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One Protocol. Infinite Potential

Open Networks

We're here to explore *how open networks enable coordination at scale*. Let's start by understanding open networks.

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We use open networks everyday!

- **Open networks** power much of our daily online interactions, from sending emails to browsing social media or different webpages. All of this is made possible by **the internet**, an open network that connects billions of devices around the world!

- Powered by open protocols like **HTTP**, the web allows computers to exchange information effortlessly, enabling us to browse websites, stream videos, and access endless information.

- Regardless of whether we use Gmail, Yahoo, or Outlook, we send and receive emails seamlessly. This is due to **SMTP**, an open protocol that lets different email services communicate on a shared, global open network.

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What if planetary-scale networks never existed?

Imagine how difficult communication would be if you could only send emails to Gmail users from your Gmail account, but not to Outlook or Hotmail users! Or can make calls from your Vodafone connection to only Vodafone customers, not the Verizon ones. You'd be stuck with limited communication options.

That's the power of open networks—bringing seamless communication across different platforms!

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Now imagine such open networks for other purposes ..

- **While the internet as an infrastructure is open, the economy on top of it isn't.** Can we imagine similar internet like open infrastructure that allows digital discovery of any resources & transactions across sectors and industries?

- Traditionally we have built **platforms closed by design** and confined the value created by the platform itself. While such design have its own benefits, its economic benefits are centralised and limited by the intermediary.

- Is there a way to **solve such unfreedoms in the digital economy**? Can we make this internet economy more inclusive, expanded and adaptable? This is where the **idea of the open networks** becomes relevant and vital.

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Protocols, Open Networks and Shared Language

Open networks run on shared languages—sets of rules called protocols—that allow different platforms and providers to communicate.

SMTP is the protocol that provides a common language for email providers, apps, and clients to work together.
HTTP is the protocol that provides a common language for the web.
GSMA CDMA is the protocol that provides a common language for the telecommunication exchanges.

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Open networks - a shift from platforms to protocol thinking

Via a decentralised architecture that unbundles experience from service
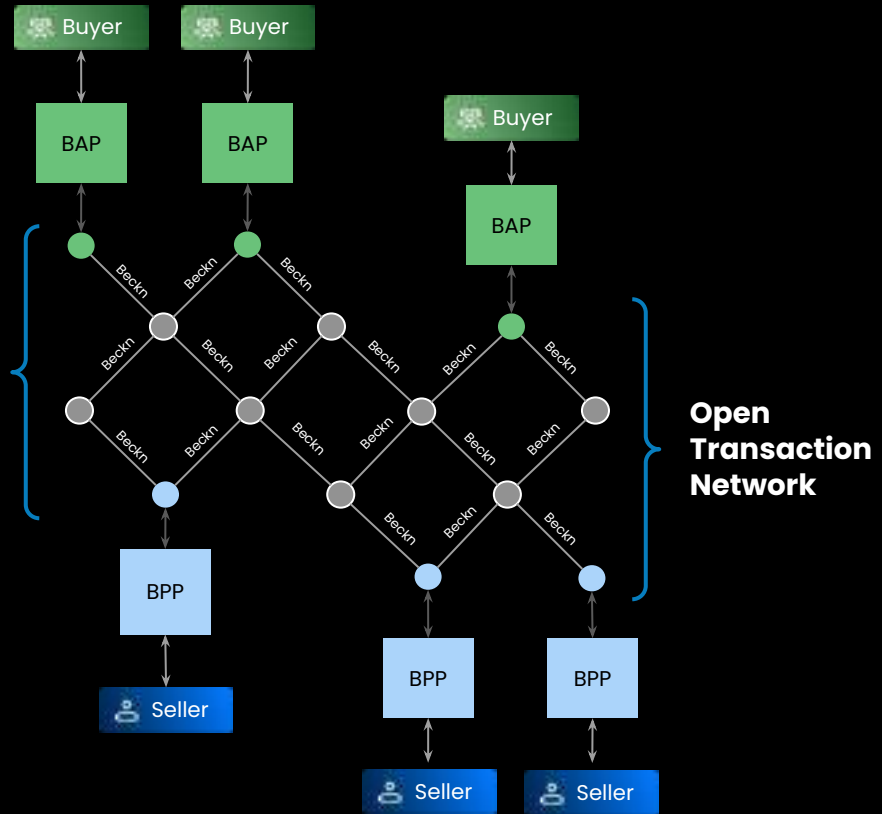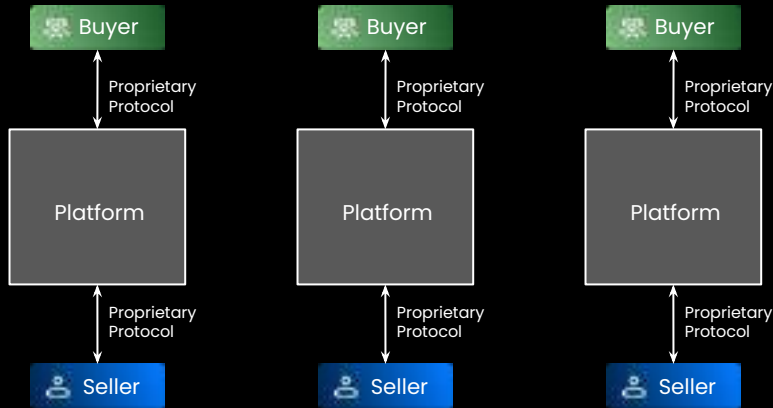
Open networks vs platforms

