WORKING DRAFT - JUNE 2026

THE BLUE DOTS^{AI} ECONOMY

Making Local Opportunities Discoverable to Unlock Existing Economic Potential

SEEDED BY EkStep

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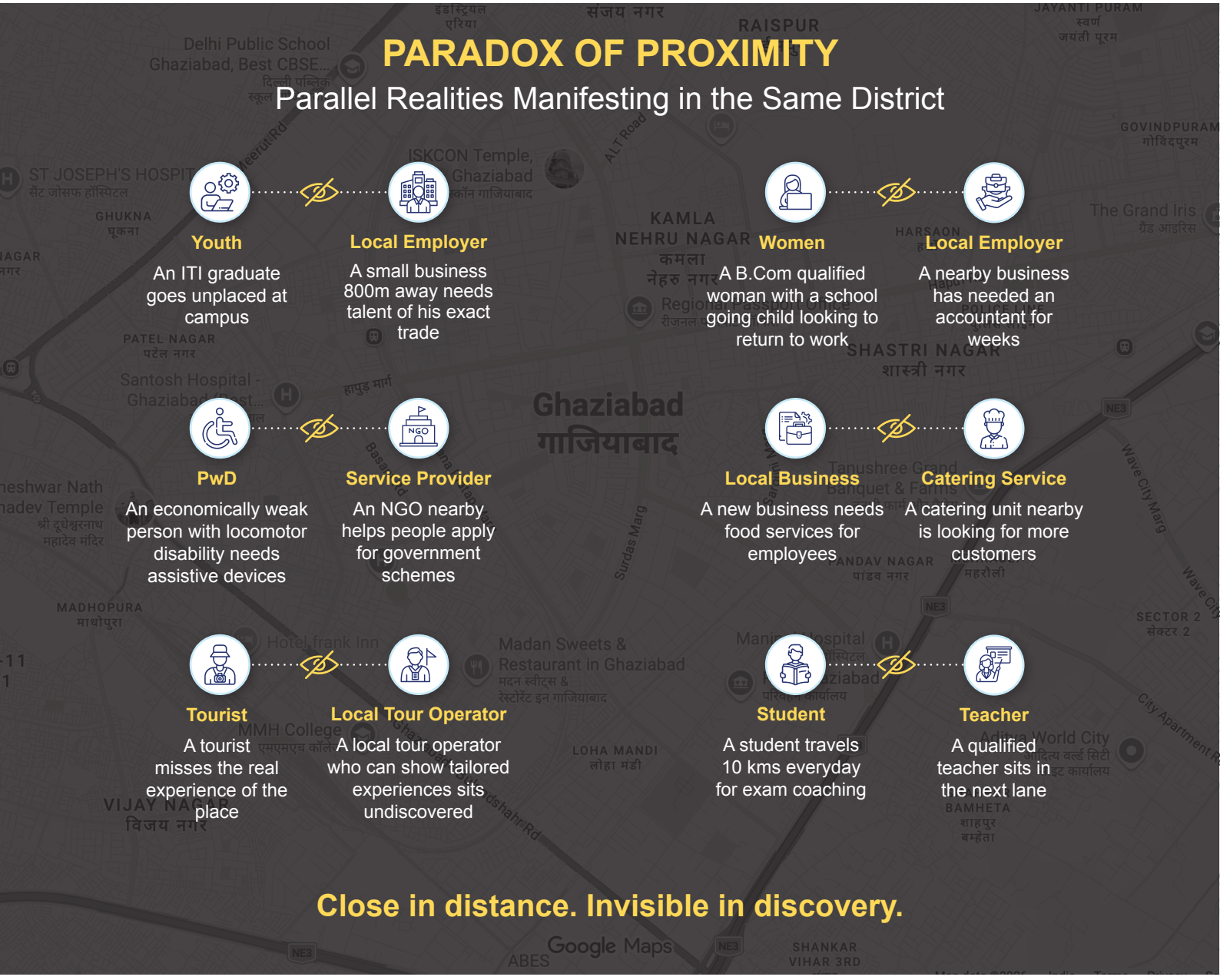
Executive Summary

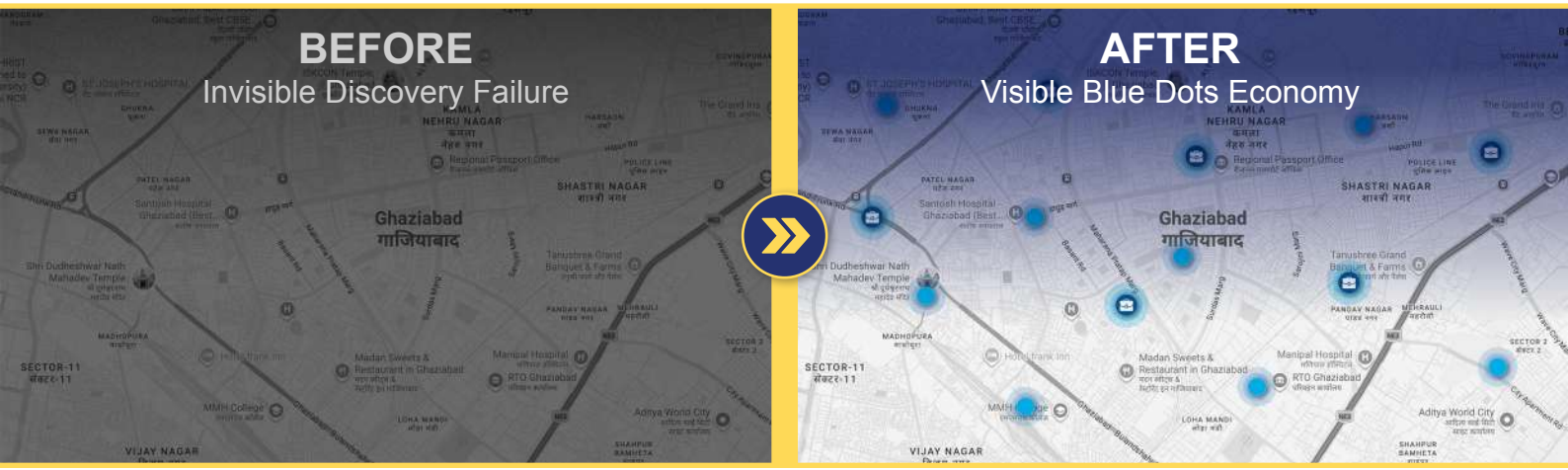
Many of India's progressive districts are not suffering from a resource failure i.e. shortage of jobs, skills, or services. They are suffering from a local discovery failure: the livelihoods, talent, schemes and services exist, in proximity, but cannot discover each other. This creates the "**paradox of proximity**".



Successful pilots in Ghaziabad & Dharwad districts show that this local discovery problem, rooted in digital darkness, is solvable.

