

**Hacking The Financial System:  
How To Change Everything Without Changing Anything**

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**D.R. Robles**

**The Ingenesist Project**

## **Preface:**

Most people are aware that the Global financial system is flawed. Through the creation of increasingly exotic financial instruments, money has been largely divorced from the fact of human productivity that it was originally conceived to represent. In other words, money no longer represents the majority of things that people are producing, specifically, the intangible qualities that create new products, unify communities, and project wisdom upon mankind. These include trust, resilience, friendship, community, love, mentorship, creativity, social service, etc.

The truth is that intangibles are, in fact, quite tangible. The proof is as follows: calculate the value of a business that operates in the absence of trust, resilience, friendship, community, creativity, wisdom, etc. Rather, the totality of intangibles are vastly “invisible”.

Today, money represents only money itself, in the form of debt. You cannot throw money at the problems that we face on Earth and expect a solution. The end game is mathematically inevitable; the best possible outcome would be for all countries on Earth to come together and lop three zeros from the world's balance sheet and reboot the old system, if they can.

Unfortunately, classically coined “factors of production”, i.e., land, labor, and capital are becoming increasingly irrelevant as the variables for scaling human production, so it is increasingly unlikely

that a reboot is even possible. The weakness of the fiat currencies is indeed quite literal.

Instead, social, creative, and intellectual capital scales at an astonishing degree with the Internet and emerging social technologies. We must now step forward because there may no longer be a way to go back.

The current financial system supports a legal system that protects us as best as it can. Our health care providers, educators, and civil services are indispensable components of modern life that cannot be interrupted. The objective then is to correct the weakness without breaking the system. As any MD will tell you, a surgeon is just like an auto mechanic, except, with the engine still running. Additionally, the body undergoing transformation will always send antigens to protect itself from an invading force. This may be the case with our efforts as well. While the opportunity is vast, the perils are profound.

### **Introduction:**

There is currently a great amount of innovation happening in social media space. When coupled with mobile computing, every industry from aviation to construction to education, governance and health care will be impacted. Yet, we are still a far way from a unified social organization system to mark the transition of humanity up another rung of the evolution ladder. It will not be Socialism, Communism, or even Capitalism as we have known them in the past. For better or worse, something different will likely emerge.

Today, the transition resembles scaffolding upon which tens of thousands of individual internet applications hang their collective hats. As this structure gets denser, the outputs of each application will become the input of proximate applications, and so on. At some point, the structure will light up and “systemization” will occur ushering in a new social structure. The greatest risk is that some entity will try to control or “broker” this intercommunication system for transactional profits. As such, we should expect resistance, not from governments or corporations, but within our own ranks of technology innovators.

The good news is that we have a once-in-a-species opportunity to eliminate the frictions in what we currently call “Democracy and Capitalism” and perhaps come closer to a more perfect rendition of these ideas. However, the failure to launch would allow for the inevitable reboot back to some prior stage of human development before we can move forward again – how far backwards? Nobody knows.

The Ingenesist Project specifies 3 relatively simple web applications that we believe would catalyze the transition to systemization of the next economy paradigm. These have working titles: Zertify, Gamidox, and Exoquant. In combination, we’ll call it simply **The ZGE Integration.**

### **Factors Of Production**

**Land:** Zertify is a knowledge inventory system that would replace the semantic Resume/CV system. Inherent in the design of Zertify are

two essential hacks; competition would be replaced in the valuation system in favor of cooperation. Second, an open source tag structure would replace a hierarchical ontology as the cornerstone of knowledge asset definition. Functionally, Zertify would introduce an individual API that people would allow for the individual to command and control their own knowledge assets as property.

Downstream, people would transact their interests and abilities with each other algorithmically much like computers communicate between themselves today. Luckily, people are not computers so quite a different response can be assumed:

**Labor:** Gamidox is a business method/system built around a concept called The Value Game. The Value Game literally manufactures social value in a community. Once the proclivity toward competition is replaced by a collaborative incentive structure, diverse groups of people acting in their own best interest can, in effect, act in the best interest of other communities where the mutual goal is to preserve a shared asset. Functionally, Gamidox would introduce a means to create tangible value in a community outside the construct of a corporation; deploying social, creative, and intellectual capital (Labor).

