Geneva Challenge 2026

The Challenges to the Future of Work

A Drive To Thrive

D T T

From Driving Time to Building Time

An AI Voice Mentor for Opportunity Discovery and Occupational Mobility among Platform Workers

Team DTT · Tehran, Iran

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Abstract

Platform work in Iran and comparable economies has made rapid access to income possible, but for many workers it does not become a clear path toward occupational progression. In Iran, Snapp's 1403 annual report records about 3.7 million active drivers. This scale shows that platform drivers are not only a company-specific issue; they are part of the country's future-of-work challenge.

The central problem of this proposal is that **platform work offers easy entry into income, but provides a weak bridge to occupational mobility**. The evidence presented in Chapter 2 shows that drivers are not a homogeneous group: some depend heavily on platform income, some work part-time, some are in transition, and some have skills that remain invisible in the current labor market. The response, therefore, should not be another generic training course. It should be a chain that understands the person, makes their assets visible, lets them test pathways at low risk, and connects them to real demand.

A Drive To Thrive (DTT) is an AI voice mentor for opportunity discovery and occupational mobility among platform workers. After introducing the full name, this document refers to it as DTT. While the driver is moving, DTT provides short, non-interactive audio content, narratives, and podcasts. When the driver is stopped, it enables conversation, exercises, feedback, and decision-making. Its architecture is grounded in Jobs-to-be-Done, Effectuation, and the Market Opportunity Navigator, and combines direct discovery, user-controlled preference signals, asset mapping, micro-experiences, human guidance, demand bridging, and voluntary training vouchers.

The proposed twelve-month pilot in Tehran involves about 120 drivers: 60 in the intervention group and 60 in a waitlist or comparison group. The pilot begins with two active occupational pathways in order to control cost and implementation complexity. Success is not measured by the number of audio files listened to. Core indicators include completing discovery, undertaking micro-experiences, entering a valid training or project pathway, receiving a credential, generating supplementary income, and increasing the driver's range of real choices.

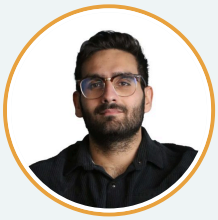
DTT does not aim to move all drivers out of platform work. Its aim is to make staying, reducing working hours, building supplementary income, or exiting the platform a more informed choice. The idea responds to several future-of-work challenges: the growth of non-standard work, weak links between training and labor demand, invisible informal skills, unequal access to reskilling, and the risk of data-driven management without worker agency. In the long term, DTT seeks to turn part of platform work from a daily-income dead end into an infrastructure for pathway discovery, skill recognition, and occupational mobility in Iran and similar economies.

Our Team

The DTT team brings together entrepreneurship, educational software, product design, and market-facing experience.

Ehsan Fakhraei

holds a Bachelor's degree in Computer Engineering from Amirkabir University of Technology and is a Master's student in Organizational Entrepreneurship at the University of Tehran. He founded Gozar Software Development, a company focused on organizational and educational software for children and adolescents. Gozar's experience in talent discovery, arts education, and learning platforms forms DTT's technical and product foundation.



Amirsalar Razavi

holds a degree in Architecture from Shahid Beheshti University and is pursuing a Master's degree in Project Management at the same university. He co-founded Gozar Software Development with Ehsan and works there as product and project manager. His role is to connect experience design, execution management, and the translation of ideas into usable products.

Mohammadreza Zamani

holds a degree in Manufacturing Engineering from Amirkabir University of Technology and is a Master's student in Entrepreneurship at the University of Tehran. His interests include business model innovation, artificial intelligence in marketing, and creativity in advertising. He has founded an e-commerce business in kitchen appliances and is a member of the creative department of a leading advertising agency in Iran, bringing market insight, user behavior, and narrative strategy to the team.

Chapter 1

Introduction and Context

1.1. Morteza and the Future-of-Work Question

Morteza is 41 years old. A few years ago, he worked in a home-appliance repair workshop. Today, he spends most days driving for Snapp in Tehran. Snapp is Iran's largest ride-hailing platform, similar to Uber, connecting passengers and drivers through an app. Morteza is not a formal employee of the platform; he accepts rides using his own car and time and earns daily income.

Entering this work was easy, but what began as temporary gradually became permanent. Part of his cash income is spent on fuel, repairs, insurance, depreciation, and vehicle wear. The deeper problem is that each day of driving does not necessarily build professional capital. Morteza has technical experience, problem-solving ability, and customer-facing skills. What he lacks is a bridge between these assets and opportunities that can create income, skill recognition, and progression.

His story is not only personal. According to Snapp's 1403 annual report, Snapp had nearly 3.7 million active drivers and an 88.7 percent share of the ride-hailing market across ten major cities. The question of this proposal is therefore: do platforms only create fast access to income, or can they also become pathways to occupational mobility?

1.2. The Future of Work and the Iranian Context

Digital technology, artificial intelligence, and platforms are reshaping the structure of work while non-standard work, self-employment, and informality expand. Reports such as WEF, Future of Jobs 2025 and ILO, World Employment and Social Outlook: Trends 2024 show that the future of work is not predetermined. Education systems, labor-market institutions, and social protection determine whether technological change becomes an opportunity or deepens inequality.

In Iran, Snapp is one of the most visible examples of this transformation. Its 1403 report records around 7.4 million registered driver accounts and 3.7 million active drivers. Compared with data from the Statistical Center of Iran, this figure is roughly equivalent in scale to 15 percent of the country's employed population. It should not, however, be interpreted as full-time employment, a formal employment relationship, or an official labor-market share. The importance of the comparison is that a private platform is in direct contact with a large segment of the workforce.

1.3. The Two Faces of Flexibility in Platform Work

Platform work cannot be described as simply good or bad. Time flexibility, easy entry, and fast income are real advantages for students, the unemployed, retirees, and households under financial pressure. But the same flexibility often comes with no standard employment relationship, no progression pathway, no workplace training, no portable benefits, and weak long-term security. Waiting time and unpaid search time also reduce effective earnings. For example, an ILO study shows that once unpaid time is included, the effective hourly wage of platform workers falls from USD 4.43 to USD 3.31 (ILO, Digital Labour Platforms).

