Giving Wings To India's 'Barefoot Unicorns' : A Strategic Acceleration Model for Backing High-Aspiration Entrepreneurs through Incubation and Flexible Finance

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18 June 2025

GIVING WINGS TO INDIA'S 'BAREFOOT UNICORNS'

A Strategic Acceleration Model for Backing High-Aspiration Entrepreneurs through Incubation and Flexible Finance

In India, entrepreneurship is often reduced to skilling combined with nano-finance. Public programs largely wash their hands after budgeting for short-term training, linking to microfinance, and creating shared infrastructure — all designed to serve large numbers of mass entrepreneurs at subsistence levels. This paper takes a 180-degree sharp reversal of that approach. It argues that by ignoring the more aspirational, growth-ready entrepreneurs — those sitting at the top of the local entrepreneurial networks — current policies are actually promoting enterprises sub-optimally, and failing to unlock the real potential of India's unincorporated sector. The paper proposes an Acceleration Model focused on identifying and backing Barefoot Unicorns — the high-aspiration HWEs and αHWEs strategically positioned at the top of local entrepreneurial networks — through adaptive incubation, behavioral conditioning, flexible finance (revenue-based financing, micro-equity), and network-driven scale, aligned to the unpredictable, non-linear journey toward Product–Market Fit (PMF). Even a modest shift could unlock 18 crore new jobs. This paper offers a strategic blueprint for governments, catalysts, CSR, incubators, investors, lenders, and DPI ecosystem actors to move beyond outcome-poor schemes towards high-leverage, ROI-maximizing entrepreneurship models.

JUNE 18, 2025

PRANAY BHARGAVA

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1. Introduction

1.1 India's unincorporated sector enterprises (αHWEs, HWEs, OAEs and Collectives)[1]

India's unincorporated micro and small enterprises in the non-farm and off-farm sectors — covering manufacturing, trade, and services — number around 7.34 crore and employ around 12 crore people, constituting nearly 100% of the labour force in India's non-agricultural unincorporated sector. These enterprises, though largely informal, form the backbone of India's rural and urban economies and are critical to inclusive economic growth. However, this vast ecosystem is marked by distinct enterprise segments:

Own Account Enterprises (OAEs)

The majority—about 6.34 crore (~86% of total enterprises in the unincorporated sector)—are Own Account Enterprises (OAEs), small-scale ventures run by self-employed individuals typically without hired workers. These enterprises are mostly driven by necessity, providing subsistence rather than growth or significant job creation. These enterprises are characterized by:

Employment	Usually just the entrepreneur and possibly a family member
Investment	Under ₹2.5 lakh
Revenue	Around ₹2.62 lakh annually
Geographic concentration	36% in urban areas and 50% in rural areas
Activities	Limited to hyper-local markets at village or panchayat level
Markets	Basic trading, retail, and minor value-added activities (pre-processing)
Financial Access	Majorly financed through Microfinance (SHG/ JLG); Minimal access to formal finance (Average loan: ₹18,986)
Digital Access	Low digital adoption 2.8% computer use; 21.7% internet access
Formalization	Minimal financial formalization (0.2% audited accounts); Predominantly unregistered (68.5%) and operate from homes, semi-permanent setups, or as street vendors.

Hired Worker Enterprises (HWEs)

A smaller but impactful subset—around 1 crore units—are Hired Worker Enterprises (HWEs), characterized by employing additional workers and higher growth aspirations. HWEs are driven by opportunity-seeking entrepreneurs with traits like strong achievement motivation, calculated risk-taking, innovation, resilience, market orientation, and strategic thinking. Although comprising just 13–

[1] Quantitative data on enterprise distribution, employment, investment, and annual revenue of αHWEs, HWEs, OAEs and Collectives, as mentioned throughout in this paper, is sourced from the Annual Survey of Unincorporated Sector Enterprises (ASUSE): 2023-24, Ministry of Statistics and Programme Implementation (MOSPI), Government of India (https://www.mospi.gov.in/). https://mospi.gov.in/sites/default/files/publication_reports/ASUSE_2023_24_Full_Report-L.pdf. Qualitative insights on enterprise activities and market behavior are based on the author's field-level experience across multiple states. Insights regarding the financing needs of different enterprise segments are derived from the policy paper: Vijay Mahajan and Pranay Bhargava, "SME Financing – How to Bridge the Persistent Demand Supply Gap?" (February 17, 2025), available at SSRN: https://ssrn.com/abstract=5141173 or http://dx.doi.org/10.2139/ssrn.5141173.

14% of unincorporated enterprises, HWEs disproportionately drive job creation and regional economic growth.

Employment	Typically, 4–5 employees
Investment	₹5–25 lakh
Revenue	₹18,26,268 annually
Geographic concentration	36% in urban areas and 50% in rural areas
Activities	Serve block-level markets
Markets	Engage in primary processing, aggregation, and distribution
Financial Access	Limited access to formal finance (average loan: ₹2,73,429) with a meagre loan-to-asset ratio of 14.1%; requires flexible financing for growth and traditional loans for working capital
Digital Access	Moderate digital adoption (24.3% computer use; 58.5% internet access).
Formalization	Improved financial practices (5.7% maintain audited accounts); Better formalization (47.8% licensed, 23.4% registered) and most operate from permanent structures (85.4%).

Extraordinary Aspiration HWEs (αHWEs)

Within HWEs, around 1,34,770 units[2] exhibit extraordinary aspirations and larger scale—for whom the term "αHWEs" is introduced, akin to 'master franchisors'. This number could have been several times higher had there been a dedicated policy focus on addressing their incubation needs; it could have easily reached 1–2% of the total enterprise universe. Entrepreneurs leading αHWEs often display dual psychological traits: high competitiveness, strategic aggression, as well as superior persuasion skills, calculated risk-taking, and strong storytelling abilities. These attributes enable rapid growth and significant economic impact. These extraordinary achievers have the capacity to scale 5–10X and absorb ₹25–200 lakh in credit.

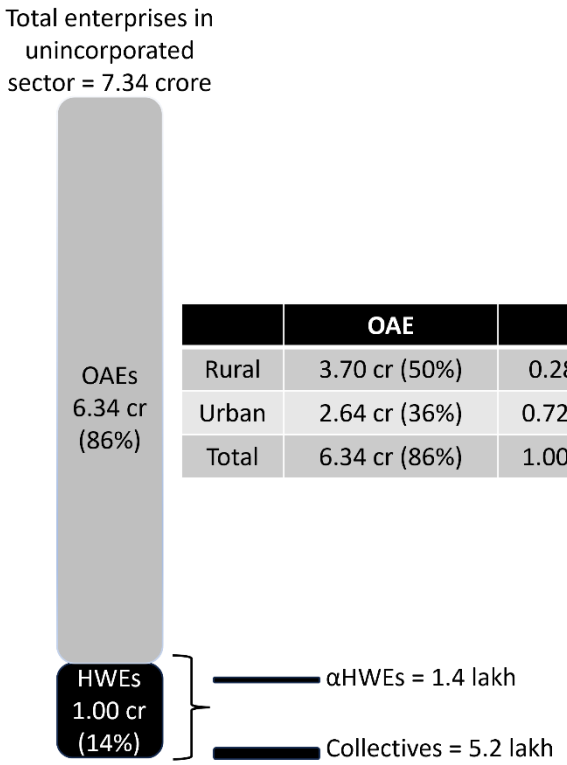
Employment	Typically over 20 employees (range 10–100)
Investment	Over ₹1 crore
Revenue	₹2–5 crore annually
Geographic concentration	Around 75% are in urban areas while 25% are in rural areas
Activities	Serve district, state, regional, and metropolitan markets
Markets	Perform higher-value activities including secondary processing, branding, and large-scale distribution
Financial Access	Require specialized micro-equity financing and tailored working-capital loans

Collectives

In India, approximately 5.2 lakh HWEs operate as collectives, representing 5.2% of all HWEs nationwide. In rural areas, around 2.62 lakh HWEs function as collectives, making up a significant 9.4% of rural HWEs. In contrast, urban India accounts for about 2.53 lakh collective HWEs, comprising 3.5% of urban HWEs. These figures highlight the stronger presence and role of collective enterprises in rural economies.

[2] Includes large sized OAEs exhibiting characteristics of αHWEs

"Collectives" refer to group-based enterprises such as societies, trusts, associations, clubs, cooperatives, self-help group (SHG)-linked businesses[3], and non-profit institutions[4], including those serving households (NPISH).



	OAE	HWE	Total
Rural	3.70 cr (50%)	0.28 cr (4%)	3.97 cr (54%)
Urban	2.64 cr (36%)	0.72 cr (10%)	3.37 cr (46%)
Total	6.34 cr (86%)	1.00 cr (14%)	7.34 cr (100%)

Figure 1 Break-up of enterprises in unincorporated sector in India (Source – ASUSE 2023-24)

[3] Example of SHG-linked Collective - Cafe Kudumbashree, Kerala's statewide women-led food enterprise network, exemplifies how SHG-based incubation ecosystems can transform vulnerable women into confident entrepreneurs. Initiated in 2004 under the Kudumbashree Mission, what began as informal canteens evolved into a structured network of over 2,400 branded units—cafes, kiosks, and catering services—by 2020. The initiative provided multi-dimensional support: enterprise training, quality assurance, branding, peer mentorship, and institutional market linkages, enabling over 9,800 women to become owner-operators.

By integrating training, working capital, and assured demand (via tie-ups with government offices and hospitals), the model addressed knowledge, capital, and market barriers simultaneously—unlike fragmented, one-off interventions. Cafe Kudumbashree not only achieved scale and financial viability but also catalysed deep social empowerment, with many women moving from domestic confines to managerial roles, and mentoring SHG entrepreneurs across India.

