Building and managing an ecosystem of co-created value

HYPE INNOVATION REPORT
by Oana-Maria Pop
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Introduction

While the Off-The-Grid Movement’s supporters[^1] might resent me for saying this, connectedness is something we cannot be without.

There are two broad types of connectedness, of course. The physical connectedness to various amenities like electricity, drinking water, plumbing, food stores, healthcare services etc. And the subtler connectedness to government and laws, the environment, people. Actually, to one's personal ecosystem with its resources, knowledge and opportunities.

At the dawn of the Information Age, both have reached incredible levels of sophistication. Suddenly, small decisions like standing up for a cause can have far reaching consequences. Suddenly, information travels faster than ever before, while social media is reducing the degrees of separation between individuals to a staggering 3.57[^2]. Suddenly, one of the MIT Media Lab’s most important inventions[^3] has a Twitter account[^4] ...

This is how connected we all are. And this is merely the beginning.

The same holds true for organizations. As markets expand and barriers to communication fall, collaboration takes new and exciting forms to reflect these changes. From the demanding, contract-based strategic alliances in the 1970s to loose ecosystems of co-created value today, innovation is becoming less of a solo act and more of a group performance.

[^1]: Off-The-Grid Movement
[^2]: Degrees of separation
[^3]: MIT Media Lab's invention
[^4]: MIT Media Lab's Twitter account
To survive and prosper in highly competitive contexts and markets, firms must learn to share ideas, initiate change, react to change, and build dynamic capabilities in the process. In a nutshell, firms must be able to seed and nurture ecosystems of co-created value.

The New York Times, Burberry, Fujitsu Services, and Novo Nordisk are just a few of the companies actively experimenting with ecosystems today. These companies, and more like them, are setting the standards for innovation and co-creation in their respective industries.

In as follows, I would like to share with you their cumulative experience, as well as my own, with understanding these new and exciting collaborative arrangements.

This whitepaper is structured as follows:

In “The Evolution Of Collaboration” you will find information on the four broad types of collaborative arrangements known to us today. Here, strategic alliances, portfolios, networks and ecosystems are all there for you to discover. While collaboration is generally a means to an end, in some cases, it can even be an end in itself.

In “Collaborator Focus Versus Value Co-Creation” you will be introduced to key terms like: “goods-dominant logic”, “service dominant logic”, “customer focus”, “resilience thinking” and “value co-creation”. Essentially, the “stuff” ecosystems are made of.

In “Building and Managing The Ecosystem Of Co-created Value” you will find a complete guide to the elements that enable an ecosystem’s creation. Using examples from five industries – architecture, publishing, fashion, telecommunications and healthcare – you will get a good idea of the art and science of ecosystem management.

Cooperation, competition, co-evolution, co-created value.
Shared resources, shared strategies, shared vision, shared enterprise.
These are the essentials of the new and promising collaborative arrangements.

Happy reading!
I mean, building!
The Evolution of Collaboration

“In the same way you can never go backward to a slower computer, you can never go backward to a lessened state of connectedness”
– Douglas Coupland (Canadian novelist and artist; author of “Generation X”)  

Healthcare, education, entertainment, spending habits, thinking patterns... The Information Age has revolutionized all of the above. Fortunately, the process of partnering for innovation has not remained immune to technological progress either. In the same way Millennials will never experience a world without connectivity or mobile devices, companies will never return to a lesser state of connectedness.  

How so? The short answer is open innovation – in all its inbound-outbound-coupled glory.  

As they contemplate their make-or-buy decisions, organizations start by considering a number of factors. Time, money, and talent all weigh in. When this decision takes place in what FastCompany calls “overdrive”, however, the parameters multiply. In a fast-paced, hyper-connected world customers, suppliers, complementors, competitors, even governments all have a stake in the make-or-buy decision and its potential outcomes.  

From the first alliances in IT and healthcare in the 1970s, to modern-day ecosystems of co-created value, collaboration for innovation is taking new and exciting forms. Take a recent co-creation exercise between journalists and VR specialists for a concept called immersive journalism, or the way architecture firm Elemental is building half-houses to empower people in disaster struck areas. Not only do these new open/collaborative relationships require distinct ways to think about time, money, and talent, either inside our outside the boundaries of the firm. They also encourage innovating for the greater good.  

Before I explain how companies initiate and nurture ecosystems of co-created value, let’s take a brief look at what has been happening in the past.
According to strategic management scholars, companies have spent the last half-century in a transition. This journey has taken them from closely managing to apparently not managing their strategic relationships. Not in the classical sense at least.

Pressured by increasing competition, shorter product life cycles and increased risk, companies today see the advantages of connecting to a variety of collaborators and collaborator types. In other words, the logic of collaboration is shifting. With it, firms’ outlook, protection mechanisms, and mission are shifting too. The result? Long-term focus, less IP, and more joint strategizing. Above all, the activity of an organization is no longer about individual wellbeing. Today, there is more and more talk about ensuring the survival of the whole.

In as follows is a brief description of the four main types of collaboration known to us today, and the importance of each (see figure and reference on the next page).

Alliances

The most basic and longstanding type of collaboration for innovation is the strategic alliance. Strategic alliances are agreements between two (dyads) or more (triads, for example) independent firms, which temporarily combine resources and efforts to reach their strategic goals.

Alliances made headlines in the 1970s and 1980s as multinationals in IT (IBM, Microsoft, Apple), semiconductors (Intel) and biotechnology (Roche, Genentech, Eli Lilly) were experiencing the limitations of their own internal resources. As a result, they began tapping into externally available assets to increase competitiveness and reach ever-complex goals.
The main reasons\textsuperscript{12} to engage in a strategic alliance, and through this ensure continuous innovation, included:

- to compensate for in-house weaknesses or technological gaps;
- to establish new product lines and portfolios;
- to successfully enter new markets;
- to serve customers better; and
- to reduce NPD (New Product Development) costs, risks, and time.

