

A new world of ecosystems

Abstract

Ecosystems are a new way to think about organizing businesses and society to create value by dissolving boundaries between today's industry sectors. Blockchain can underpin ecosystem platforms that allow value exchange between organizations and people to be transparent efficient, and fast. Several types of ecosystems are emerging with each unlocking value in its own way by disrupting incumbent business models. Enterprises should embrace this opportunity by developing strategies to address the rapid emergence of the world of ecosystems.

Ecosystems: The transformative application of blockchain

Digital technologies are spawning new platform ecosystems that challenge mindsets, organizational constructs, and business models. These platform ecosystems could connect billions of people digitally, stimulate new collaborative value creation, and even solve the world’s biggest challenges.¹ Alternatively, if economic systems distribute the new value unevenly, it could accelerate inequality and further fragment societies.² While technologies such as artificial intelligence (AI) and internet of things (IoT) are creating new value by automating and connecting things, other emerging technologies such as blockchain³ are fundamentally transforming the way that value is exchanged and distributed.⁴

Blockchain challenges the structure of society because it broadens the scope of cooperation to accelerate innovation and improve efficiency, and to create economically inclusive markets. Blockchains’ unique distributed architecture makes it possible to dissolve boundaries within and between the private, public, and civil sectors, and move toward a world of collaborative ecosystems.

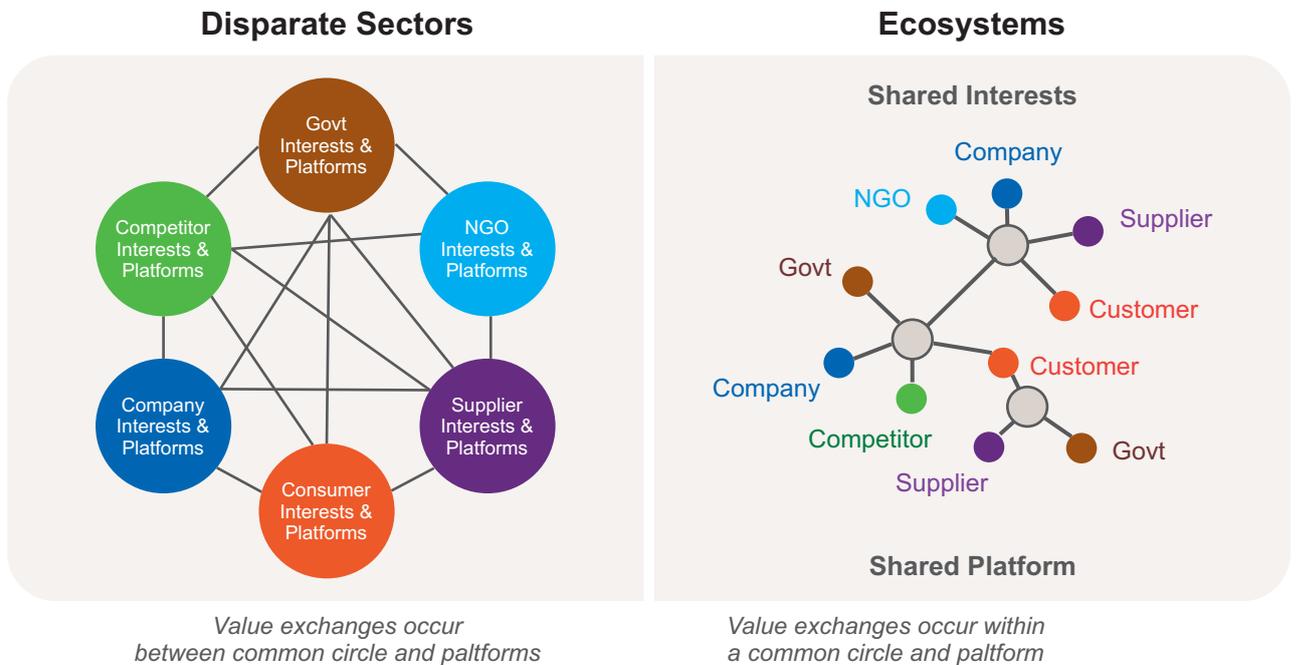


Figure 1: From disparate sectors to ecosystems

The construct of ecosystems

An ecosystem can be described as entities collaborating along a continuum of customer needs to expand addressable market and deliver greater value. A simpler way to define an ecosystem is to draw a circle around individuals, organizations, and things that share or complement a set of interests. The circle will be defined by the stakeholders’ mindsets – whether they are to improve collaboration, create efficiencies or curate new markets. Interests that define an ecosystem can range from leveraging open source development for complex⁴ problems to creating economically inclusive⁵ and sustainable markets⁶ that align with emerging consumer preferences.⁷ These interests involve interactions within and across organizations, industries or multiple sectors of the economy. Figure 1 illustrates the shift from value exchange between circles and platforms to value exchange within a common circle and platform.