FROM INVISIBLE TO VISIBLE

The Blue Dots Transformation in Ghaziabad and Dharwad



Job Visibility & Market Legibility

National Platforms:
<100 jobs visible

Cost to Surface Local Intelligence:
₹500 per survey (Traditional means)

Blue Dots Map:
10,000+ surfaced from less than 10% of SMBs

Cost to Surface Local Intelligence:
₹10 per interaction (Voice AI)

Speed & Proximity of Connection

Discovery time:
> 2 weeks

Another town/city

Discovery time: **< 1 day**

Less than **2 bus stops** (Local talent for local work)

Placement & Economic Outcome

Placement rates
<10% (Broad job fairs)

Long distance migration (Local economy suffers)

> 50% conversion rate (Targeted placement drives)

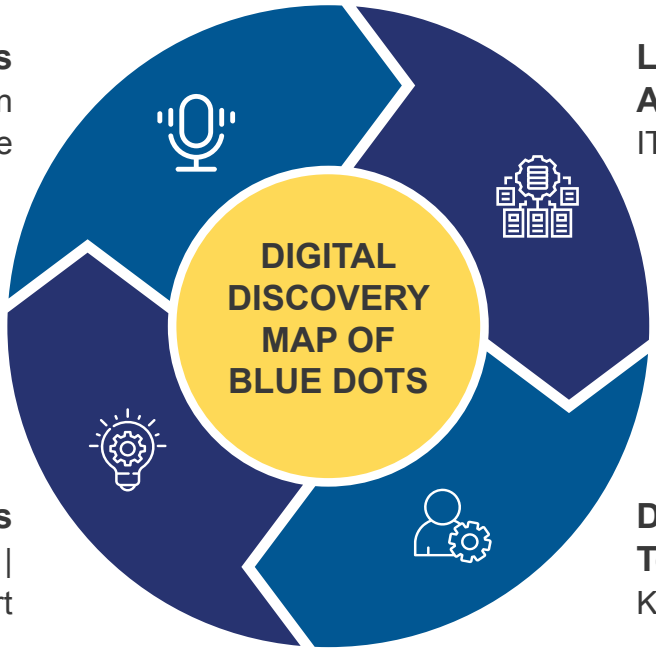
Unlocking local multiplier effect (Income & spending stay local)

Blue Dots[AI] is a shared digital discovery infrastructure that empowers the local ecosystem to convert local demand and supply that already exists in proximity into visible, credible, and continuously actionable digital signals. Governments, enterprises, startups, NGOs and more can leverage this infrastructure to solve their own local discovery challenges, whether in pursuit of better outcomes, greater efficiency, or new revenue. It is implemented through four reinforcing levers.

4 Reinforcing Levers

Blue Dots[AI] Rails
2-3 min
Any language | Any phone

Local Ecosystem Aggregators
ITIs | NGOs | MSMEs



Innovators
Assessment | Staffing | Finance | Transport

District Facilitation Team
Keeps rhythm live

Proximity without discovery is wasted potential. It is one of the largest untapped economic opportunities hiding in plain sight.

The Invisible Local Discovery Failure

When we ask why a district economy is not reaching its potential, the default behaviour is to look for what is missing — insufficient jobs, inadequate skills, not enough growth & investment. But there is a different possibility, one that is hiding in plain sight across most of India's districts: the jobs are there, the talent is there, the services and schemes are there — **everything lies in proximity but they simply cannot find each other. This is not a resource failure. It is a local discovery failure.** And it is far more widespread than we recognise.

In Ghaziabad, a commerce graduate named Kavita is being urged by her family to move to Delhi or Gurgaon — convinced that a meaningful career cannot be built at home. A manufacturing firm two kilometres from her house is looking for someone exactly like her. Neither knows the other exists. When fewer than **10 percent of Ghaziabad's SMBs** (Small & Medium Businesses) were surfaced on a shared digital map, almost **10,000 local job** openings became visible in **less than 60 days** while national platforms had been surfacing **fewer than 100** for the same district. The jobs had always been there. Kavita had always been there. **Despite being in proximity they are invisible to each other, leading to a local discovery failure**.

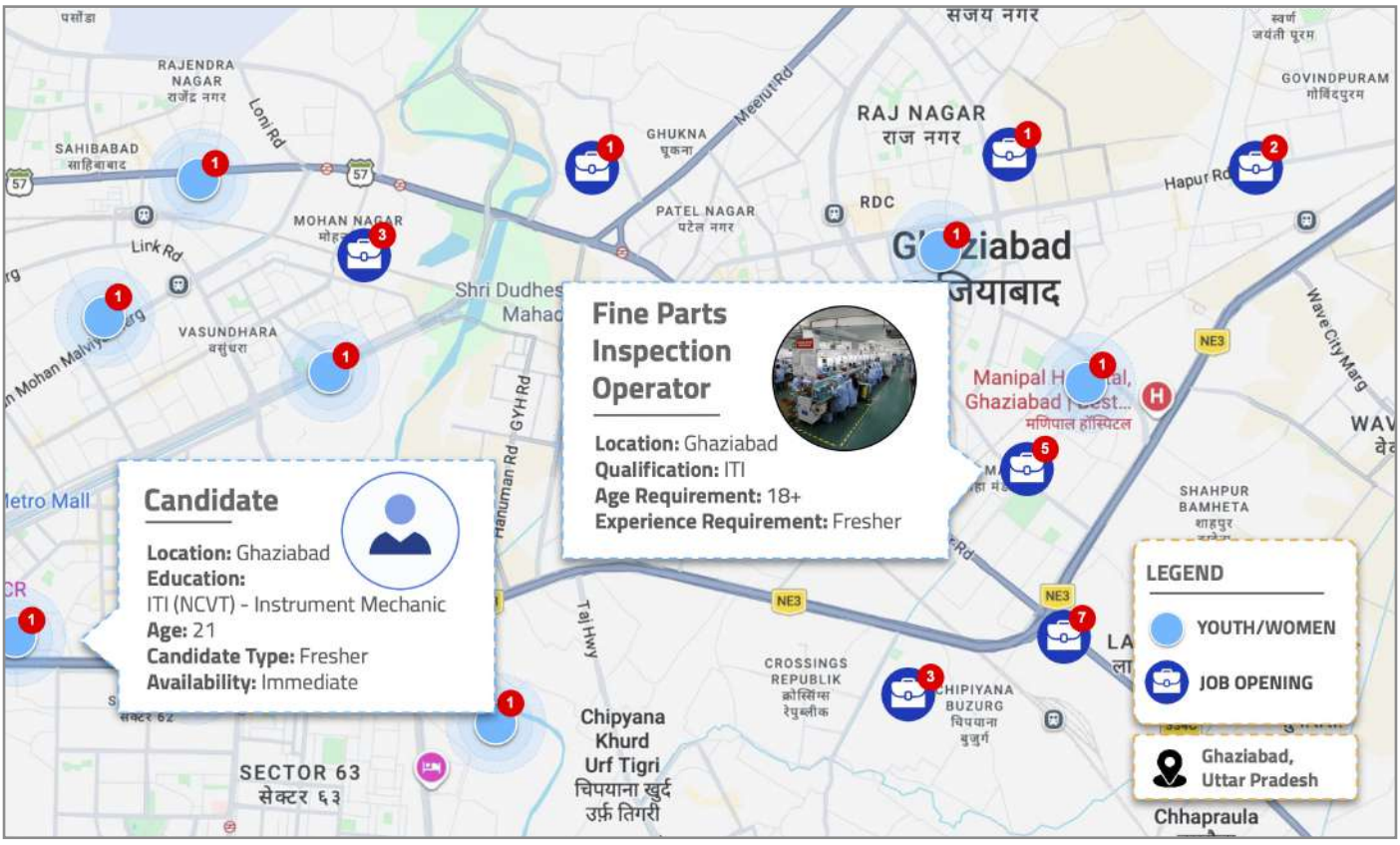
Kavita's situation plays out across every sector, every day, in every district. An ITI graduate spends weeks finding work while three SMBs within walking distance are looking for candidates with the exact same skillset A woman ready to return to work after raising children finds no nearby options, even though local employers would hire her today if they knew she existed. A tourist visiting Varanasi books through a national platform while a skilled local guide, a tour operator offering unique experiences and a local artisan sit undiscovered two streets away. A farmer cannot find nearby cold storage on harvest day and loses a fifth of the crop. A SMB waits months to find a local accountant who is, in fact, around the corner. A student travels to another town for coaching while a qualified teacher is in the next lane. In each case: **the demand is real, the supply is real, the distance is small, they are all in proximity — and yet they do not discover each other. This is the 'paradox of proximity'.**