1.4. Central Claim

The central claim of this proposal is:

> **Platform work provides easy access to income, but a weak bridge to occupational mobility; the root of this weakness is not merely a lack of skills, but the absence of an institutional link between pathway discovery, training, skill recognition, and real demand.**

The problem is not that drivers "have no skills." Many have work experience, local networks, and practical abilities, but these assets are not visible, validated, or transferable. The bottleneck is the absence of a chain from understanding the person to connecting them to economic opportunity: understanding the role of platform work in their life, identifying their assets, testing pathways with low risk, financing training fairly, recognizing skills, and connecting them to employers, customers, or real projects.

1.5. Proposed Solution and Link to the SDGs

SDG 8
Decent Work and Economic Growth - occupational mobility and access to productive opportunities

SDG 4
Quality Education - lifelong, personalized, demand-linked learning

SDG 10
Reduced Inequalities - bringing training, credentials, and networks to platform workers

DTT is our proposed response: an AI voice mentor and institutional infrastructure that understands the driver, shows possible pathways, designs low-risk experiences, gives feedback, and connects the driver to training, credentials, employers, customers, or partners. The goal is not to move all drivers out of platform work, but to increase their agency. The intervention aligns

with Sustainable Development Goals 8, 4, and 10: decent work, quality education, and reduced inequality, by extending tools for learning, recognition, and networks to platform and informal workers.

Chapter 2

Problem Statement

2.1. Scale of the Problem

Figure 1. The scale of the problem at a glance - Sources: Snapp 1403 annual performance report, Statistical Centre of Iran, and the World Bank

According to Snapp's 1403 annual report, about 7.4 million driver accounts have been created on the platform and nearly 3.7 million drivers have been active. Snapp operates in 424 cities and reports an 88.7 percent share of the ride-hailing market in ten major cities. The number of active accounts is comparable in scale to about 15 percent of all employed people in Iran; this is a scale comparison only, not a claim about full-time employment, employment status, or official labor-market share. Globally, the World Bank estimates the number of online gig workers at 154 to 435 million, depending on definition. This global figure provides context, but it is not directly comparable to ride-hailing in Iran because platform models, definitions of activity, and labor relations differ across countries.

2.2. The Daily-Income Trap

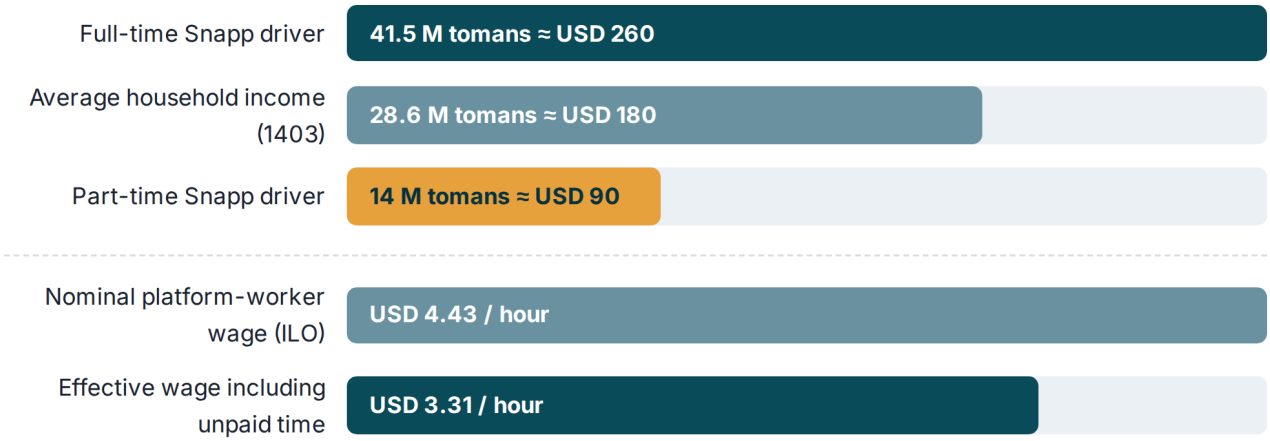


Figure 2. Top: gross monthly income comparison (million tomans). Bottom: the effect of unpaid time on effective wages (toman conversions at ≈ 160,000 tomans per US dollar) - Sources: Snapp 1403 report, Statistical Centre of Iran, and ILO

Platform driving is easy to enter: according to Snapp's driver registration requirements, a license, identity documents, vehicle documents, and basic conditions are enough. This helps people facing income pressure, but it can also create dependence: the car depreciates, work time expands, and time for training or job search shrinks.

The income can look attractive. Snapp reports average monthly receipts of about 41.5 million tomans for full-time drivers and 14 million for part-time drivers, compared with about 28.6 million tomans in average monthly household income in Statistical Center of Iran data. But Snapp's figure is gross receipts, not net wages; fuel, maintenance, insurance, depreciation, taxes, and unpaid time must be deducted. The core problem remains: **cash today, without professional capital tomorrow.**

2.3. Drivers Are Not a Single Homogeneous Group

The typology below is built from public Snapp data, exploratory interviews with 45 Snapp drivers in Tehran, and the theoretical framework in Chapter 3. Its aim is not statistical generalization, but to show heterogeneity. The personas are composite.

> **Interview Methods Note:** The findings come from thematic analysis of semi-structured interview transcripts with 45 active Snapp drivers in Tehran in Dey and Bahman 1404. The study is qualitative and exploratory and is not used for statistical generalization.

The table below summarizes the main coding categories, frequencies, and recurring concerns.

