The Real Future of the Platform Economy

Citizen Entrepreneurship and a Market Reset



Simone Cicero Follow Jan 18, 2019 · 17 min read

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The Post in Brief

- the future is about high value, complex, relational systems;
- platforms/aggregators/marketplaces are set to play an increasingly important role in the economy;
- crypto & machine learning will empower even more citizens-entrepreneurs to play a key role in parts of the economy that have so far been the realm of corporates and public institutions.

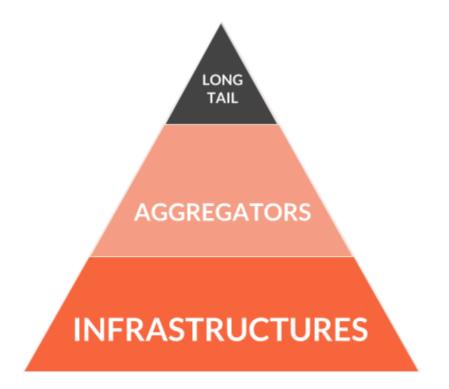




This first installment is extracted from a speech I recently gave in Qingdao, at China at **Haier's** annual opening meeting. Haier Group is a leading force in management innovation worldwide and has been recognized as a lighthouse of organizational transformation (see the latest coverage by HBR). More in details *RenDanHeyi* — its organization model — puts Haier at the forefront of **Platform-Ecosystem** thinking worldwide. In this first post, I share with our readers a framing that I offered as a starting point, to understand **where markets are heading**.

Upcoming posts will offer some reflections on how organizations should transform, to really become ecosystem-driven platforms, starting from the forefront of Haiers' *RenDanHeyi* model.

Transforming Value Chains with Networks



In the past few months, I've been working hard to provide Platform Design Toolkit adopters and our readers with a clearer representation of the **evolution of digitally enabled markets**. I shared our understanding of digital markets as *distributed* in three major layers, that of **infrastructures**, **aggregators** and long tail **markets**.

I've explained how **aggregators** play a key role in an increasingly networked economy, where manufacturing mass-market goods and services is outmoded by **connecting** talented producers with consumers in *long-tail* markets. In this economic paradigm, **small players** gain much more capabilities to deliver **exceptional value**.

In post-industrial value chains, the role of aggregators is key: be an alive, learning and **opportunity-generating system**, that produces continuous quality improvement in the experiences exchanged thus helping new *niches* emerge, unlocking new potential.

"In the 20th Century low risk meant no errors, in the 21st century, no errors delivers no learning and no learning begets death. Low risk is the result of diverse, responsive ecosystems providing rich insights" Lisa Gansky — author and Boundaryless co-founder

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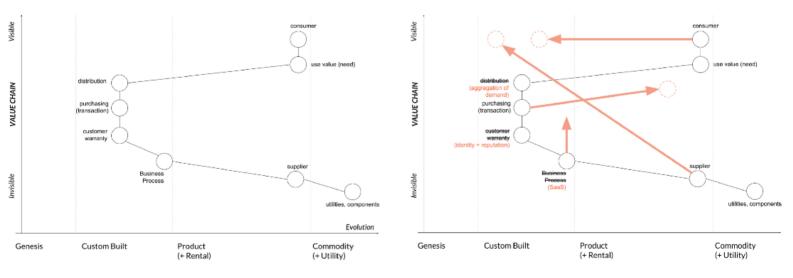
I also depicted the effect of *layerization* on the typical **industrial value chain.** I used **Wardley Maps**, to plot our *unified market theory* against evolutionary value chains, and I've been able to explain how aggregators are applying a series of key basic *"strategic gameplays"* to transform linear industrial value chains into **post-industrial systems of value chains and networks**. In industrial value chains, markets are served by organizations that hide and control suppliers behind complicated business processes that produce replicable products, and services, to **mass-market consumers.** The platformization of a value chain normally deals with five key strategic plays that, in value chain terms, can be described as follows.

1. From mass market to personalization by interaction: aggregators replace massproduced, *one-size-fits-all* manufactured solutions in favor of systems that able to produce a **long tail** of tailored niche experiences. Aggregators do this by bringing producers back on the top of the value chain, treating them as key participants to the value creation process, connecting them with their peer consumers to provide **contextualized solutions** — in one word **facilitating interaction and selforganization**.