In the strategic alliance era, collaboration meant creating formal, all encompassing, legal arrangements that allowed firms to cast a strong influence on their partners. Technology swapping, joint projects, and equity stakes were all used to have a greater say in a partners’ innovation projects. And to cash in on the profits, of course.

While formal control was largely the norm, the advantages of collaboration and looser coordination began to show. In other words, collaboration moved forward.

**Portfolios**

The second type of collaborative arrangement, still often used today, is the portfolio.

Having understood the benefits of creating alliances, firms were now interested in sustaining their benefits for longer. As such, alliances began to be centrally managed and the practice of building portfolios gained ground.

In effect, portfolio management was all about extracting best practices from alliance experiences and then spreading these internally. In this process a so-called ego firm (or focal firm) established agreements with independent companies but then managed the knowledge flows through specific functions.

Traditionally, large pharmaceutical companies have been excellent portfolio builders. In the industry's beginnings, these firms would often collaborate with small biotechnological firms to assimilate knowledge and patents in the most efficient and effective manner. While conflicts were frequent at the start – small biotechs often felt ‘robbed’ of their key resources – collaboration moved on. Effective portfolio management models were the key to this success.
All in all, the growing popularity of portfolio management translated into a new attitude towards collaborators. This attitude would later become the “co-creation” view, which we will come to in a bit.

Innovation Networks

The third type of collaboration for innovation is the network. Networks include groups of firms that share R&D goals related to products, services, processes or business models. Some examples include CITER – the Centre for Textile Information in Emilia Romagna, Italy founded in 1980, KLM and Northwest Airlines (now Delta) initiated in 1989, and The Human Genome Project, an initiative that made waves in 1990 with its first published study/article.

Dense network structures are natural progressions of alliances and portfolios. As collaboration tools and practices spread from high-tech to medium and low-tech sectors, new ways of structuring the innovation activity emerged. The key difference: all firms were now interconnected, orchestration became less strict, and low-medium competition replaced the fierce battles for survival.

In time, networks\textsuperscript{13} started competing against each other, whereas suppliers, complementors, competitors, and even the customer could now contribute to the innovation process in new and surprising ways. Also, firms were no longer concerned with managing individual collaborations and ties. They were now managing their position in the network\textsuperscript{14}.

Despite higher coordination costs, the utility of networks soon became apparent. Networks were mainly used to:

\begin{itemize}
  \item scan firms’ environments for technological advances;
  \item develop individual and group capabilities; and
  \item secure long-term survival.
\end{itemize}

All in all, networks emphasized even more the collective wellbeing of the collaborators.
Ecosystems

The fourth and most advanced type of collaboration for innovation is the ecosystem.

In their 2016 HBR piece called “The Ecosystem of Co-created Value”15, authors Marc Kramer and Mark Pfitzer, make a strong case for ecosystems. From their work we learn not only how ubiquitous ecosystems have become but also begin to understand their power to improve individual and collective wellbeing.

Today, companies like Salesforce – client relationship management systems, IMEC – Nano electronics, Korean Air – air travel, and ENEL – electricity and gas distribution are just a few examples of how ecosystems can and should be used to create value which no single organization can create on its own.

While a generally accepted definition of ecosystems is lacking, scholars like Ron Adner16 have underlined a few key characteristics. In his view, ecosystems have long-term orientation, are partly self-adjusting and make complex interdependencies between various types of partners, including end customers, explicit.

Other prominent researchers such as Satish Nambisan and Robert Baron17 add more nuance to ecosystems and show how ecosystem partners co-evolve. In their view ecosystems are “loosely interconnected networks of companies and other entities that coevolve capabilities around a shared set of technologies, knowledge, or skills, and work cooperatively and competitively to develop new products and services”.

The most comprehensive description of ecosystems, however, is captured by marketing experts. In their work, researchers Stephen Vargo and Robert Lusch18 define ecosystems as: “relatively self-contained, self-adjusting systems of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange”.
The latter view is extremely important for two reasons:

- First, ecosystems are governed by certain rules and norms that influence the relationships between members.
- Second, in ecosystems value is uniquely determined by the collaborator(s) or customer(s). Hence, innovation is no longer in service of the focal firm. Innovation is now a jointly orchestrated activity.

All in all, ecosystems are typically characterized by:

- the absence of a formal authority;
- strong dependencies among members;
- a common set of goals and objectives; and
- a shared set of (complementary) knowledge and skills

Shared vision, shared enterprise, serving each other, helping each other create value, committing to each other, and pursuing jointly formulated strategies and goals hence becomes the norm.

To conclude, effective collaboration can take many forms. From the first strategic alliances in IT and pharma to modern-day ecosystems in transportation, retailing, and utilities, companies and their collaborators are coming together to solve problems no single one of them could address alone. Self-stirring pots, smart thermostats and 3-D printed bridges are all the product of ambitious collaboration.

But collaboration is not for everyone. Before deciding to invest in setting up sophisticated alliances, portfolios, innovation networks or ecosystems, a firm must ask itself: “Do these means justify the end?” In other words, “Does partnering for innovation fit my firm’s strategic goals?” To answer that, and before moving on to the next section, I leave you with a few excerpts from the “Strategic Alliance Best Process Workbook” by Robert Porter Lynch. While this work was published in 2001, its principles are just as relevant today.
IS COLLABORATION FOR YOU? A QUICK GUIDE

Before starting to collaborate ask yourself:

• What are your goals? What do your customers need?
• Can you achieve your objectives alone?
• Would collaboration help you compensate for your weaknesses and enhance your strengths? How?
• What happens if you do nothing and maintain the current course? (“Go-It-Alone Strategy”)

If collaboration is indeed necessary, move on to:

• What is my value as a partner in collaboration? What do I bring to the table?
• What do I expect of my partner(s)? What is on my wish list?

As you select your partner think about:

• **Strategic fit:**
  Shared vision and mission, little possibility of becoming direct competitors, potential synergies (1+1>3), similar plans for the future etc.