Table 1. Exploratory interview findings

Analytical Theme	Indicators and Frequency	Key Finding
Geography and housing	**Tehran resident:** 19 (42%) **Commuter/migrant/sleeping in car:** 26 (58%)	Unstable residence and suburban commuting are part of the work reality.
Income dependence on the platform	**Full dependence:** 23 (51%) **Vital supplement:** 14 (31%) **Temporary/transitional:** 8 (18%)	For many, stopping work or entering long training is highly risky.
Invisible skill assets	**Technical/repair:** 17 **Sales/communication:** 13 **Administrative/digital:** 9 **No identifiable specialized skill:** 6	Prior skills are not seen or validated by the platform.
Main barriers to training	**Fatigue/time:** 38 mentions **Opportunity cost:** 32 mentions **Unsuitable format:** 21 mentions	Fragmented time and income loss are the main barriers to reskilling.
Career goal	**Exit toward stability:** 19 **Supplementary income/reduced driving:** 18 **Maximize platform income:** 8	Goals differ: exit, supplementation, or optimizing current work.
Data and trust concerns	**Fear of algorithmic penalty:** 29 **Distrust of government/tax use:** 22	Data governance and informed consent are conditions for trust.
Preference for complementary pathways	**Gradual transition:** 32 **Reviving prior skills:** 13	Gradual, testable pathways fit better than abrupt change.

Based on this coding, the following matrix presents composite personas and their policy needs.

Table 2. Driver personas

Group / Persona	Situation in the Tehran Context	Policy Need
Full-time / sleeping-in-car driver *(e.g., Ali)*	Full dependence; unstable housing; frozen skills; severe time and opportunity-cost constraints	Low-risk supplementary income and micro-learning adapted to fatigue
Educated part-time driver *(e.g., Negar)*	Drives to offset financial pressure; administrative/academic/digital skills; aims to exit or progress	Prevent skill erosion and bridge to the specialized labor market
Worker in transition after layoff *(e.g., Kian)*	Temporary dependence; specialized or administrative skills; wants quick exit; low trust in data use	Timely intervention before long-term dependence and protection of skill data
Underutilized suburban specialist *(e.g., Farhad)*	Technical/service background; driving in Tehran pays more than local specialization; seeks complementary pathways	Recognize informal skills and diversify income without forced exit

Therefore, "success" is not the same for everyone. Formal employment, stable supplementary income, reduced driving hours, a micro-business, or informed continuation on the platform may all be valid outcomes.

2.4. Why Training Alone Is Not Enough

Educational platforms often assume that users know what they want, have regular time, and can enter the market after training. These assumptions do not hold for many drivers. The future-of-work literature also shows that formal training alone does not solve skill-job mismatch (Autor, 2022). Training without pathway discovery, skill recognition, and demand connection can produce low-value certificates and more competition. The bottleneck is therefore not "insufficient content," but the absence of a complete chain from personal discovery to economic opportunity.

2.5. Final Formulation of the Problem

> **The current system cannot determine whether platform work is a launchpad, a supplementary job, a preferred choice, or a dead end for each person; and for drivers who are stuck, there is no tool for pathway discovery, no low-risk way to test alternatives, and no institutional bridge between training and real opportunity.**

Chapter 3

Theoretical and Policy Background

3.1. Effectuation: Starting from Available Means

Effectuation, developed by Saras Sarasvathy, distinguishes between two logics of decision-making (Sarasvathy, 2001). In causal logic, a person first defines a clear goal and then searches for the means to reach it. This logic works when the future is relatively predictable.

In effectual logic, the person begins with current means: who am I, what do I know, and whom do I know? They then use available resources to build opportunities that were not fully predictable at the outset. This is the logic of control under uncertainty.

This approach is suitable for drivers with limited resources and uncertain futures. DTT uses three effectuation principles:

- **Bird-in-hand:** start from skills, experience, vehicle, networks, and local knowledge;
- **Affordable loss:** test pathways with minimal cost before financial commitment or job exit;
- **Crazy quilt:** build opportunities with available partners and contacts.

In this proposal, entrepreneurship does not mean that every user must found a company. Effectuation is used as a method for building options under uncertainty.

3.2. Jobs-to-be-Done: Why Does the Person Drive?

The Jobs-to-be-Done framework asks what "job" a person uses a product or service to perform in their life (Christensen et al., 2016). Two people may use the same platform but have different needs.

DTT does not begin with age, gender, or education. It begins with the question: what problem is driving supposed to solve for this person? Immediate income? Transition between jobs? Flexibility for family care? Social interaction? Maximizing earnings?

The answer determines whether a new pathway, optimization of current work, or no intervention is the better option.

3.3. Market Opportunity Navigator

Effectuation provides the logic of starting, but turning personal assets into comparable pathways requires a structured method. The Market Opportunity Navigator, introduced in *Where to Play*, has three steps (Gruber & Tal, 2017):

1. Generate a set of opportunities;
2. Evaluate each opportunity's attractiveness and challenge;
3. Select a primary pathway while keeping backup options.

DTT translates this framework from the firm level to the individual level. Instead of immediately choosing a course, the driver sees several domains, tests them, and then decides.

3.4. The Strength of Weak Ties

Granovetter's classic article on the "strength of weak ties" showed that job opportunities often flow through weak ties, meaning acquaintances and more distant connections (Granovetter, 1973). Platform drivers meet many people and potentially have access to weak-tie networks.

However, this network must not become an excuse for extracting passenger information or forcing promotion. DTT uses only voluntary, transparent mechanisms after the ride has ended. The theoretical value of weak ties is preserved, but the ethical boundary is explicit.

3.5. Individual Learning Accounts

Programs such as SkillsFuture Singapore show that training credit can be attached to the person rather than a specific employer. This principle also aligns with policy recommendations on lifelong learning and portable credits (OECD Employment Outlook 2024). It is important for platform workers because they do not have a standard employment relationship that would normally finance training.

In the full DTT model, this idea can be localized as a portable learning wallet. In the first-year pilot, however, a simpler and lower-risk version is implemented as a non-cash training voucher.

3.6. Recognition of Prior Learning

Recognition of Prior Learning and TVET systems seek to assess and validate skills acquired in informal settings. This logic is consistent with ILO work on the informal economy, because a large share of skills in informal economies is developed outside formal training and credentialing

systems (ILO, Informal Economy). A driver who was previously a repair worker, salesperson, or caregiver should not have to start from zero.