Johnson, L. T., Thakur, H., & Gupta, A. (2020). *Women Engaging with Markets from Positions of Strength: An Exploratory Understanding of Kudumbashree Women's Food Service Enterprises*. Centre for Development Studies. Full text available at https://cds.edu/wp-content/uploads/2014/10/RULSG-Kudumbashree9-min.pdf

[4] Example of Non-Profit Institution linked Collective - India's Poultry Enterprises Network in Central India, pioneered by PRADAN (Professional Assistance for Development Action), stands as an example of SHG-linked rural enterprise development. Beginning in 1986 with just 600 chicks distributed to 20 tribal women in Kesla, Madhya Pradesh, PRADAN built an integrated, women-led poultry ecosystem through Self-Help Groups, and strategic infrastructure investments. Over time, this evolved into one of India's largest smallholder poultry enterprises, achieving a turnover of ₹525 crore by 2020 and engaging over 14,000 women across multiple states. The initiative exemplifies how non-profit institutions can catalyse scalable and sustainable rural enterprises through professional incubation, decentralized governance (via entities like the Kesla Poultry Cooperative and MPWPCL), and a comprehensive ecosystem of foundational support, business development services, and financing. *PRADAN, an Indian NGO, was founded in 1983 by Vijay Mahajan and Deep Joshi. A detailed video about Kesla Poultry Initiative is available at:* https://www.youtube.com/watch?v=6m6GixlHGGY

1.2 Entrepreneurial hierarchies, symbiotic relationships and local ecosystems

The entrepreneurial ecosystems manifest across various formats. Such ecosystems promote efficient resource use, facilitate peer learning, and strengthen collective market presence.:

a) **Production-Linked Clusters**[5]: Refers to a geographical concentration of enterprises specializing in similar commodities or single-value-chain activities, primarily driven by localized access to raw materials, specialized labor, or unique traditional skills. Such clusters exhibit strong competition but conditional cooperation, benefiting from knowledge spillovers, labor pooling, and shared infrastructure.

b) **Market-Linked Clusters**[6]: Refers to an interconnected network of enterprises typically dispersed geographically but integrated through market proximity, shared distribution channels, trading routes, and network externalities. Unlike production-linked clusters, these clusters accommodate diverse commodities and multiple value chains, benefiting from proximity to major industrial towns, highways, major trading routes or logistics infrastructures.

c) **Enterprise Agglomerations**[7]: refer to local networks of micro and small enterprises operating within a defined geographic area—such as a village, block, or district—characterized by informal or semi-formal cooperation, social capital, and frequent interpersonal interactions. These agglomerations often span multiple value chains and benefit from geographic proximity, shared resources, localized knowledge, and market linkages, enabling resilience, cost efficiencies, and inclusive economic growth. Such clustering reflects both the spatial logic of agglomeration economics and the embedded social networks that enable cooperation and trust.

Within these clusters and enterprise agglomerations, successful αHWEs occupy the top of the entrepreneurial hierarchy and often act as aggregators or franchisors, integrating smaller enterprises into their operational networks and promoting collective growth. They function as vital hubs in local business networks: αHWEs are closely connected to multiple HWEs, and HWEs are linked to numerous OAEs.

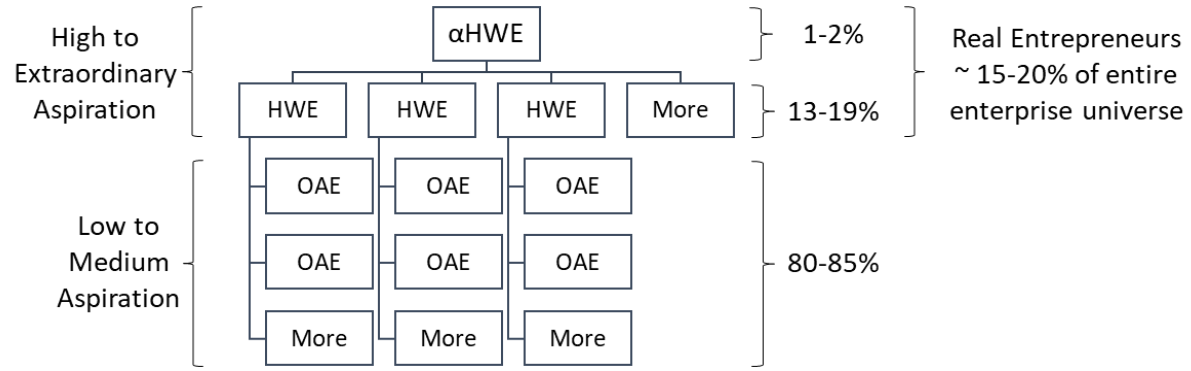


Figure 2 Symbiotic Relationship in Local Entrepreneur Network

[5] Marshall, 1920; Porter, 1998; Humphrey & Schmitz, 2002
[6] Krugman, 1991; Markusen, 1996; Bathelt et al., 2004
[7] Putnam, 1993; Woolcock & Narayan, 2000; Granovetter, 1985

These αHWEs and HWEs (the 'Barefoot Unicorns') exert outsized influence on local economies through multiplier effect and network effect:

- **Multiplier Effect**: A unit of catalytic support (X) provided to αHWEs and HWEs does not operate in isolation. Instead, it activates and amplifies the latent potential of surrounding OAEs—who often already receive microfinance or basic skilling support—by linking them to markets, supply chains, and operational best practices. This synergy allows the same investment (X) to yield an impact far greater than its face value, effectively leveraging existing ecosystem inputs and unlocking returns across the entrepreneurial pyramid.
- **Network Effect**: A robust entrepreneurial ecosystem emerges when every enterprise (αHWE, HWE or OAE) gains more from being part of the network than from acting independently. As the network becomes more interconnected, the collective value increases exponentially, driving self-sustaining growth[8].

Due to their inherent capabilities, αHWEs and HWEs—those at the top of the entrepreneurial hierarchy—are naturally better positioned to absorb capital, attract talent, capture customer attention, integrate into market systems, and establish strong forward and backward linkages. Key resources tend to concentrate around them not because of any unfair advantage, but because market dynamics inherently favor the most strategically positioned nodes in the network. As explained by Albert-László Barabási's scale-free network theory[9], well-connected nodes attract more connections over time, reinforcing their dominance. These dynamics are clearly observable on the ground: the most prominent enterprises attract greater attention, are better placed to utilize funding, draw high-potential talent, and are preferred by corporates, buyers, suppliers, aggregators, financiers, and distributors due to their perceived reliability and leadership within the ecosystem.

Yet, as the next section will show, this natural advantage is often squandered in India's unincorporated sector. High-potential αHWEs and HWEs remain overlooked in current incubation and support efforts, leaving local entrepreneurial ecosystems under-optimized and fragmented – leading to the problem of "missing middle" in India - a fragmented MSME landscape with countless tiny enterprises and very few growing MSMEs.

This is largely due to a misplaced focus on large numbers - particularly the high volume of OAEs, often labeled as "mass entrepreneurship" - and the tendency to implement basic, high-effort but low-impact, fragmented interventions that add sub-optimal value to the local entrepreneurship ecosystem.

[8] Metcalfe's Law, proposed by Robert Metcalfe in 1980, suggests that the value of a network is proportional to the square of its connected users (n^2). Originally articulated in the context of telecommunications, it was later popularized through Metcalfe's 1993 article in Forbes, and has since been applied to social and economic networks to explain how increased interconnectivity drives exponential value creation. Reference: Metcalfe, R. M. (1993). Metcalfe's Law: A network becomes more valuable as it reaches more users. Forbes, September 13, 1993.

[9] Barabási, A.-L., & Albert, R. (1999). *Emergence of scaling in random networks.* Science, 286(5439), 509–512. https://doi.org/10.1126/science.286.5439.509

2. The four fatal flaws in India's MSME incubation strategy

India's MSME support landscape has long prioritized mass entrepreneurship—a push-based model centered around basic skilling, nano-credit, and public infrastructure investments—largely targeting nano enterprises. In the name of MSME incubation, policymakers and implementing agencies often adopt inefficient, high-visibility solutions that fail to address the actual needs of high-potential entrepreneurs. These approaches falsely assume that "anyone can be an entrepreneur", effectively absolving themselves of responsibility across all fronts—be it foundational support, business development services, or tailored financing. The result is an ecosystem focused more on quantity than quality, where programs aim to create more enterprises or disburse more loans, with little regard for the viability or growth potential of the enterprises they support.

2.1 Training as a Silver Bullet: How EDPs became Theory-Rich, Impact-Poor

India's Entrepreneurship Development Programs (EDPs), shaped by rich theoretical influences—from McClelland's "Need for Achievement" (1969 Kakinada Experiment[10]), Rotter's Locus of Control[11], and Ajzen's Theory of Planned Behavior[12] to Amartya Sen's Capability Approach[13]—have over time degenerated into training-centric checkboxes. Despite their intellectual foundation, most EDPs now focus on short-term training modules that offer little follow-up or ecosystem integration.

Training has become the most convenient intervention: it's visible, contractible, and easily measurable, but rarely sufficient to catalyze real businesses. With no accountability for enterprise success, training providers continue to receive public & philanthropic funding for delivering ineffective programs. Government agencies prefer counting "trained individuals" over measuring business outcomes. Multilateral agencies influence policy from a distance, while entrepreneurs in the unincorporated sector—who face the highest risks—are left without financing, supply chain support, or market access.

Critical post-training components—such as hands-on exposure, mentoring, market linkages, business development services and startup & growth financing—are often missing. With weak evaluation[14] of

[10] One of the most influential theories is McClelland's Need for Achievement Theory, which was empirically tested in India through the Kakinada Experiment (1969), proving that motivation training can enhance entrepreneurial success. Reference: Shivaratri, Chandramouli. (2021). Know about Entrepreneurship Development Programme. The Kakinada Experiment- Motivating factors for entrepreneur-Internal and external.

[11] Julian Rotter's Locus of Control Theory (1954, applied to EDPs in the 1980s-1990s) has played a critical role in shifting the entrepreneurial mindset by helping individuals develop an internal sense of control over their business outcomes, rather than attributing success to fate or external forces. This theory gained prominence in Indian EDP training models during the 1980s and 1990s, as programs began incorporating psychological conditioning to develop self-efficacy among entrepreneurs.

[12] Ajzen's Theory of Planned Behavior (1985, integrated into EDPs in the 1990s-2000s) has influenced EDPs by emphasizing that entrepreneurial intentions can be nurtured through structured training, shaping attitudes, perceived behavioral control, and social norms. This framework became particularly relevant in the post-liberalization era of the 1990s, when entrepreneurship education and skill-building programs were expanded in India.

[13] Amartya Sen's Capability Approach (1980s, incorporated into Indian EDPs in the 2000s-2010s) has reinforced the focus on skill-building, financial inclusion, and human capital development. Sen's work on economic empowerment and access to opportunities became increasingly relevant as Indian EDPs in the 2000s-2010s started focusing on women entrepreneurs, SC/ST entrepreneurs, and financial inclusion programs like microfinance and digital lending.

[14] While the OECD's 2023 Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes has made significant efforts to address the issue of missing evaluation benchmarks for EDP training programs

whether trainees actually launch viable businesses, these programs amount to high-visibility, low-impact interventions. Public expenditure on mass skilling has thus produced unclear, often negligible returns.