• **Operational fit:**
  Geographic coverage, visibility, approaches to decision-making, performance measures/incentive schemes, workforce etc.

• **Chemistry fit:**
  Compatible work ethics, long-term commitment to the industry, community, company, and people, Stability of personnel, flexibility and innovation, predictable, consistent behaviour (in a crisis) etc.

• **Further reading:**
Collaborator Focus Versus Value Co-creation

“Anything that just costs money is cheap”
– John Steinbeck (American novelist, author of “Of Mice and Men”)

Before we move on to see how ecosystems are built and managed, let’s take a moment to grasp their underlying logic. In as follows, a crash course on “goods-dominant” versus “service dominant” logic, customer focus, resilience thinking and value co-creation. In short, the “stuff” ecosystems are made of.

From Product-Focus to Customer Focus

Thinner paper, better eyeglasses, faster steam engines, smaller mechanized clocks. Oh, and more reliable anaesthesia? (ever watched The Knick?). Traditionally, organizations have made product improvements their highest priority. Which is hard to condemn. After all, processing, assembly, launch, distribution etc. can all be measured or quantified and put into a production plan. The Stage-Gate idea-to-launch models and other processes like it leverage the latter.

Relationship "improvements", by contrast, are more elusive. The “Go/ No Go” decision here is the equivalent of lifetime fidelity towards a brand, versus lifetime indifference.

Ask any manager about the product versus customer focus divide and you will get mixed feelings. While some continue to obsess over products’ characteristics (yes, innovation can easily go overboard?), others scrutinize customers/users to see whether the product or service can get their jobs done. The two sides have, in fact, their own well-established principles.

In academia the product view is called the “goods-dominant” (G-D) logic, while the customer or service view is known as the “service-dominant” (S-D) logic. Research duo Robert Lusch and Stephen Vargo has written extensively about the topic. For over a decade now, their pioneering thinking, and that of their predecessors, has guided many firms in making a dramatic shift in how they tackle stakeholders and collaboration.
S-D logic is a unique mind-set that provides a unified understanding of the purpose and nature of firms. Among other aspects, S-D logic explains:

- the purpose of a firm's activity: to assist customers in their own value creation processes as opposed to producing and distributing units of output;
- the basis of inter-firm exchange: people exchange service only;
- the role of the customer: the customer is the creator of value and not a destroyer of it; and
- the role of innovation: innovation means helping customers create value in a more effective way; it does not mean better goods and services alone.

In summary, S-D logic embraces the concepts of “value-in-use” and “co-creation of value” as opposed to “value-in-exchange” and “embedded-value”, typical for G-D logic. As Lusch and Vargo note, “instead of firms being informed to market to customers, they are instructed to market with customers (emphasis added), as well as other value-creation partners in the firm’s value network”.

How does this all relate to ecosystems? Well, the underlying logic of ecosystems is S-D logic. Ecosystems are inherently collaborative.

Let’s keep this last one in mind before going forward.
The Collaborator Focus in an Ecosystem

The “customer is king” is a motto you’ve surely seen and heard. In ecosystems, this focus is critical since all innovative initiatives are directed towards the customer. Moreover, the customers as well as other collaborators are actively contributing to new product/service/business model development.

But where does customer focus come from and how should firms understand it?

While many things have contributed to the emergence of the “customer is king” hype, no means were more powerful than IT tools and the Internet. In an article called “The Path to Customer Centricity”24, for example, prof. Denish Shah and his co-authors explain how diverse and better data collection methods (in the final part of the 20th century) helped firms give their customers the attention and decision-making power they deserved. These methods are still very much in use today.

At first, progress with customer focus was slow, uneven and, as you can probably tell, far from genuine. Several decades and countless marketing mistakes25 later (does Mad Men ring a bell?), learning loops started to work their charm. Today, understanding customers and collaborators and adapting quickly, elegantly and intelligently to their needs26 is a growing trend.

In brief, having a customer/collaborator focus is all about:

- serving customers and not whomever will buy;
- taking strategic decisions with the customers and collaborators in mind;
- being relationship and not transaction oriented;
- creating lasting ties;
- measuring success in terms of customer satisfaction, customer lifetime value, customer equity and the like.

All in all, the transition from product-focus to having a full customer focus is in line with the evolution of collaboration. While strategic alliances and portfolios were typically established to improve some aspect of a good or service, networks and ecosystems were devoted to managing relationships and encouraging co-evolution27.
But having customer or collaborator focus does not mean any co-creation is taking place. A firm can get a customer’s job done, successfully without encouraging co-creation. This is a frequent occurrence in software and FMCG industries, where the tendency for the number of features to increase with each release (="new featuritis" or "maketing myopia") is the norm. More tabs in Adobe Photoshop or more blades on a razor can be signs of customer focus, of course. The practice, however, fails to immerse the customer and other collaborators into the NPD process. Hence, we cannot talk about an ecosystem.

For true co-creation to occur, and for ecosystems to function, a few additional steps need to be followed.

**Value Co-Creation**

So we've just established that in the new paradigm customers and collaborators are no longer passive actors to be sold to, exploited and manipulated by firms. In addition to making a nice quote for the office wall, this statement paves the way for the final notion I'd like to elaborate on: value co-creation.

If we were to draw the two main collaboration logics on a continuum, the traditional goods-dominant logic (product-focus), would sit to the far left. To the far right, we find service dominant logic (value co-creation). Between these two, slightly closer to co-creation, we find customer focus.

Any firm, irrespective of its industry, can be placed somewhere along this imaginary line. Do this exercise at several points in time and you notice the shift. Or lack of. What is happening here? While some firms embrace co-creation, others fall back on what
they know.

Furniture manufacturers, chemical firms, computer companies and energy companies have all started by being fully product-focused but are now understanding customer focus and ecosystems of co-created value. Take IKEA\textsuperscript{28}, Apple, or ENEL\textsuperscript{29} – all actively working with customers and stakeholders to provide solutions for better living, better entertainment and sustainable energy solutions.