DTT builds a portfolio of evidence, micro-experiences, and practical assessment to connect informal learning to credible certification.

3.7. Portable Benefits

One problem of non-standard work is that training, insurance, and benefits are usually tied to a job or employer. ILO literature on non-standard employment and social protection emphasizes this gap (ILO, Non-Standard Employment; ILO, World Social Protection Report 2024-26). Portable benefits propose that such resources should move with the person.

DTT's training voucher is a limited but practical pilot version of this principle: training credit is attached to the individual, not to continued cooperation with one platform.

3.8. Interdisciplinary Foundation

DTT sits at the intersection of four fields:

- labor economics, for mobility and skill-job mismatch;
- data science and AI, for personalization and scalable delivery;
- management and entrepreneurship, for effectuation and opportunity discovery;
- social policy, for financing, equitable access, and data rights.

None of these fields is sufficient alone. Technology without social policy can produce more surveillance; training without labor economics can be detached from demand; and policy without product design may not be usable.

3.9. Career Guidance and Active Labor Market Programs

DTT also draws on career guidance and active labor market policy. Social Cognitive Career Theory shows that career choice is not only about interest; self-efficacy, outcome expectations, environmental barriers, and social support also matter (Lent, Brown, & Hackett, 1994). DTT should therefore not only ask what a driver likes. It must understand what the person sees as attainable, what barriers they face, and what support they need to test a pathway.

Evidence on active labor market programs also suggests that training is more effective when combined with guidance, practical experience, employer links, and precise targeting, rather than delivered as a generic course (Card, Kluve, & Weber, 2018). DTT therefore treats training not as the final solution, but as one step that becomes active only after pathway, demand, and human support are reasonably clear.

Chapter 4

Proposed Solution

4.1. Solution and Architecture

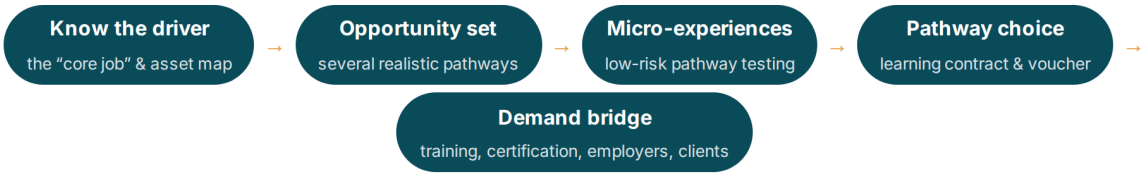


Figure 3. The driver's five-stage journey in DTT (Sections 4.2–4.6)

DTT is a digital-human infrastructure for pathway discovery among platform workers: it provides short audio content while the driver is moving and activates conversation, exercises, and decision-making when the driver is stopped. It accompanies the driver from self-understanding to opportunity testing, pathway choice, financing, credentialing, and demand connection. The table below maps each component to its theoretical or policy foundation in Chapter 3.

Table 3. Solution architecture

Solution Component	Core Function	Foundation from Chapter 3	Output for the Driver
Voice discovery and user-controlled preference signals	Understand driving's role, constraints, interests, and feedback patterns	Jobs-to-be-Done, career guidance, and AI design	Identifies the role of platform work without hidden scoring
Asset map	Identify experience, skills, networks, and current resources	Effectuation and bird-in-hand	A clear view of assets that can become opportunities
Opportunity navigator and micro-experiences	Build and test several possible pathways	Market Opportunity Navigator and affordable loss	Behavioral evidence before cost or income loss
Intelligent and human mentoring	Feedback, follow-up, and escalation of sensitive decisions	Career guidance, AI, product design, and social policy	Ongoing support without delegating high-risk decisions to AI
Demand bridge and recognition	Connect to training, credentials, employers, customers, and projects	RPL/TVET, weak ties, and work-based learning	Converts learning into real economic opportunity
Voucher / learning wallet	Voluntary, multi-source training finance	Individual learning accounts and portable benefits	Low-pressure access to training without data sale or forced deductions

The goal is not to move drivers out of the platform. It is to increase **agency**. DTT does not depend on Snapp's API or internal data and works with voluntary user-provided information. Platform cooperation is useful, but not a prerequisite.

4.2. Stage One: Understanding the Driver and the "Core Job"

DTT begins with diagnosis, not course prescription. During onboarding, the driver has a short voice conversation about work history, working hours, income dependence, family responsibilities, income goals, prior experience, interests, and time constraints. The output is an understanding of the "core job" that driving performs and an asset map.

This direct discovery is complemented by user-controlled preference signals: while moving, the driver listens only to short non-interactive content, and when stopped, gives feedback on whether it was interesting, difficult, or irrelevant. The goal is to build editable hypotheses about interests and abilities that the person may not yet see as occupational assets. Every inference must be visible, editable, and deletable by the user.

Financial discovery is also limited to what is necessary: income range, household dependence, vehicle costs, financial pressure, and available time or financial capacity for learning. The output is not a final judgment of talent; it is a testable hypothesis about the person's situation, assets, and options.

4.3. Stage Two: Building the Opportunity Set

After initial discovery, DTT does not recommend a ready-made job. It builds an "exploration basket" so that the driver can test several possible directions without financial commitment or leaving current income. Suggestions come from three inputs: the asset map, personal constraints, and signs of local demand.

In the Tehran pilot, opportunity clusters function as a shared language for exploration, not as final occupations:

Table 4. Opportunity clusters

Opportunity Cluster	Suitable for Whom?	Possible Output
People-facing pathways	Drivers with signs of communication, trust-building, explanation, negotiation, or care	Local service, sales, support, care, or customer-facing opportunities
Urban operations pathways	Drivers strong in organization, scheduling, follow-up, and field problem-solving	Coordination, light logistics, local operations, or task management
Revival of prior skills	Drivers with previous experience that has become invisible	Reactivating technical, administrative, household, digital, language, or service skills

A concrete pathway is proposed only when two conditions are met: the driver shows fit through micro-experiences, and the local market offers a defensible employer, customer, project, credential, or income route. Each pathway must answer four questions: what work does it require, which assets does it use, what constraints does it have, and what is the first low-risk step?