This can be found in –

- MoMSME's Assistance to Training Institutions (ATI Scheme) like MSME Development Institutes, NIMSME, EDII, industry associations
- MoMSME's MSME Development Institutes – EDP/ESDP Workshops
- MSDE's National Institute for Entrepreneurship and Small Business Development (NIESBUD) – EDPs
- MoRD's Rural Self Employment Training Institutes (RSETIs); managed by NIRDPR and sponsor banks

2.2 Mistaking Microfinance for MSME Finance: Serving survival, Not scale

Flagship MSME schemes have disproportionately targeted the tiniest enterprises—often microfinance borrowers or unemployed youth—with a strong emphasis on outreach numbers rather than entrepreneurial depth. Subsistence-level OAEs, which typically lack growth aspiration and operate in overcrowded sectors, are the easiest to reach and thus receive most of the attention. Meanwhile, HWEs—especially high-potential αHWEs—remain under-supported, even though they are the true engines of local job creation and economic growth.

A case in point is the Pradhan Mantri Mudra Yojana (PMMY). Since its launch in 2015, over ₹21 lakh crore has been disbursed to micro-enterprises. However, the overwhelming share of credit has been allocated to the smallest loan category—Shishu loans (under ₹50,000)—benefiting very small traders and OAEs. Larger loan categories like Kishore and Tarun, which are more appropriate for HWE-scale businesses, have received a disproportionately small share[15]. India's largest financing program, in effect, is funding survival, not scale.

2.3 Skilling + Nano-Finance ≠ Entrepreneurship: The "Anyone can be an entrepreneur" trap

The foundational flaw lies in oversimplifying entrepreneurship. Inspired by Peter Drucker's idea that entrepreneurship is a discipline that can be learned[16], policy design has incorrectly inferred that

globally, the widespread adoption of standardized success metrics remains limited. Reference: OECD (2023), *Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes 2023*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/a4c818d1-en

[15] Vijay Mahajan, *MUDRA: The Art of Taking Credit for Credit Given by Banks in the Normal Course of Their Business*, RGICS Policy Watch, with PMMY data from https://www.mudra.org.in/home/showpdf Overall_Performance_2023-24.pdf

[16] Peter F. Drucker, in his book Innovation and Entrepreneurship (1985), argued that entrepreneurship is not a personality trait or genetic predisposition, but a discipline that consists of identifiable practices and principles that can be taught and mastered. This view laid the foundation for structured approaches to entrepreneurship education and training. Reference: Drucker, P. F. (1985). *Innovation and Entrepreneurship: Practice and Principles.* Harper & Row.

everyone can become an entrepreneur with minimal skilling and credit. This assumption underpins many government programs such as:

- MoRD's Startup Village Entrepreneurship Program (SVEP)[17], implemented by EDII, Kudumbashree, RSETIs
- MoMSME's Prime Minister's Employment Generation Programme (PMEGP) implemented via KVIC, KVIBs and District Industries Centers
- MoFPI's PM Formalization of Micro Food Processing Enterprises Scheme (PM-FME) (Centrally sponsored but implemented with State governments)
- MoF DFS's Stand-Up India Scheme implemented through SIDBI and banks
- MoMSME's National SC/ST Hub

These schemes deliver short-term, isolated interventions—like capital subsidies, training, nano loans or toolkits—without sustained engagement. For example, PMFME provides subsidies to thousands of micro-units but lacks robust post-setup support. Without vision, mindset transformation, or operational capacity-building, such efforts fail to nurture real entrepreneurs. The result: limited long-term success and high rates of business dormancy or failure.

2.4 Ghost factories and idle infrastructure: The "Build it and they will come" trap

India's incubation strategies also frequently rely on building infrastructure as public goods—in the form of common facility centers (CFCs), shared equipment hubs, or one-stop shops for enterprise support. While such facilities are meant to catalyze cluster development, they often end up underutilized, poorly maintained, or completely idle—earning the label "ghost factories."

These interventions often serve as budget absorption mechanisms, allowing governments to demonstrate capital deployment without having to engage with the complexity of behavioral change, business development, or long-term mentoring. This can be found in –

- MoMSME's Micro & Small Enterprises Cluster Development Programme (MSE-CDP) implemented through Office of DC-MSME

[17] The author of this paper conceptualized and led the design of India's Start-up Village Entrepreneurship Program (SVEP), based on action-research conducted in Andhra Pradesh from 2011 to 2015. With design support from Kudumbashree, SVEP was launched under the Ministry of Rural Development's National Rural Livelihoods Mission (NRLM). SVEP became India's first national initiative to provide integrated incubation and finance for rural nano and micro-enterprises. It is now implemented by Kudumbashree, EDII, and RSETIs. As of October 2024, SVEP was active in 429 blocks across 31 States and Union Territories, with implementation underway in 280 blocks. It has supported over 3.13 lakh rural enterprises across diverse sectors.
While SVEP successfully institutionalized a decentralized incubation model through community-based business advisors (CRP-EPs), its focus remained narrowly centered on nano-enterprises and subsistence-level Own Account Enterprises (OAEs). The original policy intent was to nurture relatively larger OAEs at the Gram Panchayat-to-Block level, but implementation has largely defaulted to nano enterprise promotion and microfinancing at the village level, mistakenly following the assumption that "anyone can be an entrepreneur." As rural markets mature and entrepreneurship deepens, the current ecosystem must urgently shift focus toward higher-potential segments—aspirational OAEs, HWEs, and αHWEs. However, no existing scheme under the Ministry of Rural Development currently targets these high-aspiration entrepreneurs.

- MoMSME's Scheme of Fund for Regeneration of Traditional Industries (SFURTI) implemented through KVIC for khadi/village industries clusters
- MoMSME's ASPIRE program
- Ministry of Food Processing's cluster schemes
- NABARD's FPO and OFPO Programs (via Producers Organization Development Fund)
- MoA&FW's 10,000 FPOs Central Sector Scheme implemented with NABARD & SFAC

The problem lies not just in execution, but in flawed design logic. Insights from Mancur Olson's *The Logic of Collective Action*[18] help explain why many collective enterprise initiatives and public infrastructure projects—such as Common Facility Centers (CFCs) and shared processing units—frequently fail in practice. Olson argues that as group size increases, the rational incentive for individual members to contribute actively decreases, especially when benefits are non-excludable and accrue to all members regardless of their contribution. This creates a free-rider problem, where individuals prefer to enjoy the benefits without bearing the costs, assuming others will contribute. As a result, larger and more heterogeneous groups—common in India's rural or small-town collectives—face serious challenges in mobilizing sustained participation or enforcing cooperation.

Moreover, Olson notes that public goods will be underprovided unless there are either Selective incentives (rewards or punishments that apply only to contributors or non-contributors), or, Compulsory mechanisms (state coercion, contracts, or strong internal leadership enforcing contribution).

In the absence of such incentives or compulsion, government-built infrastructure for entrepreneurship—meant to be collectively used—often ends up idle or poorly maintained. No single actor feels sufficiently accountable for its upkeep or usage, and no individual entrepreneur finds it worthwhile to invest personal resources in optimizing its use.

This insight explains the prevalence of Ghost Factories & idle infrastructure in India's MSME landscape—facilities that are technically operational but practically defunct. It also underscores why top-down approaches to collective enterprise incubation without strong governance structures, aligned incentives, or embedded leadership are bound to fail. India's MSME infrastructure strategy, by treating group-based public goods as plug-and-play solutions, ignores the underlying behavioral and economic dynamics that make collective action difficult to sustain in real-world settings.

As an alternative, this paper proposes that fixed capital and infrastructure support should be directed to individual entrepreneurs—specifically αHWEs and HWEs—rather than collectives. These entrepreneurs can be directly financed to purchase and operate individually owned machinery, based on parameters such as local market size and the entrepreneur's opportunity cost (i.e., the minimum threshold income expected). This approach allows for more accurate estimation of viable machine capacity and appropriate enterprise scale. In this model, an Accelerator or investor can provide the fixed capital directly to individual αHWEs and HWEs, enabling ownership, accountability, and efficient utilization—thereby avoiding the pitfalls of idle collective infrastructure.

[18] Olson, M. (1965). *The Logic of Collective Action: Public Goods and the Theory of Groups.* Harvard University Press.

3. Incubating Real Entrepreneurs Through the PMF Lifecycle

India's entrepreneurial ecosystem must evolve from mass-scale outreach models to a sharply focused, outcome-driven approach that prioritizes real entrepreneurs—particularly αHWEs and HWEs. These are the enterprises most likely to scale, generate meaningful employment, and anchor local value chains. However, unlocking their potential requires identifying them accurately, supporting them through their critical growth stage, and designing incubation systems that reflect the unpredictable dynamics of enterprise evolution.

3.1 Traits and Identification of 'Barefoot Unicorns' - αHWEs and HWEs

Entrepreneurial Traits: McClelland[19] identified achievement motivation is a key predictor of entrepreneurial persistence and growth. Other studies (Baumrind[20]; Ryan & Deci[21]; Pinquart & Kauser[22]) suggest that early psychological experiences—such as authoritative parenting, emotional insecurity, or a drive for self-validation—often fuel extraordinary ambition. However, looking at the larger picture, high-growth entrepreneurs consistently display a combination of following traits:

Core Psychological Traits

- **High Achievement Motivation** *(need to accomplish challenging goals)*
- **Risk-Taking Propensity** *(willingness to pursue uncertain outcomes)*
- **Autonomy and Self-Direction** *(preference for independence in decision-making)*
- **Internal Locus of Control** *(belief that one controls their own destiny)*
- **Self-Efficacy** *(confidence in one's ability to execute tasks effectively)*
- **Resilience** *(capacity to bounce back from failure or adversity)*

Enduring Behavioural Traits

- **Grit and Perseverance** *(sustained effort over long periods)*
- **Workaholism and Time Urgency** *(obsessive importance to time)*
- **Competitiveness** *(strong desire to outperform others)*
- **Perfectionism** *(high personal standards, attention to detail)*

Dark Triad / Shadow Traits *(can be advantageous if channelled constructively)*

- **Narcissism** *(inflated sense of self-importance, used to command attention and influence)*
- **Machiavellianism** *(strategic manipulation, long-term game thinking)*
- **Extrinsic Aspirations** *(desire for wealth, fame, and recognition over intrinsic fulfilment)*

Social and Communication Traits

- **Charisma** *(magnetism that attracts followers or investors)*
- **Storytelling Ability** *(capacity to craft compelling narratives)*

[19] McClelland (1961): Entrepreneurs raised in high-expectation households develop an internalized drive for self-validation

[20] Baumrind (1971): Authoritarian parenting fosters high-achievement personalities, as children seek external success to compensate for emotional insecurity

[21] Ryan & Deci (2000): Lack of emotional support in childhood can lead to extraordinary ambition as a means of seeking validation

[22] Pinquart & Kauser (2018): Overly controlling parents can drive children to "rebel" through extreme ambition, choosing entrepreneurship as a path to distinction

Interestingly, αHWEs often exhibit a dual psychological profile. On one side, they may possess elements of the Dark Triad[23] (Narcissism, Machiavellianism) along with time urgency, workaholism, excessive planning and perfectionism—which fuel their aggression, dominance, strategic thinking, competitive edge, and hostile behaviour towards competitors[24]; On the other side, they excel in storytelling, persuasion and calculated risk-taking, enabling them to inspire, mobilize, and influence stakeholders. This unique mix of strategic acumen and charisma allows them to build networks, attract investors, and scale rapidly.