Fast moving consumer goods companies, sports equipment manufacturers, media and production companies, by contrast, were typically focused on their customers and collaborators to begin with. They are now moving into co-creation. Just look at The Campbell Soup Company\textsuperscript{30}, Nike and the Pixar Animation Studios\textsuperscript{31}.

Finally, some organizations – a select few – have embraced co-creation directly by innovating in the realm of the so-called Sharing Economy\textsuperscript{32}. Uber, Airbnb, Netflix, all let customers and collaborators add to the value co-creation process. The result is a system in which all actors evolve together.

And here is the fundamental difference between customer or collaborator focus and value co-creation.

While the former is all about identifying the needs of the customer and/or collaborators, and then meeting those needs at all cost, the latter invites customers and other stakeholders to make their resources accessible to the ecosystem. Moreover, it considers the ecosystem members (especially the customer) as a distinct source of competence\textsuperscript{33}.

In an ecosystem of co-created value, customers, competitors, collaborators, complementors and all other categories function as one well oiled machine. Everyone provides input, and everyone derives value. Every member is simultaneously a giver and a receiver of resources and
knowledge. Suppliers and customers coincide.

Let’s take two examples. Ever heard of the Københavns Fødevarefællesskab (KBHFF)? This unpronounceable Danish member-based food cooperative offers locally produced fruits and vegetables to its members in exchange for a little work. The cooperative's members are all, in fact, co-owners of the business, making their stakes equally high.

What about ScotRail? The company’s “Adopt a station” program invites citizens and communities to use unoccupied space for the provision of services via bookshops,
community centres, cafés, or for facility improvements via gardening and keeping an eye out for the occasional acts of vandalism. So far 260 stations were “adopted” out of about 344, while its popularity is soaring.

In both cases value co-creation is an integral part of keeping the ecosystems healthy and stable. Customers (the local community) contribute their time and talent to provide themselves and others with organic food and a more pleasurable travel experience. KBFHH and ScotRail, in turn, earn fidelity by sharing leadership and unused assets. Additionally, they have their infrastructure cared for.

Interestingly, value co-creation in ecosystems is as much about the actions that ecosystem members take as they collaborate and governance models they use as it is about language. In healthcare, recent research has been documenting what patient centred care is and is not according to the new paradigms (S-D Logic).

While listening to patients and their families and prescribing activities that will hopefully improve the patients’ outcomes is important, it does not represent co-creation. Co-creation is the “stewardship on the part of the healthcare (eco)system to substantially improve the likelihood that the customer can achieve the job they want to get done”. Subtle, but extremely important.
Building and Managing an Ecosystem of Co-created Value

“True stability results when presumed order and presumed disorder are balanced. A truly stable system expects the unexpected, is prepared to be disrupted and waits to be transformed.”

– Tom Robbins (American author)

By this point we know a few important things:

• ecosystems are the most sophisticated vehicles for collaboration, co-creation and impact generation known to us today;
• ecosystems embrace a logic whereby all value is co-created; and
• customers and collaborators play a key role in an ecosystem.

Now onto the more intriguing part: how are ecosystems built and managed?
What makes a good ecosystem player? How can firms prepare for this role?

The framework I am about to show was inspired by my research group’s inquiries into the topic. That is, a research project by myself and my colleagues at Hasselt University, Belgium, in partnership with the Norwegian School of Economics’ Centre for Service Innovation.

In as follows, I’d like to introduce you to the intra- and inter-organizational aspects that, we find, help firms become skilled ecosystem partners.

Building and managing an ecosystem of shared value is, in essence, the building and managing of individual cultures, structures, processes and metrics, and then securing
the synergies between them (across organizations and people). Sounds simple, doesn’t it? Let’s take a close look and find out.

Creating a Co-Creation Culture

To build ecosystems of co-created value, firms must first scrutinize the various elements of their culture. For example, they can ask themselves: “Does our organization nurture the values that are most conductive to joint value creation? How does the customer relate to these values?” This process starts with understanding what culture is – both in itself as well as in the industry and/or context in which the firms function.

Management scholars define culture broadly as the “glue that makes up a common identity between different individuals”. A pattern of shared values, if you will, accompanied by distinct norms and beliefs about expected/ appropriate behavior. A central value of customer-focused organizations, for example, is that every decision begins with the customer. A complementing norm is then to view employees as customer advocates. Finally, a customer-focused belief states that marketing is an investment and not an expense.

For value co-creation to occur, however, firms must also learn to cultivate mutual respect, empowerment and mutual trust vis-à-vis their collaborators in innovation. Mutual respect refers to the appreciation of ecosystem members’ contribution; empowerment is the ability to engage collaborators and help them take ownership of their contribution; mutual trust presumes confidence in others’ reliability and integrity. “Ecosystem partners will contribute to the best of their abilities” is the statement to look for.
An effective culture of co-creation is frequently open and collaborative towards its customers and other partners in open innovation. This is a culture that keeps the entrepreneurial and intrapreneurial spirit alive.

**Case-in-Point: Elemental**

To illustrate how a firm’s culture can be conductive to value co-creation, let’s look at architecture firm Elemental’s experience. Founded in 2001, Elemental is a self-proclaimed “Do Tank” specialising in public interest projects such as housing, public space, infrastructure and transportation. The firm believes that collaboration is the key to social impact creation. So much so that its design process is entirely participatory.

Elemental landed in the spotlight when it was commissioned to help rebuild the small town of Constitución, Chile. The town had been hit by an 8.8 magnitude earthquake, which destroyed over 80% of its buildings. The company’s task at the time was to provide
low-income housing for the survivors of the disaster and help them start anew despite general scarcity of resources. Instead of building complete residences, however, the firm built an entire neighbourhood (Villa Verde) of identical, two-storey half-houses. The unfinished half could then be expanded or customised by residents as they pleased and at their own pace. The controversial solution was initially met with scepticism but eventually caught on thanks in part to the firm’s ability to explicate its philosophy. Since the half-houses were built to barely meet the Chilean standards they left much room for improvement and customization. After receiving the keys to a residence with just the foundations, walls, roof, plumbing and electricity in place, the beneficiaries of the housing project were invited to donate time, skills and additional building materials to make it a home.