To avoid staying at the level of broad clusters, the first-year pilot activates only two concrete, testable pathways. A third pathway is deferred to the second year after demand and implementation capacity are proven. The table below is a design estimate and must be validated with training and employer partners before implementation.

Table 5. Two pilot pathways (design estimate)

Pilot Pathway	Demand Signal before Activation	Entry Condition / Personal Asset	Training / Credential	Trial Experience and Economic Output
Light installation and service for home appliances	Agreement with shops, service networks, or local repairers for trial projects	Technical background, basic tools, or interest shown in micro-experiences	20-30 hours of practical training and possible TVET/partner assessment	Supervised task, work sample, and gradual supplementary income
Customer support, sales, and local business communication	Local businesses express need for part-time support, follow-up, or field sales	Explanation, trust-building, follow-up, and respectful communication	12-20 hours in ethical sales, light CRM, and customer communication	Short support/sales project with transparent payment and tracking

4.4. Stage Three: Micro-Experiences Instead of Deterministic Tests

Interest and personality tests can start a conversation, but they should not determine a person's occupational future. DTT therefore uses micro-experiences: short, real, low-cost exercises that simulate part of each opportunity cluster.

These experiences allow the driver to touch a pathway before paying for training or leaving current income. They also generate behavioral evidence and operationalize the effectuation principle of affordable loss. Initial feedback can be AI-supported, but high-risk or ambiguous decisions are escalated to human guidance as described in Section 4.8.

4.5. Stage Four: Pathway Choice and Learning Contract

After several weeks of exploration and micro-experiences, the system provides a simple report with four elements:

- abilities that showed positive signs across several activities;
- areas requiring further practice;
- pathways more compatible with the person's time and financial constraints;
- options that are currently unsuitable because of cost, time, or weak demand.

Together with a mentor, the driver creates a short "learning contract": a non-legal plan that defines what they will test over the next six to twelve weeks, how much time they will allocate, what support they will receive, and what signals will mean continue, change direction, or stop. The goal is gradual transition, not a sudden and risky leap.

4.6. Stage Five: Demand Bridge; From Learning to Opportunity

This is where DTT differs most clearly from a learning app. Success is not measured by audio files listened to or courses completed. The final criterion is whether the driver gains a real economic option.

The demand bridge has four channels:

Table 6. Demand-bridge channels

Channel	Function	Rule and Output
Participating employers	Assess real market need and define projects/internships	A pathway activates only with defensible demand; output is less demand-free training.
Credentialing and RPL	Turn informal experience into skill evidence	Assessment is practical, contestable, and independent of platform ratings; output is a transferable skill profile.
Projects and work-based learning	Test a real environment before job change	Projects are short, transparent, and do not cut off primary income; output is lower risk for both sides.
Ethical weak ties	Voluntary use of peers, mentors, and local businesses	Passengers are not part of the pilot; output is a safe referral, mentor, or income opportunity.

This capability is tested in a limited and controlled way during the pilot. Before expansion, consent from both sides and behavioral effects will be evaluated.

4.7. Training Voucher and Learning Wallet

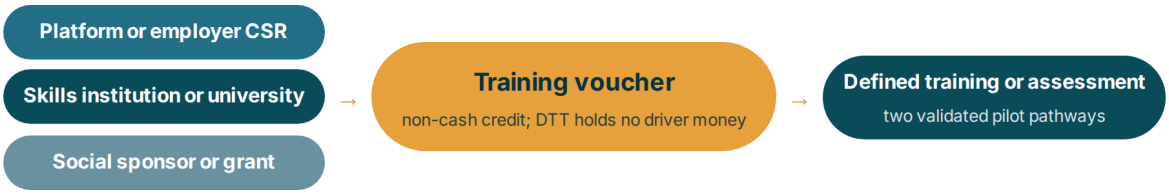


Figure 4. Voucher-based training support - discovery, micro-experiences, and initial guidance are always free; automatic deductions from platform income are not allowed in the pilot

The training wallet is designed so that cost does not prevent starting. The basic rule is clear: pathway discovery, micro-experiences, and initial guidance are free for the driver. In the first-year pilot, DTT does not charge drivers and does not hold user money. Training support is provided as a non-cash voucher or credit funded by a sponsor, university, employer, platform, or skills institution.

In the pilot, automatic deductions from platform income are not allowed, even with user consent, because they increase financial pressure, consent ambiguity, and platform dependence. After safety and impact are demonstrated, more complex financial models such as a portable wallet

can be considered only with legal review and independent oversight. Non-payment must never reduce a user's basic access.

Voucher sources may include the platform, employers, skills institutions, universities, or social sponsors. Implementation details and the financial model are presented in Chapter 6. The training credit is used only for a defined training or assessment cost and is not a general revenue source for DTT.

4.8. Human Layer and Referral System

DTT does not try to replace human relationships with AI. Technology handles repeated tasks such as content introduction, initial responses, reminders, and personalization, but high-stakes decisions are referred to people.

The human layer has three levels:

Table 7. Human referral levels

Human Level	Role	When It Intervenes
Peer guides	Experienced or retired drivers who support onboarding and motivation	Start of use, loss of motivation, or tool confusion
Pathway mentors	Domain specialists for pathway choice, portfolio review, and professional problem-solving	After micro-experiences or before training/project entry
Case managers	Referral of users with more complex barriers to appropriate services	Debt, family pressure, access barriers, or financial/legal/mental-health concerns

Human guides intervene when there is a high-risk decision, ambiguous result, sensitive work sample, employer dispute, psychological pressure, or financial/legal issue. The system must know when not to answer and instead refer.