Shared assets may include everything from a zip car, education, health care, public infrastructure, condominiums, even the biosphere. Gamidox retains the qualities of “Invisible Hand of Capitalism” in an economic game except favoring iteration by design rather than producing losses by competitive destruction.

**Capital:** Together, Zertify and Gamidox will generate a great deal of very clean and valuable data. These data are processed through an application called Exoquant, which algorithmically assigns value to intangibles so that financial instruments (such as an innovation bond) can be “measured into existence” to augment or replace a struggling fiat currency or fund social ventures outright. The ability to computationally predict the likelihood that a set of knowledge assets can execute an economic outcome sometime in the future, will allow for the securitization and capitalization of knowledge assets.

### **New Factors of Production**

ZGE should correct the existing financial system so that the money that people use will more closely represents their actual productivity, not a remote proxy for productivity, such as land labor and capital. Instead, Social Capital (the willingness and ability for people to collaborate), Creative Capital (the willingness and ability to combine diverse ideas into new ones) and Intellectual Capital (the willingness and ability to apply empirical processes) can become the assets that entrepreneurs will allocate to scale the production of things that our civilization needs in order to co-exist in our increasingly limited environment.

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## **Part 1: Hacking The Financial System**

The financial System is made up of 5 components; they act as a system. If any of these components falters or is corrupted, the whole system becomes unstable.

### **These 5 components are:**

- Markets (demand)
- Entrepreneurs (supply)
- Accounting System (inventory)
- Institutions (to keep the game fair)
- Currency (storage and exchange of value)

### **For example:**

The dot.com crash was a problem with the accounting system failure. The 2008 crisis was a vetting mechanism failure. Devaluations across the globe are currency failures. Poverty is a market failure. Corruption is an entrepreneurial failure. All of these forces are interrelated and any one will have an impact on all of the others.

Zertify, Gamidox, and Exoquant are specifically designed to replicate the practical functions of these 5 components – but in a slightly different way. Since Finance and Economics are mathematical and natural systems are also mathematical, we cannot escape the technical under pinning – our hack needs to be true to the math.

<b>Function</b>	<b>Current System</b>	<b>ZGE</b>
Demand	Markets	No Change
Supply	Entrepreneurs	No Change
Inventory	Accounting System	<b>Zertify</b>
Vetting	Financial Institutions	<b>Gamidox</b>
Currency	Fiat Currency	<b>Exoquant</b>

In doing so, we have an incredible opportunity to correct many flaws of the old economy. Anything that has no direct impact on the math also has no impact on performance and function of the 5 components – and can be easily designed OUT of the system.

**For example:**

- We have an opportunity to swap out competition for collaboration
- We have an opportunity to swap out scarcity for abundance
- We have an opportunity to swap out mass consumption for mass sustainability
- We also have the opportunity to eliminate a wide range of biases such as gender bias, racial bias, physical bias, social class bias, political bias, and many more factors that are irrelevant to the calculus of finance.

**Where's the Hack?**

Every time there is an economic instability of any magnitude, black market currencies tend to form. We have all heard stories of Levis,

cigarettes, or even tulip bulbs being used as currency. Black market currencies can also be quite subtle, yet no less tradable.

With 21st Century technology and social media, we are witnessing the emergence of what we can only now call “social currency”; such as reputation, referrals, vouches, influence, SEO, community, groups, and various other domains. These are all black market currencies because they are used for the storage and exchange of the value that people create. The thing that any Black market currency lacks is the rest of the “system”.

The difference now – and perhaps this is the first time in human history – should the so-called black market currency become systemized to the same extent and actually perform better than the currency that it hedges, “a flip” will occur and the old system will fail to re-boot back to it’s current form and instead flip to a new and more advanced social organization structure.

In the next sections, I will describe how ZGE augments their corresponding financial system component.

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## **Part 2: The Accounting System Hack**

In the first post of this series, we identified the 5 components of a financial system and suggested that Zertify, Gamidox, and Exoquant would serve to simulate their functions in a parallel economy, ultimately hedging it’s collapse.