αHWEs also often exhibit cognitive biases such as optimism bias (excessive focus on positive outcomes), overconfidence bias (strong belief in personal abilities), illusion of control (perceived control over uncertain events), and confirmation bias (favoring information that aligns with existing beliefs). Some may also display high emotional intensity, obsessive tendencies, or impulsivity, which, while not necessarily indicative of clinical disorders, can impact their decision-making processes and resilience in business.

> Traditional psychometric tests fall short in identifying such traits, especially among rural or semi-literate populations. They are often language-dependent, time-consuming, and prone to manipulation. Instead, more accurate identification methods include analysing behavioural and biometric indicators—such as digital transaction footprints, loan repayment track record, mobile usage patterns, gaming behaviour, and potentially even genetic data and cognitive assessments using wearable tech or neurofeedback tools.

Experience: Scaling a business demands more than theoretical knowledge—it requires 5–10 years of hands-on exposure in fields like trading, manufacturing, processing, or services. Research by Ericsson[25], Simon & Chase[26], and Becker[27] underscores the strong correlation[28] between real-world immersion and entrepreneurial success. Schumpeter[29] similarly emphasized that innovation—and therefore growth—is primarily driven by practical execution and the creative recombination of resources.

Identification is only the first step. These entrepreneurs must be supported through a critical stage in the enterprise lifecycle—the achievement of Product–Market Fit (PMF).

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[23] The "Dark Triad" refers to a set of personality traits—Narcissism, Machiavellianism, and Psychopathy—that, when channelled constructively, can enhance entrepreneurial success through strategic risk-taking, persuasive leadership, and long-term game thinking

[24] αHWEs may potentially exhibit traits associated with the Type A personality construct, introduced in the 1950s by cardiologists Meyer Friedman and Ray H. Rosenman. They observed that characteristics such as competitiveness, impatience, and a sense of urgency were prevalent among their cardiac patients.

[25] Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). *The role of deliberate practice in the acquisition of expert performance. Psychological Review, 100*(3), 363-406.

[26] Simon, H. A., & Chase, W. G. (1973). *Skill in chess. American Scientist, 61*(4), 394-403.

[27] Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education.* University of Chicago Press.

[28] Van Praag, C. M., & Cramer, J. S. (2001). *The roots of entrepreneurship and labour demand: Individual ability and low risk aversion. Economica, 68*(269), 45-62.
Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). *Human capital and entrepreneurial success: A meta-analytical review. Journal of Business Venturing, 26*(3), 341-358.

[29] Schumpeter, J. A. (1911). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle.* Harvard University Press (Translated 1934).

3.2 The importance of achieving Product–Market Fit (PMF)

Product–Market Fit (PMF) is the point where an entrepreneur finds that their product or service truly works in the market—customers want it, are willing to pay for it, and come back for more. It means the business has figured out what to sell, to whom, at what price, and how to deliver it profitably. In simple terms, the business is no longer guessing; it has found a formula that works.

For MSMEs in the unincorporated sector, this is the turning point where the enterprise moves from just surviving or testing ideas to becoming a stable, income-generating venture. Without reaching PMF, most businesses struggle with low sales, customer dissatisfaction, or high losses. But once PMF is achieved, the enterprise can confidently grow—hire workers, take larger orders, or expand into new markets—because it has something that the market truly wants and values.

A key sign that a business has reached PMF is positive unit economics—that is, each product sold or service delivered earns more money than it costs to make or deliver. The business starts generating profit on each transaction, not just covering costs. Another important sign is that the lifetime value of each customer (LTV)—the total money a customer spends over time—is many times higher than the cost of acquiring that customer (CAC), such as through marketing or promotions. When a business consistently earns more from its customers than it spends to get them, and can do so repeatedly, it has a strong foundation for long-term success and scaling.

Typically, once PMF is achieved, the business enters a high-growth phase, often referred to as hockey-stick growth or the S-curve. In this phase, revenues and customer base expand rapidly, driven by word-of-mouth, repeat customers, and operational momentum. What once felt like a slow climb suddenly accelerates as the product gains traction and market acceptance deepens. This phase is critical, as it offers the opportunity to scale operations, formalize systems, and attract investment—but only if the business has the right support and capital to handle the growth surge.

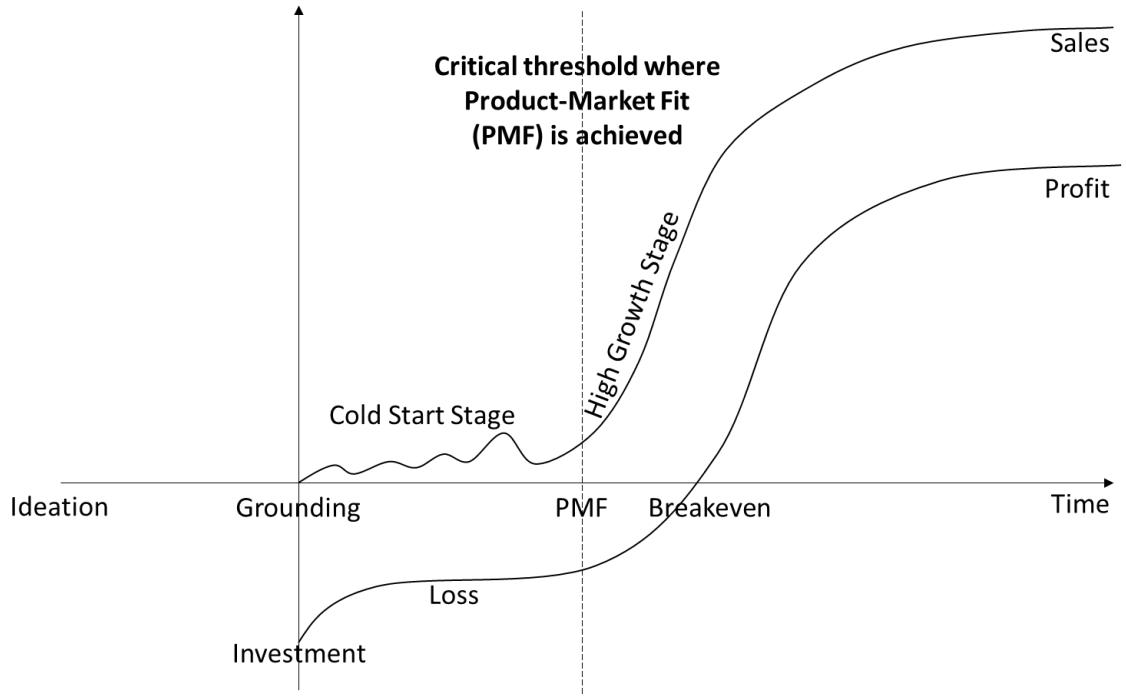

Figure 3 The critical threshold where Product-Market Fit (PMF) is achieved

3.3 Principles of adaptive, non-linear incubation design

Reaching PMF is neither linear nor predictable. It requires time, experimentation, and adaptive support. The journey varies widely depending on market context, sectoral dynamics, consumer behaviour, and social environment.

As per Everett Rogers' *Diffusion of Innovations*[30], the adoption of a new product or service depends on five key factors: how well it fits existing practices (compatibility), its perceived advantage, simplicity, visibility of benefits, and how easily it can be tried before full adoption. These factors influence adoption across five key segments: innovators, early adopters, early majority, late majority, and laggards—forming a bell-shaped diffusion curve. Because adoption is shaped by human behaviour & mindset, social networks, communication channels, and cultural factors, the timeline to reach PMF is inherently uncertain.

If the journey to PMF is uncertain—meaning no one can predict exactly *when* or *if* a business will get there—then the timeline and intensity of support can't be rigid or one-size-fits-all. Some entrepreneurs may take a few days to reach PMF, while others may need months of trial, error, and adaptation. Some may never reach it at all. That's why the duration of foundational support, business development services, or seed funding must be adapted to the actual needs and pace of the enterprise, not decided in advance with fixed deadlines or cookie-cutter models. Imposing standard timelines or uniform support often leads to failure—not because the entrepreneur lacked potential, but because the system lacked flexibility. Instead, incubation for αHWEs and HWEs should be flexible, strategic and symbiotic.

At the ecosystem level, real transformation happens when a group of local entrepreneurs—anchored by one high-performing αHWE, surrounded by several HWEs and OAEs—reaches a critical mass. This network of enterprises becomes truly self-sustaining only when it hits a tipping point, much like how an individual business becomes stable after reaching PMF. Once this threshold is crossed, growth starts to happen organically—more buyers, more suppliers, more financiers, more service providers—all without constant external support.

But until that tipping point is reached, both individual enterprises and the broader ecosystem require patient, tailored, and sustained incubation. This is not about ticking boxes or rushing to show quick success—it's about building a resilient foundation. Real transformation takes time. The support system must stay long enough for meaningful change to take root, allowing local enterprise networks to eventually grow and thrive on their own.

3.4 Why Pre-PMF and Post-PMF require different support

The incubation needs of αHWEs and HWEs evolve as they progress toward and beyond PMF. Their support requirements can be bifurcated into two phases:

- **Pre-PMF Incubation**: Focused on helping the entrepreneur validate the product/service, iterate on business models, access seed capital, receive hands-on mentoring, entry level business development services and connect with early markets and customers.
- **Post-PMF Incubation**: Geared toward scaling operations, deepening market access, upgrading technology and systems, advanced business development services, securing working capital,

[30] Everett M. Rogers, in his seminal work Diffusion of Innovations (1962, revised editions in 1983 and 2003), outlined five key factors influencing how new ideas and technologies spread. Reference**:** Rogers, E. M. (2003). Diffusion of Innovations (5th ed.). Free Press.

attracting investment in terms of flexible finance & micro equity, and strengthening managerial capacity.

