

Imagining local retail with beckn

Concept paper



Imagining Local Retail Open Network in India

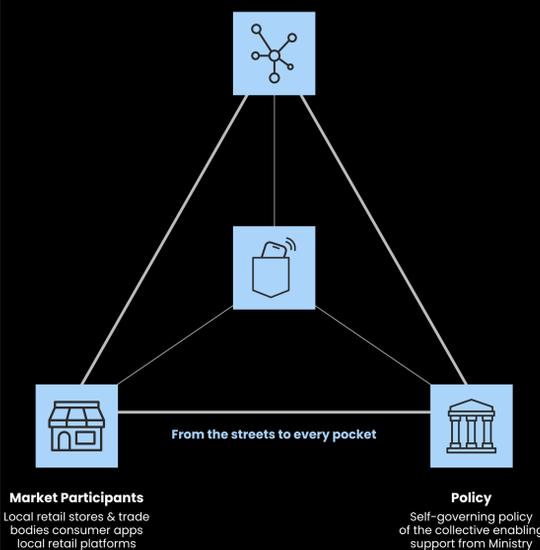
The ever-easily accessible local retail stores across the country are facing an unprecedented crisis today, due to the COVID-19 pandemic and the resulting lockdown/social distancing. To enable customers to continue to access them, local retail stores are taking efforts to bring themselves online. However the vast scale, variety (store/inventory size, category variety) of the local retail stores warrant a common way of discovery of orders while factoring the inherent diversity and the scale. Bringing local retail stores online at a massive scale requires three things to happen in tandem.

Alignment of incentives of market participants across the value chain – local retail stores, local retail platforms, consumer apps, logistics and final mile delivery platforms has to be enabled with policy or commonly agreed upon rules for fair and transparent market participation, using some form of formal or informal institutional structure. But this alone would not suffice. Market engagement requires orchestration through an enabling yet minimal technology infrastructure. Local Retail Open Network using beckn protocol is one such example.

Local Retail Open Network can allow a variety of network participants like the trade bodies, local retail stores, grocery SaaS platforms, logistics and final mile delivery service providers to join hands together and unlock the challenges of access and outreach especially during the Covid-19 pandemic and enable consumers to buy essential supplies from the local grocery stores online through mainstream consumer apps.

Local Retail Open Network, based on an open and interoperable beckn protocol, can integrate the technology platforms and solutions of the participating members seamlessly.

Public Infrastructure
Local Retail Open Network on beckn protocol
Rapid expansion of reach open distributed commerce



Market Participants
Local retail stores & trade bodies
consumer apps
local retail platforms

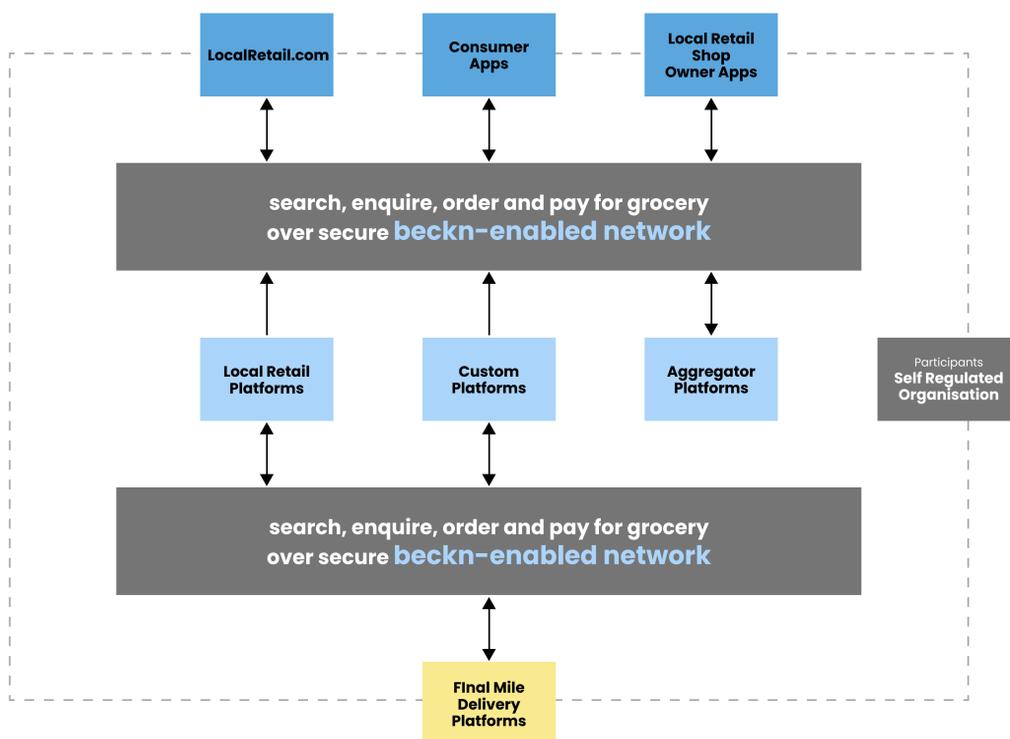
Policy
Self-governing policy of the collective enabling support from Ministry

