

Implications for Near-Future Economy: Reorganization of Human Productivity

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By Tony Mandarano

TGM Ventures

Overview

Humans create value. This is a primary principal and core truth. If we isolate one human being and put that human being into a setting, such as a jungle, the human being will find a way to create value in the form of surviving. The very act of hunting, gathering or cultivating food is the creation of value. In this example, the human being consumes 100% of the value that is created.

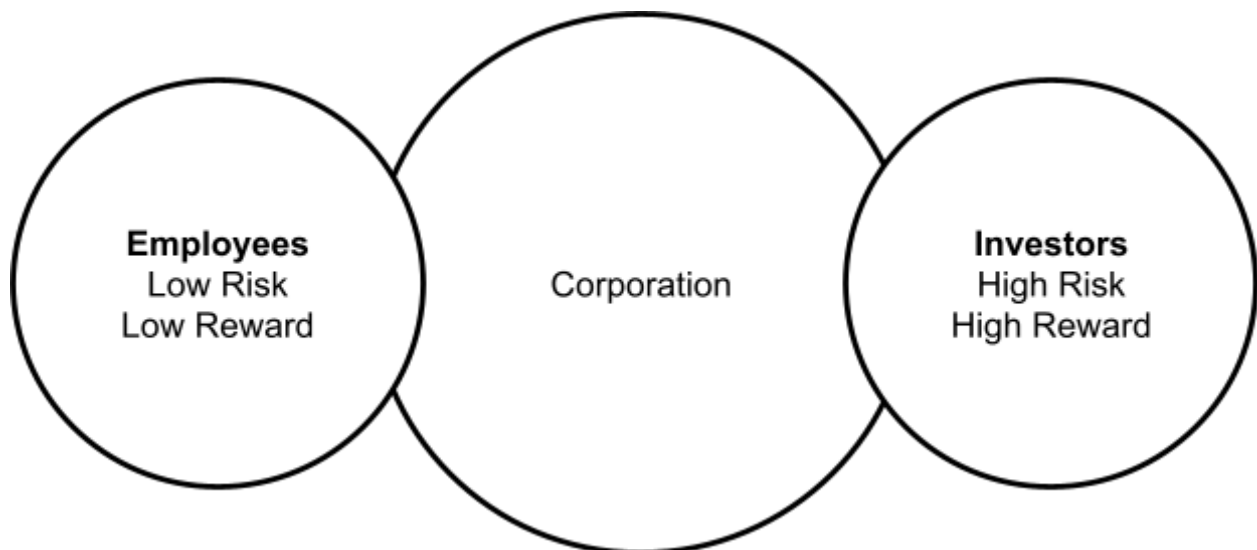
If we add another human being to the mix, I submit that the two persons will *naturally* specialize their tasks and coordinate their production in a way which either produces more resources or saves time to produce the same amount of resources. This natural tendency towards cooperation, organizing the means of production and allocation of resources is a biological trait of human beings.

This is what an economy is. A method and system for allocating human capital (time) and non-human capital (physical resources). I would submit that in a functioning and productive economy the system results in a net positive creation of additional value to *all* stakeholders. For example, all parties are contributing, say, 10 and getting back 11 in value. If certain stakeholders are contributing, say, 10 and only receiving back 9... this equation will ultimately not last forever and those participants will leave the economy.

In summary, people organize together and cooperate not for the sake of cooperation itself, but for the benefit of their own individual interests. If they can find a way to better organize to produce more value with the same amount of work, they will do so.

Traditional Modern Organization of the Economy

Let's take a moment to explore the modern economy. At the heart of the modern economy is the *company*, or the *corporation*. The large innovation present in creation and use of the corporation is to separate and contain risks and rewards.



Prior to the corporation you would have to convince the workers to assume the risk. As an example, an entrepreneur / capital allocator would need to convince the workers to go out and plant the crops and then the workers could receive food after the plants yielded a harvest. However, what happened in the event of a bad harvest or no harvest? The workers would then be in a dire situation. Prior to this segmentation of risk created through a company structure, the workers assumed much more risk. This prevented the economy from experimenting with high-risk ventures which could yield breakthrough innovations.

It's important to note that the legal system is the critical precursor to the formation of the corporation. It was impossible to create contracts and long term cooperation through the corporate vehicle prior to the standardization and enforcement which was created through a high functioning legal system.