In both phases, personalized foundational support, business development services, and larger-sized, flexible financing mechanisms are essential. Unlike generic skilling or microcredit programs, this approach recognizes the non-linear, high-risk, high-reward journey of real entrepreneurs—and backs them accordingly.

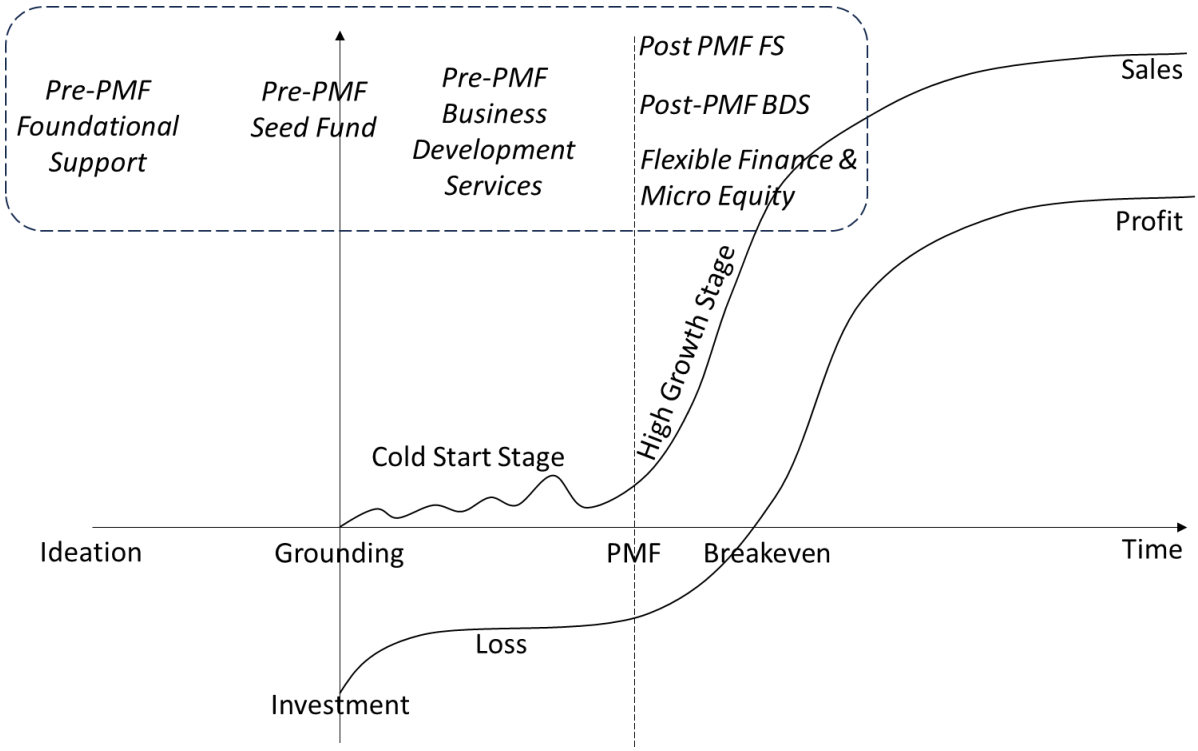

Figure 4 Pre-PMF and Post-PMF stages and the phase-wise incubation support

4. Three Pillars of Support

4.1 Foundational Support (FS)

To build a thriving entrepreneurial ecosystem, especially for αHWEs and HWEs, Foundational Support must go beyond surface-level training and financing. It must deeply engage with the mindset, experiential learning, social networks, and long-term mentorship required to move these enterprises from survival to scale.

Foundational support can be divided into two phases: **Pre-PMF (before Product–Market Fit is achieved) and Post-PMF (after PMF, when enterprises are ready to scale).**

a. Pre-PMF: Mindset, EDP, exposure, experiential learning

Social conditioning and mindset shift

Many small entrepreneurs in India are not limited by ability, but by mindset—shaped by social norms, family expectations, and deep-seated fears. In many communities, entrepreneurship is still seen as risky, unstable, or even taboo, especially when compared to government jobs, salaried jobs or

agriculture. Low confidence, fear of failure, fear of unknown, discomfort with formal institutions, and a limited vision for growth often hold potential entrepreneurs back.

To overcome this, mindset shift programs need to be woven into incubation efforts. These initiatives aim to make entrepreneurship aspirational—creating a psychological "pull" rather than relying on external "push."

Local storytelling is key: Media campaigns that celebrate successful local entrepreneurs can inspire others. District-level "Shark Tank" style forums—where entrepreneurs pitch growth plans and receive feedback or investment publicly—can build excitement and credibility. Global examples abound: In countries like South Korea and China, national campaigns glorifying entrepreneurs as "champions of growth" helped spark entrepreneurial booms. India can localize this by turning neighborhood success stories into role models for the next generation.

In parallel, **short workshops** rooted in psychology—drawing on Carol Dweck's Growth Mindset theory[31], Richard Boyatzis's Intentional Change Theory[32], and Positive Psychology[33]—can initiate shifts in perception and behavior. Many entrepreneurs in the unincorporated sector have never interacted with formal institutions. For them, business planning or negotiating with a bank is unfamiliar and intimidating.

Demystification is critical: **Simple role-plays and simulations** (e.g., practicing a sales pitch or a bank loan discussion) can build confidence. As more HWEs begin to take pride in growth and innovation, the local culture itself starts to shift. Over time, entrepreneurship becomes a voluntary aspiration, rather than a fallback option.

Entrepreneurship Development Programs (EDPs)

The recent impact-rich EDPs are modeled primarily after Competency-Based Training (CBT) and McClelland's Achievement Motivation Theory, embedding their principles throughout its design and delivery. From CBT, the module draws its structured, outcome-driven approach—defining key entrepreneurial competencies, offering measurable self-assessments, and guiding trainees through practical, skill-building exercises and action plans. From McClelland, it integrates a strong focus on internal achievement drive, goal orientation, risk-taking, and self-motivation—clearly reflected in personal success stories, opportunity-versus-necessity framing, and the emphasis on cultivating entrepreneurial mindsets. Together, these frameworks ensure the EDP not only builds skills but also shapes the attitudes and motivations necessary for entrepreneurial success.

[31] Carol Dweck's Growth Mindset theory (2006) posits that individuals who believe their abilities can be developed through effort and learning are more likely to embrace challenges and persist after failure—an essential mindset for entrepreneurial resilience. Reference: Dweck, C. S. (2006). Mindset: The New Psychology of Success. Random House.

[32] Richard Boyatzis's Intentional Change Theory (2006) outlines how sustainable personal transformation occurs through a series of discoveries—beginning with envisioning an ideal self—which is relevant in reimagining oneself as an entrepreneur. Reference: Boyatzis, R. E. (2006). An overview of intentional change from a complexity perspective. Journal of Management Development, 25(7), 607–623.

[33] Positive Psychology, as developed by Martin Seligman and others, emphasizes strengths, optimism, and well-being as drivers of human flourishing—foundational elements for promoting entrepreneurial confidence and agency. Reference: Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55(1), 5–14.

Building on this foundation, there is significant scope to deliver Digital EDPs through the Digital Public Infrastructure (DPI) using Agentic AI[34]. Such an initiative should go beyond traditional EDP content and offer a comprehensive suite of services including:

- Personalized, need-based digital business plans tailored by sector, product, and market conditions
- Commodity-wise opportunity identification and Detailed Project Report (DPR) generation for loan applications
- Startup advisory covering operations, marketing, HR, and financial management
- Step-by-step playbooks and interactive content specifically designed for first-generation entrepreneurs

Agentic AI platforms can continuously learn from user behavior and decision patterns to refine recommendations, ensuring that each entrepreneur receives contextual, real-time, and actionable advice, thus scaling EDP delivery with precision and personalization.

Skilling through exposure and experiential learning

Entrepreneurship cannot be taught in classrooms alone. While theoretical knowledge has value, the key learning happens in the field—through observation, trial, failure, and iteration.

To achieve this: **On-site learning** must replace classroom lectures. Instead of abstract lessons on writing business plans, entrepreneurs should engage in "**learning by doing**". For example, an aspiring food-processing entrepreneur could intern at a functional factory to learn about production, packaging, and compliance first-hand. Exposure visits to successful enterprises (even in other states) can broaden entrepreneurial imagination. A cluster of village weavers visiting a modern apparel unit can pick up insights on design, pricing, and supply chain management.

Experiential learning, combined with mentoring, has a far stronger effect on long-term entrepreneurial success than standalone training modules –

- Gielnik et al. (2015)[35] provide empirical evidence that entrepreneurship training boosts business creation within the first 12 months but has diminishing effects beyond that period. Their study underscores that without continued support, real-world exposure, and post-training interventions, many trained entrepreneurs fail to sustain their ventures.
- Research by Lange et al. (2012)[36] found that while entrepreneurship education can help in securing startup funding, it has little effect on long-term business success. They also provided empirical evidence that real-world experience is twice as effective as formal entrepreneurship courses.
- Smolka et al. (2024)[37] highlight that compulsory entrepreneurship training often increases short-term business activity but does not translate into sustained engagement or long-term impact.

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[34] Pranay Bhargava and Vijay Mahajan, Architecting India's Credit DPI For High-Growth MSMEs (April 28, 2025). Available at SSRN: https://ssrn.com/abstract=5284150

[35] Action and action-regulation in entrepreneurship: Evaluating a student training for promoting entrepreneurship. *Academy of Management Learning & Education*, 14(1), 69–94

[36] Marram, Ed and Lange, Julian and Brown, David and Marquis, Joel and Bygrave, William D., Is Entrepreneurship a Teachable Profession? An Examination of the Effects of Entrepreneurship Education and Experience (March 22, 2014). Available at SSRN: https://ssrn.com/abstract=2412932

[37] Smolka, Katrin & Geradts, Thijs & Zwan, Peter & Rauch, Andreas. (2023). Why bother teaching entrepreneurship? A field quasi-experiment on the behavioral outcomes of compulsory entrepreneurship education. Journal of Small Business Management. 62. 1-57. 10.1080/00472778.2023.2237290

Simulated market exercises can accelerate learning: Entrepreneurs may start by selling sample products in a local fair, gather customer feedback, and revise their offerings. With mentor support, these trials can gradually scale from local to regional markets. This phased launch approach teaches risk management, customer feedback loops, and adaptive decision-making –

- Knight's Uncertainty-Bearing Theory (1921)[38] emphasizes that entrepreneurs succeed not just by acquiring knowledge but by managing uncertainty through adaptive decision-making in real business environments. Since mass EDP training operates in risk-free environments, it fails to develop the resilience and risk-assessment capabilities needed for real-world entrepreneurial success.
- Sarasvathy's Effectuation Theory (2001)[39] posits that successful entrepreneurs do not follow linear business plans but make decisions based on available resources and real-time market feedback. Traditional EDP training assumes a predictive model, which does not prepare entrepreneurs for the highly dynamic and uncertain nature of actual business environments.
- McClelland's Achievement Motivation Theory (1961)[40], tested through the Kakinada Experiment (1969), demonstrated that while motivation training can increase entrepreneurial intention, sustained business success requires continuous reinforcement through mentoring, real-world experience, and financial backing. Motivation alone does not translate into business survival.
- Isenberg's Entrepreneurship Ecosystem Theory (2010)[41] highlights that entrepreneurship flourishes in an environment that nurtures learning, mentorship, and real-world business exposure.