This is the distinction that changes everything. A district facing a resource failure needs new investment, new infrastructure, and new capacity. But a district facing a local discovery failure already has what it needs — it just cannot see it. Many of India's progressive districts fall into the second category. The cause is singular and structural: local discovery doesn't work because the district's people, services, enterprises are **digitally dark, which in turn creates a local discovery crisis**. Most of the district economy — livelihoods, services, schemes — are not on any digital map. It lives on walls, poles, autos & hoardings as posters, and travels through word-of-mouth chains. National platforms were built for digitally fluent users, not for the fragmented, vernacular, hyperlocal reality of district life.

This paradox of proximity: where local supply and demand sit kilometres apart — sometimes metres apart — function as though they belong to entirely separate economies. What is nearby should be easiest to find. In India's districts, it is often impossible to find. The long tail of SMBs, local talent, local service providers & schemes, and citizens is largely invisible. **What looks like a jobs crisis, or a skills gap, or poor service & scheme utilisation, is often something simpler and more solvable: a discovery crisis**.

The cost is real. SMBs contribute around 70 percent of employment in India but only 30 percent of GDP[1] — constrained not only by capital but by the inability to find nearby talent, nearby customers, and nearby services when they need them. The government invests continuously in skilling, schemes, and services — yet placement rates stay below 50 percent[2], service and scheme utilisation below 70 percent. These are not failures of intent or investment. They are, in significant part, failures of local discovery. **And unlike resource failure, local discovery failure does not require significant investments. It requires the digital discovery infrastructure to make what exists in the proximity, visible**.

That is what Blue Dots[AI] enable: a shared digital discovery infrastructure that empowers the local ecosystem to convert local demand & supply that already exists in proximity into visible, credible, and continuously actionable digital signals. A Blue Dot is a precise, location-anchored signal — a job, a service, a scheme, a skilled person — placed on a shared digital district map that every actor can see and act upon. AI is the element that makes this work for everyone: a 2-3 minute voice conversation in any local language on any basic phone is enough to become a Blue Dot. No form, no English, no digital literacy required. The job seeker simply speaks — and becomes discoverable. SMB owner describes a vacancy in the local language — and starts seeing relevant candidates. The service provider joins the digital map without navigating any interface. AI understands the intent, structures it, places it — and then keeps working: surfacing relevant dots based on needs, nudging where needed, emitting live patterns for administrators.



[1] Ministry of Micro, Small & Medium Enterprises, Government of India, July 2024 (https://www.pib.gov.in/PressReleasePage.aspx?PRID=2142170&reg=3&lang=2)

[2] Mercer-Mettl, India Graduate Skill Index 2025 (2025) (https://blog.mettl.com/india-graduate-skill-index-2025/)

The proof already exists. In Ghaziabad and Dharwad, once this shared digital discovery infrastructure was activated, **hiring moved from word-of-mouth and walk-ins to a live digital map.**

Time-to-discover talent fell from weeks to days & hours

The distance to get a job reduced from far away to just 2 bus stops away

Placement conversion rates rose from below 10% during job fairs to above 50% during targeted placement drives

The pilots did not create new demand & supply. They revealed local demand & supply that had always been there, in each others' proximity — and made it locally discoverable & actionable.

This works through four reinforcing levers: voice AI creates Blue Dots in minutes; local ecosystem aggregators build density fast; a district facilitation layer keeps the rhythm live; and innovators plug in as the digital map of Blue Dots grows, making it self-sustaining.

The resources are there. The demand is there. The distance is small. What is missing is the shared digital discovery infrastructure that lets a district see itself clearly enough to connect what it already has. That is a solvable problem — and building that infrastructure is a choice that states and districts can make today.

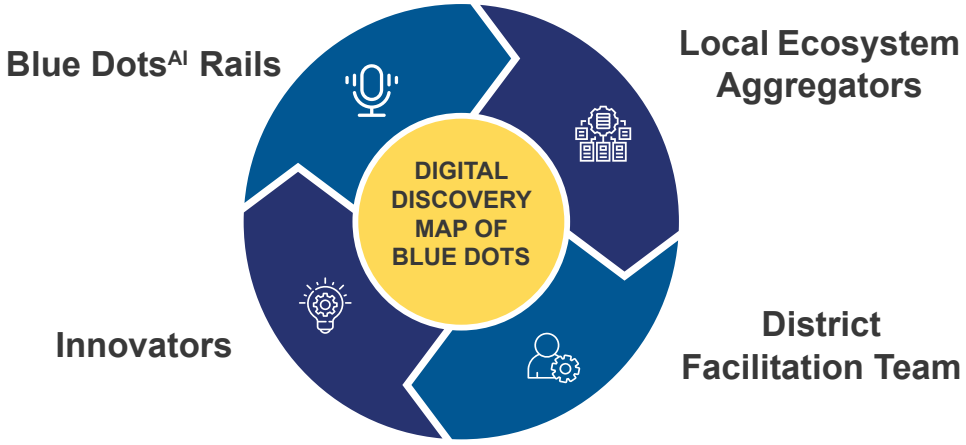
The sections that follow explore specific dimensions.