Greatest Wealth Creation Vehicle of Modern Times

We need to discuss the legal system. The legal system that we have today is a very new construct when looking at the total timeline of humanity. Let's define the *functioning legal system* as a set of publicly available and agreed upon rules, regulations and operations which are enforced without bias. This then allows for *long term cooperation* through the use of contracts between persons and corporations. In systems which allow for the private possession of capital, capital is then able to be contractually owned and allocated with the full protection of the state as per the governance provided by the legal system. The combination of the functioning legal system, the corporation and the protection of capital by the state is what has allowed for the incredibly large creation of capital over the last several hundred years.

Without a functioning legal system and contractual obligations, you have to depend on trust. You can't scale the creation of capital (aside from real tangible assets) with trust. Our modern wealth creation system and vibrant capital economy is built on the unbiased enforcement of contracts and long term cooperation: legal system + corporation.

Looking into the Future

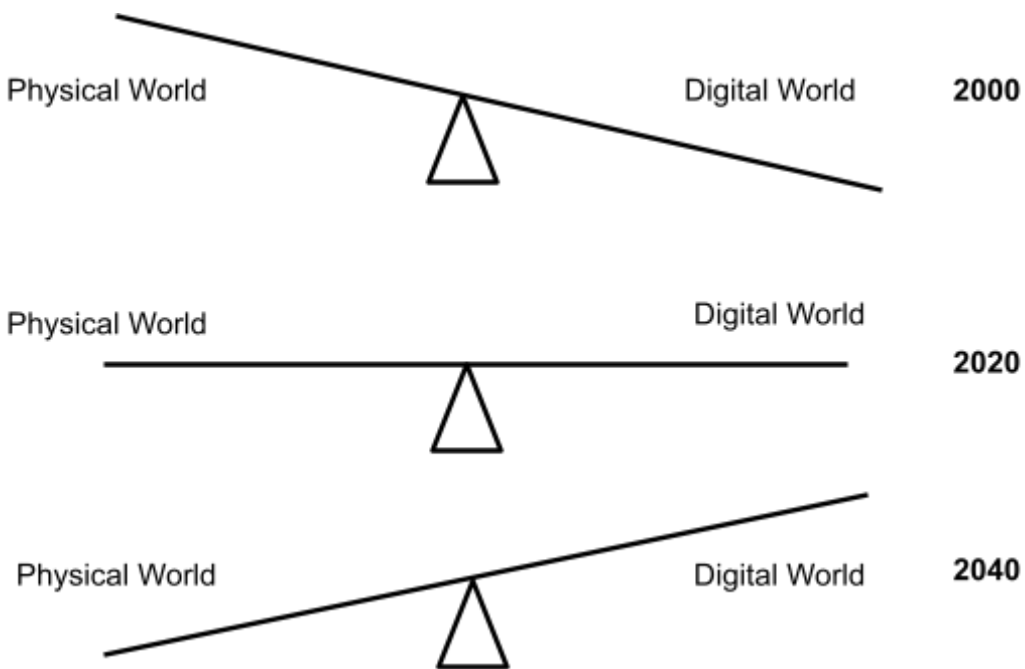
Tipping Point: Digital First

A very very very long time ago at some unknown date and evolutionary phase, we used to live in a world which was purely real. Then, the innovation of story allowed us to augment the real world and begin adding layers which only exist to humans, within the mind. This ability to tell and belief in story at a widespread level has allowed many innovations which are not real, but are accepted as real to all of us. Money, credit, contracts, corporations, etc. The shared belief results in real action and real impact. The point here is that just because something isn't tangible, doesn't mean it doesn't have real value to people.

Humans have consistently shown a trend to live more and more in a world which is not *real*, but constructed. Even things that people take as fundamental, such as the Bill of Rights... are not real. They are construct. Our shared belief and cooperation amongst agreed upon rules has

created an abundance of wealth and collective prosperity. This trend is unlikely to reverse, rather it is accelerating.

Computer and digital technology has only accelerated every aspect of our augmented reality. From personal computing, then the internet to actual augmented reality and virtual reality. Think of the relationships you have with people you care about and how much of that is actually just text and images on a screen through Facebook, Instagram or iMessage. We're headed for a digital-first world. We're going to enter a new digital frontier that is foreground with the background being the "real world" until it's so far out of sight it disappears into the horizon. By then, we probably won't even be able to distinguish between the tangible and digital world as we'll have the technology to "feel" in the digital world and we'll think we're back inside the tangible world (enter the *simulation argument*).