- 2. **Standardize transactions:** aggregators create channels and modes of interaction that **standardize the recurring transactions** between producers and consumers in an attempt to reduce transaction cost.
- 3. **Provide SaaS to simplify a business process:** aggregators normally codify complex business models into **Software as a Service** and make it accessible and easy to use for small players, solving many typical headaches for producers.
- 4. **Aggregating demand and supply:** by aggregating demand and supply in the same place, they reduce the need for advertising, marketing and distribution generating "pull" dynamics (attraction of the best fit) versus industrial push marketing;
- 5. **Identity and reputation**: by the creation of contextual **identities** and by designing clear **reputation systems** they let the best players emerge, helping consumer navigate towards the best and right producers;

In Wardley Map's terms, the effect of the application of these recurring traits produces a peculiar value chain shape change: from **C** (industrial) to **Z** (post-industrial) as one can see from the pictures below.

The dominators of the modern economy, understand these dynamics exceptionally well and, not only choose a role to play in accordance with these new rules but also increasingly play **multiple roles in parallel**. These players can produce powerful dynamics of innovation in continuous cycles: first, they **let ecosystems explore and create new propositions,** then they **institutionalize and commoditize these new propositions**, preparing the next cycle of value chain climbing.

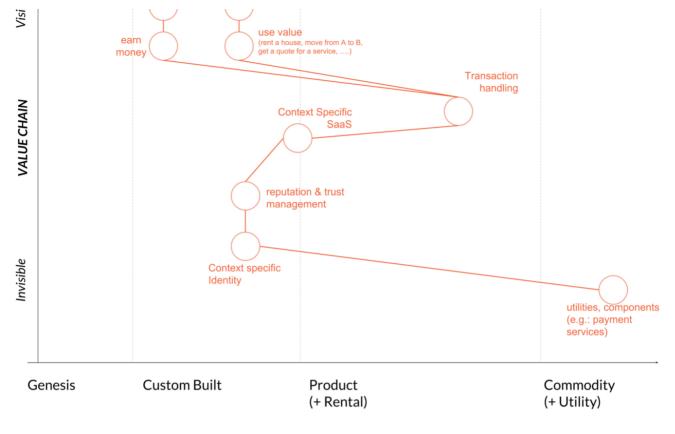


The typical industrial service value chain and the platformization plays

ble

producer

consumer



The Typical Aggregator Value Chain

The poster child of this economy can be seen in Amazon. From the reality of a book retail e-commerce, the Seattle giant succeeded to become a generalist *"infrastructure-to-consumer"*, and an aggregator-marketplace that leverages a broader set of merchants, creating a virtually endless inventory, deepening the possible choices for the user.

In the process, Amazon also continuously componentizes and commoditizes the marketplace products offered, by continuously launching amazon "basics" versions, or just **plainly new brands**, that aim at monetizing directly the categories that emerge as best sellers.

Amazon inherently uses its ecosystem — as Simon Wardley once said — as a *"future sensing engine"* continuously **eating a larger part of an even larger cake**, that it is fated to conquer an even larger part of the market. **Amazon doesn't think like a retailer, it thinks as the retail industry.**

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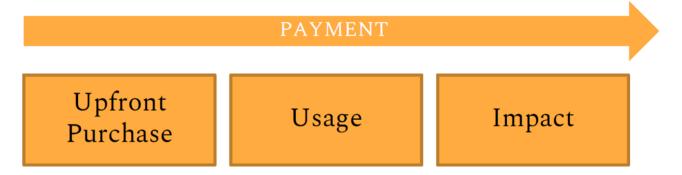
From Products to Services to Impact in a boundaryless digital world

In the last part of 2018, we've been lucky to see a few great works and reports coming to life. Earlier work also — that came up in May from Mary Meeker — already pointed out

the **rising importance of subscriptions in services**, re-shaping the product consumption patterns.