Blue Dots^{AI} as Digital Infrastructure for Local Discovery

Blue Dots^{AI} is a digital discovery infrastructure — comparable in spirit to what UPI created for payments. UPI built shared rail that any bank, any app, and any citizen could use. Blue DotsAI build shared digital rails that any government department, SMB (Small & Medium Business), private & social sector or citizen can use to become discoverable and find others — without owning or controlling the digital map, connected to each other through an open discovery protocol. Any actor can plug in, contribute and leverage. This is what makes it replicable across districts and states without bespoke implementation each time.

This comes alive through **four reinforcing levers working synchronously,** each essential to building and sustaining the ecosystem.

1. **Blue Dots^{AI} as Shared Digital Rails** - A 2-3 minute voice conversation in any local language on any phone is enough to become a Blue Dot on the district map.
2. **Local Ecosystem Aggregators** - ITIs, SMB associations, civil society organisations and skilling centres rapidly build density by onboarding entire institutions at once.
3. **District Facilitation Team** - The facilitation team led by the administration anchors the discovery rhythm, keeping it live and continuous rather than episodic by working with the local ecosystem aggregators and innovators.
4. **Innovators** - Staffing firms, assessment firms, placement firms, transport providers, financial services providers and more plug in as the map grows, making the ecosystem self-sustaining.



Together these are the local digital discovery infrastructure that convert proximity into economic value.

Blue Dots^{AI} make it work for more than 80 percent of the district economy, the long tail that has never appeared on any digital system and has remained invisible or digitally dark — democratising access regardless of literacy, language, or device. At 2-3 minutes per interaction, AI-enabled creation & leveraging of dots is also a dramatic improvement over traditional field surveys that cost ₹500 or more, generating actionable economic intelligence at scale. Once the dots are created, AI continues: nudging seekers & providers to nearby options, synthesising signals across livelihoods, schemes, and services into live district intelligence. The administrator who today governs from static reports produced months after the fact can instead see a continuously updated map, where local demand & supply are concentrated, where capacity sits idle, where investment is not reaching. But this intelligence is not only for administrators. A skilling centre can see where demand for specific trades is clustering and align its intake accordingly. A business can see where talent is available before it starts hiring. An NGO can see which schemes are going unclaimed in which pockets. When enough Blue Dots accumulate, individual signals become collective intelligence, and that intelligence sharpens every intervention, public and private, making the district legible not just to itself but to every actor trying to serve it.

This does not run on its own. The **Blue Dots^{AI}** digital rails and the district facilitation team are anchored by the district administration, and enabled through the sponsorship & stewardship of state government champions — this is what keeps the discovery rhythm alive. Without that, the map stagnates. With it, the ecosystem self-sustains. The infrastructure is the rail. The administration is what keeps the trains running.

Addressing the Discovery Failure Addresses Inequality

Discovery failure does not fall evenly. It falls hardest on those with the fewest resources at disposal — the ones who cannot rely on who they know to find what they need. A woman re-entering the workforce after years at home. A person with locomotor disability who needs a job, assistive support, and accessible transport. A first-generation graduate from a smaller town without the alumni connections that urban peers take for granted. A daily wage worker who finds work only through whoever happens to know them that day. For each of them, the local discovery failure is not a friction — it is the primary barrier between them and economic participation.

A shared digital discovery infrastructure changes this structurally rather than individually. In February 2026, needs of over one lakh persons with disabilities — across livelihoods, schemes, and services — were surfaced across multiple districts in ten days, at approximately ₹10 per interaction compared to ₹500 or more for a traditional field survey. When a woman returning to work can find a job opening in proximity without relying on personal contacts;. when a person with disability can find nearby avenues to participate in the economy; when a graduate can find local employment immediately after finishing studies; when a daily wage worker starts getting regular work; it doesn't just enable them to earn, it also enables dignity. **Local discovery failure is in part a story about who gets systematically excluded. Fixing the infrastructure changes who gets included — not through redistribution, but through local discovery.**

What Better Discovery Is Worth In Economic Terms

When local discovery improves, economic activity compounds across three layers simultaneously.

Livelihoods accelerate	Job seekers find work sooner, enterprises fill roles faster, and capacity is utilised rather than wasted.
Services & schemes accelerate	The same public rupee produces more participation and more economic activation — a service that once required a journey is found around the corner, a scheme that once took six months to discover eligible citizens does that within days.
Local multiplier strengthens	When work is found locally and income is earned locally, spending happens locally — on food, transport, childcare, repairs, tuition, neighbourhood services etc. Each of those transactions is income for another local enterprise, which hires locally in turn. When discovery is local, the multiplier stays local.

Estimates, based on the Ghaziabad district's data and extrapolated across India's top 100 districts, suggest that improving local discovery could add upwards of ₹87,500 crore annually to their GDP. This is not a projection of new spending or new investments. It is an estimate of existing potential — jobs on posters, schemes unclaimed, services unknown to the citizens who need them — that goes unrealised each year because the district cannot see itself. Better local discovery is not a welfare argument dressed in economic language. It is an economic argument in its own right which also makes sense for private players to act on.

A Market That Now Makes Sense

District-level blue and grey collar markets have historically not worked for private players on their own economics. The time and cost of finding workers and local customers was too high, conversion too unpredictable, margins too thin. Venture Capital investment in livelihoods has concentrated in white collar for precisely this reason — not because the demand in other segments was absent, but because the unit economics to serve it profitably were not there.

Startups, civil society orgs and local businesses leveraging Blue Dots[AI]

Shared digital discovery infrastructure changes the foundation. When the cost of finding verified local talent or a nearby customer is carried by digital public rails, private players building on top face near-zero acquisition costs and it brings down discovery time to minutes & hours not days or weeks. A placement firm, an assessment services provider, an upskilling firm etc. can now discover this long tail of local demand & supply and compete on quality. Such firms are already engaging with this shared local discovery infrastructure in pilot districts — because it makes their own operations more efficient and enables better outcomes for livelihoods, services & schemes. As more districts do this, a new category of viable local economy businesses can emerge: which is not another national platform, but district-level services built on shared digital discovery infrastructure that serves the long tail of India's economy.

A Model That Can Travel Globally

The discovery failure India's districts face is not unique to India. In any economy where livelihoods & services are largely informal, vernacular, and hyperlocal — where national platforms serve only the digitally fluent, where the economy's long tail is invisible on any digital map — the same proximity paradox applies. Local demand and supply sit close together and never find each other. Schemes reach a fraction of the eligible. Services see low consumption & operate far below potential. The structure repeats across geographies, and so does the opportunity.