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Open networks are different from platforms.

Consider the case of food delivery. Zomato limits us to ordering from restaurants listed on its app. To explore more options, we have to switch to other apps like Swiggy or Uber Eats, but even then, we're confined to their platforms. This is platform-thinking.

If Zomato adopts the Beckn Protocol, it joins a larger network, enabling its sellers to reach users on platforms like WhatsApp and GPay. Likewise, users can browse catalogs from other Beckn-enabled providers like Swiggy or Uber-eats, compare options, and choose the best fit—unlocking broader markets for sellers and better choices for buyers. This is (the power of) open-networking.
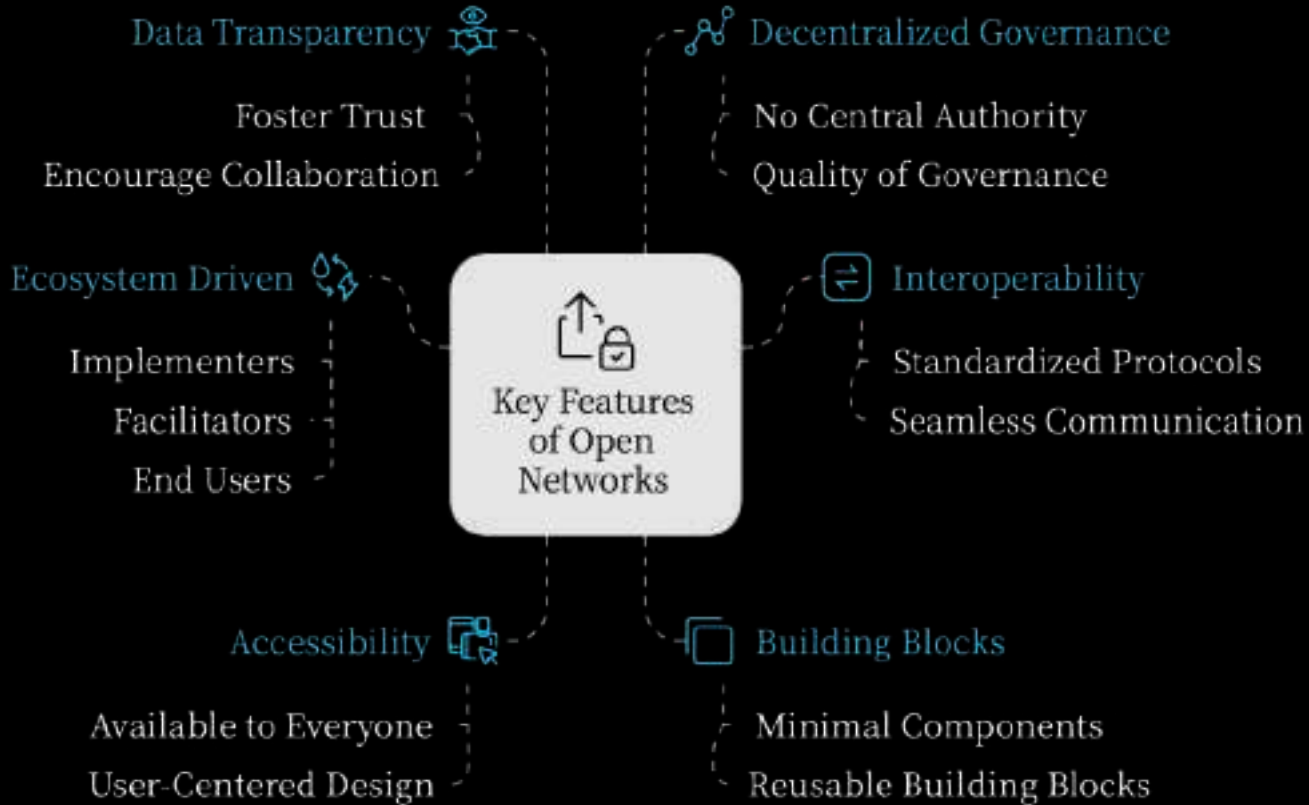
*** Note*: Platform names are used for representative purposes only. This applies to all digital platforms, not just specific ones.

