commerce.
- Outdated notions regarding money and competition undermine productivity and sustainable growth in the high-tech global economy.
- Cultivating a *Green Revolution of the Heart* will foster the determination to mobilize the resources necessary for the rapid worldwide development of a sustainable economic system.

Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them.

Jesus Christ
The Gospel of Matthew

Awakening #1: *Sustainable Prosperity* is already replacing “Scarce Resources and Unlimited Wants and Needs” as the foundation for modern economics and commerce. (Hodroff, 2003)

“Scarce Resources and Unlimited Wants and Needs” is the foundational premise of free-enterprise economics. Achieving the greatest good for the greatest number, by necessity, calls for an efficient and equitable way to distribute the good things in life, which are — theoretically — in limited supply. There was indeed a time in human history

⁴ Human “needs” is an entirely subjective assessment which the author chooses not to define for anyone other than himself. While there are a variety of basic necessities for human survival (food, shelter, clothing, physical and emotional nurture, etc.), human existence is about far more than surviving. One person’s perceived needs (college education, single family dwelling, late model vehicle; manicure and facial) might be another person’s perceived luxuries.

when everyone could not attain adequate food, shelter, clothing, education or healthcare, not to mention many of the so-called finer things in life. Sadly, we have not updated our economic premise to match current economic realities, and the consequences are unnecessary suffering across the globe and a lower quality of life for everyone.⁵

Using the example of food and world hunger, consider whether this premise of modern economics is perhaps outdated: Food is not a “scarce resource.” It is an abundant renewable resource. There are no “unlimited wants and needs” for food. The consequences of overeating are obesity and poor health. Hence, both halves of the premise “scarce resources and unlimited wants and needs” are erroneous. Meanwhile, people die of starvation all over the world, despite the fact that global agribusiness — one of the most powerful industries on the planet — desires to sell and deliver more food to more customers. So, the issue of world hunger is not a matter of scarcity, but rather a matter of financial resources.

Food is only one of countless products and services that are no longer in scarce supply. Healthcare is fundamentally an abundant renewable resource. There is more and better healthcare available each and every day, and we need never run out of healthcare. We also have an enormous capacity to train more doctors, nurses and other healthcare professionals when they are needed. There are not unlimited wants and needs for healthcare, either. Putting aside a handful of hypochondriacs, we all have far better things to do with our time than to pursue endless diagnoses and treatments.

High quality education is similarly an abundant renewable resource. Like food and healthcare, there is virtually no limit to the amount of education that can be produced. Many quality educational institutions, the world over, seek more students or, if financial resources became available, would eagerly expand to serve more students. We can also train educational personnel as needed. Meanwhile, there are limits to the number of classes that anyone can take, even if they took classes around the clock, so there are not unlimited wants and needs for education.

In ever more countries around the globe, there are now enormous surpluses of desirable products and services. This is an attribute of free-enterprise capitalism that will be further examined below. Such is not the case everywhere, of course, but it is true for more people and places than ever in human history. There are more books, newspapers and magazines than it is possible to read. There are more television programs, radio shows, movies, museums, concerts and theatrical events than anyone could ever watch or attend. Eager fans can not attend even a small percentage of all the sporting events in progress at any given time. There are more restaurants than anyone can eat at; more travel destinations than anyone can visit; more lectures than anyone can attend and so forth — and there is more of everything all the time!!

⁵ The consequences of operating from an outmoded economic premise are not merely poverty, famine and disease for hundreds of millions of people in poor, non-industrialized nations. There is a direct relationship to social and economic problems in industrialized nations as well — crime, addictions, job stress and pollution affect people from all social and economic classes.

Of course there are things in life that are in short supply, for instance Rolls Royce automobiles or mansions on mountaintops. But it would be absurd to postulate that a core problem in the global economy is that every family does not have a Rolls Royce or a mountain villa. **“Scarcity” is no longer the dominant economic reality;** therefore, we need a new foundational premise. Consider, instead, that the essential challenges of sustainable global economic development can be met utilizing existing resources. We are just a little confused about how to pay for things.

Awakening #2: Outdated notions regarding money and competition undermine productivity and sustainable growth in the high-tech global economy. (Hodroff, 2003)

There is perhaps no greater bewilderment in life than the confusion in economics between money and wealth. Money — the tool — is equated with wealth, the material and technological resources that contribute to the material quality of our lives. We live surrounded by immense, undistributed wealth and underutilized business capacity side by side with enormous, unsatisfied human needs. Meanwhile, as we compete over money a mere fraction of our available wealth is actually distributed.

Imagine the absurdity of a movie theater with plenty of empty seats running out of tickets to sell and turning away eager customers. Our global economy operates no differently. Large and powerful companies have food, medicine, housing, computers, automobiles, airline flights, telecommunications services and more, all of which they desire to sell. But if individuals or communities lack financial resources (tickets), businesses rarely devise another way to sell and deliver their products and services. So, **these very businesses downsize and even fail, while there is still an enormous unmet need for their offerings around the world.**

Then suddenly, with grokking so blinding that he trembled, [Valentine Michael Smith, the Man from Mars] understood money. These pretty pictures and bright medallions were not “money”, they were symbols for an idea which spread through these people, all through their world. But things were not money.... Money... was a great structured symbol for balancing and healing and growing closer.

Robert Heinlein
Stranger in a Strange Land

Earthlings in the 19th and 20th Centuries came to depend on money as the critical ingredient in commerce and economic life. But in the high-tech global economy of the 21st Century, this time-honored approach is holding us back. In a world of abundant wealth, side by side with enormous unmet human needs, only money is lacking to distribute that wealth. But how can money — a mere symbol, and our own invention besides — ever be in short supply? First we will examine and confirm this puzzling **reality**; then we can explore feasible **solutions** to the dilemma.⁶

⁶ Appendix One explains in more detail why today's money does not efficiently match available wealth with unmet human wants and needs.

The Reality An example of the *money versus wealth* dilemma is the periodic “soft” home construction market in the US and elsewhere in the world. There is never a soft home construction market because everyone enjoys decent housing. Nor is there a lack of boards, nails, concrete, shingles or electrical power to run construction equipment. A soft market in home construction has never been blamed on a lack of skilled labor or capable management. Lastly, there is certainly no lack of infrastructure — transportation, financial or telecommunications — to support new home construction. All that is ever truly lacking is money (consumer purchasing power) for willing homebuilders and eager homebuyers to each get what they desire. Put another way, every necessary *factor of production* is at hand, *except money*: producers and customers; materials and energy; skilled labor and management; needed infrastructure. Yet, **money was invented to promote commerce, not to inhibit it**; so what is wrong with this picture?

At this point, economics provides only a rationalization, not a rational explanation, for the problem. It is argued that people lack the job skills to add value to the economy; that is why they lack the purchasing power to buy homes. Only by stopping to examine this commonly accepted explanation can we move beyond where we are currently stuck.

In the US and around the world, there is an inestimable amount of work to be done at every level of job skill: the construction of homes, schools and health care centers; growing and distributing food; providing childcare, senior care, youth mentoring and better student teacher ratios in schools; improving the energy efficiency of existing homes and businesses. None of these services require high-tech, high-skilled workers. It is all within the skill set of millions of unemployed and underemployed people around the world.

So, how can there be needed work side by side with people who possess adequate skills to do the work, with *only a lack of money* to bring needed work and available labor together? Once again, we must reflect on how **money was invented to promote commerce, not to inhibit it**.

*No problem can be solved from the same level of consciousness
that created it.*

Albert Einstein

The High Cost of our Confusion over Money Consider the economic insecurity of many senior citizens, wherein tens of millions of our parents and grandparents struggle to make ends meet. Meanwhile, seniors who currently enjoy sufficient resources are vulnerable to a decline in the stock market, the insolvency of the US Social Security system or the liquidation of a pension fund. Each of these three financial institutions — precisely like money itself — is our own invention, and each boils down to nothing more than numbers in a computer. (adapted from Skinner, 1948)

Our level of thinking in this matter is totally inadequate: regardless of whether or not these institutions perform well or poorly, the goods and services that our senior citizens require for a high quality of life are more plentiful every day. If there was a decline in the stock market, the failure of a pension fund, or even insolvency of the entire social

security system, the U.S. economy could still produce more and better goods and services on a daily basis.

This exemplifies the confusion in economics over money and wealth. While individuals, families and businesses might have financial problems — as in the example above — we would have lost none of our real wealth (materials, energy, technologies, skilled people and infrastructure). We could produce everything that our senior citizens need, exactly the same as before the financial problems. Financial problems are money problems... *numbers in a computer problems*. They are not production and distribution of goods and services problems. Economics has collapsed the issues, thus creating a crisis where none need exist, by collapsing the distinctions “money” and “wealth.”