Chapter 5

Usability and Design

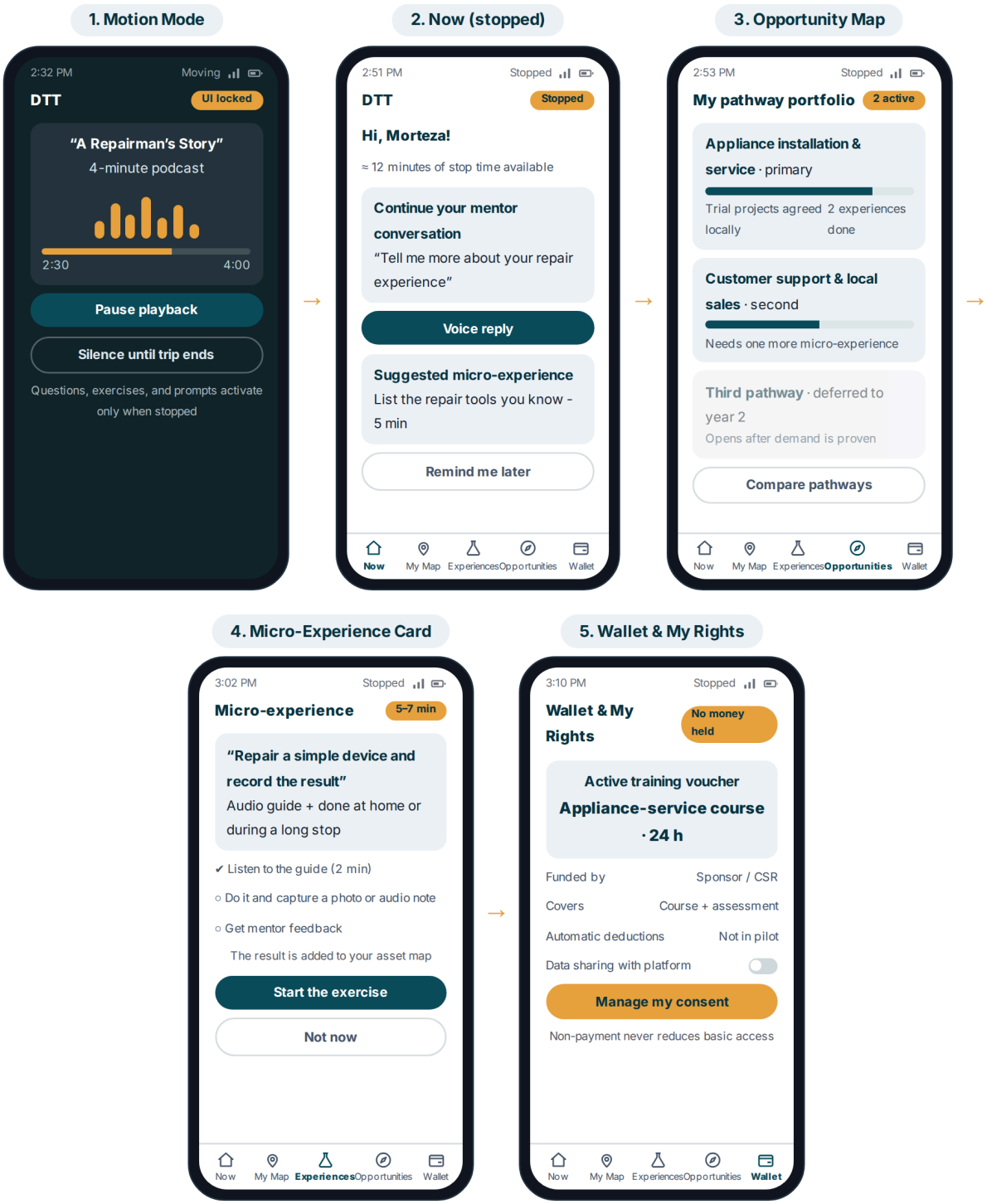


Figure 5. Prototype of the five core screens - the user journey from Motion Mode to the training voucher; each screen carries a single primary decision; values are illustrative

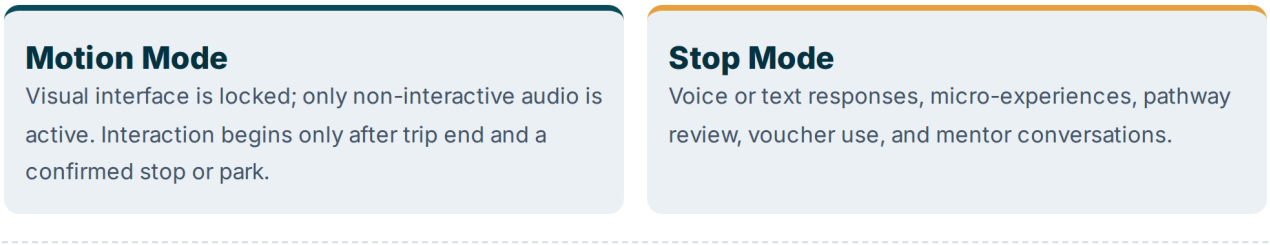


Figure 6. DTT's two interaction modes - a clear safety separation between motion and stop

DTT's design must fit the rhythm of driving, safety requirements, and users' access constraints. The design summary is shown below.

Drivers' time is fragmented across driving, waiting, moving without passengers, short breaks, and family responsibilities. DTT therefore cannot rely on long, regular training sessions. The user experience must distinguish between "moving" and "stopped" and must not turn driving time into learning time at the cost of distraction.

Table 8. Design decisions

Design Area	Core Decision
Safety	While moving, the visual interface is locked and only non-interactive audio is active; interaction is allowed only after trip end and confirmed stop/park.
Two user modes	"Moving" is for listening; "stopped" is for responses, micro-experiences, pathway review, voucher use, and mentor conversation.
Main interface	Five sections: Now, My Map, Experiences, Opportunities, Wallet, and My Rights; each page has one primary decision.
Mentor tone	Realistic, non-judgmental, controllable, and without promises of guaranteed success.
Low-literacy or underserved users	Voice onboarding, large buttons, short text, read-aloud support, human help, and practical evidence instead of formal resumes.
Weak internet or devices	Lightweight version, compressed audio, selective download, offline playback, and user-approved sync.
Accessibility	Screen reader support, adjustable contrast and text size, transcripts for audio, and voice commands while stopped.
No coercive design	No daily streaks, penalties, or rewards for interaction while driving; users control silence and content type.