What **Blue Dots**[AI] also offers development institutions and governments across the world, is a new model for unlocking economic data at scale. Voice AI surfaces hyperlocal market intelligence that has never before been visible, at a fraction of the cost of traditional field surveys. As a Digital Public Good, the model is financially sustainable and openly replicable, not dependent on proprietary platforms or continuous donor funding. This is not just a discovery tool. It is a cost-efficient infrastructure for making untapped local market potential visible and actionable.

The **Blue Dots**[AI] approach is designed to be replicable anywhere — any country can deploy it. Voice AI works across languages & personas. The local ecosystem aggregators exist across geographies and the model works wherever institutional nodes exist. The facilitation team can work wherever there is a local administrative unit with the authority to convene. Innovators exist in each market. India's experience in Ghaziabad and Dharwad provides the proof: the local discovery failure is solvable, the model is portable, and the economics are favourable. For investment bodies, development institutions and governments seeking to activate informal economies at scale — this is not an experiment to observe. It is an approach ready to take anywhere.

Appendix 1
The Proof: Success in Ghaziabad and Dharwad

How two districts revealed local demand and supply that was always there

Ghaziabad and Dharwad did not test whether local demand & supply existed. They tested whether it could be made visible and actionable. The answer was unambiguous.

The first thing the pilots revealed was the scale of hidden demand. When approximately 10 percent of SMBs in each district were Blue Dotted, over 10,000 local job openings surfaced in each district. Many had been circulating through word of mouth and fragmented postings for months, remaining unfulfilled. During the same period, leading national platforms showed fewer than 100 active listings in these same districts. The demand was never absent. It was digitally dark.

Dharwad manufacturers, convened by a local SMB association, converting job openings into Blue Dots

Electrician graduates from ITI Dharwad, made digitally discoverable as Blue Dots

Shri Abhinav Gopal, IAS, Chief Development Officer, Ghaziabad, outlining how job and candidate aggregators come together to generate Blue Dots across the district

The second was how quickly local supply and demand could be made visible. Over 15,000 job seekers were surfaced in Dharwad and Ghaziabad respectively, structured into discoverable digital signals in 2 weeks. Before the pilots, reaching them required physical camps, job fairs and intermediary networks. Voice-enabled Blue Dotting reduced intent capture to two-three minutes per person.

The third was what happened when local demand and supply could see each other. Placement conversion rates rose from below 10 percent in typical job fairs to above 50 percent in targeted placement drives. Time-to-discover talent fell from over two weeks to under two days. Jobs that once required long commutes were now within two bus stops.

	BEFORE	AFTER
Job Openings Visible Locally	< 100 on national platforms	10,000+ surfaced per district from less than 10% of SMBs
Cost of Capturing Local Economic Intelligence	₹500+ per interaction through traditional field surve	< ₹10 per interaction through voice AI
Time to Become Digitally Discoverable	Multiple touchpoints, physical presence required	2-3-minute voice conversation on any phone
Speed of Surfacing Job Seekers	Weeks of physical mobilisation, camps and job fairs	20,000+ surfaced across two districts in 2 weeks
Time to Discover a Relevant Candidate	> 2 weeks	< 1 day
Placement Conversion	< 10% at job fairs	> 50% in targeted placement drives
Distance to Employment	Long commutes, often to another city	Within 2 bus stops

The pilots did not create new supply or demand. They revealed what was already abundant offline.

What followed was telling. A range of organisations are showing intent to leverage Blue Dots, with some already doing so. One clear reason: Blue Dots bring down the cost & time it would take for them to reach the long tail of this local demand & supply. Placement and skilling organisations are using better candidate & job visibility to sharpen their targeting and improve training-to-placement conversion. Assessment providers find that a discovered candidate base makes their services relevant in ways that were not previously possible. And local operators are finding that better discovery makes their deployment models more scalable. The market is finding its own reasons to participate, not because it was invited to, but because the local digital map gives them access to a larger market, makes their own work more efficient and their outcomes more predictable.

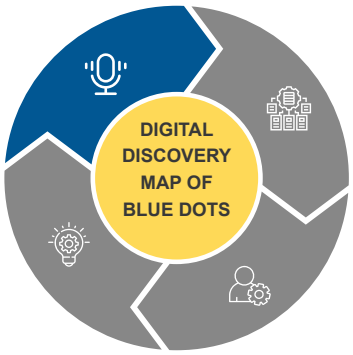
Both Ghaziabad and Dharwad are now expanding the approach within the districts. Uttar Pradesh and Karnataka are taking it further, scaling to multiple districts across each state in the coming year.

Appendix 2
The Local Discovery Infrastructure

Blue Dots powered by voice AI makes the district discoverable. Local ecosystem aggregators build density. The District Facilitation team keeps the rhythm. Innovators make it self-sustaining.

Four reinforcing levers work together to convert a digitally dark district economy into one that can see itself. Each is necessary. None is sufficient alone.

1. Blue Dots^{AI} as Shared Digital Rails

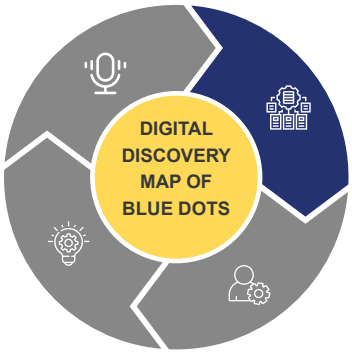


The reason most of the district economy has never appeared on any digital map is not lack of intent. It is that every existing digital system assumes a level of literacy, device access, and interface familiarity that excludes the majority of district residents. Voice AI dissolves this barrier entirely. Speaking in one's own language on any phone, including a basic feature phone, is enough to become a digitally discoverable Blue Dot: a precise, location-anchored digital signal placed on a shared district map that every actor can see and act upon. The AI does the rest: understanding intent, structuring the signal, placing it on the map. This is not a marginal improvement on existing onboarding. It is a different category of access, one that reaches the long tail of the district economy, at a fraction of the cost of traditional methods.

But AI does not stop at creation. It continues working after a Blue Dot is created: nudging job seekers when their status changes or when a nearby opportunity appears, prompting providers when relevant candidates surface, and synthesising patterns across thousands of signals into live intelligence for administrators and ecosystem actors. The map is not a static directory. It is a continuously active system.

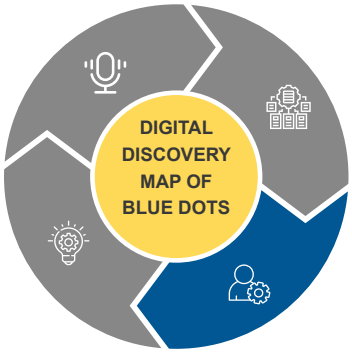
This is made possible because Blue DotsAI are offered as Digital Public Goods: open, reusable components that any government department, private firm, social organisation, or development institution can deploy and adapt for their own use case, whether livelihoods, tourism, agriculture, welfare, or beyond. No one owns the map. Everyone can use it. This is what makes the approach replicable across districts, states, and geographies without building from scratch each time.