Consider this metaphor: If a computer system holding millions of bank accounts failed, everyone would know that it was only an accounting issue. We would quickly find a way to reconstruct the accounts and make sure that people did not suffer. But when a financial institution or financial instrument is in trouble (pension fund, stock market, bank, Savings and Loan, Social Security system, valuation of the dollar, etc.), we become frightened and act as if real wealth is lost or unavailable. Under these circumstances, it is deemed logical that people lose their livelihoods or their life savings. We fail to distinguish that these institutions are merely collections of accounts, i.e. numbers in computers.

Everything that supports our quality of life remains standing: farms, factories, grocery stores, hospitals, universities, restaurants, fitness clubs and retailers. It is difficult to grasp, but if one or more financial institutions were to fail, *the economy would still have all the same real wealth*, despite what happens to the electronic debits and credits in people’s individual accounts.

If we awaken to the difference between money (the accounting tool) and wealth (the goods and services that our seniors require), we will see that our seniors face artificial and unnecessary economic hardships. Empowered by the distinction between money and wealth; businesses, government agencies and community organizations can together address not only the needs of our senior citizens but also of people the world over.

Imagine walking along a river and suddenly noticing babies floating past and drowning. How would you react? Would you jump into the river to save as many babies as you can? Would you call to others to bring boats and nets, perhaps saving even more babies? Or, would you work your way upstream to discover what is putting babies in the river? While the first two approaches would each save some babies, only the last approach can possibly get to the systemic root of the problem.

Innovation, Best Practices and Paradigm Shifts There are currently many exciting innovations in economic development that function within the existing money paradigm.

Three examples are: micro-lending,⁷ services to unbanked populations⁸ and affinity donations through credit card purchases.⁹ Together, these worldwide efforts send billions of dollars of direct financial aid and services to economically disenfranchised people. There are two useful observations to make regarding these programs: first, these programs demonstrate that people, en masse, are eager to help improve the lives of individuals, families and communities the world over; second, they also demonstrate the serious limitations of economic development approaches that rely on traditional financial resources. While these programs may offer critically important economic safety nets, neither safety nets nor foreign-aid by themselves can create sustainable families, communities or economies.

It is noteworthy that the evolution of money demonstrates for us how best practices must be transcended to transition to a new paradigm. Gold and silver coins did not emerge from improvements in barter. The leap to coins required the application of new knowledge in smelting and minting. Similarly, the invention of paper currency and checks did not result from advances in the minting of coins, but rather represented a new paradigm in money, based upon the invention of printing.

Best practices in managing paper currency and checks did not lead to the introduction of credit cards, which were an outgrowth of computers. Similarly, e-commerce was as an outgrowth, not of credit cards, but of developments on the World Wide Web.

The next section briefly surveys three new-money models, perhaps offering a glimpse at the next economy, while providing sustainable business strategies to for-profit and nonprofit entrepreneurs.

(1) The Non-cash Economy and a Currency Exchange While money may make the world go 'round, it is certainly not the only game in town. Eight types of noncash transactions are briefly surveyed below. They are as mainstream as apple pie and as effective — each in their own way — as cold, hard cash. Together, they form a parallel non-cash economy of extraordinary breadth and power, where virtually anything that can be produced and distributed with money is already being produced and distributed without traditional financial resources. And, similar to the way that national economies utilize currency exchanges — converting pesos into dollars and vice versa — it may serve us to find ways of bridging the cash and non-cash economies. (Hodroff, 1993)

⁷ Micro-lending is the practice of providing minute loans (by the standards of industrialized countries) to entrepreneurs in non-industrialized nations, which enable the recipients to start or expand small businesses. Loan proceeds might be spent to purchase a cow, a sewing machine or a small amount of retail inventory.

⁸ Services targeted at the unbanked are a major initiative by credit card companies and banks to attract new customers who do not currently use bank accounts, credit cards and other mainstream financial services. There are win-win features for both sides of the relationship, with training in financial literacy often a component in the offering.

⁹ Affinity donations from credit card purchases, such as a Sierra Club Visa Card or an alumni association MasterCard, send contributions to a chosen cause, demonstrating both cause-related marketing and socially responsible business.

1. **Barter** Barter or trading is a legal, taxable form of commerce, used every day by individuals, families, businesses and nations. While most people think of bartering as a direct two-way trade (referred to by economists as “dual coincidence of needs”), modern barter is facilitated with a barter dollar or trade credit. A circulating “barter unit” supports ongoing commerce and makes possible an unlimited number of exchanges. (www.irta.com)
2. **Volunteerism** There are paid fire departments and volunteer fire departments; both put out fires. There is paid delivery of restaurant meals and “Meals on Wheels,” delivery by volunteers. Each day volunteers keep hospitals, schools and community organizations running smoothly. The volunteer economy operates on a uniquely level economic playing field. An hour of time contributed by a homemaker receives the same recognition as an hour of time contributed by an attorney. (Toffler and Toffler, 2006)
3. **Open Source Software Development** Both UNIX and Linux are operating systems using billions of lines of software code. UNIX is not better than Linux because it cost billions of dollars to create and maintain, while Linux was developed cooperatively and distributed freely as Shareware. Companies, such as IBM and Sun Microsystems, are already building bridges between their own proprietary, cash-based, software systems and the collaborative, free, Open-Source systems. This may be one example of how we can create “currency exchanges” between the cash and non-cash economies that are market-based and profit-driven, as well as socially responsible and sustainable. (Raymond, 2001)
4. **Self-help and Mutual-aid Groups** There exists a parallel non-cash healthcare system founded in the United States and operating globally. It is known as the 12 Step program of Alcoholics Anonymous (AA) and is reflective of many such initiatives. While some people pay cash for treatment of alcoholism or drug addiction at private, public or nonprofit hospitals and clinics, millions of others go weekly to church basements and coffee shops. In these “collective self-help” meetings, no one is charged and no one is in charge. There are no doctors or trained professionals treating people, no medications prescribed, no medical equipment in use, no dedicated buildings, few paid employees and no paperwork. AA — and its offshoots for compulsive gambling, overeating, shopping, workaholism and so on — are spiritual programs where all who suffer are welcome. (www.aa.org)
5. **Family Economics** Today, we have a proliferation of paid domestic services including childcare, senior care, cooking, housecleaning, laundry, lawn and garden care, snow removal, home repairs and so forth. While it is most likely impossible to assess the superiority of paid domestic labor over unpaid (note the hue and cry by some for moms to stay at home), it is clear that many people earn a paycheck for the very same activities for which others receive little or no compensation. Paying credits to stay at home caregivers and other domestic workers, while using a currency exchange to help them spend those credits within the cash economy, could raise the quality of life for millions, while rewarding activities that promote the well-being of families and society.

6. **Loyalty Rewards (business scrip)** The last 10 years has seen an explosion in customer loyalty programs, such as frequent-flyer miles, American Express Membership Rewards, Starbucks Points, etc. (www.colloquy.com) As a competitive marketing tool, loyalty rewards are a creative form of discount, e.g.; buy six flights and get one free. Yet the market has responded enthusiastically to this non-cash form of currency, despite the challenges of redeeming trillions of outstanding miles and points. Moreover, business scrip suggests a useful distinction for new money. Scrip is backed by the products and services of businesses, rather than by government promises to issue more money in the event of a money crisis. As well, business scrip demonstrates money that is simply an accounting tool or ledger entry. For example, frequent-flyer miles are issued, redeemed and then taken off the books. They do not circulate. (Hodroff, 2003)
7. **Complementary Currencies** There is a growing worldwide movement promoting a variety of non-cash, financial instruments, such as Time Dollars, barter credits, local currencies and social incentives. There is also a growing body of literature and websites explaining how new currencies can be used to enhance economic cooperation. There is also a modest and growing emphasis on sustainability issues. The focus tends to be on local commerce and individual-to-individual (C2C) transactions, but there is growing exploration of business-to-consumer (B2C) commerce. The term Complementary comes from the example of Complementary and Alternative Medicine (CAM), where practitioners see useful roles for both mainstream and alternative healthcare modalities. (Cahn and Rowe 1998; Lietaer, 2001)
8. **Nature** Nature is the largest economy on the planet, providing many lessons in how to operate with neither money nor bureaucracy. Nature is a gift economy providing humans with such free resources as energy, raw materials, medicines, food and entertainment. As an example, the sun blesses us every day with light and life-giving energy.