Training must be context-specific: Each Entrepreneur Network (e.g., mushroom farming vs. textile weaving) requires different technical knowledge. The Accelerator should bring in sector-specific experts to provide relevant guidance.

Peer learning matters: Structured group sessions where entrepreneurs share real-time challenges and crowdsource solutions, moderated by experts, build problem-solving skills and collective confidence.

b. Post-PMF: Mentorship and network building

Once enterprises reach PMF, the next challenge is scaling in a sustainable manner. At this stage, access to social capital—in the form of mentorship, peer networks, and trusted relationships—becomes a key driver of long-term success. A thriving entrepreneurial network functions as soft infrastructure: it is low-cost, high-impact, and becomes increasingly self-sustaining over time.

To build this, programs must actively invest in promoting strong relational networks. This includes organizing **regular network meetups** where 10–15 entrepreneurs can share experiences, troubleshoot challenges, and learn from industry veterans. **Sector-specific mentor panels**—for example, a successful textile exporter guiding several garment manufacturers—can offer targeted, practical support. Research (Minniti & Bygrave[42]; Kaiser & Müller[43]) shows that while short-term training may

[38] *Risk, Uncertainty, and Profit* (Boston MA: Hart, Schaffner and Marx; Houghton Mifflin, 1921)
[39] Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *The Academy of Management Review*, *26*(2), 243–263.
[40] McClelland, D. C., & Winter, D. G. (1969). *Motivating Economic Achievement*. New York: Free Press
[41] Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, 88(6), 40–50
[42] Minniti, M., & Bygrave, W. (2001). *A dynamic model of entrepreneurial learning. Entrepreneurship Theory and Practice, 25*(3), 5-16.
[43] Kaiser, U., & Müller, B. (2015). *Skill formation, entrepreneurship education, and innovative start-up activity. Small Business Economics, 45*(4), 791-811.

help start businesses, it rarely ensures long-term success unless entrepreneurs are embedded in strong networks of support.

Sociologists like Bourdieu and Coleman[44] have emphasized that **social capital—the trust, norms, and reciprocal relationships within networks—can be even more powerful than financial capital in influencing business outcomes. Entrepreneurs with strong relational networks gain faster access to customers, suppliers, funding opportunities, and critical knowledge**. Bourdieu's Social Capital Theory[45], studies by Nahapiet & Ghoshal[46] and Stuart & Sorenson[47] confirms that mentorship and relationship-driven support consistently outperform standalone technical training.

In the early stages, Accelerator's external facilitation is essential to act as a network broker. This can involve organizing visits to trade expos, linking entrepreneurs to industry associations, and facilitating collective brand promotions. Digital platforms can also be used to promote continuous peer-to-peer exchange, sharing of opportunities, and problem-solving.

Over time, a tiered mentorship system can evolve naturally. High-performing αHWEs can serve as "master mentors" or local franchisors, guiding HWEs within their cluster. In turn, successful HWEs can mentor OAEs, helping them transition from subsistence ventures to employer-enterprises. To sustain this ecosystem, mentors should be formally recognized—through awards, status, or visibility—and large firms could be incentivized to mentor or onboard smaller suppliers within their value chain.

In rural and semi-urban areas, where first-generation entrepreneurs often lack inherited business networks, this program-created community becomes a kind of surrogate business family—providing advice, emotional backing, and access to real opportunities. As the network density increases, the ecosystem reaches a tipping point: aspiring entrepreneurs begin to see role models around them, social norms start to celebrate ambition and enterprise, and a virtuous cycle of aspiration and mutual support emerges—lifting the entire entrepreneurial landscape forward.

As entrepreneur networks anchored by local αHWEs and HWEs reach critical mass, they may transition into self-sustaining ecosystems independent of direct support from the Accelerator. Concurrently, these networks become avenues for revenue and profit generation through the provision of various incubation and financial services to its network enterprises. Long-term digitization of these decentralized networks may eventually facilitate the creation of Decentralized Entrepreneur Networks (DENs)[48].

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[44] Coleman, J. S. (1988). *Social capital in the creation of human capital. American Journal of Sociology, 94*(S1), S95-S120.

[45] Bourdieu, P. (1986). *The forms of capital.* In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood Press.

[46] Nahapiet, J., & Ghoshal, S. (1998). *Social capital, intellectual capital, and the organizational advantage. Academy of Management Review, 23*(2), 242-266

[47] Stuart, T. E., & Sorenson, O. (2005). *Social networks and entrepreneurship. In Alvarez, S. A., Agarwal, R., & Sorenson, O. (Eds.), Handbook of Entrepreneurship Research* (pp. 233-257). Springer.

[48] DENs, utilizing advanced technology, may enable decentralized governance and transactions without central intermediaries. In such structures, members participate in governance through token-based voting or predefined smart contracts; Resources are pooled collectively, decisions are transparent, and rewards are distributed based on established rules; DENs can effectively manage decentralized governance structures, allocate local resources efficiently, provide milestone-based compensation for Business Development Service providers, and streamline management of revenue-based capital (Flexible Finance, Micro-Equity) through programmable disbursal and repayment mechanisms. This evolution signifies a strategic shift toward transparent, decentralized, and self-governing entrepreneur ecosystems, promoting robust local economic growth.

Pre-grounding infrastructure for foundational support*- In case brownfield infrastructure is not available, Pre-PME Foundational Support may be preceded by setting up of Incubation Centre(s) containing training rooms, processing units for demonstration, residential & catering facilities. This may be done through philanthropic capital.*

4.2 Business Development Services (BDS)

Business Development Services (BDS) address critical functional gaps for αHWEs and HWEs—gaps that large firms fill through in-house teams or outsourced professionals, but which small entrepreneurs often struggle to access or afford. BDS offerings, when designed as shared services, help micro-enterprises overcome the inherent disadvantages of small scale by enabling them to focus on their core activities—production, innovation, and customer service—while backend and enabling functions are handled by specialists or intermediaries.

Currently, most micro-entrepreneurs are overburdened, juggling accounts, compliance, marketing, logistics, and HR on their own—often without the expertise or time to do any of them effectively. By offering cost-effective, centralized support, BDS interventions allow them to accelerate growth, improve product quality, and strengthen business sustainability.

BDS support can be segmented across the Pre-PMF and Post-PMF phases of enterprise development.

a. Pre-PMF: Branding, market access, digital onboarding, certifications

At the pre-PMF stage, entrepreneurs require support in areas such as business planning, branding, market access, and digital integration. These services can be initially delivered by human experts and gradually transitioned to agentic AI-powered Digital Public Infrastructure (DPI)[49] that ensures scale, personalization, and cost-efficiency.

Branding, Market access, digital onboarding and certifications

Most micro-enterprises operate with rudimentary branding—generic packaging, inconsistent visuals, non-compliant packaging content, and minimal digital presence. This limits their ability to compete and earn customer confidence compared to larger, trusted brands. Initially supported by human branding and marketing professionals, Agentic AI can later assist in:

- Branding and marketing including upgrading the packaging design, labelling, logos, and develop marketing collateral
- Social media marketing campaigns including promotional/ social media videos on Youtube or Instagram Reels/ Pamphlets
- Digital Onboarding: Help entrepreneurs establish a basic digital footprint through Google Business listings, Facebook pages, websites, and SEO. Provide training and onboarding support for e-commerce platforms like Amazon, Flipkart, ONDC, and GeM. Act as an intermediary to simplify the process—handling documentation, explaining digital workflows, and ensuring smooth entry into digital marketplaces.

[49] Pranay Bhargava and Vijay Mahajan, Architecting India's Credit DPI For High-Growth MSMEs (April 28, 2025). Available at SSRN: https://ssrn.com/abstract=5284150

- Assistance with Certificate & Registrations (e.g. FSSAI, Agmark, ISI, GST, labour certificate, Udyam (MSME), and industry-specific certifications
- Additionally, support the creation of common branding identities—such as a Geographical Indication (GI) tag, organic produce certification, or enterprise agglomeration-based brand mark—under which many small producers can co-market, turning a fragmented supply base into a compelling brand story.

b. Post-PMF: Bookkeeping, compliance, legal and export advisory

Once an enterprise reaches PMF and is ready to scale, it faces new complexities—accounts, regulatory, legal, compliance, and international trade challenges that require specialized support.

Book-keeping, regulatory, compliance, and legal support

Navigating licenses, registrations, and ongoing compliance often becomes a major bottleneck for growing enterprises. A shared compliance desk, staffed by chartered accountants, retired government officers, or legal professionals, can address these challenges by providing comprehensive support services. These include bookkeeping, maintenance of financial statements, GST return filing, annual compliance, labour compliance, audits, and other regulatory and legal filings. By aggregating demand across multiple enterprises, such a shared service model creates economies of scale, making high-quality professional services affordable and accessible to individual entrepreneurs.

Export advisory and international market entry

Many small enterprises hesitate to export due to limited knowledge of procedures, contractual risks, and lack of access to financing or trade partners. The Accelerator can bridge this gap by onboarding experienced export and legal advisors who offer practical guidance on product-market mapping, compliance, and documentation. They can support contract drafting, help navigate customs and quality standards, facilitate access to export financing, and recommend risk mitigation tools like Letters of Credit and export credit insurance.