Imagining the Ecosystem Model for Local Retail Open Network

Local Retail Open Network can be implemented as an open network that adopts open APIs of beckn protocol to integrate the consumer applications on one hand and the local retail store provider side on the other hand, to enable the end-to-end search-order-payment-and-delivery cycle:

1. A consumer can use any beckn local retail enabled application to search for neighbourhood local retail stores
2. All the neighbourhood local retail stores, that are brought online using their respective online platform providers built on beckn local retail protocol, can be discovered by the consumer end application
3. The consumer can select, order and optionally pay for the items from the selected local retail store and the orders will be received and confirmed by the selected local retail store using their own application
4. The local retail store provider platform, if it chooses to use third party delivery partners on local retail network, can then use the same Local Retail Open Network APIs to search for final mile delivery service providers and place an order for pickup and delivery to the consumer

The Local Retail Open Network APIs also provide online visibility on the orders, payment receipts, tracking and confirmation of deliveries. A sample of such a network is illustrated below:



Local Retail Open Network allows any consumer app to play the role of a 'beckn app' for searching, inquiring, ordering and paying for grocery from the neighbourhood local retail stores. Using the same network, the local retail stores can search, order, pay and track services of the final-mile hyperlocal delivery providers and thus, allow the entire order-to-fulfillment cycle to be enabled within the same network.

The network participants can co-opt to help create the following for the network:

1. Contribute and help adopt beckn local retail open schema as a standard for the network
2. Define rules around participant registration, pricing structure across the transaction value chain, revenue settlement rules (for online and COD payments), rules on fair and transparent exchanges across the network, framework for creation and application open data for aggregated anonymised datasets to improve and grow the economy on the network
3. Setup the local retail beckn gateway(s), including registry, by representatives/service providers
4. Interface with government functionaries /regulatories for enabling policy support and formalisation of the network as a legal entity in future



Using beckn protocol, participants can transmit and apply these policies digitally, instantly and consistently. It allows dynamic real-time updates on policies; thus, allowing for rapid testing and evolution of policy, and enabling natural compliance.

Beckn protocol specifications include features like open registries, form-agnostic data elements & structure with concerns of security and privacy addressed in the design.

Every transaction conducted on the network is digitally signed by the application and the provider to ensure non repudiability and digital audits. This allows the ecosystem to come up with appropriate rules for any charges, grievance redressal mechanism, and independent audits of the network participants to ensure overall adherence and fair play by all participants of the network.

Local Retail Open Network, as an open digital infrastructure, retains the agency of the local retail stores and offers the choice to have their own preferred local retail platform providers and similarly, allows consumers to exercise their choice on the consumer apps to search and order for groceries.

Local retail stores in this way, can beckn a new future and continue to retain their position as an essential lever in the nation's economy.

