

How Platform Ecosystems Can Turbocharge Your Strategy To Address Societal Challenges



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Problem of practice:

As societal value creation gains importance, there is a growing realisation that some complex challenges facing society are hard to tackle by the corporate or even through a public-private partnership. To effectively tackle grand challenges such as food security, clean energy or cyber-security threats, to name a few, value creation needs to look beyond the organisation's boundary for multiple-stakeholder collective action. So how best to organise for this? A recent research [article](#) by Finnish academic Paavo Ritala says, 'by developing scalable online-cum-physical platforms that engage diverse stakeholders focused on the challenge to be addressed'¹

¹Featured in the May 2023 issue of the *Journal of Product Innovation Management*; author Paavo Ritala developed a view on the power of platform ecosystems in developing collective solutions to societal problems in the article "Grand challenges and platform ecosystems: Scaling solutions for wicked ecological and societal problems"

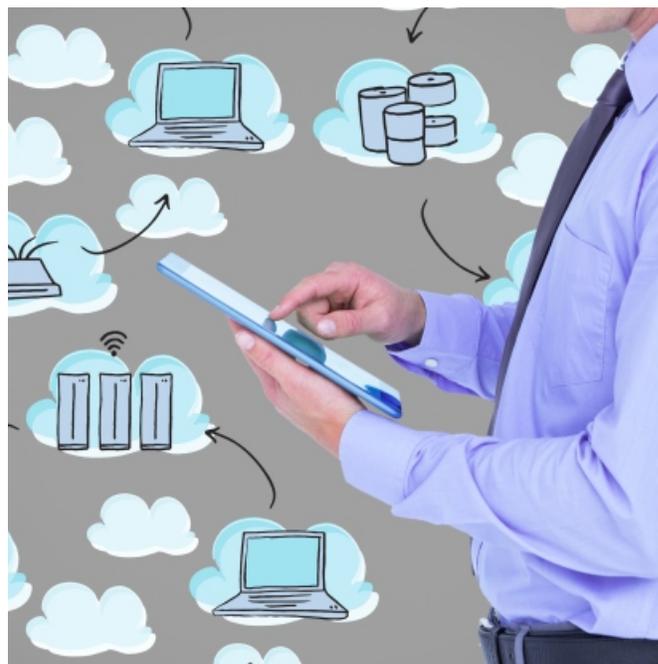
Grand Challenges: Role of Business

As a [Harvard report](#) suggests, most consumers (77%) as well as investors (73%) are increasingly motivated to engage with companies that are focused on ‘making the world a better place’.² Taking note of this broad trend, the [Business Roundtable](#) — an association of 200 CEOs of major US companies — made a public commitment in 2019 to ‘meeting the needs of all stakeholders’ to create value.³ A [report by McKinsey](#), a global consulting firm, goes further: It recommends deep integration between company strategy and goals for environment, social and corporate governance (ESG).⁴ To achieve real change, the [World Economic Forum](#) has emphasized the need for cooperation, beyond company strategy, to tackle the top societal challenges, which range from misinformation to climate change.⁵ The question remains – how? Recent research by Finnish academic Paavo Ritala suggests that large companies can do so by orchestrating collective action via ‘platform ecosystems’.

Platform Ecosystems Defined

[Platform ecosystems](#) consist of an infrastructure that enables multiple collaborating organisations to work efficiently, in a complementary manner, towards a common goal.⁶ An important feature of such ecosystems – which can be digital and/or physical – is to establish rules and processes to facilitate coordination between stakeholders, engage them and allow them to voluntarily share activities, knowledge, and resources. The overall goal of such an ecosystem is to foster innovation, leading to new and effective ways to tackle grand challenges.

Large businesses are uniquely positioned to bring such platforms to life. What might this look like? Imagine an ambitious, large corporate foundation that wants to address a complex societal challenge. To leverage the power of platform ecosystems, the corporate could invest its funds to set up a digital platform that enables community organisations across markets and regions to connect. Through this process, two or more such communities can connect to better their impact, but in doing so they also add value to the entire ecosystem. The orchestrator of this ecosystem – typically a large corporate – plays an important and active role. It can keep the participants engaged through economic and pro-social incentives, facilitate the transfer of one solution from one domain to another, and help connect solutions with the agency that can scale it up. Large and innovation-led companies already have similar systems to tackle complex business challenges, so why not use a similar setup to develop solutions for important social challenges?