In order to accomplish this, we need to start with an accounting system hack. Fortunately, standard accounting practices are quite robust with double entry balancing of assets and liabilities. Luckily, the problems only arise with the definition of what is an asset and what is a liability. That is a relatively easy jailbreak.

### **The Price Is Wrong**

The problem is that we “price” assets from low to high, from bad to good, and from loser to winner, etc., with little regard for proximity, environment, community, or time, etc. The financial system needs to artificially create losers in order to price the winners. This is fairly obvious for tangible assets like cars, tomatoes, and real estate, but not so much for so-called intangible assets like people. This is hugely inefficient on so many levels and therefore vulnerable to attack.

### **The collaborative advantage**

Zertify classifies human knowledge assets on a scale of 1-6 beginning with “teacher” and ending with “student”. Students and teachers do not compete with each other and therefore intermediate levels represent various degrees of collaboration, not competition. The teacher bias represents supply of knowledge and student bias represents the demand for knowledge, this establishes a trade vector in our proto-economy.

Technically, the 6 segments represent 6 standard deviations on a normal distribution. This allow for communities to organize around their diversity rather than recoil among their similarity. This arrangement also allows for the usage of an important body of predictive mathematics as we'll discuss later.

## **Benign.**

This simple hack is important because it is benign to the current economy and will not trigger an antigen. Corporations, governments, and communities already seek to match the right knowledge asset to the right demand asset for knowledge – this is actually improved under the new accounting system.

Therefore, the hack is true to the math because it provides the existing financial system with an equivalent predictive asset while eliminating irrelevant bias and costly competition.

## **The Resume Must Die**

The objective would then be to move away from the resume system and establishing a community knowledge inventory system under a commons based ontology. Everyone would have their individual API, which they own, manage, control and transact. A person's CV would be expressed as a string of code that is anonymous until the point of transaction. A tremendous amount of data will be derived from Zertify, which will feed into the next hack called The Value Game.

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### **Part 3: The Institution Hack**

In this section we will identify a hack to the vetting institutions and players that are supposed to keep the financial game fair, but in many ways complicit with its unfairness; these include Banks, Insurance companies, even the legal system, etc., any institution that sets the rules of play. Gamidox will change the rules.

For lack of a better example, Gamidox resembles a classic MBA analysis and strategy tool called Michael Porter's 5 Competitive Forces. In Porter's analysis a corporation competes within its own business environment against:

- Competitive rivalry within an industry
- Bargaining power of suppliers
- Threat of new entrants
- Threat of substitute products
- Bargaining power of customers

The Zertify Hack swaps out the competitive nature and installs a more efficient collaborative nature. Revisiting Porter's 5 Forces for collaboration, we can say the following would be true of the parallel economic system:

- Collaboration within an industry
- Collaboration with suppliers
- Collaboration with new entrants
- Innovation of improved products

- Collaboration with customers

### **This is already happening.**

Social Media is driving many social innovations that act as “institutions” would in the legacy economy. For example:

- Vendors use Customer Relationship Management (CRM) systems in nearly every industry.
- Designers use Supplier Relationship Management (SRM) systems to collaborate Globally.
- Social Media has spawned the field of Vendor Relationship Management (VRM) where the market tells the producer what to make and how to behave.

### **Community Relationship Management**

But when we combine CRM + SRM + VRM we get Community Relationship Management (CoRM). In essence CoRM is a Value Game. Where customers, vendors, and suppliers all acting in the best interest of their constituents are in fact acting in their own best interest. Cheating gets you thrown out of the game.

### **Benign.**

Gamidox is an organization that educates, creates, and deploys this new class of business methods where Communities are encouraged to act in their own best interest when collaborating with other communities. Jobs are created, things are produced, value is

exchanged, and assets are accounted. Capitalism remains in high gear and the hack will not trigger an antigen.

## **Playing The Value Game**

The Value Game is played wherever 3 or more communities interact with each other to preserve a shared asset rather than consume it. A Value Game can be built around any sharable asset such as a public corporation, an airplane, a high impact citizen, a condominium building, public infrastructure such as schools, bridges, and health care, etc.