With detailed instructions from Elemental as well as from local authorities, mass-customization began. Ultimately, the residents would own the houses.

The solution offered by Elemental emerged from the firm’s preoccupation with respecting, empowering, and trusting its customers – all key elements of a co-creation culture. By helping residents help themselves, and also by involving other key partners - e.g., local authorities and service providers specialising in sewage, garbage collection, healthcare, education, Elemental built an ecosystem of co-created value.

Interestingly, and despite its uniqueness/ingeniousness, the firm’s solution is proving impossible to replicate to other parts of the world. And this brings us to another element of the ecosystem-building framework: the rules and norms of collaboration. Developed nations would seldom adopt Elemental’s approach due to customers’ and other collaborators’ perception of the project. Americans, for example, might feel embarrassed to live in such half-houses, while the
government would lose face for even suggesting them.

So despite the company’s culture being fully conductive to value co-creation, powerful rules and norms hinder the ecosystem’s development and stop a possibly life-saving project.

**Designing the Right Structure**

Organizational structure, or the “anatomy of an organization” as it is sometimes called, is the second element of the framework. Structure consists of all formal reporting relationships and their sub-components, including, but not limited to: number of levels in the hierarchy, managers’ and supervisors’ span of control, and cross-departmental communication. Essentially, everything related to departments and functions.

A firm geared towards its customers and collaborators will typically align its activities to deliver superior value. This includes special response units or special functions like Chief Customer Officers to design, orchestrate, and/or improve customer experiences. Value co-creation, however, requires one additional component: a formal structure for collaboration. Partnering Units or Partner Management departments are common examples as such.

Reengineering a firm’s structure to support ecosystems of co-created value is an inherently difficult task. Deep structural change typically starts small via informal coordination activities that cut across existing product and functional silos. In this scenario, well-trained and well-incentivized members of staff not only manage ever-complex collaborator relationships but also take accountability for their actions.

A great proxy for whether a firm’s structure helps or hinders value co-creation is, of course, the “permeability” of its walls. Organizations embracing open innovation – or the combination of internal and external ideas as well as internal and external paths to market to advance the development of new technologies, have structures that allow ideas to be spun in and out of the firm as necessary.
Case-in-Point: The New York Times

To illustrate how organizations rethink their structures and become more skilled at co-creating value, I’ve picked an example from publishing and media: The New York Times. This prominent news organization, like many of its competitors, has struggled to remain relevant to readers in the digital age.

The New York Times is a daily American newspaper, winner of some 117 Pulitzer Prizes, and generally a symbol of excellence in journalism. Despite its rank, The Times was not immune to the threat of digitization. Its decision to embrace the ecosystem approach was, in fact, determined by a unique set of circumstances tied to this trend. First, the Washington Post and The Wall Street Journal, its two rivals, had announced digital transformation in order to meet the modern needs of the reader. Second, falling readership, low traffic on the website and generally little reader engagement were signaling the need to change.

In pursuit of effective digital transformation and value co-creation, The Times did what it knew best: it ran an investigation and wrote a report. Instead of observing others’ change journeys,
however, it carefully analyzed its own. The input for the innovation report was an impressive organization-wide survey. This survey included: taking stock of unused internal assets in the organization, speaking at length to employees and even drawing competitor “cheat sheets” to understand how digital tools were leveraged by others. Once the picture became clear, the newspaper set up a plan to reorganize newsroom structures. This move would help deliver maximum readership value and generate impact.

Co-creation at The Times was ultimately achieved through a series of important actions. For example, the company learned to leverage the audience and experiment with user-generated content. Additionally, the Times became a platform for discussion and also discarded the traditional one-size-fits all approach to advertising in favor of inter-

Internal structures, cultures, processes and metrics – adapted for co-creation –

Rules and norms of collaboration
disciplinary promotion “squads” assembled for each story. In terms of departmental changes, The Times integrated functions like Design, Technology, Consumer Insight Group, R&D and Product and assembled a newsroom strategy team to keep leaders apprised of competitors’ strategies, changing technology and shifting reader behavior. Finally, the Times named a Reader Experience Leader, or a special function in charge of overseeing collaboration efforts. As one of the action points in the Times’ innovation report reads: “Build the newsroom out of Legos, not bricks. The right structure for today won’t be the right structure for tomorrow”.

Polishing the Processes

The third element of the framework is all about a firm’s operations. Business processes are actions that firms engage in to accomplish a pre-established purpose or objective. Today we know of five generic processes that define a customer-focused organization. These are:

• an internal strategy development process with both the firm and customer in mind;
• an internal value creation process of the same nature;
• a multi-channel integration process for customer relationship management and consistent company image;
• an information management process to collect, collate and use customer data;
• a performance assessment process to ensure the organization’s strategic aims are reached.

For value co-creation to happen, however, processes must be taken one step further. For example, the firm must encourage two-way communication with its customers as well as other collaborators in the ecosystem. Similarly, the performance management process must facilitate learning from all parties. These subtle distinctions are illustrated in the self-assessment guide at the end of this whitepaper.

Just like the structural changes, process changes also involve a step-by-step approach. For a start, and depending on their necessities and level of expertise, firms can make or buy IT systems of varying complexities to automate parts of the value co-creation process in their ecosystems. Next, firms can map their processes to better understand the possibilities for creating new value. Finally, firms can audit their processes internally, making sure they are aligned to the value co-creating mission.
Case-in-Point: Burberry

How does a 161-year-old British label known for its iconic trench coat employ the notions of collaborator focus and value co-creation to revive an otherwise traditional business model? By doing, as YouTube personality Casey Neistat would have it, what it cannot do. That is, by breaking free from established industry norms, embracing collaboration and laying the groundwork for an ecosystem of co-created value.