Platform Ecosystems In Action

The following real-life examples highlight how platform ecosystems tackle large and complex problems. We begin with two examples Ritala’s research provides: The Patient Innovation platform and the Excess Materials Exchange platform.

The [Patient Innovation platform](#) enables patients and caregivers to collaborate towards finding new treatments for chronic and rare diseases.⁷ The platform empowers a patient support network and also benefits user innovators by connecting them with resources – including big pharma – to commercialize their solutions.

The [Excess Materials Exchange](#) platform incentivizes businesses to reuse their ‘waste’, allowing them to earn revenue from their waste materials while accessing raw materials at a lower cost.⁸ In the larger scheme of things, this means that fewer materials are going into landfills, and the environmental extraction of raw materials is reduced, all the while businesses gain financially — a win-win.

Other initiatives have brought together businesses for a common social cause, such as the [Priceless Planet Coalition](#) by payment-processing corporation Mastercard.⁹ This platform unites businesses, governments and non-profits to promote tree restoration to combat climate change. The coalition provides funding, technology and expertise to support forest restoration projects across six continents.

Common to all of the examples above, are three key elements – as described in *Figure 1* below – for creating an effective platform ecosystem.

Figure 1 : Three Key Elements of Platform Ecosystems

Key element	Role / Description	Benefits
Coordination structures	<ul style="list-style-type: none"> ▶ Creation of platform infrastructure, setup of practices and rules to be followed by the ecosystem participants 	<ul style="list-style-type: none"> ▶ Ensures sustained and concerted efforts by all stakeholders
Collective action	<ul style="list-style-type: none"> ▶ Multiple participants collaborating to solve a larger challenge 	<ul style="list-style-type: none"> ▶ Visibility one members idea can be solution for others ▶ Collaboration across locations, at scale ▶ Better resource-sharing, which delivers greater benefits for all participants
Solution development / Generativity	<ul style="list-style-type: none"> ▶ Potential to generate new solutions once old problems are addressed and new challenges come up 	<ul style="list-style-type: none"> ▶ Enables platform to turn into a self-fulfilling cycle that does not require oversight from the ecosystem orchestrator

An In-depth Case From India

Launched in 2000, [e-Choupal](#) is the most extensive internet-based intervention in rural India, reaching over 4 million farmers in more than 35,000 villages.¹⁰ Designed and operated by the Indian multinational conglomerate ITC, the [e-Choupal](#) addresses the problem of fragmented farms and weak infrastructure in the Indian agricultural ecosystem.¹¹

- 1. Coordination structures:** As the orchestrator, ITC took on the responsibility of setting up the coordination infrastructure in the form of internet kiosks across villages. These kiosks provide real-time, local-language information on weather forecasts, best practices and prices for both inputs and produce. A farmer from the community operates the kiosk and can offer a competitive price for any farmer’s produce, based on an examination of a sample. Farmers can choose to sell through traditional middlemen, but usually realize better prices offered on the platform. If the farmer accepted the price quoted, s/he could take their produce to a physical procurement and warehousing hub – [ChoupalSaagar](#) – for sale and payment.¹²
- 2. Collective action:** The custom-designed e-Choupal website also enables two-way knowledge-sharing on farming practices and facilitates the joint purchase of farming inputs at competitive prices. As more farmers saw improved productivity and higher prices for their produce by working with the platform ecosystem, other stakeholders such as supply chain intermediaries began to participate. The participants on the platform are now working on ‘plans to integrate bulk storage, handling & transportation facilities to improve logistics efficiencies.’

- 3. Generativity:** Some of the innovative solutions for addressing operational challenges for e-Choupal include power back-up through batteries charged by solar panels, local caching of static content on the website and a 24x7 helpdesk among others. As the improved version of e-Choupal, ITC has developed a more comprehensive ‘phygital’ model, called [ITCMAARS](#).¹³ On the digital side, this involves a smartphone app through which farmers can access insights on pesticides, and other crop protection solutions at the individual farm level. These insights are in addition to the information that was shared with the farmers in e-Choupal. The app interface also improves accessibility to several third-party input suppliers for fertilizers and pesticides. On the physical side, ITCMAARS set up ‘physical staging point for inputs and output supply chains’ for Farmer Producer Organisations (FPO – a form of farmer collectives) in villages. These physical staging points make it easier to induce collective action from different stakeholders and bridge the gap between ITC’s limited procurement hubs, village markets, and small-scale farmers.