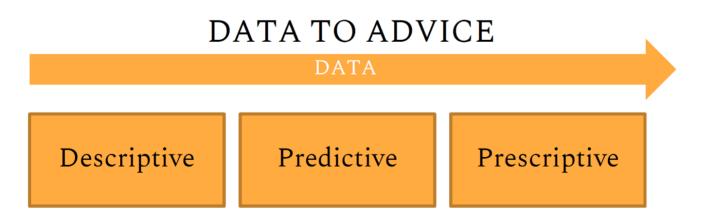
This trend was already foreseeable. John Hagel's pioneering work on explaining the evolution of business models, previously explained how — beyond the already rampant evolution from **product to services** (with the "access over ownership" mantra), the evolution would continue to the next step: from *pay-per-use* services subscriptions into **pay-per-impact**, all enabled by a new generation of connected technologies, able to sense relevant and contextual data on the actual value generated for the user.

TRANSACTION TO RELATIONSHIP



From John Hagel's The Big Shift in Business Models

Isn't this one of the key meanings of **IoT**? It's not casual that one of the essential capabilities of IoT in ecosystems is to enable the sampling of relevant and contextual information, to evaluate how much value is being generated in an interaction or relationship. The emergence of pay-per-use business models is growing fast, pay-per-impact will follow.



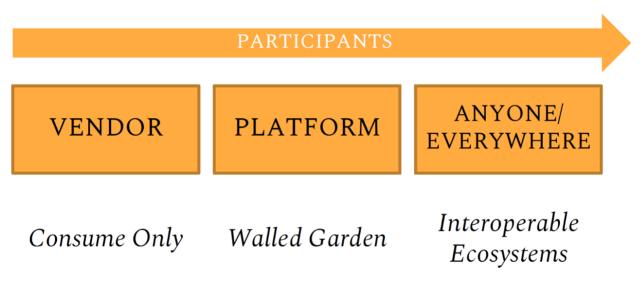
From John Hagel's The Big Shift in Business Models

Always coming back to Hagel, we also need to understand that an increasing number of platforms, aggregators — network orchestrators for value creation — will then be able to

leverage on data, to provide not only suggestions but, **prescriptive suggestions**. As Hagel said "rather than just anticipating likely future events, [these players] have the ability to advise customers on what action to take in response to those future events in order to create the most value for themselves."

At the same time, Hagel also alerts that the future is likely going to require interoperating platforms: as the need is to interact with anyone, everywhere, grows according to the potential value that we can gain from the interaction itself. Private walled gardens will fail to deliver these opportunities. We need to realize that business models of the future will need to be "permissionless" and "ecosystemic", vetting and constraining users will likely become impossible or counterproductive.

ONE TO MANY



From John Hagel's The Big Shift in Business Models

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Pervasive Dynamics

At this point, we might ask: where are these dynamics supposed to play a role? Which parts of the economy will be subject to the evolution towards ecosystem-driven, self-organized, value-driven marketplaces?

Some markets are maturing steadily (e-commerce/retail is probably the most mature so far) and there's a growing understanding, that a huge potential lies into networking and transforming, currently *disorganized*, low performing markets that cover the whole spectrum of household consumer spending.



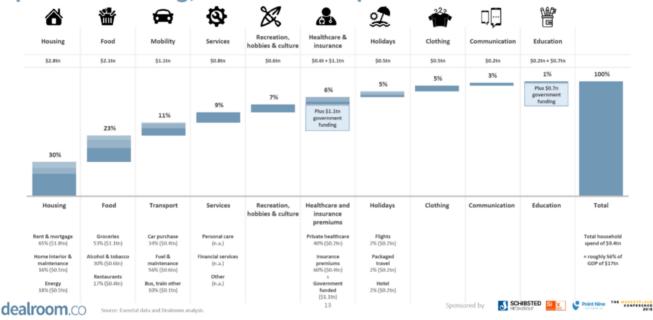
From Ben Evans

Recently released **Ben Evans'** *"The End of the Beginning"* and **Andrew Chen's** *"What's next for marketplace startups? Reinventing the \$10 trillion service economy"* presentations, make a good recap of the potential. Both these pieces of work pointed out the enormous opportunity that lies ahead in transforming the services economy. This

also has been echoed by a great *Dealroom* report on the **"Future of Online Marketplaces"** that contextualized a **9T\$ opportunity** only in the US.