Before you say "there's no way that the digital world is now equal to the physical world", please take a look at your iPhone screen time and usage. Take a look at your investments and the percentage of which is digital and or not tangible. Look at the amount of time spent in relationships digitally. Look at where you consume your news and information. The world has quietly but rapidly gone digital on the infrastructure of the physical world.

Now that we are reaching the tipping point, we're creating the infrastructure for a digital first world.

A Tidal Wave of Change

Just as the invention of paper, ink, reading and writing set the stage for the formation of a functioning legal system (set of standards and protocols which could be built upon) and

ultimately corporations (an application of the standards and protocols provided by the legal system)... an enormous revolution to this very same structure is here.

Trustless distributed computing protocols are creating a digital computer-based legal system which can be built upon. These platforms will allow contracts to be written rapidly, enforced rapidly and all with predictable rules which cannot be changed by any central power. Whether this replaces the current human-centric legal system entirely or helps accelerate the efficiency of our crowded and expensive court system is anyone's guess, but the disruption is certainly here.

It's safe to guess that the innovation is going to lead to the dramatic formation of new capital similar to the enormous impact that was made on the economy through the innovation of the functioning legal system.

More specifically, an interesting component to these new innovations is they live in cyberspace. There does not need to be a geographical epicenter or a state endorsement. In a way, I see this as a potential capital black hole which sucks capital in from the entire world into a state-less domiciled capital-protective United States 2.0. Ethereum, for example, in many ways can be viewed as its own economy. It's not far-fetched that some of the next major innovations will be formed on Ethereum or a competing ecosystem and go on to create trillions of dollars in value. It's a cyber economy. An economy detached from the physical world, state-less. People and capital fled from around the world to seek opportunity in the United States. Will the world's capital flee from overly oppressed, overly taxed and overly indebted nations to the stateless digital economy with fair, just and unbiased enforcement of rights for all? The risk adjusted returns on this bet seem massively positive.

Let's summarize here by saying the future enforcement of human rules and contract settlement will occur less through humans and more through distributed computing platforms and protocols. Simply put, Ethereum-like platforms are the next legal system.

Implications for the Corporation

The corporation was and is the most effective vehicle for organizing and allocating human capital and financial capital resources on top of the functioning legal system. Born out of the physical world, this model made complete sense for the physical first world. A world in which humans and physical resources are moved around and allocated. However, in the digital first world, this structure does not make sense. Possibly, a representative version of this can work, but the architecture is outdated and is going to be dramatically overhauled.

While the overall concept that was created by a corporation regarding *equity* and segregation of risk will certainly live on, many of the by-products created by the corporation are about to die.

Employees

The concept of an employee is a person who joins a company and is there for a long term. They are not easily or rapidly disposed of and the corporation makes a form of investment into the employee and there is a mutual value that occurs whereby the employee stays with the

corporation for a long period of time and receives job security. Several macro trends are upsetting this. Jobs are being destroyed and created much faster. The idea of staying with one company for a lifetime or even a decade is going away. We're trending towards a shorter and shorter term tenure. This makes this mutual bargain less fair for the employee and the corporation when it comes to job security.

Another reason why someone becomes an employee is because they can earn more money than they would otherwise be able to on their own or at another corporation. In other words, the corporation is able to allocate their time and production in a way which creates more value than they would elsewhere.

In this scenario, the employee is actually after more money and/or value and is less motivated by job security.

However, this person is actually not receiving any net benefit in being an employee. If this person could be an independent contractor or freelancer and make more net value per unit of time, they will. This explains the boom of freelancing.

The job security that used to come with being an employee is fading.

As a result, many workers feel dissatisfied. They do not have the security they once had and they are also limited in their economic prosperity by their employer's ability to allocate their time. This top-down centrally planned labor allocation model is prone to inefficiencies and ultimately reduces overall productive output from its full potential, thus reducing the economic output which is passed onto the employee by the corporation.