Under the guidance of Chief Creative and Chief Executive Officer Christopher Bailey, and driven by its core values “protect, explore and inspire”, Burberry today leads a movement that could help cool an overheated fashion system. Today, designers, retailers and fashion organizations are showing support of the British label’s “buy-now-wear-now” approach, which promises to bring customers and brands closer together and slash useless anticipation. That is, the inability to order collections directly from the runway.

Rethinking how collections are shown and marketed and, broadly speaking, reorganizing the value chains around them required careful planning at Burberry. These steps were as follows:

• first, and following the example of The Times, Burberry undertook an in-depth review of its operating model to ensure that the label was fit to deliver on its ambitious plans;
• next, Burberry placed co-creation processes at the core of this transformation;
• gradually, Burberry reduced innovation process complexity, kick-started internal value creation (new ways of working and of relating to collaborators), improved internal and external communication via better branding, and implemented an information management process;
• finally, Burberry removed duplication across functions and between the regions and its corporate centre to streamline operations.

Alongside its processes, some other ways in which Burberry nurtured relationships with customers and other ecosystem members included the work done via the Burberry Foundation. At the same time, partnerships with technology giants like Google for
Burberry Kisses\textsuperscript{51} helped the label “democratize luxury”. By making its brands more visible to various categories of customers, and also enabling customers to combine Burberry items with lower-end brands, the firm created new avenues for innovation and value co-creation.

**Minding the Metrics for Co-Creation**

The fourth and final of the organizational element mentioned in our framework is collaboration metrics. Metrics refer to the variety of tools organizations and their leaders use to assess performance; for example, the performance of their employees, of their innovative product and service portfolios, customers’ satisfaction etc. Firms today will often develop entire scorecards\textsuperscript{52} with Key Performance Indicators (KPIs) to assess the effectiveness of their open and collaborative innovation programs too. Open innovation (OI) performance measurement systems are now trending as more and more organizations seek to understand how collaboration can add to the bottom line.
Developing adequate metrics for co-creation is important for two reasons:

• First, such metrics can motivate employees more effectively to meet customer and collaborator needs by offering the right incentives.
• Second, metrics can help managers determine the financial implications of their customer and collaborator-focused decision-making.

Hard metrics such as number of co-creation projects or idea campaigns, the number of employees involved in open innovation initiatives, and the intensity and duration of the co-creation project can all be accounted for on a regular basis. At the same time, understanding the level of customer satisfaction, trust, intention to collaborate repeatedly must be monitored if collaboration between ecosystem partners is to be sustained in the long run.

Despite the continuous emergence of new metrics to capture customer focus and co-creation, effective monitoring remains a difficult task. Customer loyalty, advocacy, reduced price sensitivity in particular pose this problem.

An additional complication is related to keeping track of how the metrics change as a firm undergoes transition – e.g., from product-focus in an alliance to value co-creation in an ecosystem. Decisions to downsize or outsource, for instance, can lead to increased profitability in the short run, but might erode carefully accumulated customer satisfaction in the long.

As a general trend, hard metrics like revenue and speed of gaining market share remain critical in certain areas of a customer-focused organization. Complementing them are softer metrics that capture insights from online listening (customer perceptions, for example), sentiment analysis, and data mining as of recent years.
Case-in-Point: Fujitsu Services

Fujitsu Services, an information technology and equipment services company (whose parent organization owns some 97,000 patents worldwide) has a unique approach to measuring the effectiveness of collaboration and value co-creation in its ecosystem.

In an interview with Joachim Box, Business Director at Fujitsu UK & Ireland, I learned that collaboration is, in fact, viewed as a conversation with customers over the long term. Fujitsu starts by identifying challenges and business issues that a particular customer or sector, might have and looks to collaborate in those key areas. While the latter could be (wrongly) viewed as selling innovation consultancy33, the company focuses on learning from customers’ and other stakeholders’ experience and then improving that experience so that the entire ecosystem is better off.

A recent example is a collaboration project with a major airport. While developing the “digital ear” – a device that sends an alert when the noise level is very high, allowing staff to see whether aircraft engines were running longer than necessary – the company worked in iterations, showcasing development rather than a finished product.

Overall, Fujitsu employs both classic innovation metrics like return on investment, ideas to implementation, and number of people involved in the process, but also monitors two other important aspects of customer focus and value co-creation.
These are:

- Understanding whether the joint goal was reached: “Have we solved anything? Is there some sort of commercial value generated as a consequence of the collaboration?”
- Understanding whether the customer or collaborator is prepared to work with the company again. To this end, a so-called “voice of the customer” program, whereby a third party carries out surveys and interviews with the customers, was put in place with great success.

Soft metrics in particular are very useful in understanding when and how attitudes towards Fujitsu are changing as a consequence of the co-creation exercise. At the same time, monitoring these metrics helps expand a consistent approach around the globe. That is, wherever a customer engages with Fujitsu, they get a similar experience leading to consistency in collaboration.
Knowing the Rules and Norms of Collaboration

Last but certainly not least, we come to the rules, norms, meanings, symbols, practices, and similar aides to collaboration in an ecosystem. Such aides to collaboration are perhaps the most important elements of the framework, given their specificity as well as extraordinary influence on the relationships between partners. It follows that managing the “rules of the collaboration game” effectively is an essential part of value co-creation. In fact, organizations that do not consider rules and norms as part of their strategy frequently fail to support healthy ecosystems in the long run.

According to management theory, the basic function of these rules and norms is to provide cognitive shortcuts, reduce uncertainty and, ideally, create stable expectations of the behavior of others.

While rules and norms are generally seen as enablers of collaboration and joint value creation, they can also act as a constraint. For example, the shortcuts they provide can result in ineffective principles, beliefs and ideologies (remember the not-invented-here-syndrome?), which, if left unaddressed, can actually hurt or hinder collaboration altogether.