Outcomes: Rolled out in July of 2022, the app has benefited over half a million farmers through 1100 farmer collectives.¹⁴ By 2030, the app is projected to cover 4,000 collectives and benefit 10 million farmers. To date, the e-Choupal and ITCMAARS app have collectively seen usage by 4 million farmers across 22 Indian states, have improved productivity, 4 million tonnes of agri produce from 22 states and has supported over 20 value chain clusters. Thus, these platforms have successfully combined the three key elements of a platform ecosystem to address grand challenges of food security and farmer livelihood.

Figure 2: Implementation of best practices for an effective ecosystem

Key element	Implementation best practices
Coordination structures	<ul style="list-style-type: none"> ▶ Need strong platform infrastructure, supporting technologies and tools to develop skills ▶ Should formulate rules which help participants focus the collective action towards a common goal as well as prevent conflict
Collective action	<ul style="list-style-type: none"> ▶ Participants must buy into the vision ▶ Give incentives for individual gain to drive potential freeloaders or opportunistic members to act for the collective goal
Solution development / Generativity	<ul style="list-style-type: none"> ▶ Infrastructure and governing principles must be constantly updated ▶ Update incentives periodically ▶ Update the collective goal to address new challenges

While best practices and the three elements are critical, the platform’s success and the participants’ acceptance of contributions depend on their trust in the ecosystem and its coordinator

Implementation 101

As an organisation, if you are wondering where to start... The first step is to establish the infrastructure of the platform ecosystem, provide your participants with the technology to get started, and give them the principles they need to follow. If [ITC](#) had set up a village internet kiosk or a mobile app but not taught farmers how to use them, their initiative wouldn’t have worked. These defined core structures and governance rules also help ensure that participants act to support each other rather than compete or take unfair advantage.

Then show your participants the far-reaching impact their actions could have—positive and negative. A platform ecosystem only works if participants voluntarily provide inputs that can help not just themselves but also other participants. All stakeholders must work together to create value in the ecosystem to overcome industry inertia and prioritize short-term profits. If vision isn’t enough, motivation could do the trick. In the [Patient Innovation](#) platform, users with ideas that have commercial potential are motivated to share their insights (that help the collective) because they also stand to gain financially.¹⁵

Once you’ve found a way to engage participants and stimulate collective action, the next challenge is to keep things fresh and relevant. Your ecosystem will need to evolve with the problem, as new challenges emerge and older ones are solved. Core infrastructure must be updated,

and incentives and motivations must be constantly refreshed. For instance, boot camps and competitions are periodically organised in the Patient Innovation project, and Patient Innovation Awards are given to those who ‘who have developed innovative solutions to cope with the challenges of health conditions’. [The Excess Materials Exchange](#) programme staff publish policy recommendations and case studies and release podcasts to announce new possibilities for patient inputs on the platform.¹⁶



Remember that...

While best practices and the three elements are critical, the platform's success and the participants' acceptance of contributions depend on their trust in the ecosystem and its coordinator. It takes a long time to develop the relationship and confidence in the ecosystem. For example, ITC built a relationship through its decades-old presence in the e-Choupal, which helped them build up the farmers' trust in their initiatives. While the common self-interest – and joint efforts to solve formidable challenges will ensure adoption, sustained participation will only happen if the rules are fair and the risks of exploiting the platform kept low by design. This happens when the shared principles, standards, and technologies are geared to reduce risk.

The final aspect relates to the creativity, innovation, and alternative solutions the participants can come up with or get while using the platform. The value creation potential of the platform would be limited if the model is static and the participants cannot adapt to find solutions to new and emerging challenges.

A final word on the importance of a platform-driven societal value creation ecosystem: By 2025, 60% of the workforce will be millennials, who prioritize working for a company with a strong CSR commitment.¹⁷ To take your CSR to the next level, there is now a clear roadmap.



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