Multiple kinds of ecosystems

There are many ecosystems within and across the private, public and civil sectors of the economy that are interest-driven and centralized. These ecosystems can be reorganized to form the Ecosystem of You⁸, a new market that embeds the interests of the private, public, and civil sectors into experiences that are purposeful, profitable and economically inclusive.

Four ecosystems that support the Ecosystem of You include:

- Digital Enterprise Ecosystems
- Open Collaborative Ecosystems
- Commons Ecosystems
- Life Experience Ecosystems

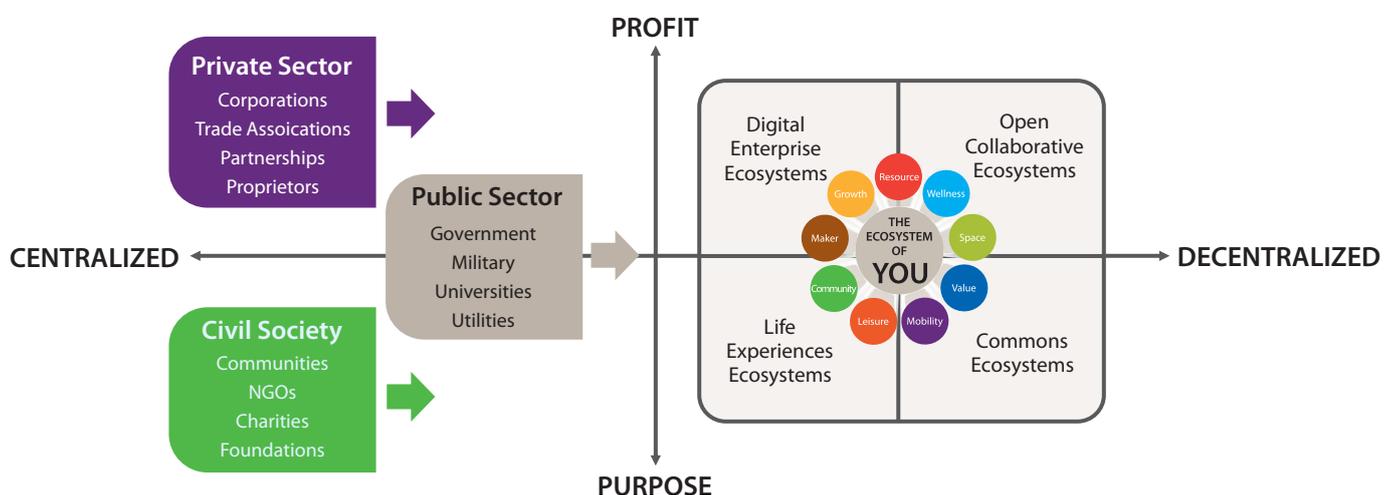


Figure 2: Transitioning from siloed sectors to the Ecosystem of You⁹

Digital Enterprise Ecosystems

A digital enterprise ecosystem has its roots in the private sector and comprises companies with a common interest in achieving multi-party efficiencies to gain price, quality or speed to market advantages over competitors. Service providers create network effects by curating a platform-based ecosystem that becomes the industry standard for hyper-productive consumption.

Examples of digital enterprise ecosystems include:

- **Intra-organization Ecosystems** move away from traditional corporate hierarchical structures that struggle to manage communication and information to turn large companies into networks of autonomous company-like teams. Frameworks such as Holacracy, Agile, Sociocracy 3.0 and Collaborative Network Economies support these ecosystems.
- **Industry Platform Ecosystems** decentralize innovation as providers create platforms upon which others innovate. Examples include the Apple and Google mobile device ecosystems, Amazon Alexa virtual assistant ecosystem, and the banking ecosystem R3.
- **Prosumer Ecosystems** decentralize production by enabling consumers to become producers or 'prosumers' that create products and services and exchange them directly with their peers. Platform providers such as Uber, YouTube, and AirBnB monetize exchanges via subscriptions, transaction fees or advertising and dictate terms to both the demand and supply side of the exchange.
- **Supply Chain Ecosystems** utilize decentralized platforms such as Viant to improve transparency, tracking and efficiency among manufacturers, suppliers, distributors, service providers and customers in complex global supply chains.
- **Multi-industry Ecosystems** power customer experiences that transcend corporate and industry borders. For example, an ecosystem of vehicle manufacturers, prosumers, energy, real estate and retail providers can coordinate their offerings to create a convenient consumer experience for Electric Vehicle Charging.

Open Collaborative Ecosystems

Open collaborative ecosystems decentralize governance and ownership in a model that disrupts and disintermediates digital enterprise ecosystem platform providers. Prosumers own the platform and govern all decisions and terms of exchange, including income distribution. There are multiple examples of

blockchain open collaborative ecosystems emerging across nearly every aspect of the economy.