2. Local Ecosystem Aggregators



Discovery needs density. The insight that makes **Blue Dots**[AI] scalable is that density does not have to be built by going to individuals & SMBs one entity at a time. Local institutions already hold the relationships with supply demand: an ITI has hundreds of students, an MSME association has hundreds of member businesses, and an NGO has deep connections to specific communities. When these local institutions onboard their constituents as Blue Dots, density builds rapidly and the signals carry institutional credibility. These local ecosystem aggregators are not just a faster path to scale. They are what make **Blue Dots**[AI] credible.

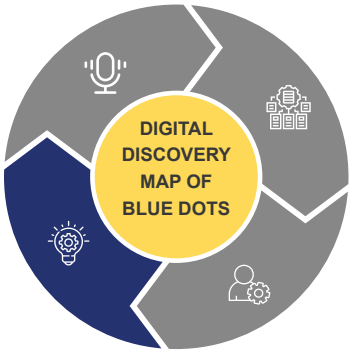
3. District Facilitation Team



A live digital map requires a live rhythm. Without active maintenance, Blue Dots go stale, both sides lose confidence, and discovery reverts to the word-of-mouth and walk-in patterns it was designed to replace. The district facilitation team, anchored by the administration, is the rhythm keeper: ensuring both sides of the map stay current, connecting aggregators and innovators, and maintaining the cadence of follow-through. This is not a technology management role. It is a convening and coordination role, and it is what separates districts where the digital map becomes a living ecosystem from those where it becomes another dormant database.

This facilitation team is typically of six to eight members drawn from government, the social sector, and MSME associations, which brings data, actors, and action together in one place. A small Project Management Unit sits behind it, keeping the district facilitation team functional: coordinating with ecosystem partners, tracking progress, and ensuring the governance cadence does not slip. Together they give the initiative the institutional backbone it needs to sustain momentum beyond the initial activation.

4. Innovators



The fourth lever is what transforms Blue DotsAI from a public initiative into a self-sustaining ecosystem. As density grows, the map becomes valuable infrastructure for private actors: staffing firms can source more efficiently, assessment providers can deploy more meaningfully, transport and financial services providers can reach customers they could never find before. They engage because it serves their own interest. And their engagement compounds the value of the digital map for everyone else, generating patterns of

demand and supply that administrators, skilling institutions, and businesses can all act on. All of this happens based on the consent of the user. The district does not just become more connected. It becomes legible to every actor trying to serve it.

Together these four levers convert proximity into economic value, not through new investment or new infrastructure, but by making what already exists in the district visible, credible, and continuously actionable. Critically, every Blue Dot on the map exists only because the person or organisation behind it chose to be there. Consent is the foundation of the signals becoming digital and of signals being exchanged.

Appendix 3
Activating a Use Case: What Implementation Involves

From decision to meaningful activation in under 3 months

Activating **Blue Dots**[AI] in a district does not require building a whole district infrastructure from day one. It requires picking use case(s), finding the right local ecosystem aggregators on both sides, and starting. The infrastructure scales from there. A district can go from decision to meaningful activation in under 3 months, across three stages: **Setup, Activate, and Drive Outcomes**, each roughly four to six weeks. There's a version 1 of the District Livelihoods Playbook that has been published to capture how to do this in a district. This version will evolve as Blue DotsAI get implemented across diverse use cases.

Which use case(s) do we start with?

Pick the use case(s) where a single department can own it, where local ecosystem aggregators on both sides already exist, and where the local discovery failure is most visible and most felt. Livelihoods is the most common starting point but tourism, education, agriculture etc. are all viable entry points, often faster to activate because the local demand and supply sides are clearer and the local ecosystem aggregators more concentrated. For a perspective on various use cases, refer to Appendix 5.

What does early activation actually look like?

The first four to six weeks are about density: enough Blue Dots on both sides start happening without external push. This happens fastest when one strong local ecosystem aggregator on each side is mobilised: an MSME association for jobs, an ITI for seekers, a tourism board for experiences, a farmers' cooperative for agriculture and so on. Once both sides have density, the map starts doing the work.

What does the government need to own?

Not the technology, not the mobilisation, not the matching. The ecosystem will do those once the live digital map has density. What the government owns is the convening authority that brings the right local ecosystem aggregators and innovators together, the signal that this is a serious initiative worth participating in, and the sustained attention that keeps the rhythm from becoming episodic. A government champion at District Collector level and a sponsor at Mission Director or Secretary level.

What does my team need to do?

In the first phase, the task is to identify the use case and bring local ecosystem aggregators to the table on both sides: on the seeker side, ITIs, colleges, and NGOs connected to youth and women; on the provider side, MSME associations, the District Industries Centre, and the employment exchange. A Jobs Facilitation Centre serves as the institutional anchor that keeps these actors coordinated. In the second phase, the focus shifts to lighting up Blue Dots on both sides until density is sufficient. By the third phase, innovators are beginning to plug in and the team's role shifts to seeing outcomes and sustaining the rhythm.

What does success look like in 90 days?

A live digital district map with thousands of discoverable Blue Dots on both sides of the chosen use case(s). A local ecosystem actively engaged and innovators began to offer services on the infrastructure. As density builds, two things follow naturally: innovators plug in because the map expands their reach & makes their own work more viable, and the accumulating data becomes intelligence that every actor in the district, government, business, and civil society, can see and act on.

The use cases that activated fastest in Ghaziabad and Dharwad were not the most complex or the most ambitious. They were the ones where a single senior champion decided to move fast.

Appendix 4
The Economics: What is the Size of the Opportunity?

Estimating the GDP impact of addressing local discovery failure in India's districts

The core logic is simple. Improved local discovery addresses the paradox of proximity by adding workers to the economy since jobs & job seekers were always present but invisible. Those workers earn locally, spend locally, and that spending creates further economic activity through a multiplier effect. Ghaziabad is the base and 100 progressive districts in India are the scale.

Ghaziabad district has a population of over **4.7 million people** (2.4 million men and 2.3 million women).