There's certainly a lot more to discover about *marketplaces* (aggregators, platforms) but they're surely set to play a larger role in the economy in the years ahead, as their technological **enablers** (growing potential at the edge), and **drivers** (personalization of experiences) are **pervasive**.

\$9 trillion in consumer household spending: two-thirds is spent on housing, food and transportation



From Dealroom's report



Evolution of Services Marketplaces

COMPLEXITY OF SERVICE

From Andrew Chen

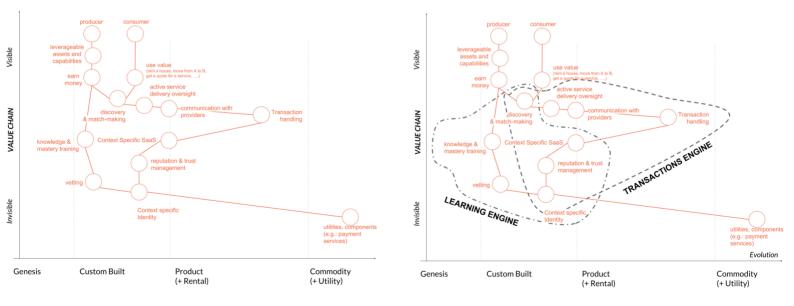
According to Andrew Chen, marketplaces are set to transform markets which are currently constrained by **regulatory**, **technological** and **operational** hurdles, and will do that by providing and evolving even more elements of the value chain.

If we expand a little the representation of a marketplace/aggregator/platform-enabled value chain, integrating the new elements that Chen identifies as increasingly key in the current and upcoming years, one can see in the pictures below the result that we get.

While the Z-Shape — typical of aggregators — is substantially preserved, the need to face more complex markets requires a **whole new set of value chain elements** to be controlled. In the marketplaces of the future one could expect:

- greater **service overseeing** from the platform owner;
- more important **discovery and match-making** as context becomes even more king;
- and a renewed focus on the upskilling services that the platform shaper will provide to producers, especially in more **sensitive markets** (such as education, professional services, real estate, personal care, and development, etc...).

The two essential engines of platforms indeed emerge more clearly in the picture below: the **learning engine** (that focused on providing continuous opportunity to learn, improve, hone new capabilities and make the best of the producer's talents) and a refined **transactions engine** where the shaper plays a more important role in ensuring consistency in the experiences, designs to allow trust to emerge, and lets the value flow more easily.

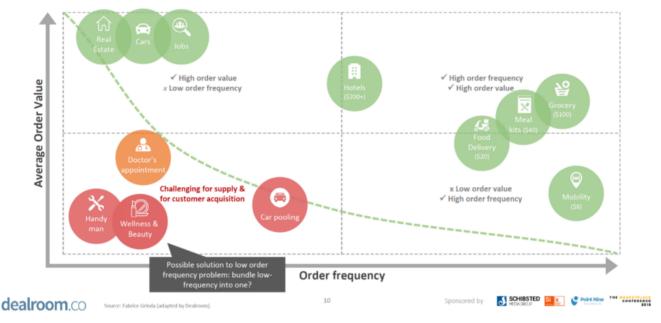


Modern Marketplaces control more components of the Value Chain according to Chen, here's the result.

Dealroom's report also provides some further interesting bits in examining the

characteristics of the new markets that marketplaces are unlocking. We're likely talking about markets where transactions can be rarer and more valuable, like in real estate. Here as we've seen, the aggregator-platform provides a **broader set of support services** and oversees a **broader part of the value creation process**, in an attempt to enable **a new space**.

Order value x order frequency = customer life-time value: another key success factor



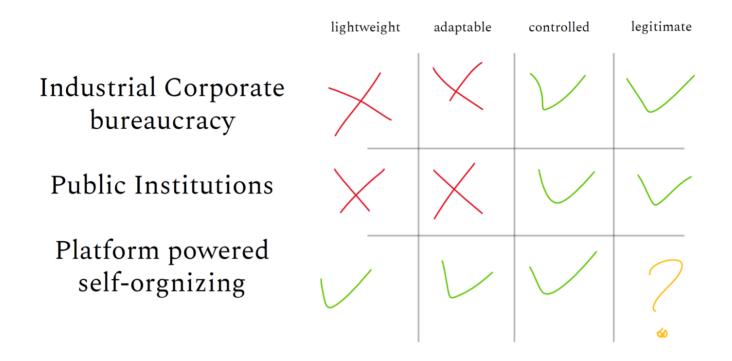
This *new space* overcomes the bureaucratic nightmare of corporate-or-publicly provided (or regulated) services, and lets ecosystems drive innovation and value creation in a more adaptable and nimble manner, providing an "architected" experience that is trustable, replicable and perceived as enjoyable and fair by the participants, without the need of an institutional "stamp".