The sun, as part of the global commons (which is everyone's birthright), is inclusive and its energy is abundant and reliable. Therefore, people do not compete over or seek to hoard sunlight, hinting at what human nature might be like in an economy with sufficient resources for all. The awesome power and mystery of nature has been the source of fearful metaphors, such as "survival of the fittest." Yet nature's creatures neither work ceaselessly nor worry incessantly as humans often do. Native and Aboriginal cultures the world over call upon the rest of us to recognize the gifts and the teachings of our generous Mother Earth. Explorations of a next economic era would be well served to grapple with this wisdom.¹⁰ (Swimme, 1992)

¹⁰ Editor's note: Current economic theory is linear and thus inevitably at odds with all cyclical systems — which includes the entire universe. Meanwhile, one of the few things in the universe that is linear is current economic thinking.

Try to visualize empowering ways of integrating these non-cash systems into the mainstream cash economy. Imagine the common benefits that could befall businesses, families, communities and the environment. What might it be like to enhance employee wages and benefits without increasing cash labor costs for employers? Imagine a non-cash approach to Social Security that didn't raise taxes or risk anyone's life savings in the stock market. What if a community that lost jobs to downsizing or out-sourcing had alternative financial resources to quickly help everyone into new productive roles in the economy? Within the non-cash economy, these things are happening every day in one form or another. They are simply not yet systematically applied to the global economy.

While the cash economy is powerful, productive and well organized, the non-cash economy is powerful in its own ways and indispensable to a healthy, functioning society. While the cash economy focuses on producing goods and services for sale, the non-cash economy is a stronghold of important, social values, such as cooperation, compassion, family and community ties, mentoring, and religious or spiritual strength. The non-cash economy also demonstrates both a more level economic playing field and a myriad of creative solutions for our lack of traditional financial resources.

(2) B2C and Dual Currency Bartering When people and businesses lack financial resources for desired commerce, they sometimes turn to bartering or trade. Barter represents as much as 25 percent of the global economy, yet it is not nearly closing the gap between the current quality of life and what the high-tech global economy makes possible. As barter is a moneymaking proposition for businesses, it is an example of how the profit motive can be part and parcel of money-innovation. Two innovations in the practice of barter could dramatically increase the flow of goods and services to where they are needed around the world.

Barter Innovation #1: The first improvement to traditional bartering is the possibility of wide-scale B2C (business to consumer) bartering. At present, there are two types of barter:

- **B2B** (Business-to-Business) bartering is where companies swap their products and services with one another to save cash: restaurants barter meals for menus; hotels barter rooms for airline flights for their executives.
- **C2C** (Individual-to-Individual or Consumer-to-Consumer) bartering is plain, old-fashioned horse-trading: a neighbor gives babysitting for vegetables from her garden; two friends trade house painting for car repairs.

Until now, the complexity of modern Business-to-Consumer (B2C) bartering has made it inconceivable. Imagine grabbing a basket of vegetables and heading down to Home Depot in hopes of bartering for a new saw. Yet, the coordinating power of the Internet and the self-organizing acumen of social networks (Craig's List, Wikipedia, FaceBook, My Space, etc.) make Business-to-Consumer bartering imminently feasible. Though B2C bartering businesses could enjoy more customers and individuals could enjoy more products and services whenever traditional financial resources are insufficient or unavailable. A B2C barter network could match needed work in communities (childcare, senior care, youth mentoring, home construction, green community education, etc.) with people who need jobs.

Barter Innovation #2: A second improvement to traditional barter would help businesses to increase their bartering, by protecting and improving their cash flows. A business can not barter too much of its excess capacity (or offer too many “in-kind” contributions to community causes) before disrupting its cash flow, because every business has hard cash costs tied up in materials, labor, overhead, etc. If, instead of a full-barter deal (or a full “in-kind” contribution to a community organization), a merchant charged part-cash and accepted part-barter, then it could barter right up to the limits of its capacity without fear of disrupting its cash flow. As well, if the cash portion of the exchange included a profit, then part-cash; part-barter exchanges would even improve a merchant’s bottom line.¹¹ (Hodroff, 1997)

(3) DualCurrency Commerce: A Bridge to the Next Economy¹² *DualCurrency* Commerce integrates popular business tools (electronic payment systems, barter, customer-loyalty rewards, affinity donations and employee volunteerism) with money-innovation to advance sustainable economic development. Instead of merely rewarding customers for their spending activities (which doesn’t promote a very level playing field and is not the most constructive behavior that we can reward), why not reward behaviors and support causes that we value? Examples include incentives for:

- young people to stay in school, get better grades and graduate
- community volunteerism to build healthy communities
- sustainable behaviors, such as recycling, carpooling and using alternative energy
- wellness activities that improve people’s health, while lowering healthcare costs

Where would we find the funding for such an exciting array of rewards? Through the *DualCurrency* lens, the answer is obvious. We can use excess business capacity, just like backing frequent-flyer miles with empty airline seats, backing Star Bucks Points with cups of coffee, or backing Disney Bucks with rides at Disneyland.

EcoBucks: an Example of Green Incentives¹³ Sally Anderson is a volunteer for the Sierra Club. Sally receives 10.00 EcoBucks (E\$) for each hour of promoting public awareness on environmental issues. As she canvasses door to door, the EcoBucks program also offers incentives to community members for recycling, carpooling and improvements to the energy efficiency of their homes. Sally goes on-line to learn where she can spend her EcoBucks. She sees that the Olive Garden Italian Restaurant offers *DualCurrency* specials at lunchtime. Sally takes a friend to lunch and pays the \$20.00 tab with her *DualCurrency* VISA card. The merchant receives \$12.00 in US dollars and E\$8.00 (this is similar to the economics of “2 for 1” dining specials; other merchants would have different ratios of dollars to EcoBucks). Sally can go on-line, any time, to check her EcoBucks earning and spending.

¹¹ The impetus for a business to barter its excess or underutilized capacity is what economics terms the *marginal cost of production*. It is the same principle behind discount offers such as “2 for 1” dining, senior discounts, dollar movie night or cyber-fares. Once fixed overhead is covered, even highly-discounted sales can be profitable.

¹² For more information on *DualCurrency* Economics see Appendices I and II and the White Paper at <http://www.DualCurrency.com/commercepages/whitepapercomplete.html>; for suggested applications of the concept visit www.DualCurrency.com

¹³ Businesses and organizations throughout the essay are examples only; no contracts are implied



* sample ratios and restrictions that create a dualcurrency industry standard



Businesses are illustrations only; no contracts implied

DCS DualCurrency Systems

2

Everybody Wins with EcoBucks:

- The Olive Garden enjoys additional sales and incremental profits without advertising; they also promote sustainability by exchanging underutilized business capacity for EcoBucks earned by community volunteers
- Sierra Club improves volunteer recruitment and retention, while encouraging sustainable commerce and a new economy
- Sally and her friends save cash and support participating businesses, while the community gets a better environment

A Sample *DualCurrency* Pilot Program for Global Economic Development A Sister-City program is established between Minneapolis, Minnesota, and Monterrey, Mexico. Each city has developed a *DualCurrency* Business Network that honors EcoBucks. The focus for earning E\$ is the construction of modest, solar adobe homes in the less affluent neighborhoods of Monterrey. Spending EcoBucks supports retail merchants in both cities and increases commerce between the U.S. and Mexico. Universities in both cities have agreed to accept E\$ towards tuition, books, meals and student housing. Many students enroll in the EcoBucks program for the opportunity to subsidize their college educations, while helping to create a better world.

Professionals from both Mexico and the US also earn E\$ as architects, engineers, construction managers, hospitality coordinators, merchant liaisons and so forth. In Minnesota, the mobilization to improve housing in Monterrey looks like a blend of work-study, the Peace Corps and a community outpouring to address a natural disaster. There is a great commitment by Minnesotans to learn the language, the culture and the economic realities of residents in their Sister City of Monterrey, which creates solidarity among *DualCurrency* Network members on both sides of the boarder.

Fernando and Melissa are students at the University of Monterrey. They earned E\$ during their freshman and sophomore school years by working part-time in the

Monterrey Solar Housing Project. When Fernando and Melissa take a year to study at the University of Minnesota, they save a great deal of money buying everything possible on a *DualCurrency* basis: airfare between the U.S. and Mexico, restaurant meals, local entertainment in Minneapolis, clothes, school supplies and gifts are all purchased in a combination of Pesos (converted to US dollars) and *EcoBucks*.