However, A Value Game fails for assets and communities that offer literally no socially redeeming values (that is the point of social redemption)

## **The New Value Movement**

The Value Game literally manufactures New Value. As communities interact with each other around the context of a shared asset, they teach and learn from each other – populating Zertify. Several layers of vetting and conflict can be eliminated from an economy which will make all many forms of production and associated employment, run faster, smoother, and more efficiently.

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### **Part 3: The Wall Street Hack**

In this post we will identify the hack on the Wall Street Financial instrument regime. Although exoquant is a bit technical, the basic hack is quite simple:

- Everyone knows that money is created through the creation of debt.
- Everyone also knows that debt is a promise to produce something more in the future.

#### **Likewise:**

- Everyone also knows that innovations increase human productivity.
- Everyone also knows that innovation is a promise to produce something more in the future.

#### **Here's the hack:**

Therefore, a currency backed by debt, and a currency backed by innovation are both backed by future productivity. As such, two currencies backed by the same underlying asset are fully convertible with each other. Water dissolves water and innovation dissolves debt.

#### **Here is how the Wall Street algorithm works:**

- People produce stuff in exchange for money

- Bankers do not care about money, they care about the rate of change of money over time. This is called the “interest” rate.
- Stockholders do not care about interest rate, they care about the rate of change of interest rate over time, this is called growth rate.
- Hedge fund managers do not care about growth rate, they care about the rate of change of growth rate over time, this is the margin on their bets; options, and derivatives, etc.
- CDOs and other financial exotica become increasingly divorced from the fact that people produce stuff for money.

### **The Exoquant Analogy Algorithm:**

- The value of information is derived from the rate of change of data over time
- The value of knowledge is derived from the rate of change of information over time
- The value of innovation is derived from the rate of change of knowledge over time
- The value of wisdom is derived from the value of innovation over time.

In order to “see” innovation before it happens, all we need to do is identify and measure rates of change of information in communities...and so on. Technically, this is a derivative, i.e., something whose value is derived from the value of something else.

All of these metrics can be seen quite readily in the Zertify, Gamidox data sets. Each is a “derivative” backed by the stuff that people produce rather than the fiction of debt. The ability to predict future

productivity is superior with an innovation backed currency and therefore superior to debt forced productivity – often compared to slavery.

## **The Silver Bullet**

Innovation is a magic word. The hack is true to the Wall Street math as well as American culture. Anyone running for public office would not attack the proposition of an innovation backed currency. Therefore, the hack will not trigger an antigen.

The next and final post, The Currency Hack, will formulate this innovation currency in more detail.

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## **Part 4: The Currency Hack**

Contrary to conventional wisdom, currency is the last hack, not the first. Only after Zertify, Gamidox and Exoquant are established would it be possible to introduce a currency that could compete, if not hedge the dollar.

With Zertify we can estimate the probability that a collection of knowledge assets will be able to execute a business plan some time in the future.

With Gamidox, The Value Game is played where several communities interact around a shared asset such as a condominium,

airplane, school, hospital, road, car, or any “product” that has socially redeeming value.

These interactions are measured such that we can assign “value” to the game with the Exoquant algorithm.

**So taken together:**

If we can predict the probability that the interactions carried out by communities of people (relative to a product) will have a known value in the future, we can represent it as a “cash flow” with a known volatility (risk). Now, combining many interactions carried out by many communities around many products with known volatilities, we can pool the predicted cash flows into one large diversified cash flow.

Next, we can cut the large flow into “bonds”, which we can extrapolate to net present value and to fund the community activities.

This very similar to the way that corporation form and raise money – except without the corporation. While banks continue to issue Debt Bonds, communities will issue Innovation Bonds in parallel.

**Here is the hack:**

In the old days everyone carried gold around in order to engage in trade. Since gold was heavy, bankers let people keep the gold in their vaults and they wrote little chits of paper that represented the gold. After a while, people just traded the chits and it was no longer necessary to convert back to gold with each transaction. Eventually,

the gold standard was eliminated altogether and people just traded the paper.