Pre-grounding infrastructure for Business Development Services *- In case Agentic AI DPI brownfield infrastructure is not available, Pre-PMF BDS Support may be preceded by investing in Agentic AI DPI for EDP, Market access, Branding, Digital Onboarding & certifications. This can be done through philanthropic capital.*

4.3 Flexible Finance and Micro-Equity

Traditional financial products—such as fixed-interest loans—are poorly suited to the volatile, unpredictable, and uneven cash flows of high-growth micro-enterprises, particularly during their early and scaling stages. For αHWEs and HWEs, the need is not just for capital, but for capital that is patient, adaptable, and performance-aligned.

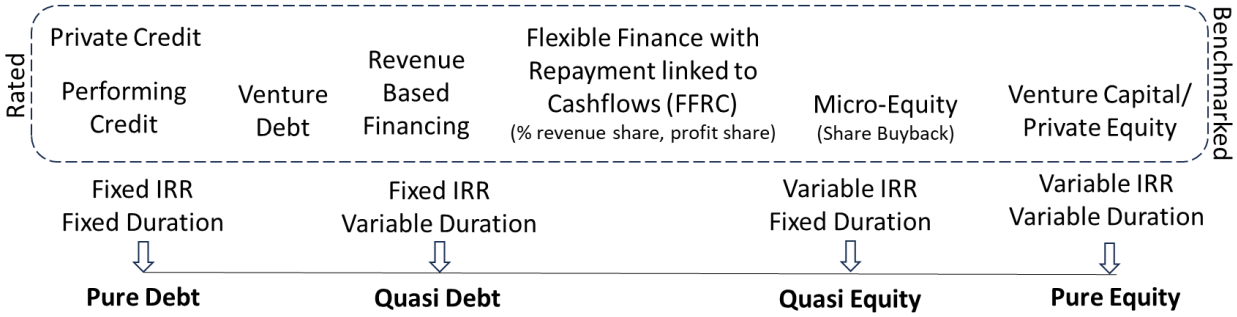

Figure 5 The wide spectrum of financial instruments – understanding where Flexible Finance & Micro Equity falls; IRR (Internal Rate of Return) indicates the interest rate while Duration indicates the Tenure of the loan.

To address this, the proposed framework places flexible financing and micro-equity at the center of its design. The core principle is simple yet transformative: repayments or returns are tied to the enterprise's performance—measured by cash flows (revenue or profits)—rather than rigid interest-based obligations. This ensures that the financier and entrepreneur succeed together, encouraging a "partnership finance" model that aligns incentives and shares risk. This motivates the investor/ accelerator to go beyond partnership finance, offering foundational support, and business development services to entrepreneurs. It is precisely the kind of trust-based capital that ambitious entrepreneurs seek.

a. Pre-PMF: Seed Capital

The Pre-PMF phase is the highest-risk stage in an enterprise's lifecycle. Here, failure rates are high, and positive cash flows may be delayed—or never materialize—if the entrepreneur fails to achieve PMF. **During this phase, entrepreneurs require risk-tolerant, flexible seed capital that supports experimentation, early traction-building, and adaptation.** To make this possible, catalyst capital (in form of viability gap funding, or performance-linked grants) must be deployed. These interventions help bridge the uncertain and fragile stage before commercial viability kicks in.

In the case of 'impact-first' social enterprises, driven by mandates such as employment generation, climate resilience, women's empowerment, or the upliftment of backward castes—and often organized as cooperatives, SHG enterprises, or producer collectives—it is crucial that such enterprises be led by a professional social entrepreneur (with traits and experience of αHWE and HWE but with intrinsic motivation to contribute to community well-being). Intrinsic aspiration stems from a deep, internal drive to create meaningful impact, solve problems, or contribute to a community—where the enterprise becomes a vehicle for purpose, fulfilment, and self-actualization. These enterprises may be classified as Social HWEs or Social αHWEs, depending on whether the social entrepreneur demonstrates high or extraordinary levels of aspiration. For such social enterprises, during the early incubation phase, it is essential to provide seed funding in the form of grants, soft loans from an Impact-first Incubator, or seed capital from a SEBI-registered Social Impact Fund (SIF). This seed capital supports the social enterprise during the high-risk, pre-revenue stages. Only once the Social HWE or Social αHWE achieves product–market fit should mainstream financing—such as flexible finance or micro-equity—be introduced. This prevents premature financial pressure and enables a smoother, more sustainable scale-up.

b. Post-PMF: Flexible Finance for HWEs and Micro-Equity for αHWEs [50]

Once PMF is achieved and enterprises demonstrate sustainable demand and unit economics, financing needs evolve. At this stage, two differentiated instruments are needed:

Flexible Finance with Repayments Based on Cash Flows (FFRC) – for HWEs

Under the FFRC model, loan repayments are not fixed interest rate instalments but instead vary based on a percentage of monthly revenues or profits. During lean periods, repayments are lower; during peak months, they rise—allowing full repayment over a longer timeline without the risk of default due to short-term volatility.

FFRC structures may include revenue-based financing or repayment linked to a defined percentage of revenue or profit. While behaving like hybrid debt, FFRC creates a win-win scenario: the financier gains upside potential in exchange for absorbing risk, and the entrepreneur gains repayment flexibility aligned with business cashflows. Final closure can be structured through a fixed repayment cap (debt-like), a time-bound sunset clause (more equity-like), or a negotiated exit after reaching a cumulative repayment threshold (similar to venture debt structures with warrant-like features).

Micro Equity – for αHWEs

For αHWEs—entrepreneurs positioned to scale rapidly into regional enterprises—equity-like capital is more suitable than traditional debt. These enterprises are often expanding into new markets, or launching innovative products—initiatives with high growth potential but also greater uncertainty. Imposing fixed repayment obligations can stifle innovation and constrain growth. Instead, they require risk-aligned capital that shares in the upside and supports long-term value creation.

Micro-Equity structures may include partnership finance—where the investor or accelerator takes a partnership interest in an LLP—or, in the case of a company, a convertible instrument that grants equity at a future valuation event linked to a revenue multiple. Repayment may be structured through share buyback mechanisms, allowing the entrepreneur to regain full ownership once the business matures. These structures allow investors to participate in the upside without burdening entrepreneurs with early-stage valuation negotiations or complex compliance requirements.

c. Post PMF: Leveraging mainstream capital

Post-PMF, high-growth enterprises can access mainstream capital through a structured model involving traditional lenders, and the Accelerator (with in-house investment vehicle or an AIF). The investment vehicle or AIF can provide catalytic capital that serves two critical functions: (1) acting as an income-smoothing buffer to meet Income Recognition and Asset Classification (IRAC) norms, and (2) offering a credit risk guarantee to traditional lenders—such as MSME lenders, small finance banks, or commercial banks—in case of business failure.

Lending can occur through an escrow-linked structure, where the AIF absorbs monthly revenue volatility by covering deficits during low-income periods and capturing surpluses during high-growth months. This ensures lenders receive scheduled repayments with fixed yields, regardless of enterprise-level fluctuations. For every ₹1 brought in by the AIF, ₹4–₹5 of senior debt can be mobilized, significantly enhancing capital availability for MSMEs.

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[50] Vijay Mahajan and Pranay Bhargava, SME Financing - How to Bridge the Persistent Demand Supply Gap? (February 17, 2025). Available at SSRN: https://ssrn.com/abstract=5141173 or http://dx.doi.org/10.2139/ssrn.5141173

In NBFC-linked debt models for FFRC, the AIF ensures that repayment schedules remain compliant with IRAC norms by dynamically managing cash flow mismatches. In equity-linked structures for micro-equity, the AIF participates in the upside through negotiated buyback premiums or future equity conversions, while also bearing downside risk. This creates a risk-sharing, reward-aligned financing architecture that balances the needs of lenders, investors, and entrepreneurs.

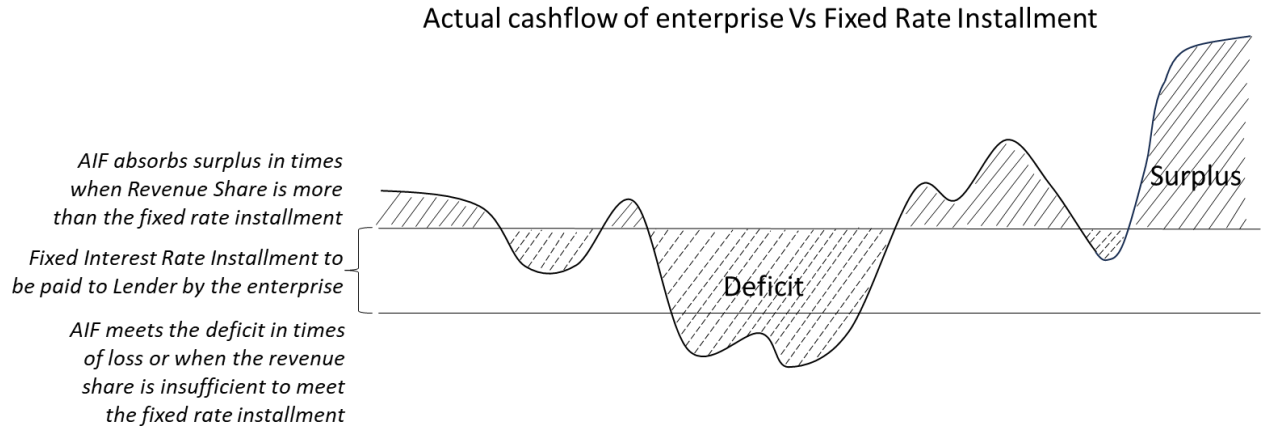

Figure 6 Smoothening of the cashflows by AIF to help the Lender meet the IRAC norms

By aligning repayments to business performance, this blended model enables αHWEs and HWEs to scale sustainably—while offering investors diversified, risk-adjusted returns and preserving lender confidence through structured downside protection.

5. The Accelerator Model: A dual role institution

The proposed incubation framework can be best operationalized through an Accelerator, which serves as the vehicle for delivering the full suite of support services—ranging from foundational support and business development services to financing and investment.

5.1 Incubator + Investor = The Accelerator

The Accelerator plays two interdependent yet distinct roles—incubator and investor—both of which can be executed by the same institutional entity. As an incubator, it provides foundational support and facilitates BDS across the entrepreneurial journey, both pre- and post–PMF. As an investor, it mobilizes and delivers flexible financing and micro-equity solutions tailored to the unique risk-return profiles of αHWEs and HWEs. This dual role enables the Accelerator to seamlessly integrate capacity-building with capital infusion, ensuring that enterprises receive both the "soft" support of mentoring and services and the "hard" support of patient, risk-aligned capital as they scale.