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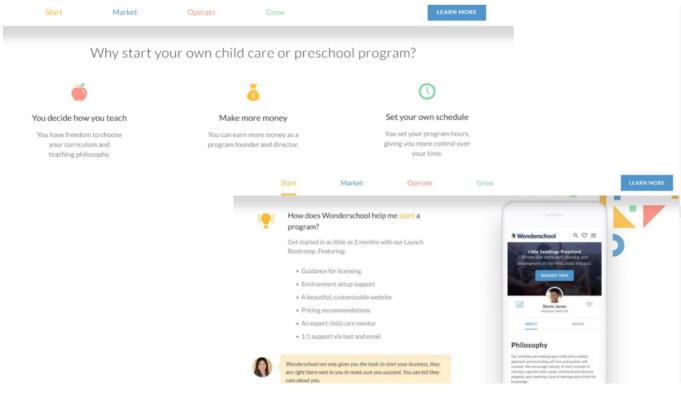
The possibilities created by aggregators are key in an age where everyone can and should be empowered to **produce** value. In this age, producers need to be empowered to leverage on their **talent** and connect with their potential markets, instead of being hidden in a complicated business process that is increasingly sustaining just a **self-serving bureaucracy**. Taylorism complicatedness can't cope with the speed of change, and adaptation, that is needed in today's economy: welcome complexity.

The major challenge in these new high-value markets will be that of **helping ecosystems self-organize**, ensuring quality in contexts where the XXth century

industrial-institutional models are hitting their inherent limitations, but that **used to be the domain of regulated professionals, corporates or public servants**.



Education is a good example. **Wonderschool**, an **a16z** backed, company is letting educators provide pre-school care and education services to the communities where those are needed, responding to a growing need to rethink education, beyond traditional patterns.



WonderSchool value proposition

If I can add my personal experience in Italy, I can say that I'm now involved in a *platform cooperative* that has connected hundreds of citizens allowing them to self-produce their energy through the installation of solar panels on top of buildings.

In the South of Italy, I'm lucky to know an emergent network of wheat producers that is trying to create a system that connects them with their consumers directly, with the potential of transforming them into "investors". The aim is at investing in infrastructure (such as a warehouse, and further facilities for making more elaborated products starting from the wheat—think pasta for example), and give back returns to consumer-investors in the form of regular deliveries of organic products: this would be a revolutionary way to make a resilient food-chain.

Both these models have the potential for large scale replicability.

Access to technology and widespread open knowledge leaves room for the emergence of new paradigms, all based around self-organizing around tailored solutions, organized at **community (local)** and **tribal (ultra-contextual)** level. We can expect similar patterns to emerge around an increasing number of contexts, ranging from **food security** to **healthcare** and **social care**, from **local energy harvesting** to **welfare.** In these fields, centralized, industrial institutions are struggling to meet the innovation demand, as these emerging, contextual behaviors can hardly be industrialized.

This is going to be at the forefront of platform innovation, part of which will empower a wave of **Citizen Entrepreneurship** that will reinvent XXIst century institutions. Policies will surely be needed to allow this "**economic freedom**" to express, here's where Chen indeed foresees **regulatory hurdles**, that will likely be a hot topic for conversation as no one likes to let power go. In my humble opinion, policymakers should care less about opening up the decision making space to citizens, while they should **obsess about opening up the economic space**, also growing citizen's awareness towards the potential available to organize value in the local economy.