In Monterrey, the *EcoBucks* campaign is much more than a typical volunteer program. Because of cash-like financial incentives, a powerful alliance has developed, which includes the Mexican construction industry and the building trades unions; the Universities and their faculty, workers and students; local retail merchants and community members. An explosion of creativity and resources are harnessed, spawning a cooperative, win-win attitude in the community. (Hodroff and Halvorson, 1999)

DualCurrency Tithing: New Financial Resources without Charity or Taxes

Innovation in the nature of money, as well as how it is used, offers commercial opportunities with important social benefits. (Hodroff, 1997) As an example, *DualCurrency Tithing* blends *DualCurrency* pricing with the age-old religious practice of tithing.¹⁴

Everyone in a *DualCurrency Network* pays for products and services partly in cash and partly in rewards (generically termed *DualCurrency Dollars*). While everyone pays the same prices for goods and services, those with greater financial resources voluntarily pay a higher percentage of US dollars (US\$), so those with fewer financial resources can pay with a higher percentage of *DualCurrency Dollars* (DC\$).

For example, an upper middle-class family might pay for a \$40.00 restaurant tab with US\$32.00 and DC\$8.00. This would allow a lower income family in the Network to enjoy the very same \$40.00 dining experience by spending US\$12.00 and DC\$28.00. (see Appendix One for more details) It is a bit like teaming-up on the benefits of two for one dining or senior discounts. Both families have produced value in the economy and each can afford an enjoyable family dining experience.

New Organizational Forms for a New Economic Era Every new economic era manifests new organizational forms to achieve its full potential. Democracy, for its part, produced elections, as well as legislative, executive and judicial branches of government to move society beyond rule of kings and queens. A Federal Reserve System was devised to make paper money and banking workable. New organizational models have already emerged to support rapid and sustainable economic development, as well as a more level economic playing field worldwide.

Observe how the World Wide Web operates without governmental direction, elections or even a management team. The system functions efficiently based upon a set of original **design principles**, appropriate to its mission of universal access and the sharing of information. The Internet is an example of a complex, adaptive system because it grows and changes organically to address the needs of its stakeholders:

¹⁴ Tithing is the practice of giving ten percent of one's income to the church or charitable causes.

individuals, businesses, buyers and sellers, industries, universities, governments, nonprofit organizations and communities. The Internet demonstrates just how adaptable a high-tech network can be.

The worldwide fellowship of Alcoholics Anonymous (AA) is an example of how a spiritually based, people-oriented organization can also be a complex adaptive system. The second Tradition of AA states, “Our leaders are but trusted servants; they do not govern.” There are no elections and no management group running AA, yet tens of millions of people around the world collaborate in weekly meetings to recover from alcoholism, drug addiction and other maladies. (Hodroff, 1991)

Perhaps most germane to our pursuit of money-innovation and economic transformation is a complex adaptive system in the financial-services industry. VISA International is a cooperative, self-managing network of banks, operating from core design principles in a decentralized and nonhierarchical manner. VISA Founder Dee Hock coined the term ‘Chaordic’ from “chaos and order” (balancing competition and cooperation) to describe what was, at the time of VISA’s founding, a revolutionary, new business model. (Hock, 1999)

Supported by the Internet, and reflecting a growing desire by people to manage their own affairs, there has been enormous growth in organizations operating through grassroots participation. Social networks, gathered around various projects and missions offer new organizational structures for commerce, community service, education, news and more. Wikipedia, for example, is an on-line community building and maintaining an ever-growing, ever-changing encyclopedia. The community monitors content, repairs damage to the site and answers questions from interested people. Craig’s List is a free, on-line alternative to traditional paid want ads in newspapers. People and businesses post ads on Craig’s List with little intervention by the Founder or paid staff. (Brafman and Beckstrom, 2006)

MySpace, YouTube, FaceBook, LinkedIn, Ecademy and many other social and business networks engage hundreds of millions of participants, fostering virtually unlimited individual and collective self-expression (within the norms of the community). These networks function at the local, national and international levels. If a mass campaign for rapid and sustainable global development caught on through these networks, it could have tens of millions of participants overnight. On-line social networks represent a platform for electronic town-hall meetings, stakeholder consensus building and mass grassroots participation in the next economy. They are also examples of cooperation beyond the traditional left versus right political framework. There is little partisan activity in social networks. People of the most diverse opinions, economic backgrounds, cultures and lifestyles are collaborating side by side—or, perhaps better put, electron-by-electron.

From Win-Lose Competition to Win-Win Collaboration Our economic system functions, primarily as a zero sum game of winners and losers; not because it has to, but because the design principles of money and economic competition push it in that direction. (Henderson; 1996) Employee wages are held down for investors to enjoy a high rate of return. A company harms the environment in which its community lives to control its manufacturing costs. School programs for youth are gutted to avoid higher

taxes. Jobs are shipped overseas, while families and communities suffer economic hardships. Unfortunately, there is no clear alternative, today, for how to play the game. The final section of this chapter holds out the possibility that win-win solutions are already at hand, and that we need merely awaken to our courage, creativity, faith and open-heartedness.

Every few hundred years in Western history there occurs a sharp transformation. Within a few short decades, society—its world view, its basic values, its social and political structures, its arts, its key institutions—rearranges itself. Fifty years later there is a new world. And the people born then cannot even imagine the world in which their grandparents lived and into which their own parents were born. We are currently living through such as transformation.

Peter Drucker
The Post-Capitalist Society

Awakening #3: Cultivating a *Green Revolution of the Heart* will foster the determination to mobilize the resources necessary for the rapid worldwide development of a sustainable economic system.

How can it be that the words idealistic and utopian have become pejoratives in the English language, implying that someone is out of touch with reality or that an idea is utterly impractical? What could be more practical than humans striving for a more ideal existence? What could be more meaningful than to pursue our full potential as physical, intellectual, emotional and spiritual beings? What could be more exciting than to leave a legacy for our children and our children's children of a world better than our own?

The first two Awakenings reflected the emergence of realistic solutions to seemingly intractable social, economic and environmental problems: First, abundant goods and services are now universally available from the business sector, through evermore sustainable methods of production and distribution. Second, while age-old business practices idolize money and competition, thus inhibiting economic progress, inventing new forms of money is a consistent ingredient in economic history. In addition, new high-tech organizational models — which support *unbridled economic cooperation* — are on the rise. The third Awakening addresses our motivation and human capacity to act for the common good and to birth an era of *Sustainable Prosperity* at this time in our history.

People from all walks of life and from all economic classes are today so busy putting out economic fires that there is precious little time to consider long-term, economic programs for the prevention of fires. It is thus imperative that we ask: What economic issues are so compelling that people will invest time, effort and resources to address them?

Protection of the environment and ending global poverty are two such critical issues, but for countless busy people, these are not personally compelling. In contrast, a *quality of life revolution* for individuals, families and communities could engage every type of person, from those in desperate financial circumstances to middle-class and affluent

people, experiencing their own brands of workplace and family stress, strain and despair.

Coping with Stress versus Thriving in Life Witness the global epidemic of addictive coping behaviors, as people struggle with the affects of economic uncertainty, workplace stress and a lack of genuine community. Besides widespread alcoholism and drug addiction (illegal drugs and prescription drugs), we observe a rise in overeating/obesity, gambling and sexual acting-out. Numbing out in front of television and on the Internet, as well as numbing out in depression, are all symptoms of too much stress. It can be argued that compulsive consumerism and workaholic lifestyles (including the social activist variety) also belong on a list of coping behaviors.

Lack of balance in our lives, including adequate time for physical, intellectual, emotional and spiritual pursuits, seems to drive large numbers of people to compensate with the accumulation of stuff... and more stuff..., which often leads to working longer and harder — and so the cycle goes on and on. Meanwhile, our physical and emotional health, as well as the well-being of our families and communities, pays an exorbitant price. (Kasser, 2002)

Busyness and Stuff are Booby Prizes Perhaps the greatest gift of *Sustainable Prosperity* will be the gift of time for personal, family, community and spiritual activities. Acute workplace stress and busy-sickness are examples that demonstrate how *our economy runs us*, rather than the other way around. People from every nation on Earth are increasingly bogged down in a money chase. Growing numbers question the quality of our lives, asking: How did my life come to this? Is this what I really want for myself and my family? How can we chart a new course?

Despite enormous advances in technology and productivity, economic competition, on a global scale, is driving individuals and families to work longer and harder just to maintain their current economic status. **But enduring a long and stressful workweek is neither a law of free-enterprise capitalism nor a characteristic of human nature.**

Economics is an invented game. We have played the money-chasing game and learned its benefits and limitations. It may be time to reinvent the game — or at least to rewrite the rules — so that: family time trumps over work time; our quality of life trumps over the toys in our garages; healing and growth trump over addictive coping behaviors; and loving kindness trump over fear and economic insecurity.