Youth (18-29)
~ 920 thousand in Ghaziabad

Women (30-45)
~ 450 thousand in Ghaziabad

Persons with disabilities (18-45)
Prevalence 2.2%
~40 thousand in Ghaziabad

Step 1: New Workforce Participation

Three groups carry significant latent workforce potential. A conservative 5% addition to each finding work through better local discovery — yields 70,000 new workers in Ghaziabad.[3]

	Group	Ghaziabad population	5% added to workforce
	Youth (18–29)	~920,000	~46,000
	Women (30–45)	~450,000	~22,000
	PwDs (18–45)	~40,000	~2,000
	Total		**~70,000**

[3] Office of the Registrar General and Census Commissioner, India (2011). Census of India, Ghaziabad District. (https://www.census2011.co.in/census/district/511-ghaziabad.html)

Step 2: Local Spending

Lower-income and first-time earners retain a high share of income locally — kirana, rent, transport, and services are all consumed nearby.[4]

	Sector	Typical Distribution	Local Spends (INR)
	Food & Retail	35%	52,500
	Housing/Rent	20% (Stays at home so no spends here except 20% utilities) 20% x 20% = 4%	6,000
	Transport	10%	15,000
	Discretionary	20%	30,000
	Savings	15%	0
	Total Spends		**103,500**

Local spending per worker: ~INR 1,00,000 per year (67% of income, after excluding savings)

GDP addition to Ghaziabad from local spending: 70,000 × INR 1 Lakh = INR 700 crore

Step 3: Multiplier Effect

Each INR 1 of local spending generates INR 1.5 of local economic activity — through demand for retail, housing, transport, education, and services. This is grounded in global evidence (Moretti 2010, Bartik 2019) and consistent with Indian MSME cluster research.[5]

GDP addition to Ghaziabad from multiplier effect: INR 700 crore × 1.5 = INR 1,050 crore

Total GDP Addition: Ghaziabad and Top 100 Districts

Scaling: Ghaziabad population ~4.7M. Top 100 districts population (excl. metros) ~250M. Conservative scaling factor: 50×.

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[4] Ministry of Statistics and Programme Implementation, Government of India (2024). Periodic Labour Force Survey. (https://mospi.gov.in/periodic-labour-force-survey-plfs)

[5] Moretti, E. (2010). Local Multipliers. American Economic Review. (https://eml.berkeley.edu/~moretti/multipliers.pdf)

Component	Ghaziabad (INR crore/yr)	Top 100 districts (INR crore/yr)
Local spending	~700	~35,000
Multiplier on local spend (×1.5)	~1,050	~52,500
Total		**~87,500 crore**

Caveats: *Districts with weaker SMB density or local linkages may generate less; stronger cluster districts may generate more. Ghaziabad is a reasonable mid-point. These estimates exclude compounding effects from repeat local spending cycles.*

What this calculation excludes:

Three categories of value are real but not included in the figures above, to avoid conflation:

Welfare and scheme utilisation

Faster discovery compresses time-to-impact for beneficiaries and lifts utilisation rates. This generates incremental income for a different population through a different mechanism — additive to the livelihoods figure, not overlapping.

Services activation

When local providers become visible, service consumption rises — teachers, repair, care, tourism, agri-services and many more. This is partially captured by the multiplier but under-represents direct service GDP.

SMB productivity and revenue

Faster hiring and better local customer discovery improves SMB output. Not modelled here.

Including these would raise the figure materially. **The INR 87,500 crore estimate is therefore conservative.**

Research Basis:

Multiplier effect (1.5)

- **Moretti (2010):** 1 tradable-sector job creates 1.6 additional local service jobs. Foundational global evidence.
- **Bartik (2019, Upjohn Institute):** Multiplier of 1.5 on conservative restatement.
- **India Policy Forum — Chaurey & Nayyar (2022):** 10% increase in tradable employment produces ~4.2% increase in non-tradable employment and 2.8% increase in local firms.

- **Jena (2017):** MSME clusters in 21 states produce 96.3% of India's MSME manufacturing output — confirming cluster multiplier conditions in districts like Ghaziabad.

Local spending retention (67%)

Marginal propensity to consume for lower-income and early-career workers is 0.6–0.9 in Indian research. In tier-2 cities, local retention is higher than metros due to lower e-commerce and financial investment leakage. 67% reflects the conservative end after excluding savings and remittances.

Appendix 5
Beyond Livelihoods: Blue Dots Across Sectors

The local discovery failure doesn't just happen in citizens discovering livelihood options. The local discovery failure also happens when a person with disability looks for assistance, a tourist looks for local experiences or artisans, a farmer looks for a place to store produce during harvest, a student looks for teachers for exam prep and so on. Many use cases of addressing the local discovery failure have surfaced from the ecosystems that will utilise the Blue DotsAI infrastructure & approach. Rather than a single closed marketplace, these open, shared digital public rails enable local discovery of demand & supply in different colors & icons based on the persona and the need. This fluidic exchange allows for specialised discovery on a shared rail, turning the district into an interconnected economic engine.

Blue Dots[AI]

Livelihoods for Youth

The Problem

The 'local discovery failure' keeps youth and employers invisible to each other, even when they are just two bus stops apart. This wastes precious time: youth lose income while employers lose revenue & productivity to unfulfilled positions. This friction drains a district's economic potential and stalls the country's demographic dividend.

<50%

Placement rate of youth in India

What Blue Dots[AI] Do:

Blue Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Blue Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

Eliminates idle time for youth and productivity loss for employers, strengthening the local economy.

8:00 AM

"I guess I will have to move to a city to find a job."

8:02 AM

"I didn't realize there are 100s of relevant jobs in my vicinity!"

Pink Dots[AI]

Driving Greater Female Labour Force Participation

The Problem

The labour market faces a 'local discovery failure' where women and flexible work opportunities remain digitally dark. Every day lost in finding work isn't just a personal loss—it is a day of lost income and a stalled national economy that sidelines 50% of its population.

<35%

Labour force participation rate of women in India

What Pink Dots[AI] Do:

Pink Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Pink Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

Reduces the friction that keeps women off the grid, surfacing nearby opportunities to facilitate active participation in the workforce.

8:00 AM

"I don't want to travel more than 20 minutes for work."

8:02 AM

“Spoke for 2 mins and I can now see remote work and roles just two bus stops away.”

Purple Dots[AI]

Enabling Economic Participation by PwDs

The Problem

For persons with disabilities (PwDs), 'local discovery failure' of livelihoods and services is a forced exit from the economy. Every month spent waiting for an assistive device or skilling or a livelihood option, is a month of lost income. When they remain invisible to each other, a willing workforce is kept on the sidelines.

~100 million

PwDs can take an active part in India's economy

What Purple Dots[AI] Do:

Purple Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Purple Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

Livelihoods, schemes & services can find PwDs within 5 kms, moving PwDs from exclusion to inclusion in the economy.

8:00 AM

"I don't know who to talk to for the support I need to start working."

8:04 AM

"I just highlighted my needs and I can already see options for both work and services!"

Orange Dots[AI]

Growing the Tourism Economy

The Problem

In the tourism sector; thousands of local guides, tour experiences, and artisans remain digitally dark. When the search for authentic, local experiences is high-friction, travelers stick to overcrowded hubs, and local entrepreneurs are forced out of the industry. ‘Local discovery failure’ leads to lost revenue for a sector that can contribute significantly to economic growth.

$78 Bn → Projected growth of the Indian tourism sector by **2047** → **$3 Tn**

What Orange Dots[AI] Do:

Orange Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Orange Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

Puts providers on the grid, connecting them to tourist demand and ensuring the local community generates more income.