Current Model: Buying/Selling Time

In our current economic framework, employees sell their time to corporations that buy it. The corporation is then responsible for devising ways to assemble the collective time and physical resources in a way which creates an outcome that can be bought and sold to the marketplace.

The corporation is the one that bears the financial responsibility for delivering on the outcomes.

A very important result of this model is that there is not a lot of incentive for employees. The employee gets paid regardless of their output. There are then hosts of capital spent on trying to measure whether or not the time spent on each employee is worthwhile.

This also means that when an employee creates outcomes valued materially in excess of the amount they sold their time for, they are a large net-loser. I'd argue that modern corporations are largely built on these employees.

The business, ultimately, of most human-capital centric corporations (which is the majority of today's valuable corporations) are simply in the business of hiring employees, allocating their

time and then paying them a fraction of the value that they create for the corporation (whether that is .01% to 99%).

Ideal Model: Buying/Selling Outcomes

If customers want to buy outcomes and corporations are complex cooperative outcome-providing systems, why is it that we have an obsession with laborers selling their time? I believe the answer is simple. It is inherently very hard to measure most outcomes.

For certain roles, outcomes are easy to measure. For example, sales is an easy role to measure outcomes. It's no surprise then that sales roles are usually commission based as preferred by both the corporation and the salesperson.

A taxi ride is quite easy to measure and you buy the outcome. This led to the most well known of the transactional corporations, Uber. Customers buy outcomes, Uber pays drivers a portion of this transactional outcome.

It's very clear that people want to buy outcomes. Additionally, people want to be paid a percentage of the outcome they create... that is... unless they do not create more value than they are currently paid.

Gigification of the Entire Economy

It appears clear that we are on trend toward the complete gigification of the economy. A hyper competitive, outcomes based economy. It's happening with low-skilled and non-complex work, it is now going to migrate up to the most complex jobs and functions. This will put even more pressure on wages and create a large bifurcation of earning power within labor.

If we look at the pareto principle applied to the labor force, we'd expect to see that 20% of the workforce is creating 80% of the value. With technology creating even more scale and an "if you're not first your last" type of value distribution, what this means is that a large percentage of the workforce is overpaid, possibly even materially.

With freelancing and independent contracting emerging as an increasingly viable option with low barriers to entry where workers can capture more of the value they create, it seems likely that there will be a large competitive brain drain from corporate employee structures to freelance structures. As this happens, it will increasingly leave the corporations with persons who are in it for job security and the 80% who create an immaterial ROI for the corporation.

The ramifications of this are significant. Most clearly is the political issue of what happens when the knowledge workers which are creating 10-1000x value are no longer subsidizing their less productive counterparts, but are instead capturing the vast majority of the value they create.

Radical Change

If the corporation is no longer providing job security and it is no longer competitively allocating resources versus the bottom-up rivals, why do we even need a corporation? I believe this is an inevitable question and represents a very large material debate we will have into the future. If I were guessing, I'd say the corporation either dies or it becomes a state-subsidized vehicle to keep people employed for political purposes.

The Opportunity

A digital set of tools and integrated with a marketplace where buyers and sellers of outcomes come together to transact. Similar to how Google is the world's information network and Facebook is the world's social network. If successful, in the future, all humans would work through this work interface, similar to how the browser is used to access the internet.

While there are freelancing marketplaces and people who buy and sell the freelancers, the difference with this innovation is that the business is not in buying and selling the freelancers or their time. The innovation is in helping human capital allocators build repeatable systems/processes and task allocation tools that can then be put out to the marketplace of talent.

One way of thinking about this is that we are building a UI for building business. The goal is to turn the corporation into more of an application whereby all aspects of the business are programmed. Humans then perform the function of the application where needed.

For non-recurring work, the projects are created at a great deal of detail and then able to be assigned to the marketplace for bidding.

There are a lot of byproducts that are interesting which come out of this model. The ability to build these business workflows and "business model builder" creates an economy of its own. There most certainly will be an economy of "work flow creators" similar to how there are shopify app creators.

As an organization, we will create tools to empower entrepreneurship by dramatically lowering the bar for entry (as easy as forking a business model / purchasing a plan and assigning people in the marketplace) and allow workers to gain full control over their time, focusing on selling outcomes and not their time.

Call to Creators

If you are interested in this concept in any capacity (investor, technical or non-technical co-founder) please reach out to me @tmandarano.