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Framing the opportunity

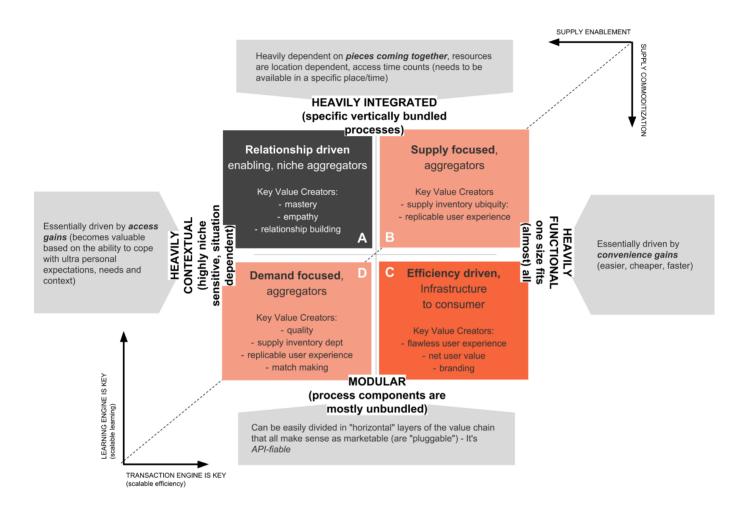
With the evidence that *marketplaces-aggregators-platforms* are set to play a larger role in the economy, it is useful to try visually frame the opportunities more specifically, based on the type of process being organized.

We can classify the market opportunities according to two different dimensions:

- one dimension discerning between **contextual** (and therefore niche sensitive) and **functional** (where one size fits *almost* all) services;

- the other in accordance with the **modularity** and *"ease of unbundling"* of the related business (value creation) process.

If we plot the service landscape in a plan, we can come up with the following scheme:



Let's make a few examples: looking at the vertical axis, retail is definitely a modular and *"easy to unbundle"* process (it's easy to subdivide it into pieces like curation, advertising, fulfillment ...), while healthcare related services, are inherently more complicated: even if one can maybe provide an unbundled equipped space (like with **Medneo** example in Germany), visiting a doctor is often time-dependent, empathic experience, often part of a long-term relationship that goes multi-channel (live, phone, etc...) and emotional.

On the other hand, looking at the horizontal axis, for some services, one is normally content with finding something that provides **cheaper**, **faster**, **easier** options (praising what we normally call *"convenience gains"*), while on the other I'll need to find an answer that is **perfect for me**, available **in the right moment**, **at the right place** (as in the doctor example): in one word, *contextual*.

A soft diagonal line from the upper right corner to the lower left will likely help us discern between platforms that **enable providers** (the more at the upper left) vs platforms that tend to *commoditize* them at the extent of trying to "hide" them as in a traditional industrial process (lower right).

In the lower right quadrant, the **transactions engine** becomes key and reduction of frictions (reduction of transaction cost) becomes heavily important: the system needs to achieve what John Hagel calls *scalable efficiency* (thanks Ron Kersic for the great intuition here).

On the upper left quadrant, the **learning engine** becomes more important as suppliers are more visible, more key to the user experience, and to some extent representing deeply the brand in higher value transactions: here providers are essential in making the *"perfect fit"* experience. In this quadrant (and more generally in the upper left half) the platform is tackling more contextual and integrated problems: **mastery is key** and therefore upskilling, adaptation and evolution of providers become paramount. The system needs to generate *scalable learning* (still a Hagel's concept, and still, thanks Ron). Here's the quadrant where most of the revolution is going to happen.

While quadrant A and C are at the opposite range of the post-industrial (contextual) vs industrial (ubiquitous) platform spectrum, quadrant B and D are more similar, and more traditional battlefield for aggregators: the more one moves to the right, the more the aggregator will have to *standardize providers*, the more you go left the more the dept, difference, and peculiarity in providers will enrich the experience.