8:00 AM

"I don't know how to attract more customers."

8:02 AM

"I just spoke about my work and somehow, three customers have made an enquiry!"

Green Dots[AI]

Boosting Efficiency of Farming

The Problem

Labour, equipment repair & storage options remain digitally dark in the agriculture sector. When a farmer cannot discover a local mechanic or farm labour, in time, it results in productivity loss and squeezed margins—this 'local discovery failure' is a direct tax on the agriculture economy.

$12 Billion

in crop value is lost annually, driven in part by resource discovery delays during harvest

What Green Dots[AI] Do:

Green Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Green Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

This optimizes the local agriculture ecosystem to reduce waste/loss and maximize revenue/profit.

8:00 AM

"The crop is ready, but I can't find farm labour anywhere and the rain is coming."

8:02 AM

"Took just a few minutes to find many options of farm labour nearby!"

Brown Dots[AI]

Powering Growth for SMBs

The Problem

SMBs are throttled by invisible local barriers. When a business is "digitally dark," they miss nearby customers and struggle to source the services or supplies needed to expand. This 'local discovery failure' forces businesses to stay small, leading to missed revenue and stalled

~60 million

SMBs in India employ <10 people

What Brown Dots[AI] Do:

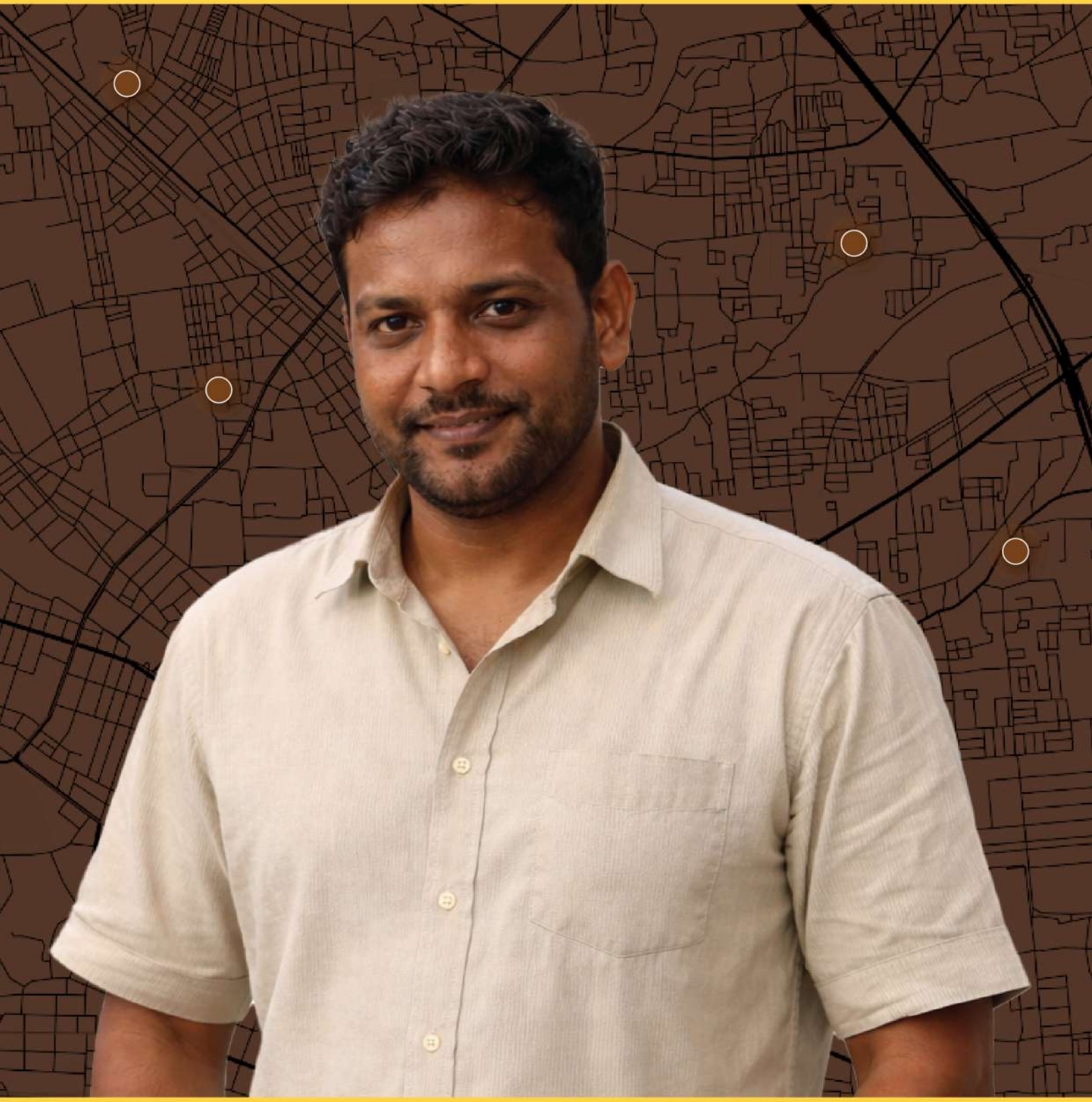
Brown Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Brown Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

This unlocks new markets, access to capital, services and suppliers, allowing SMBs to grow their business.

8:00 AM

"I've found it hard to grow my business because nobody knows we're here."



8:02 AM

“Now customers can find me digitally —and I’ve already found a nearby supplier for my next order!”

Yellow Dots[AI]

Powering Discovery of Education Avenues & Services

The Problem

Students face a 'local discovery failure' that forces them to travel to crowded exam prep hubs in cities/towns because the JEE/NEET/Govt. Exams coach or Maths teacher in their own pincode is invisible. This wastes money & time in travel, while qualified local educators sit idle. Every hour spent in transit is an hour of study lost, stalling their learning & earning potential.

40 million

Students write entrance exams in India each year

What Yellow Dots[AI] Do:

Yellow Dots[AI] make local supply and demand digitally discoverable.

Voice and vernacular AI create Yellow Dots in just 2-3 minutes (as fast as making an instant coffee) and facilitate discovery of local options.

This connects students to teachers, counsellors, exam prep centres in the vicinity, allowing them to save time & money and improve their chances of building a dream career.

8:00 AM

"I'm in 11th grade and failing Maths. I need a teacher nearby, but I have no idea who to ask."

8:02 AM

“Found a teacher and a local exam prep centre. Looking forward!”

References

1. World Bank Group (2026). World Bank Supports India's Ambitious Skills Program to Better Prepare Youth for the Job Market.
2. Mercer-Mettl (2025), India Graduate Skill Index 2025.
3. Ministry of Micro, Small and Medium Enterprises, Government of India (2025). MSME Sector Accounts for 30.1% of India's GDP, 35.4% of Manufacturing and 45.73% of Exports.
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