I loaf and invite my soul, I lean and loaf at my ease observing a spear of summer grass. Walt Whitman

Shortening the Workweek to Liberate our Family Time Once we grasp the distinction between money and wealth and the enormous lost productivity from the competitive money-chasing game, we will awaken to a surprising reality: The high-tech global economy already produces everything required for all of us to be economically secure on the physical plane. By working together for the common good, we can all have as much food, healthcare, education, travel and entertainment as we could ever use. The big challenge — and opportunity — is to create the leisure time to enjoy the

life that capitalism now makes possible. Three examples will demonstrate: (a) sharing necessary and productive labor; (b) eliminating environmentally harmful products, and (c) visionary action by our political leaders that will speed the arrival of *Sustainable Prosperity*.

Appendix Two describes how we can pool currently wasted business capacity into a Virtual Community Warehouse, which can be used to back a next generation of money. This new money can be used to raise employee pay and benefits without raising cash-labor costs for employers. The impossible becomes possible; people can work ever-shorter hours and enjoy ever-greater compensation. (Skinner, 1948; Hodroff, 1993) Reducing the hours required to earn our daily bread is a logical benefit from continuous improvements in technology and productivity, but it has been impossible within a paradigm of *competition over scarce money*.

No More Unemployment (a): Picture one bank acquiring another bank; in today's competitive business environment, the next step is virtually inevitable: a large number of employees will be downsized out of their jobs, while those left behind will likely work longer hours with even less job security. Skilled employees are now walking the streets in search of new jobs. But the economy has lost none of its productive capabilities. In fact, it produces more and better goods and services every day... some people have simply been deprived of electronic credits for their bank accounts.

Some simple and logical questions now arise: Why should anyone suffer a lower quality of life because their company becomes more efficient? Shouldn't the opposite be the case, where everyone benefits from improvements in business efficiency? In a healthy and inclusive society, what would be other ways to address this situation?

Consider the possibility that instead of laying anyone off, the available work could be shared by all those in the newly-merged company. In such a situation, all the right skills are on hand for job-sharing. Instead of the bank cutting labor costs to be competitive, the available cash for wages could be share among all the employees and the difference could be made up in *DualCurrency* Dollars from the Virtual Community Warehouse. An employee who was making \$100,000/year working 50 hours per week might now be making US\$60,000 and DC\$40,000, while working only 30 hour/week. Everyone would have *less job stress*, not more, while also enjoying more personal and family time. Why not? Society is richer, not poorer, every day. Of course, the bank can not produce this result with US\$ alone. However, in a *DualCurrency* economy, the bank, its employees and the community could team up to do it.

No More Waste (b) Think about the packaging of many consumer products today (perhaps remembering Adam Smith's famous pin factory tale). When you go to a store and buy a fancy men's shirt, you get far more than a shirt. It goes home from the store in a branded bag, which is advertising for the store. Before you can iron and wear the shirt, you must make your way through plastic wrapping, pins and cardboard, tissue paper and tags, and maybe even a plastic or cardboard brace around the collar. All this is trash that goes straight into the garbage — except that maybe the bag might be used to hold your recycling... and the cardboard might be recycled... and the pins might go with the rest of the pins that rarely get used for anything, but never get tossed out. Essentially, the only consumable part of the purchase is the shirt.

Now, imagine that environmental consciousness grows to where the market demand for products with excessive packaging declines precipitously (much like the market impact on McDonald's and Wal-Mart). The shirts would likely show up on hangers or in stacks as most other clothes are marketed today. In the current economic paradigm, if the environmentally harmful packaging was eliminated, many people would likely lose their jobs making plastic wrap, pins, cardboard, tissue paper and collar braces. But what if — instead of people losing their jobs — the situation could instead result in shorter working hours for everyone involved, with no reduction in pay or benefits for anyone? Impossible in today's economy, but a straightforward process within a *DualCurrency* economy!

Here's how it could work (the example is metaphorical, intended to show how greater business-labor-customer cooperation will produce win-win outcomes):

A. Production of 1000 shirts	B. Production of packaging for 1000 shirts
15 workers at 40 hours = 600 hours	15 workers at 40 hours = 600 hours
A minus B = C	
30 workers, requiring 20 hours each, produce the shirts without packaging in 600 hours	

By producing only the shirts, society has lost none of its consumable wealth. All that is lost are environmentally harmful products, leaving more people to perform fewer hours of work. Through sharing the available work, hours of labor can continuously fall. Meanwhile, employee compensation can continuously rise based upon ever-improving efficiencies in production. As in the bank merger example above, people can be paid in a combination of US\$ and DC\$, the latter backed by goods and services from the Virtual Community Warehouse. This is the *DualCurrency* approach to not only eco-conversion of harmful business products, but to unemployment, downsizing and outsourcing, as well as to peace conversion of military products and services in a world at peace (beating swords into ploughshares). If the economy is our own creation, why should it not afford each and every person a better quality of life day in and day out?

Beyond Politics as Usual (c): The Left versus Right polarization and stalemate within politics and economics is, in and of itself, an enormous waste of human and financial resources.¹⁵ Witness the unending debates over who is to blame for problems in the economy. Witness the enormous resources devoted to both failed business initiatives (market solutions) and ineffective government programs to end poverty or create more jobs. Witness the massive electoral campaign efforts that merely shift a few seats back and forth between Republicans and Democrats. Imagine the innumerable hours and dollars that might better be invested in a unified effort at sustainable economic development.

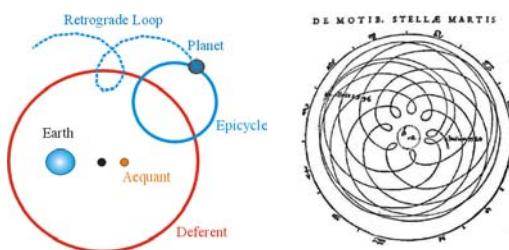
¹⁵ The list is long of who and what gets the blame for problems in the economy: the rich and the poor; politicians on the left or the right; global corporations, foreign competition and immigrant workers; the unions and poor family values; schools, teachers, parents and children. The targets of blame and people's political perspectives seem to go hand-in-hand. Yet not a single person alive on the planet today created the economic system that we all inherited, so why blame anyone... when blame gets us nowhere?

DualCurrency economic solutions transcend the Left versus Right debate, precisely because they are business-led, market-based and profit-driven; yet decidedly not “trickle down.” Currently wasted wealth in the economy could be put to work immediately for the benefit of all. Imagine if a handful of courageous politicians led the way into the next economy by job-sharing with their political rivals (in other words, team-leadership by Republicans and Democrats, with Independents, Greens, Libertarians and others joining in where useful). One possible system for sharing work has been described in this chapter. It could be immediately applied to sharing the job of political leadership. Imagine investing the resources now used for election campaigns into designing bi-partisan solutions to pressing social, economic and environmental problems. Then imagine that the candidates — who would have been competing for a single elected position — would share the office and the leadership role. They would be in a powerful position to mobilize their constituents in business, labor, government and the community to implement those new solutions. (see *Computer Democracy* in Appendix Two) Elected officials, who are job-sharing and team-leading, would be paid in a combination of US\$ and DC\$, requiring no burden on taxpayers.

What you do to the least of my brethren, you do unto me.
Jesus Christ
The Gospel of Matthew

Show me the love... Divine love, self-love, human solidarity, and our natural concern for the environment and all sentient beings are simply different faces of life's very essence. Cherished leaders throughout human history — Jesus, Buddha, Mahatma Gandhi, Martin Luther King, Mother Teresa and Nelson Mandela to name just a few — brought not only great vision and intellect to their efforts, but were distinguished by a commitment to universal love and compassion.

If “love” seems an odd topic for a discussion on sustainable, global development, it is because we have lost sight of the fact that economics exists to serve life — not vice versa. Modern economics is much like the old Ptolemaic model of the universe with the Earth at the center. While the model had most of the right elements, it was still inaccurate and unworkable. By simply moving the sun to its proper place at the center of the solar system, the model became instantly viable, helping science and society to advance.



Shifting the sun to the center of the solar system did not represent a change in the universe; it was our awakening to a more accurate understanding of reality. We can enjoy a similar awakening regarding the sustainability of global economics. The global economy is dysfunctional because we have put money at the center of the system; not just figuratively, but literally. Money is the gatekeeper for important economic activity; so individuals, families, communities and nations must pursue money to address even their most basic human needs. While economists and others might roll their eyes and say, “of course,” this discussion sheds light on a devastating limitation in our approach to economics: every single factor of sustainable development is at hand on a global scale; yet with insufficient money on the table, desired commerce doesn’t occur.

What should be at the center of our economic solar system to bring workability and greater vitality? While the answer may seem obvious—money and economics should revolve around people — consider that human values, and therefore economic values, are subjective. The welfare of human beings, protection and nurturance of the environment or, even, “the Greater Glory of God” might all be fitting foundations for economics and commerce. There was, perhaps, more wisdom than we realize when an earlier generation placed the slogan “In God we Trust” on our nation’s currency. With just a modicum of faith in a Higher Power — or merely in our fellow human beings — we might transcend our fears and doubts about the electronic numbers in our bank accounts that supposedly represent our economic security.