Required prototypes	Moving-mode screen, opportunity map, micro-experience card, training voucher, and demand bridge diagram.

The pilot safety protocol is staged: first usability testing while stationary, then controlled safety testing, then limited release of passive audio, and only after independent review, field release. A zero-speed signal alone is not enough to activate interaction; interaction begins only after the ride has ended and the user confirms safe stopping.

Data governance is part of product design, not a legal appendix. The table below summarizes the main data flows.

Table 9. Data flows and protection

Data	Purpose	Access	Protection and Deletion
Driver voice/text response	Asset map and testable pathways	User, authorized mentor, minimal evaluation team	Encryption, consent-based transcription, deletion of raw audio
Movement/stopped status	Prevent risky interaction	Product system; no employer sharing	Safety only; no ranking
Income range and financial pressure	Avoid incompatible recommendations	User and authorized guide	Minimal self-report, editable and deletable
Micro-experience and work sample	Assess readiness and skill evidence	User, mentor, and pathway partner with case-specific consent	Case-specific sharing; no default platform access
Preference signals	Discover interests and career hypotheses	User and authorized mentor	Visible, editable, disableable, and deletable

DTT collects no passenger data, records no rides, does not train models on participant data without separate consent, and creates no hidden score about personality or occupational worth. Learning data is separated from platform data. Employers or training partners can access only the evidence that the user approves for a specific opportunity.

Chapter 6

Implementation Plan

6.1. Pilot Logic

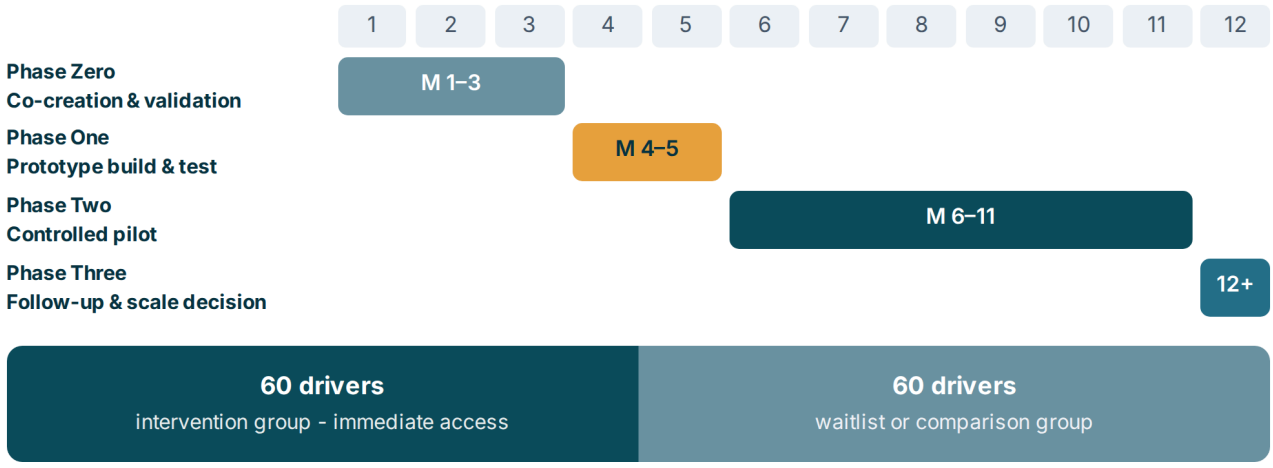


Figure 7. The twelve-month Tehran pilot cycle and the 120-participant study design (prototype tested with 20–30 drivers in Phase One)

The first-year pilot tests a minimum, controlled intervention: discovery and asset mapping, micro-experiences, and human-reviewed connection to two validated occupational pathways. The aim is not to prove large-scale impact, but to determine whether DTT is usable, safe, trustworthy, and able to connect drivers to real opportunity. In this year, complex portable accounts, automatic deductions, full RPL, and passenger-based networking are not implemented. The full cycle is twelve months: three months of preparation, two months of prototype testing, six months of intervention, and final follow-up.

The main study is designed for about 120 drivers in Tehran: around 60 in the intervention group and 60 in a waitlist or comparison group. If random allocation is ethically and operationally feasible, the waitlist group will be randomized. Otherwise, the pilot will be reported as a phased pilot with baseline and follow-up comparison, not as a definitive causal trial. Before that, the prototype is tested with 20 to 30 drivers. These figures are chosen for a lightweight pilot and are not intended to provide the statistical power of a large impact study.

6.2. Phase Zero: Co-Creation and Demand Validation

In months 1 to 3, the project does not begin with software development. It first validates the problem, two opportunity pathways, and real market demand. Activities include a small workshop with diverse drivers, interviews with 8 to 12 employers or service networks, negotiation with one or two training/credentialing institutions, and design of data and safety protocols. The output is a demand map; no training pathway enters the pilot without defensible demand.

6.3. Phase One: Prototype Development and Testing

In months 4 and 5, a minimum version is tested with 20 to 30 drivers. It includes voice onboarding, movement/stopped detection, passive audio content, asset mapping, micro-experiences, a lightweight mentor dashboard, consent settings, and training vouchers. The goal is not to measure economic impact or the independent effect of AI, but to test safety, comprehensibility, data usage, and drop-off points.

6.4. Phase Two: Controlled Pilot

Figure 8. Target funnel for the intervention group - figures are operational targets, not claims of guaranteed impact

In months 6 to 11, about 60 drivers in the intervention group enter the full pathway: discovery, exploration, micro-experience, pathway choice, learning contract, and limited connection to training, projects, or referrals. Not everyone is expected to enter training. The target funnel is: 60 entries, 45 completing discovery, 35 completing micro-experiences, 25 choosing a pathway, 20 to 22 entering training/projects, and 18 valid economic opportunities.

6.5. Phase Three: Follow-Up and Scaling Decision

In month 12 and three months after the intervention, short-term results and persistence are assessed. The final decision is made for each component separately: continue the voice discovery service, keep or remove opportunity pathways, adjust the training voucher, and expand or stop voluntary networking.