In short, the rules governing collaboration in an ecosystem can be:

- normal (laws) and informal (customs, traditions, practices);
- basic (property rights in real estate) and supportive (restrictions, use of property);
- hard (binding and policed) and soft (rules of thumb, suggestions).

While there are no right and wrong distinctions, the aforementioned categories are only meaningful in context.

Shaping effective rules and norms takes time and effort of behalf of all ecosystem partners (including the customer). As a very first step, partners must be aware of the various types of rules governing their interactions and manage these effectively. In the pharmaceutical industry, for example, regulatory challenges are a typical example of how rules can severely hinder co-creation. With the advent of modern medical procedures such as utilizing a patient’s own tissue as part of the treatment (cell therapies for bone reconstruction), authorities struggle to establish frameworks that will govern research in the field.
Case-in-Point: Novo Nordisk

Staying in the realm of pharma, and to better understand the extraordinary importance of rules and norms for collaboration, let’s analyse Novo Nordisk’s journey.

But first, some context. According to a recent PwC prognosis, the outlook for the pharmaceutical industry has never been more promising. With new tools to develop breakthrough medicines materializing every day, demand for products escalating and trade becoming easier, the ingredients for sustained growth appear to be in place.

In reality, however, several important trends are pushing organizations to reinvent their business models, as well as rethink and better manage the relationships with key actors in their ecosystem. Some of these trends include:

• increased transparency and accountability: product recalls more visible, faster travelling information;
• strict regulation, empowered patients: patients organize themselves in patient organizations who lobby for their rights; they also sometimes have access to clinical trial data;
• growing number of collaborators in the ecosystem: partnerships with medical device companies, traditionally compatible with pharma, complemented by partnerships with technology start-ups focusing on analytics, Internet of Things, and artificial intelligence, local governments, payers, patient associations, universities, research centers etc.;
• digitization and changes in the competitive landscape: IT companies become the new rivals due to ability to collect, store and process big data, and the increased necessity to measure the impact of medicine in the real world.

Under these circumstances, healthcare and pharmaceutical companies are increasingly learning to use their resources more effectively and focus on establishing patient-focused service ecosystems in order to prosper and create value.
Understanding the archetypes of their target markets and having a multi-dimensional view of patients, interacting with patients in a more relevant manner, identifying challenges and business issues that a particular patient group experiences and launching a collaboration based on those, asking key evaluation questions (“Would the patient be prepared to work with us again?”) are all important practices that pharmaceutical companies can adapt from other sectors such as retail, beauty, telecommunications and logistics.

Some important practices that such organizations must master in order to build and sustain patient-focused service ecosystems, however, is managing the relevant rules and norms of collaboration.

According to a chapter available on the World Health Organization’s website as well as other sources, the main "rules" in the pharmaceutical industry include:

- legislation – customer-focused laws, regulations, and guidelines;
- informal agreements;
- IP agreements;
- on-going practices – routines for improved customer outcomes;
- language;
- general beliefs; and
- informal social norms.

At Novo Nordisk, a Danish multinational and world leader in diabetes care, the “rules of the collaboration game” have been recognized and managed from the start.
Novo has worked actively with a number of important stakeholders, including but not limited to: caregivers, patient associations, independent research organizations, payers, ministries etc. to provide patients with better health outcomes. For example, the company has helped lobby for better legislation and has improved on-going practices in developing countries, making sure that diabetes educators have the necessary resources to continue their work. At the same time, Novo has employed various types of IP to create links with stakeholders while maintaining the open and collaborative approach to R&D. Moreover, Novo was involved in resolving important societal issues by assessing the effect of the pharma value chain on climate change. In this context, Novo Nordisk partnered with AstraZeneca, Baxter, GlaxoSmithKline, Johnson & Johnson, Pfizer and The National Health Service Sustainable Development Unit to publish the first international guidelines for calculating the carbon footprint of pharmaceuticals and medical devices. Finally, Novo has worked extensively with creating more accessible language to patients by joining EUPATI – The European Patients’ Academy on Therapeutic Innovation.

Rounding Everything up

Creating an ecosystem of co-created value and sustaining this ecosystem in the long run is not an easy task. As we have seen, culture, structure, processes and metrics all need to be aligned in order to reflect and cater to the needs of the ecosystem partners. Culture in particular, plays a strong role. Exhibiting mutual respect, empowering and showing mutual trust are key to successful innovation projects. Similarly, understanding the “rules of the collaboration game” can help untangle the complex dynamics of ecosystems. More often than not, projects come to a standstill precisely due to misalignments in strategy, confusing language or simply cumbersome IP agreements.

For value co-creation to occur, resources need to flow smoothly and evenly, and ecosystem members need to acknowledge their contribution and worth.

Ultimately, ecosystem management is relationship management. And relationships require time and commitment.