When people are loving, brave, truthful, charitable, God is present.

Harold Kushner

Imagine the global economy as an enormous business with different nations as its divisions and distributors. Few businesses could survive the number of underserved and dissatisfied customers in today’s global economy. On the other hand, if every nation had access to the technologies and best practices of a well run business, a great deal of human suffering would vanish overnight. Mass customization¹⁶ of products and services is one business process with significant practical applications to economics and society.

It would be pretentious to suggest that a new and hopeful economic vision would make people’s deeply held differences in values and lifestyles go away. The issues over which people disagree, often violently, are wide-ranging: eating meat versus veganism or vegetarianism; personal discretion in disciplining children versus the obligation to protect children from abuse; freedom of sexual expression versus religious prohibitions; as well as controversies over abortion rights, recreational drugs, handguns and automobile emissions are just a few examples.

Maslow’s Mobile: Embracing Diversity through the *Mass Customization of Social and Economic Life* Maslow’s hierarchy of needs is a familiar framework for categorizing human wants and needs. (Maslow, 1954) Maslow’s hierarchy is neutral

¹⁶ Mass customization in manufacturing combines the competitive efficiencies of mass production with the customization of products to fit the niche preferences of customers; in other words it is a process for each person to get exactly what they want, rather than to settle for what a majority of people might prefer, thus pointing towards a new brand of consensus economics.

regarding preferences in such areas as cultural and religious values, lifestyles, political views and so forth. Below, we will apply Maslow's framework to the challenges of diversity in economic planning and development, while offering a modification to the hierarchical model.

First, in Maslow's view, the physiological needs at the bottom level of the hierarchy, such as food, shelter, clothing and healthcare are fundamental to every person's well-being and a prerequisite for meeting higher-level needs and desires. From a sustainable development vantage point, this first level reflects the only human needs that require substantial material resources. The other needs and desires — safety; love/belonging; esteem and self-actualization — are met through development and/or exchange of human physical, intellectual, emotional and spiritual reserves. This human capital is virtually inexhaustible and can not reduce the Earth's nonrenewable resources.

Second, a standardized hierarchy is a poor framework for thinking about human wants and needs. To begin with, there is no standard human being; we are each as unique as snowflakes, even within common social or economic groupings (race, ethnicity, gender, religion, economic class, affectional preferences, national origin, etc.). As well, a structure that is wide at the bottom and narrow at the top implies that what is at the top is scarce or of universally higher value and/or may be difficult to obtain. It also implies that fewer people will fit at the top. Maslow's hierarchy also suggests that people must ascend the levels in sequential order, rather than skip over levels or progress back and forth across levels. None of these inferences are necessarily accurate. Therefore, another framework for considering human wants and needs may be better suited to the design of diverse, inclusive and equitable social structures.

Imagine, for a moment, society as a mobile with human wants and needs represented by objects of every imaginable size, shape, color, pattern, weight, and material composition. Such an approach suggests virtually infinite freedom of choice, which is part and parcel of the democratic, free-enterprise ideal.¹⁷ A mobile further suggests that wants and needs can be prioritized by individuals or within communities and are not at all standardized.

The key requirement for workability in a mobile is *balance*, and in achieving balance everybody wins! A mobile also suggests that we are all in the same boat, together, and that win-lose politics and economics does not work. Stated in Maslow's terminology, there can not be much individual self-actualization unless and until there is universal self-actualization; or as Jesus so eloquently stated, "What you do to the least of my brethren, you do unto me."

What does all this mean for the lives of individuals, families and communities? To begin with, *mass customization of social and economic life* would help everyone to *live and let live*, because other people's economic choices would not represent a threat to our own nor to our future economic security. If, indeed, real or perceived material scarcity fosters economic insecurity, then material sufficiency, economic stability and equitable relations

¹⁷ This is an expression of the democratic philosophy that "one should have the right to do whatever one desires, as long as it does not abridge the rights of others."

would likely bring out the best in human beings — compassion, trust, cooperation and full self-expression.

In such a society, people might lose interest in running other people's lives and find greater satisfaction and joy in their own lives. In a world of *Sustainable Prosperity*, ever fewer people would likely use their precious time for political battles over public policy and the distribution of numbers in computers. Today's political acrimony might become outmoded, like the once commonplace practices of cannibalism, witch-hunts and chattel slavery.

A prosperous and sustainable global economy would have many more resources for people to build communities with others who share common values and lifestyles. Popular social networks such as FaceBook, MySpace and YouTube could easily bring such groups together. Taking a page from bygone days, some people might create communities with their religious and spiritual fellow travelers. Hunters might build eco-villages on privately-owned wooded lands, while animal protection advocates might invest heavily in wildlife preserves. With abundant renewable resources available, it is possible that a new Global Peace Corps would help to construct culturally appropriate eco-villages in non-industrialized nations. This would provide homes and jobs for local residents, while offering eco-vacations and cultural exchanges to people from around the world.

Perhaps, in a world where everyone has access to good paying jobs with reasonable hours of work and plenty of leisure time, there would be little interest in financially motivated crimes; especially if stealing numbers from other people's accounts made little difference in your material well-being. The utopian possibilities of *Sustainable Prosperity* can be the subject of many chapters and books. Suffice it to say, abundant economic resources pose a grave threat to unnecessary human suffering on the planet and an alternative to current political strife.

In conclusion, four action steps will help to advance *Sustainable Prosperity* and to awaken a *Green Revolution of the Heart*:

1. Economists are invited to critique improve and promote the Awakenings found in this chapter. Sustainability advocates and holistic thinkers might become economists, helping to promote a revolution in what is currently termed "the dismal science."
2. Think tanks and thought leaders, from business, academic, community and government sectors, can explore and advocate for these outside-the-box approaches to sustainable economic development. Product-development groups in companies and entrepreneurs can design, develop and launch products and systems, employing new approaches to money and more collaborative business models.
3. Anyone can help to broaden the grassroots discussion through the Internet, while those so inclined can produce articles, videos, books and courses that explore the many facets of *Sustainable Prosperity* and a *Green Revolution of the Heart*. Electronic, Town-Hall Meetings and Stakeholder Consensus Building can be promoted within industries to begin the transition to cooperative, planned and sustainable economic growth.

4. We can all practice living with loving and open hearts. Gandhi suggested that we “be the change” that we seek to create in the world. Our green lifestyles, as well as our personal healing and growth, matter greatly. Let us strive to be people of the coming economic era; *loving, brave, truthful and charitable*.

Blessings on your journey. Namaste.

Joel Hodroff
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Appendix One: The Dual Nature of Money and *DualCurrency Tithing*

How can money — an icon or symbol of our own design — be at the root of such enormous failures and frustrations within our highly developed, global economy? How can there be abundant food side by side with global famine; construction companies seeking customers side by side with populations lacking affordable housing; empty college desks in a world that cries out for a more educated workforce? The answers lie hidden in a little explored characteristic of money. Unraveling this mystery holds the key to rapid and sustainable global economic development.

Our money has a dual nature; it is simultaneously a symbol and a scarce commodity.

1. Our money possesses some characteristics of a symbol.

- A. It is a universal unit of measure akin to an inch, a gallon or a pound, used to measure the value of goods and services, including the value of labor, for exchange in the market, and
- B. It is an accounting tool — an entry in a ledger — exactly like any other set of numbers: credit \$1050.00; debit \$750.00; balance \$300.00.

These symbol-like characteristics of money promote economic cooperation.

2. Our money possesses some characteristics of a scarce commodity:

Our money is a commodity-like unit of exchange, akin to the commodities that money descended from (tobacco, salt, cows) or the early forms of commodity-money (gold and silver coins, precious stones). This early money was not merely symbolic; it was composed of things, which themselves had intrinsic value.

This scarce, commodity-like characteristic of money promotes economic competition.

Economists refer to modern money as *fiat*, which means symbolic. The most common form of money, today, is an electronic debit or credit in a computer. What could be more of a symbol than an electronic debit or credit? Yet, there is still an aspect of money that is commodity-like, and distinctly not symbolic. This can be demonstrated with several examples. It is this non-symbolic nature of money that causes confusion and difficulty in both economics and social policy.

Money as a Scarce Thing First and foremost, symbols are purely information and exist in the commons for all to share. No symbol, other than money, can circulate from person to person. I can't give you an inch and no longer have the inch for myself. I can't hand you an hour and be short an hour myself. Yet if I give you \$100.00, you now have the \$100.00, and I no longer have it. It is yours to do with as you please. That is not in the nature of a symbol.