### **The currency of abundance**

Likewise, after a while it would no longer be necessary to convert the community currency into dollars. As the dollar slowly starts losing its value under the weight of the debt load, people will just trade community currencies. All of these values are made visible and validated from Zertify, Gamidox, and Exoquant data streams.

The antigen will not be triggered because this is exactly the same way that corporations interact with banks to capitalize and securitize dollar debt, the difference is that we are capitalizing and securitizing community innovation by measuring data, information, knowledge, innovation, and wisdom. A currency of abundance can then replace the currency of scarcity.

### **Nothing Changes and everything changes**

Corporations and government can continue activities to the degree that they produce socially redeeming value by simply purchasing innovation bonds from the people with their dollars – if they'll accept them.

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## **Part 5: Evading The Antigen**

Over the last 20 years or so, I have spoken all over the United States and many parts of the world about the idea that there may be a single and relatively easy way to correct flaw in market capitalism.

To fix this anomaly would be to correct many of the biases and divisions inherent in an otherwise functional social organization system. The work of the Ingenesist project, of course, is to correct that flaw.

**From past experience, I always get one of three reactions:**

1. Some people get it immediately, and engage deeply.
2. Some people don't get it and ignore completely,
3. It triggers an antigen in some people and they attack it.

I learn a great deal from each type of response. In fact, the vast majority of ideas in the Ingenesist Project come from hundreds of other people who have participated in one of these three ways. The first two types are self-explanatory; this post is about the third.

### **The Flaw in Capitalism is well protected**

The antigen is not just a person who disagrees with a fact or feature of our work. They hold a deep visceral objection that is personal, emotional, physical and always disproportionate to the level, scope, or even the topic of conversation.

The problem, I have come to realize, stems from the suggestion that the Zertify knowledge inventory strategy seeks to improve the ability to match the supply and demand of knowledge assets in a community. The antigen does not believe that there could or should be a better broker than themselves.

Frankly, it is the function of our most revered institutions to match the supply and demand for knowledge assets; Universities, Hospitals, Corporations, Consultancies, think tanks, and even Governments hold this ability forward as justification for their ability to collect revenue. Some will see ZGE as an improvement to their mandate; others will see it as a threat to their existence. We should expect extreme reactions.

### **Historic perspective**

Ingenesist Project began as an international comparative education program during the NAFTA Negotiations for the mutual recognition of professional engineers between Canada, Mexico, and the United States. This was likely among the first attempts to treat knowledge like a tangible asset of trade.

As it turned out, it was not in the best interest of the Mexican government to give their engineers “wings” so that they could fly across the border instead of working for pennies in a foreign owned sweat shop. Among corporations, it was not necessarily in management’s best interest to give up some control of information transmission. Nor would it be in their best interest for other companies to be able to identify their employee’s knowledge assets.

The stark reality is that is human knowledge where the money is stored.

### **It's not about right and wrong**

The point of this article is not to make the antigen wrong about their response. It is quite natural and we have all done it. The nature of the antigen is competitive whereas the nature of the New Value Movement is collaborative – precisely the economic difference that we seek to articulate. Knowledge is the real Gold in the economy and some people will try to contain it like money in a vault.

The Flaw in Market Capitalism is the antigen behavior/reaction itself – not the person demonstrating it. Our challenge for the future will be to amplify communities and their mavens to become better at connecting people in collaboration with each other while also identifying and redirecting the antigen response before it is activated. Sort of like robbing a bank...

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### **Conclusion:**

Congratulations if you have made it this far in the document. Nobody said it would be an easy hack, but consider the fact that we are turning back over 400 years of modern financial innovation in a comparatively short period of time, using cheap existing technology without forcing a collapse of the current financial system nor

triggering the natural antigen response. I don't believe that anyone other than The Ingensist Project is willing to make that claim.

In this document, we have literally adapted the calculus of Wall Street and projected it upon the value of intangible assets – that is all. We do not proclaim to have astonishing intellect or prophetic insight – we are simply saying that the Calculus will set us free.