5.2 Four types of capital required by the Accelerator

To perform its functions effectively, the Accelerator must have access to four distinct types of capital, each serving a specific purpose and requiring different repayment or return mechanisms:

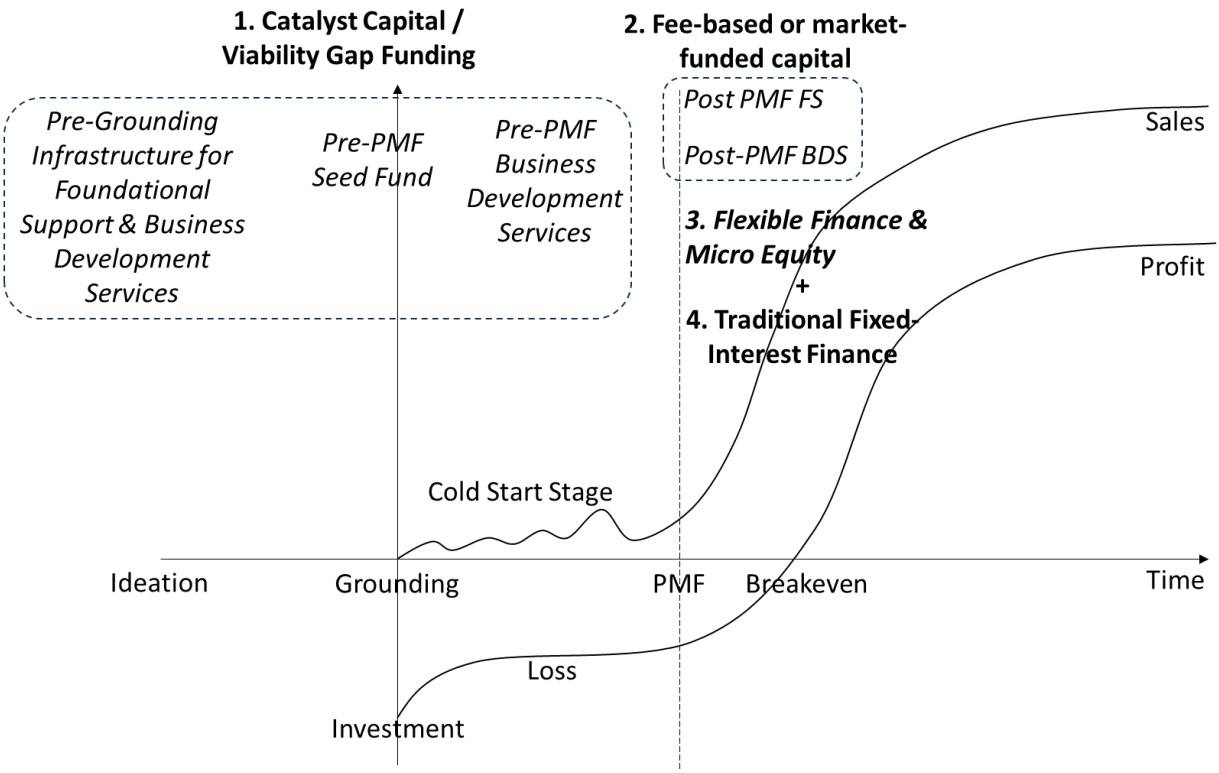

Figure 7 The Accelerator requires infusion of four different types of capital

a. Catalyst capital / Viability gap funding for Pre-PMF early support

In the early stages—before PMF is achieved—enterprises require foundational support and de-risking mechanisms to reach viability. To enable this, the Accelerator can mobilize catalyst capital or viability gap funding sourced from government grants, philanthropic capital, or the Social Stock Exchange (SSE). These funds may be channeled through a Section-8 company, a SEBI-registered Category I Social Impact Fund, or a Category II Alternative Investment Fund, depending on the legal structure and compliance strategy.

The primary purpose of this funding is to support the initial setup and operational costs for αHWEs, HWEs, OAEs, and local entrepreneur networks. This includes investment in pre-grounding infrastructure, Pre-PMF Foundational Support, Pre-PMF Business Development Services (BDS), and seed capital to test and iterate business models before they reach market validation.

The repayment or accountability mechanism for catalyst capital can follow a "pay-for-success" model, where disbursements are linked to measurable, outcome-based milestones. For instance, tranche-based funding may be released upon achieving specific growth indicators such as increases in sales, fixed assets, employment, credit access, or enterprise formalization. This outcome-driven approach ensures accountability while preserving flexibility to support high-potential but early-stage enterprises.

b. Market-funding or Advance fee for Post-PMF FS & Post-PMF BDS

Once PMF is achieved and the enterprise or local entrepreneur network enters a phase of rapid growth (S-curve or hockey-stick trajectory), the Accelerator can mobilize additional funding to scale support for HWEs, αHWEs, and affiliated networks. This capital may come from two primary sources:

- Working capital loans from financial institutions, or

- Upfront business fees or partnerships with market actors and private beneficiaries such as aggregators, suppliers, e-commerce platforms, or financiers.

The purpose of this funding is to deliver targeted Post-PMF Foundational Support and Post-PMF Business Development Services, ensuring enterprises have the strategic and operational capabilities to sustain and accelerate growth.

The repayment mechanism varies by funding source. When capital is mobilized through advance fees from market actors, the Accelerator offers "acceleration as a service" in exchange for these fees. When funds are sourced from financial institutions, the Accelerator recovers its costs by charging HWEs and αHWEs a fixed service fee or revenue share in exchange for continued support. These repayments are then used to service the working capital loan, establishing a revolving, self-sustaining financing mechanism for delivering post-PMF support at scale.

c. Risk capital to de-risk traditional lenders and meet IRAC norms

To enable traditional lenders to finance high-growth micro-enterprises without breaching regulatory requirements, risk capital can be mobilized from impact investors with high risk tolerance and long-term investment horizons. This capital can be pooled through a SEBI-registered Category II Alternative Investment Fund (AIF) managed by the Accelerator or a designated fund manager.

The capital deployed by the AIF serves a multi-faceted role in supporting the growth of αHWEs and HWEs. It provides risk-aligned, equity-like capital to enterprises ready to scale, and facilitates innovative financing structures such as revenue-sharing, profit-sharing, or deferred equity buybacks. Additionally, the AIF works in tandem with traditional lenders by absorbing cash flow surpluses and deficits, thus enabling stable, fixed-instalment repayments that comply with Income Recognition and Asset Classification (IRAC) norms. In the event of enterprise default, the AIF acts as a credit risk guarantor, further protecting the interests of the lending institutions.

The repayment mechanism for the AIF is designed to align risk and reward. The fund earns returns through a share of enterprise revenues or profits, equity repurchase agreements (typically priced based on future revenue multiples), and the capture of surplus cash flows. By sharing upside potential and cushioning downside risk, this structure de-risks lenders while offering the flexibility and scalability needed by high-growth enterprises.

d. Traditional lender leverage: Multiplier effect

Traditional lenders—including development financial institutions, MSME-focused NBFCs, Small Finance Banks, and Commercial Banks—play a vital role in scaling credit access for high-potential enterprises. These institutions provide working capital and term loans directly to αHWEs and HWEs, with their lending de-risked and catalyzed by concessional and equity-linked capital deployed through the AIF via Flexible Finance and Micro-Equity structures.

This blended model creates a leveraged capital architecture, where every ₹1 of concessional or micro-equity capital from the AIF unlocks ₹4–₹5 of mainstream credit. Traditional lenders benefit from reduced risk exposure while continuing to operate within standard underwriting practices. The AIF acts as a financial buffer, absorbing cash flow fluctuations and partially underwriting the risk, thereby making it commercially viable for lenders to engage underserved but high-growth enterprises.

This structure aligns the incentives of all parties: lenders receive stable fixed-interest returns with lower credit risk, the AIF participates in the upside while providing downside protection, and entrepreneurs gain timely access to appropriately structured capital tailored to their growth trajectory.

Repayments to traditional lenders follow standard fixed-interest schedules (e.g., Repo Rate plus risk premium). Meanwhile, any cash flow surpluses or deficits generated through revenue-linked repayments or equity buyback mechanisms are routed to the AIF corpus. This enables three key functions:

- Instalment smoothing, protecting both lender and borrower from seasonal or cyclical volatility;
- Credit risk guarantee, shielding lenders when enterprise revenues underperform; and
- Residual return capture, allowing the AIF to earn upside after lender obligations are fulfilled.

6. Conclusion: A strategic call to action

Catalysing 25% OAEs into HWEs & 5% HWEs into αHWEs = 18 crore new jobs

India stands at a pivotal moment in its economic development—where grassroots entrepreneurship, if strategically nurtured, holds the potential to unlock vast, untapped economic value. Insights from the ASUSE 2023–24 highlight the latent promise of these enterprises. Nearly 25% of OAEs exhibit strong indicators of growth-readiness, including digital activity (18.9% use email and 17.8% seek market information), financial inclusion (29.1% use formal financial services), education (29.4% have completed higher secondary or beyond), and access to infrastructure (30.9% operate from permanent premises and 21.7% use the internet). These characteristics suggest that with targeted incubation and structured business development support, a significant proportion of OAEs could successfully transition into HWEs.

Furthermore, 5% of existing HWEs show clear potential to evolve into αHWEs, or high-growth enterprises. Indicators include early signs of digitization (1.9% deliver products online, 6.9% use internet-based communication) and increasing engagement with formal systems (5.1% interact with government programs and 12.1% are registered under CGST). Current estimates suggest that if even 25% of OAEs—approximately 1.8 crore enterprises—graduate into HWEs, and just 5% of HWEs—around 5 lakh—scale into αHWEs, India could generate over 18 crore new jobs. Such a transformation would fundamentally reshape the country's employment and enterprise landscape, positioning grassroots entrepreneurship as a cornerstone of inclusive economic growth.

While the projections are ambitious, the underlying insight is critical: focusing on high-aspiration enterprises yields disproportionately greater developmental impact than distributing limited resources across millions of subsistence-level businesses.

This is not a call to abandon OAEs—but rather to strategically elevate αHWEs and HWEs as engines of regional growth and aspirational models for others. When αHWEs and HWEs are incubated effectively, they generate network effects that pull OAEs upward—not through coercion, but through visible, relatable success stories that inspire replication. By building strong entrepreneurial anchors, India can promote dense, supportive ecosystems in which even smaller or subsistence-level businesses thrive, benefiting from increased local demand, shared infrastructure, and spillover effects.

Now is the moment to act. Now is the time to invest in India's next generation of entrepreneurs.