Commons Ecosystems

Commons ecosystems focus on sustaining ongoing access to and health of the shared resources. Some types of common ecosystems, include:

- Ecological Commons: air, water bodies, wetlands, landfills
- Civic Commons: public spaces, public schools, public transit
- Social Commons: caring for the sick, elderly and children; housework
- Cultural Commons: literature, music, arts, design, film, video, television, radio
- Knowledge Commons: intellectual information and content

Examples of commons ecosystems include open source software such as Bitcoin and Ethereum, Guardium, a platform for distributed emergency response, and social plastic, a platform to incent recycling.

Life Experience Ecosystems

As platform models continue to proliferate, the world will increasingly be comprised of interoperable ecosystems where every organization, individual, and thing are integrated. This will allow a great opportunity to create connected life experiences. Life experience ecosystems recognize that industries do not produce experiences that emulate human experience. Take tourism, for example. While integration within and between the travel and hospitality segments can make tourism more convenient, people want to connect with others who share their interests and experience the places they visit in unique, authentic ways. There is an enormous underserved market to orchestrate similar meaningful experiences where people connect with each other on the basis of interests and values.

The Ecosystem of You

The ultimate opportunity in a hyper-connected world is to create an ecosystem of ecosystems that draws upon the interests of digital enterprise, open collaborative, commons and life experience ecosystems to create life experiences that meet everyone's needs.

The Ecosystem of You model covers nine dimensions, each based on a fundamental human need. As the industries of today transition toward hyper-connected ecosystems, there is a great opportunity to shift the perspective from 'independently providing services to customers' to 'collaborating to enrich human lives'.

What if everyone...



Figure 3: The Ecosystem of You¹⁰

Exponential Ecosystem Innovation

Traditionally, innovation follows an S curve—as one innovation matures, another one emerges (see Figure 4). The S curve measures the speed and adoption of an innovation and helps determine when to jump from the first curve to the second curve, and time investments in new technologies and business models. However, with open source blockchain, the pace of ecosystem emergence is accelerating exponentially and causing S curves to compact and overlap as multiple ecosystems form simultaneously (see Figure 4).

To navigate the fast pace of innovation, organizations have to ride multiple curves simultaneously, experimenting along the spectrum of models in a way that creates value in current industry structures while exploring the emergence of new life experience markets.

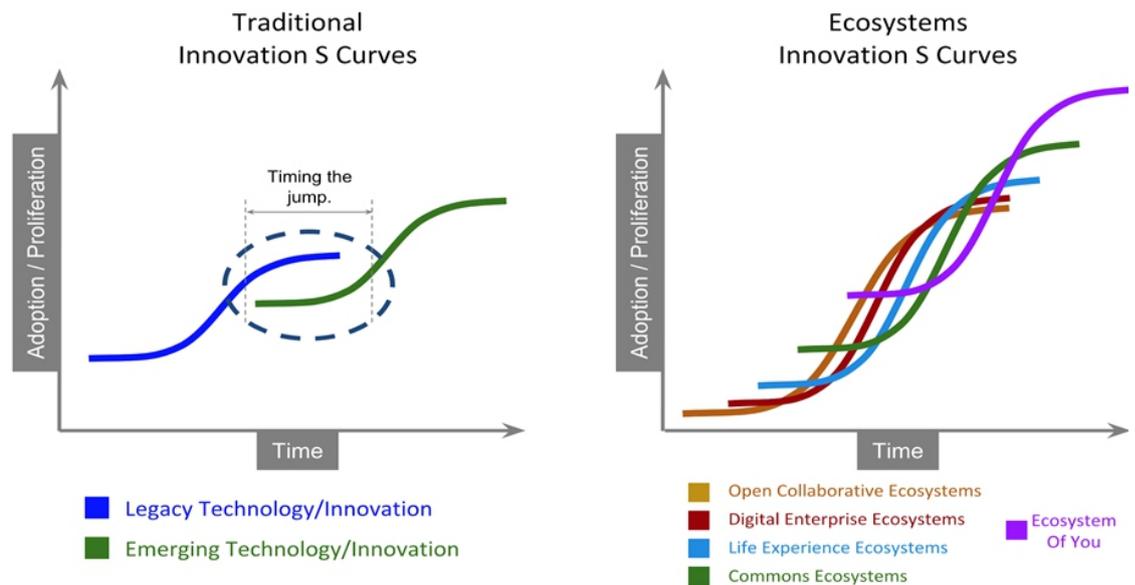


Figure 4: Traditional Innovation vs. Exponential Ecosystem Innovation

Conclusion

Ecosystems offer transformational innovation opportunity with blockchain. Multiple types of ecosystems are emerging and enterprises need to address the challenge by developing strategies that simultaneously address opportunities of current industry structures while reshaping their business models to generate value from ecosystems.

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