Before jumping to the conclusions, I invite you to take a self-assessment test and reflect on whether your organization nurtures the elements of collaboration and co-creation.
<table>
<thead>
<tr>
<th>Element name</th>
<th>Element type</th>
<th>Question to ask</th>
<th>Answer Yes/ no</th>
<th>Can you think of an example?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A CULTURE OF CO-CREATION</td>
<td>Intra-organizational</td>
<td>Are the resources contributed by our collaborators appreciated? (mutual respect)</td>
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<td>Do we allow collaborators to influence the collaboration process? (empowerment)</td>
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<td>Do we trust that our collaborators will not (willingly) alter the outcome of the innovation/collaboration exercise? (mutual trust)</td>
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<tr>
<td>STRUCTURES FOR CO-CREATION</td>
<td>Intra-organizational</td>
<td>Do we have a function that represents the collaborator?</td>
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<td>Do we have a formal structure (department/division) for collaboration?</td>
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<td>CO-CREATION PROCESSES</td>
<td>Intra-organizational</td>
<td>Does our strategy process include activities with collaborators?</td>
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<td>Does our value creation process focus on co-creation?</td>
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<td>Does our multi-channel integration process allow and encourage two-way communication with collaborators?</td>
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<td>Does our information management process facilitate collaborator learning?</td>
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<td>Does our performance assessment process include collaborator-focused measures? (Do we measure our success with open innovation?)</td>
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<tr>
<td>METRICS FOR CO-CREATION</td>
<td>Intra-organizational</td>
<td>Do we record hard collaboration metrics? - e.g. no. of collaborative projects, no. of people involved in collaborative projects, intensity/duration of collaboration etc.</td>
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<td>Do we record soft collaboration metrics? - e.g., satisfaction, trust, intention to collaborate repeatedly etc.</td>
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<tr>
<td>RULES AND NORMS OF COLLABORATION</td>
<td>Intra-organizational</td>
<td>Do we understand how legislation influences value co-creation in our ecosystem? - e.g., do we lobby for better laws, regulations, and guidelines?</td>
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<td>Are we aware of informal agreements in our ecosystem?</td>
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<td>Do we understand how IP agreements can mutually benefit the collaborators in our ecosystem?</td>
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<td>Have we developed an adequate language for better collaborator interaction and education?</td>
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<td>Do we record and monitor other rules and norms of collaboration?</td>
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Conclusions and Key Things to Remember

If you have just finished reading this whitepaper, congratulations! You now understand a great deal about ecosystems of co-created value. Hopefully this knowledge will help you reconsider some aspects of your current innovation work.

If you have just skipped to the end, you are in luck. A summary of the main points is right below.

In their order of appearance:

**From Part 1: “The Evolution Of Collaboration”**

- it is difficult to revert back to a lesser state of connectedness; instead of fighting it, firms should embrace the opportunities it brings for individuals and businesses alike;
- in the past 50 years, firms have transitioned from closely managing to not managing their strategic relationships - the specifics of alliances, portfolios, networks and ecosystems provide evidence of this trend;
- despite pressure to do so, collaboration is not always the answer; a self-assessment will help figure out if open innovation fits into the strategy;
- a common mistake managers make is to plan out the full ecosystem at the onset, pick their position within it and then defend that role at all cost; positions in ecosystems are fluid, while members make each other replaceable; that is, in effect, an ecosystems basic philosophy.

**From Part 2: “Collaborator Focus Versus Value Co-Creation”**

- collaboration is a continuum; all organizations can be placed somewhere between product focus and value co-creation; continuously monitoring this position is important;
- product focus is straight-forward, customer focus and value co-creation are less so; a firm needs time to adjust and understand these key notions before implementing ambitious innovation strategies;
- ecosystems are based on service-dominant logic and its principles; the most important one: customers, not firms, determine the value of a new product, service, or business model.
From Part 3: “Building and Managing The Ecosystem Of Co-created Value”

• improving culture, structure, process, metrics or institutions in isolation will not guarantee joint value creation; synergies across all these elements is a must;
• an effective ecosystem partner will have both the internal make-up necessary for co-creation as well as a good overview of stakeholders and the rules and norms of collaboration between them;
• as industries change, a firm’s internal building blocks – culture, structure, processes, metrics – will typically change too (though this is not always the case);
• institutions are highly context specific and probably the most important element to be considered when building and nurturing ecosystems of co-created value;
• the benefits of ecosystem collaboration include: access to knowledge, assets and resources, cost and risk sharing, speed and efficiency of innovation, increased competitiveness and increased new product or service quality;
• the challenges of collaboration in an ecosystem include: risk of opportunism and partner selection, sharing of benefits (not always desirable), collaboration takes away resources, high coordination costs, pays off in the long run.
ACKNOWLEDGEMENTS

I would like to thank Associate Prof. Nadine Roijakkers and Assistant Prof. Sara Leroi-Werelds at Hasselt University, Belgium, for helping me understand this complex topic in theory and practice, the HYPE Innovation team for their interest in the research, as well as all the companies and collaborators mentioned in the text for inspiring the examples. Open innovation ecosystems represents a growing research field. The more is known and shared, the more effective companies can be at creating complex collaborative arrangements with the help of partners.

GETTING IN TOUCH

How did you like this read? Found it inspiring or quite the opposite? Whatever the answer, I’d love to hear back from you.
So please consider getting in touch via:

Email: oanamaria.pop@uhasselt.be
Twitter: @OanaMariaPop
LinkedIn: https://www.linkedin.com/in/oana-maria-pop-94323421/
Notes & Links

2. While researching the topic in 2013, the magical number was 3.9 - http://blog.hypeinnovation.com/serendipitous-connections-with-crowdsourcing. In 2016 another calculation using the Facebook platform and data from 1.6 billion users gave an average of 3.57 - http://www.popsci.com/six-degrees-separation-try-three. The world is becoming smaller and smaller.
7. http://blog.hypeinnovation.com/open-innovation-your-3-options-for-getting-it-done
12. https://www.nap.edu/read/2021/chapter/5#17
27. In other words, in alliances and portfolios better products and services were the primary reason for collaboration. In networks and ecosystems, better innovation output was a mere by-product of it.
30. The company is well known for its innovation activities https://www.campbellideass.com
36. While these aspects of culture have only been studied in the context of the pharmaceutical industry, their application can be much broader. http://journals.sagepub.com/doi/abs/10.1177/1094670516666369
39. Institutions represent the rules and norms of collaboration in a certain industry or context
40. http://99percentinvisible.org/episode/half-a-house/
50. http://www.burberryplc.com/about_burberry/our_strategy?WT.ac=Our+strategy#a_4a65700b1347430c92632043ca3ff73e
53. The company does have a highly successf innovation service called Activ8 - http://www.fujitsu.com/uk/services/business/activ8/
54. Charles Edquist has written at legth about the topic - https://charlesedquist.com/articles/
55. Douglas North is another important scholar in this area - https://www.jstor.org/stable/1942704
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