Second, there is no such thing as a symbol that can be *unavailable to perform its defined function*. It would be absurd to suggest that there are not enough pounds to weigh a fish, not enough minutes to tell the time or not enough numbers to add up a sum. Yet it is commonplace, and accepted as rational, that there is not always enough money for desired economic activity. This is true whether the need for money is to expand a growing business, to keep children the world over from starving to death or to

fund cancer research. Every other factor of commerce could be at hand — willing sellers and buyers; plentiful goods and services — yet without money, desired economic activity does not occur. This also is not in the nature of a symbol.

Lastly, there is certainly no other symbol that can be loaned for interest or invested for dividends. It would be ridiculous to lend me a nine and expect back a ten; or to invest twelve inches into my company and expect a Return on Investment of a few inches in dividends each year. Yet, the scarce, commodity-like nature of money causes money — unlike any other symbol — to command interest and dividends in the market. (Linton, 2001)

It is not here being argued that this is a negative characteristic of money. It is merely being distinguished that our money has a commodity-like nature and, unlike a true symbol, money is often unavailable for desired economic activity. The relative scarcity of money explains why it is imperative to find another tool to help us connect willing sellers and willing buyers (or match work to be done with people qualified to do the work) when traditional financial resources are unavailable or insufficient.

Abraham Maslow accurately suggested that, “If your only tool is a hammer, every problem looks like a nail.” If our only form of money is a traditional, national currency, or the Euro which is patterned on national currencies, then we will continue to come up short of needed financial resources. Perhaps it is time to add another tool to our toolbox! Since money evolved from scarce commodities as a tool to distribute “scarce resources,” it would behoove us to create a financial instrument for the distribution of goods and services that are plentiful.

DualCurrency Tithing: Financial Resources beyond Charity or Taxes Monetary innovation provides commercial opportunities with social benefits. The practice of tithing — donating ten percent of one’s income to those in economic need — comes from the Judeo-Christian tradition shared by hundreds of millions of people worldwide. Tithing is an act of compassion, conceding that giver and receiver coexist in an economy, where everyone does not enjoy equitable financial resources. Such charity provides a critically important safety net for many people.

However, it is nowadays judged that charity and/or government services can also be disempowering to recipients. There is a popular adage that coaches, “Give someone a fish and they eat for a day. Teach someone to fish and they eat for a lifetime.” Charity and government services, in general, attempt to redistribute wealth and operate within the current money paradigm. Together they provide only short-term relief at best.

On the other hand, adding a customized, tithing feature to the *DualCurrency* pricing system, described above, can have enormous influence at the systemic level. There are many activities within the non-cash economy for which people could earn spendable rewards. Examples include volunteering, bartering services, quitting smoking or dropping weight, carpooling or recycling, and so on. Within a cooperative *DualCurrency Network*, participants with greater financial resources can assist those with fewer financial resources. When some people voluntarily spend a higher ratio of U.S. dollars to rewards, others, with fewer financial resources, can spend a higher ratio of rewards to US dollars.

DualCurrency Tithing has exciting social implications, because, while everyone pays equal prices, those with fewer cash resources can earn rewards and pay their own way, with dignity and with fewer tax or charitable subsidies. This modern approach to tithing is modeled on “sliding-scale prices based upon ability to pay,” a thoughtful idea that has only caught on within limited circles. The *DualCurrency Tithing* program is completely voluntary and requires neither government regulation nor tax subsidies to implement.

Here is an example of *DualCurrency Tithing* transactions: A restaurant owner agrees to accept 60% cash (US\$) and 40% *DualCurrency Dollars*¹⁸ (DC\$) from members of a *DualCurrency Network*; very similar to the economics of 2 for 1 dining and senior discounts. A standard member of the Network buys a \$40.00 meal for US\$36.00 and DC\$4.00 (a 10% cash savings).¹⁹ Of the \$40.00 price, the restaurant receives its promised 60% or US\$24.00. This leaves a US\$12.00 cash surplus (\$36.00 less \$24.00 = \$12.00), which is deposited into the *DualCurrency Network Tithing Fund*. Now, a low-income member can purchase a \$40.00 meal for US\$12.00 and DC\$28.00. (a US\$12.00 cash subsidy from the Tithing Fund brings the member’s US\$12.00 to US\$24.00 for the restaurant.)

Both customers are charged the same total price of \$40.00, but one customer voluntarily pays with a higher percentage of US dollars, so that the other customer can pay with more *DualCurrency Dollars*. From a business standpoint, the restaurant is making the same profit on both meals, and, perhaps most importantly, **the restaurant is profiting from more business, not merely donating meals.** Low-income customers are able to afford regular prices in a combination of cash and rewards. Here is a review of the numbers:

Customer Type	Meal Price	Customer Pays US\$ / DC\$	Cash to Restaurant	Cash Surplus	Cash Subsidy	Tithing Acct. Balance
Tithing Customer	\$40.00	36.00 / 4.00	24.00	12.00	0.00	12.00
Low Income Customer	\$40.00	12.00 / 28.00	24.00	0.00	12.00	0.00

DualCurrency Tithing is a relatively simple and straightforward proposition: voluntary cooperation between merchants and customers can release currently underutilized business resources for the benefit of everyone. Merchants get more sales and profits; less affluent customers get needed goods and services; banks, credit card companies and payment processors get additional transaction revenues; and communities enjoy new economic development resources without resorting to higher taxes.

¹⁸ *DualCurrency Dollars* represent the translation of any type of rewards into dollar equivalents for spending along with US dollars inside a *DualCurrency Network*

¹⁹ A *Tithing Member* might pay US\$44.00 to donate an additional 10% in cash.

Appendix Two: *Proliferation of Competitive Duplication* — the Blind Spot in Green Economics

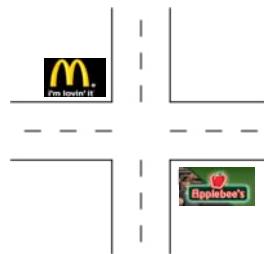
Because the high-tech global economy produces ever more products and services with ever fewer materials and ever less energy, labor and capital, we should witness a dramatic, across-the-board improvement in our quality of life, shortening of our working hours and lessening of the detrimental impact of production and distribution on the environment. Since this is not the case, we must ask ourselves: **Into what economic black hole are the massive productivity gains of the high-tech global economy disappearing?**

It is obvious that our free-enterprise economy simultaneously produces material abundance and abundant waste. We see literal mountains of every imaginable refuse: disposable products; last year's fashion rejects; unnecessary product packaging; polluting materials from industrial processes; as well as broken and worn out consumer discards from tires and sofas to computers and televisions. There is also the wasted potential of unemployed and underemployed people the world over, not to mention the human potential and material resources lost to poverty, crime and war.

Proliferation of competitive duplication is a blind spot in the sustainability equation. It squanders valuable resources and creates underutilized or wasted productive capacity in almost every business. Turning currently underutilized business capacity into the profitable sales of needed products for people everywhere is the win-win economic foundation for a commercial revolution.

The Double-edged Sword of Competition Free-enterprise competition is a powerful engine of economic growth. Seemingly everybody wins. Competition increases customer traffic to a given destination, while improving consumer choice, quality and service. Competition also holds down prices. As well, it is our model for economic growth, creating jobs and expanding the tax base by rewarding entrepreneurs for hard work, risk and innovation.

Competition makes things better



Extreme competition (which is referred to herein as *proliferation of competitive duplication*) does all of these things as well. But extreme competition inevitably puts severe downward pressure on every company's market share, prices, profits, employee

compensation and investor dividends. Here a creative tension is revealed, because employee wages are the single greatest source of consumer purchasing power. What results is a large and growing gap between what a normal growing economy can produce and what employees and their families can afford to buy with their needlessly restrained wages.²⁰



Proliferation of competitive duplication is an inevitable — yet repairable — feature of free-enterprise capitalism. Every industry in its growth cycle invites competition, until the market is saturated and no longer attractive to new entrants. The so-called process of natural selection or survival of the fittest then trims the field, creating economic equilibrium. But the cost of equilibrium is downsizing and business failures, which erode the job base, the wage base and the tax base of a community. This cycle of *innovation, growth, maturity and decline* applies to virtually every product and industry, and is well understood. Economists insist that falling prices benefit everyone in the end, and that new jobs created by ongoing innovation replace old jobs that are lost. Yet, there is no convincing explanation for the fact that **businesses downsize and fail while there is still enormous unmet need for their products and services** within the U.S. and around the world.