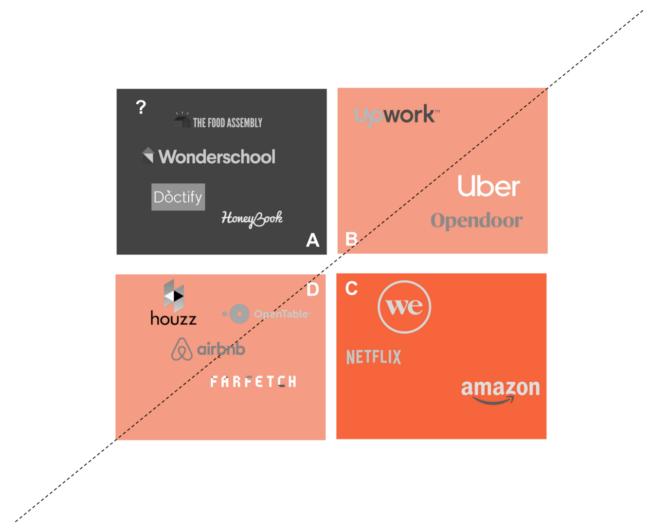
This characteristic makes the upper right aggregators incentivized on **aggregating massive supply** (as the ubiquity of supply becomes central to a consistent and efficient experience), and the lower right ones more sensitive to **aggregate demand** because the specialty of the provider will be properly met with a peculiar demand only if most of the demand is aggregated in the same place.

The spectrum of aggregators captured in the matrix will then range from:

- **tend-to-be- global-monopolies** aggregators like Amazon that almost have traits of infrastructures;
- **aggregators that will coexist** based on the nature of their markets, characterized by various grade of integration and contextuality (e.g.: Uber and Lyft, Airbnb and HomeAway, etc...);

• integrated, super contextual, **niche aggregators**, very sensitive to local/tribal potential and needs, possibly leading to the next wave of **citizen entrepreneurship** (rebuilding institutions for the XXIst century).

Here follows a picture where I'm adding some well-known brands to the matrix for you to contextualize:







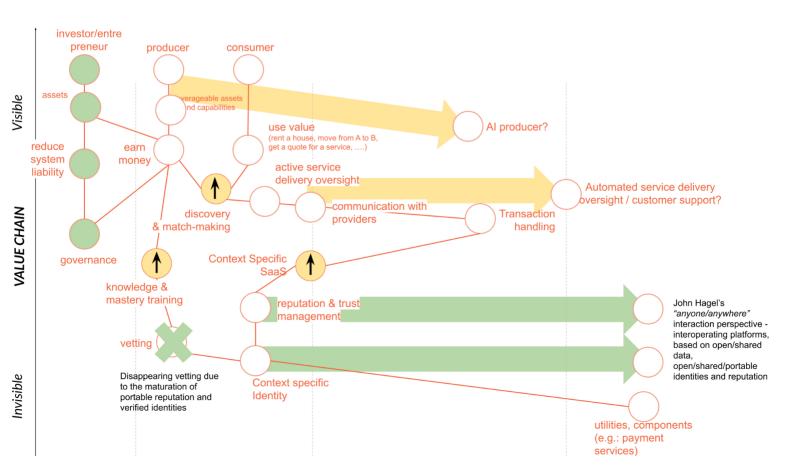
Click to Connect and explore what the Platform-Ecosystem landscape means for your organization

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A Market Reset

In the presentation *"The end of the Beginning"* Evans presents **Crypto** (intended I guess as for the full spectrum of blockchain technology and crypto-tokens) and **Machine Learning** as two potentially heavily impacting shifts calling a "market reset". Andrew Chen as well presents *Automation and AI* as one of the possible drivers to unlock the future of marketplaces by *"automating away the need for a licensed service provider altogether"*.

But — besides excitement — how can we foresee if these two major shifts will really create the "market reset" that Evans talks about? If we take the description of the marketplace Value Chain that we just shared, and we try to evaluate the impact of these two rampant technologies what do we really get?



			Evolution
Genesis	Custom Built	Product (+ Rental)	Commodity (+ Utility)

In yellow the impacts of AI and Machine Learning, in green, that of Crypto.

If we first look at the yellow lines and spots, there we can see where machine learning and AI could have an impact. We can imagine that the systems of **knowledge and mastery development**, along with the **Software as a Service** that we provide as platform owners (architects) to the ecosystem, can improve by leveraging on massive data analytics, and intelligent automation.

We can also imagine that our capability for **match-making** and **discovery** can improve though increasingly, on a smaller scale-contextual system, players *car*" by former Uber CEO, with autonomous driving), and that customer support and service overseeing can be partially accomplished by the use of automated systems, but I can't foresee now any further impacts.