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Importantly, open networks are not rivals of platforms

Open networks allow various platforms to work in harmony. In an open-network food delivery world, multiple platforms still exist, and consumers can choose freely between them. This is like how UPI (a protocol that enables an open payments network) allows payments across different platforms—users can pick GPay, PhonePe, or PayTM, but aren't limited to transacting only with users of the same app, unlike with Zelle or Venmo.

This cross-platform **interoperability** through UPI has actually increased the number of payment platforms. Instead of each building its own user base, platforms can benefit from the existing network and focus on offering better user experiences.

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Key Features of Open Networks

Data Transparency
- Foster Trust
- Encourage Collaboration

Decentralized Governance
- No Central Authority
- Quality of Governance

Ecosystem Driven
- Implementers
- Facilitators
- End Users

Interoperability
- Standardized Protocols
- Seamless Communication

Accessibility
- Available to Everyone
- User-Centered Design

Building Blocks
- Minimal Components
- Reusable Building Blocks

Open networks bring about..

Expanded markets

Reduced cost of transactions due to low cost infrastructure

Private innovation on public rails

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the language of transactions

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beckn is an open source universal transaction protocol

An economic resource discovery & transaction protocol

- ./ Mobility service
- ./ Energy
- ./ Agri producers
- ./ Circular goods & service
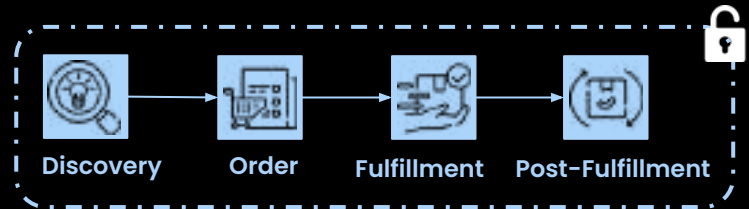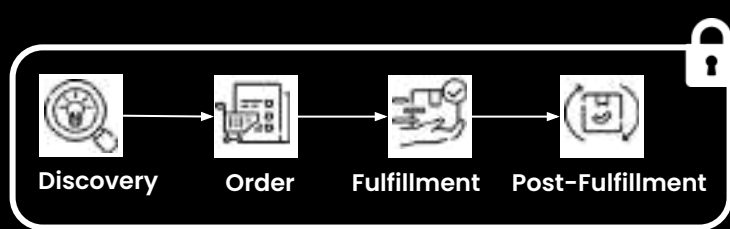- ./ Financial instruments
- ./ Skill ..

- ./ Ordering
- ./ Booking
- ./ Blocking
- ./ Sourcing...

- ./ Decentralised, P2P
- ./ Generic but exhaustive
- ./ Layered
- ./ Transactions as micro-contracts...

Open Source Specifications	Tech & AI Neutral	Open Community

Discovery → Order → Fulfillment → Post-Fulfillment

Discovery → Order → Fulfillment → Post-Fulfillment

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beckn is unlocking new paradigms globally

8
Live Networks

~15
Countries

15+
Domains unified

60+
Projects in different stages

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Case-in-point across regions and sectors

ONDC: Country-wide open network for digital commerce, mobility, credit and many more.

Namma Yatri: Peer to peer auto-booking application in Bengaluru running on the Open Mobility Network

ONEST: Open Network for Education and Skilling Transactions

Unified Health Interface: An Open network for health enabling Ayushman Bharat Digital Mission

Unified Energy Interface (UEI): Open network for various energy transactions: EV charging, battery monetisation, demand flexibility & peer trading

Open Gamia Network: A country-wide open network for digital commerce and skilling

Belém Arberta: A city-wide open network for skilling, job and education

Vriddhi: The first open network in Nepal for tourism, art and culture

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The story doesn't end there…

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The community is exploring numerous possibilities in the world of energy

UEI — Unified Energy Interface

Decentralised EV charging open network

Green charging

Battery monetisation and demand response

National Distributed Energy Resources (DER) registry:

Peer-to-peer energy trading

Battery passport

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Come, let's reimagine the possibilities of climate and sustainability actions with **beckn**