An Entrepreneurial Solution Downward pressure on market share from *proliferation of competitive duplication* causes the growth of excess or underutilized business capacity. This wasted wealth takes innumerable forms: fertile land that is not farmed; excess inventory of every variety; larger planes grounded while smaller planes compete in the air; empty restaurant tables and empty college desks; off-hours at fitness clubs, salons and oil change shops, to name just a few.

It is feasible to capture and distribute much of this currently underutilized business capacity. Tools for cashless commerce include bartering, volunteer rewards and non-cash employee benefits, as well as wellness and green incentives. All exemplify win-win approaches to commerce, where people get needed purchasing power, businesses get more customers and communities get new economic resources, while banks and

²⁰ Such wage restraint is unavoidable in today's competitive, money-chasing economy, but unnecessary in a collaborative *DualCurrency* economy.

payment systems companies get increased transaction revenues.

One use of currently wasted wealth would be to increase employee compensation without raising cash labor costs for employers. The process equates to improving employee wages and benefits by utilizing empty restaurant tables, off-hours at fitness clubs, excess retail inventory, and so on. **Instead of downsizing companies to match money-based demand in the market, it makes much more sense to increase people's purchasing power up to the level of available business capacity.**

How it could work Every employer knows how to use a portion of their excess capacity as a perk or a benefit for their own employees. Employees who work for an airline enjoy free or discounted flights. Those who work at universities generally enjoy free or discounted classes. Fitness club employees enjoy free or discounted memberships, while restaurant employees enjoy free or discounted food. This is true across the private sector, as well as in the public sector (public universities) and the nonprofit sector (YM/YWCAs). It is noteworthy that if businesses operated at full-capacity, with 100 percent cash customers, this common form of employee benefits would not exist, confirming the existence of underutilized business capacity.



Now imagine a system in which the excess capacity of any employer is made available to all employees as a perk or benefit for working within a network of cooperating businesses, government agencies and nonprofit organizations. This is not hard to imagine, given the precedent of buying networks and discount clubs. Now, imagine the pooling of all this excess capacity into a Virtual Community Warehouse for sustainable economic development, accessed not only by employees but by all those earning rewards within the community.

It is a *virtual warehouse*, because none of the products need to be purchased in advance or stored somewhere special, as with a Costco or Sam's Club. Instead, they

remain where they are normally produced and sold — at the airlines, the university, the fitness club or the restaurant. When a *DualCurrency* Network member shows up, either online or at the establishment, they can enjoy *DualCurrency* special offers. Through a *DualCurrency Virtual Community Warehouse*, the capture of currently underutilized business capacity offers employees new purchasing power, businesses more customers and communities new economic resources.

Industry Associations and Industry Standards: How Free-enterprise manages Excessive Competition The free-enterprise system manages excessive competition, easily and without government regulation, by setting needed standards across any given industry. Capitalist countries have yet to apply this principle to *proliferation of competitive duplication* within the economy, whether at the local, state or national levels.

Why set industry standards? Consider how impractical it would be if there were 15 different types of electrical outlets to accommodate 15 different styles of electrical plugs on consumer products. To avoid this mess, an industry standard is set to which all manufacturers of both electrical outlets and consumer products adhere. The same is true of Internet Protocol on the World Wide Web, which did not require government regulation, but instead grew out of collaborative development and agreed upon design principles. There are applicable precedents in the field of monetary innovation as well.

Monetary Innovation and Industry Standards In the 1800s, the United States transitioned from gold and silver coins to paper currency, as the dominant form of money. During that time, virtually every state and every bank issued their own paper money. The system was unworkable, and thousands of banks failed. In response, the equivalent of an industry standard was set for paper currency. It consisted of a single national currency and a Federal Reserve System. Then, a hundred years later the phenomenon was repeated.

In the early years of the credit-card-industry banks, department stores, gas stations and others each issued and processed their own credit cards.²¹ The young industry had operating losses of tens of millions of dollars. An industry standard was set that provided workability and profitability for the banks. It was the VISA platform (followed quickly by MasterCard). We can learn a great deal from the standard that was set, because it included a new financial instrument (the electronic debit and credit), a new payment platform and a cooperative network of banks and retail merchants. Virtually everything proposed in this chapter can be rapidly created through a cooperative network made up of banks (and the payment systems industry), retail merchants and cardholders, which was the original vision of VISA's Founder. (Hock, 1999)

Increasing cooperation and mediating competition can bring significant improvements to free-enterprise economic development. The cooperative capture of currently wasted business capacity for distribution throughout the world would be a powerful alternative to capitalism's long-established "grow or die" imperative. It is essential, in pursuit of a sustainable global economy, to recognize how the scarce, commodity-like nature of money combines with *proliferation of competitive duplication* to compel competition at the expense of cooperation. In a nutshell, you could say that *proliferation of competitive*

²¹ Today, the phenomenon is once again repeating itself with customer loyalty programs.

duplication represents poor planning and an enormous loss of productivity for our economic system as a whole.²²

Economics by Design: the Next Productivity Revolution The necessity and desirability of planning in modern business is indisputable, whether that planning is for marketing, finance, new product development, global expansion, employee relations, Information Systems or a myriad of other business functions. *Economic planning* is commonly held to be either impossible or communistic, because we fail to think outside-the-box of competitive, money-centered economics. **The use of planning solely for competitive business purposes is not a law of free-enterprise capitalism.** Planning in setting industry standards is an important precedent for planning applied to our free-enterprise economy as a whole. Private-public-nonprofit planning of joint economic-development projects is another useful example. Labor-management collaboration is yet another case in point. Collaborative economic design can occur at any level of business, community or government activity — local, national and even global.

We live in a world of mass customization of products and services. The market has learned to respond to the desires of customers down to the level of thousands of unique preferences in a single manufactured product, such as a bicycle or a house. Mass customization of products and services might be considered evidence for the continued presence and value of an “invisible hand,” first noted by economist Adam Smith. The free-enterprise system continues to evolve new ways of offer a great good for a great number of people the world over. Yet there is clearly room to improve in offering “the greatest good for the greatest number,” particularly as we include the environment and future generations in our equation.

In a world of *Sustainable Prosperity*, every individual, family and community could enjoy more of exactly what they want and need. *Mass customization of social and economic life* could provide economies of scale to meet the needs of all people, while customizing products and services to the cultural, economic or environmental requirements of communities, regions and nations. Ever more sustainable products and processes — combined with new organizational models of popular participation in social and economic life — promise improved efficiencies in the market, a more level economic playing field, and a universally high quality of life for people the world over.

Empowering Sustainable Development through Computer Democracy²³ The merits of representative democracy versus direct democracy (also called e-democracy or digital direct democracy) have long been debated. The debate tends to reflect an either/or approach to the issue. Instead, it may help to consider how *Computer Democracy* can enhance traditional representative democracy and hasten sustainable economic development.

²² Editor's note: which says nothing about its inevitable destruction of the functional ecosystems that support it. In other words, the current economic system is self-destructive.

²³ Computer Democracy is herein used to mean the application of efficient and secure telecommunications systems for participatory policy development and community mobilization. Such systems are also useful for the efficient election and recall of political representatives or for referenda on issues and policies.

In today's world of rapid and continuous social and economic changes, the centuries old practice of selecting representatives only once every four years is rather outdated to say the least. Why wouldn't citizens be apathetic and resigned about a system that is more disempowering of the populace than it is empowering. Using the metaphor of the economy as a modern business, once again, who in this day and age would patronize a company that sends packages by horse drawn wagons or that offers only black and white televisions?

Computer Democracy can support political leaders and grassroots constituencies alike. Everyday technologies of the banking industry can enhance communication, collaboration and mobilization of people in workplaces, schools and communities. Notice how a social security number or other chosen password can allow citizens to call-in or email a confidential opinion or vote for immediate tallying. This could efficiently inform elected representatives of the will of their constituents. The computer voices that today provide customers with instructions can just as easily list issues for a referendum or list candidates for election or recall.

Prompt and efficient electronic town-hall meetings are possible at every level of policy-making: neighborhood, city, regional, national or global. Detailed and thorough presentations and debates could rapidly reach every interested citizen through radio, television, newspapers, magazines and the Internet. An informed public could participate in prioritizing allocation of the new economic resources described in this essay.

As a counter-force to today's "one dollar one vote" political reality — typified by outrageously expensive campaigns and lobbying efforts — *Computer Democracy* would empower any constituency to obtain a voice and a vote in public policy: industry associations could dialogue with communities; labor and management could devise win-win strategies; high-tech, industrialized and non-industrialized countries could design mutually beneficial economic and cultural exchanges; students the world over could help to design and implement well-paying economic development programs.

Once again, modern technologies offer extraordinary opportunities for rapid and sustainable global economic development without the need to redistribute electronic debits and credits from anyone's account to anyone else's.

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