In green, instead, I've highlighted the impacts of crypto. Crypto might soon **unlock reputation and identity from a single platform** and enable the perspective that John Hagel touts, as *"anyone/anywhere"*, where participants can participate to value creation beyond the walled garden of a single platform.

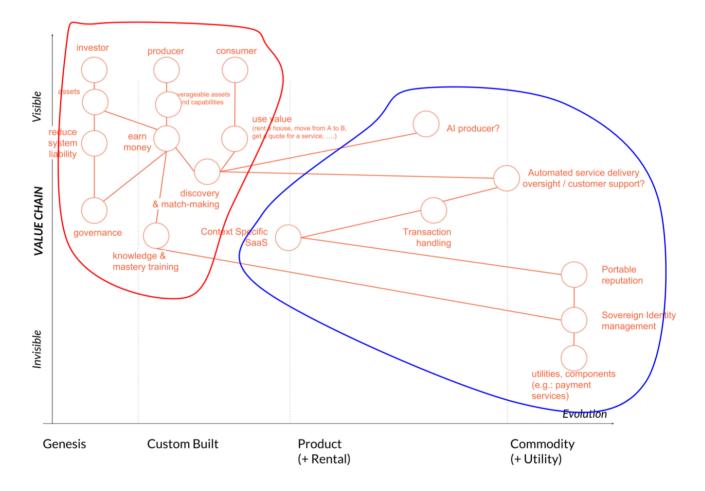
This transformation might enable what is normally called a "*sovereign*" identity (that belongs to the user, not the platform) and a "**portable**" reputation, where social credit score/capital is — again — not related just to a single platform but universal, and portable.

These verified identities and portable reputation would in turn probably reduce the need for "vetting", as participants will be able to discern by themselves who they want to interact with. A good example here can be the Free trade feature offered by blockchain-integrated, protocol-based e-commerce aggregator *Open Bazaar* which describes itself as a *"free online marketplace, with no restrictions, no platform fees"*.

A second major impact of the maturation of crypto will be a widespread explosion of **new models of financing**, that would add another key player to the ecosystem: the **investor**. Such an investor would be likely **closer to the system being organized** (in the upper left quadrant), and therefore interested in reducing the **liabilities** in the system to make it more anti-fragile. She will be interested in earning money (or, better, the utility currency) but also to generate **specific positive outcomes in the context where she lives, her tribes and community**.

As a further effect, crypto may enable new mechanisms of **shared governance**, by efficiently embedding **decision-making rights** into ownership and reputation **tokens**, letting investors, producers and consumers play a stronger role — along with the platform owners and architects — in the **governance** of the platform (reinventing *institutions*).

What we have in the end is a value chain that is further divided in two sides. One to be more "enabling", likely providing further support to *platform-to-platform* interoperability, and one heavily contextual and small-scale (local, tribal), or at least *"fractal*" or *"glocal*": connecting the local, tribal contexts as multiple nodes of a global network. In this latter part of the value chain **economic players will start to organize around the design of economic spaces that reduce systems liability, through shared investing and shared governance.**



According to Akseli Virtanen, founder of pioneering crypto economics venture *Economic Space Agency*:

"cryptoeconomics opens to us economy itself as a design space"

Once the capabilities of design leave the domain of creating something **individually pleasing the customer**, and enter the realm of *"economics"* they become inherently socio-political as they have the potential to impact the social sphere of our interactions, our communities and the systems we live in.

Cryptocurrencies or not, defining the success of an endeavor in this new perspective will certainly become a hard catch. The future of economics is going to be complex: not only these systems will be **self-organized** but also **self-measured**, and **self-determined** by the ecosystem and communities that power them.

The transition of the economy towards complexity poses an enormous threat to the idea of industrial organization we are mostly used to, and calls for a wave of reinvention that will unleash a tremendous amount of value if embraced.

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Conclusions

In this post, I presented an overall recap of the expected evolution of digital markets and explained why marketplaces-aggregators-platforms will likely play a substantial role.

Stay tuned on the blog as I'll follow up with other installments, that will connect this reasoning with the impacts on the role, shape, and concept of organizations.



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