6.6. Three-Year Roadmap

Table 10. Three-year roadmap

Period	Scope	Main Goal	Decision Point
Year 1	Tehran; about 120 participants in evaluation	Prove safety, real use, and limited opportunity connection	Continue only if pilot thresholds are met
Year 2	Expansion in Tehran and limited entry into two other cities	Stabilize high-demand pathways and employer agreements	Cover part of operating cost through institutional revenue
Year 3	Multi-city network and transfer preparation	Standardize the model and localization package	Decide on expansion across platforms or comparable countries

6.7. Partners and Their Incentives

Table 11. Partners and incentives

Proposed Partner	Role	Readiness Needed before Implementation	Incentive
Driver communities and local channels	Trust-building, recruitment, and peer guide selection	At least one non-exclusive recruitment channel	Representation of driver interests and reduced distrust
Transport platforms	Outreach, recruitment support, and financial participation with data consent	Useful but not required; no default access to learning data	Better driver experience, lower burnout, and CSR
TVET and credentialing institutions	Practical assessment, testing, and limited certification	At least one training partner for each pilot pathway	Extending skills systems to informal workers

University or research institute	Evaluation design and ethical oversight	Independent evaluation partner before main recruitment	Policy evidence generation
Employers and business networks	Define standards, projects, internships, or jobs	Several trial opportunities for each active pathway	Access to screened workers
Foundations and CSR programs	Fund basic training vouchers	Financial or in-kind commitment so drivers are not charged	Measurable social impact

DTT must remain implementable without formal platform participation. In that case, recruitment can use driver communities, car-service centers, local channels, and peer referrals.

6.8. Governance and Implementation Team

The pilot needs a small secretariat: program manager, product manager, technical/data lead, pathway and training lead, employer network lead, user operations, data protection, and an independent evaluation team. The steering group should include drivers, a skills institution, employers, the product team, and an independent researcher. If a platform participates, it is only one member and must not control data or the project's direction.

6.9. Resources and Financial Model

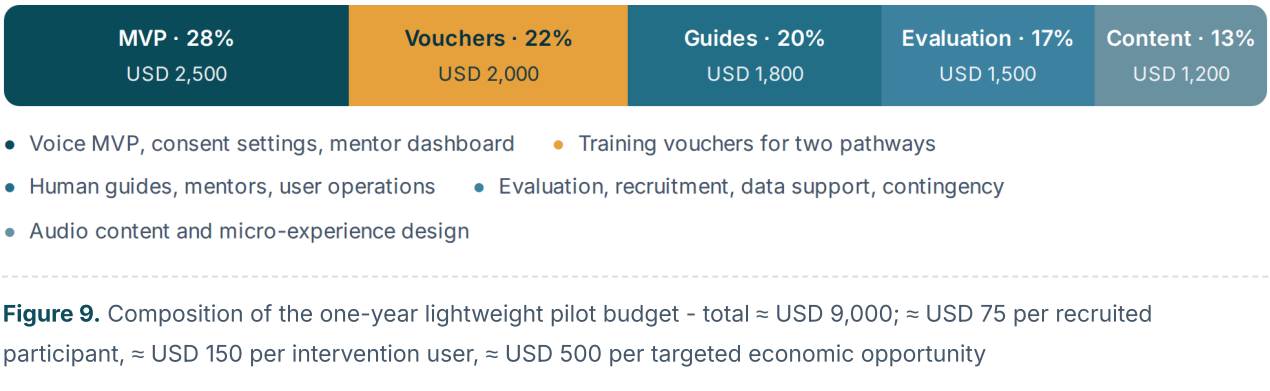


Figure 9. Composition of the one-year lightweight pilot budget - total ≈ USD 9,000; ≈ USD 75 per recruited participant, ≈ USD 150 per intervention user, ≈ USD 500 per targeted economic opportunity

The lightweight pilot budget is calibrated to the Iranian context and covers only what is necessary to test the core hypotheses. It does not fund a full product, scaling, or a broad training network. The baseline assumption is that part of product development, content design, and evaluation is covered through in-kind contributions from the team, university, or training partners.

Table 12. Lightweight pilot budget

Cost Item	Approximate Budget
Voice MVP, consent settings, and lightweight mentor dashboard	USD 2,500
Audio content, podcasts, and micro-experience design	USD 1,200
Human guides, mentors, and user operations	USD 1,800
Limited training vouchers for two pilot pathways	USD 2,000
Evaluation, recruitment, data support, and contingency	USD 1,500
Total Lightweight Pilot Budget	**USD 9,000**

Financial principles are separate from the cost table: discovery, micro-experiences, and initial guidance are free for drivers; DTT does not hold driver money in the pilot; vouchers are used only for specified training or assessment; and post-pilot funding may come from platform contracts, employer payments for successful recruitment, skills/municipal/CSR budgets, or outcome-based training partnerships.

To cover pilot costs, financing should be multi-source so that the project does not depend on one sponsor.

Table 13. Financing sources

Financial / In-Kind Source	Role in the Pilot	Status
Prize or research grant	Part of development, evaluation, and operations	Prospective
Team in-kind contribution	Product development, experience design, and project management	Available from the team
University / research institute	Research space, evaluation, and academic credibility	Requires agreement
Platform or corporate CSR	Training vouchers and recruitment support	Prospective and non-exclusive
Employers / training providers	Trial projects, training discounts, or practical assessment	Requires pathway-level agreement
Skills or municipal institution	Credentialing or access support	Requires negotiation

Unit economics must be visible from the beginning. With a USD 9,000 budget and 120 participants, the cost per recruited and assessed participant is about USD 75. If 60 enter the full intervention, the cost per intervention user is about USD 150. With a target of 18 valid economic opportunities, the cost per economic opportunity is about USD 500. If the economic output falls below this threshold, the pilot is not cost-effective enough for Iran and the pathways, vouchers, or mentoring model must be redesigned. The initial operating assumption is one human guide for about 30 to 40 active users, with complex cases referred to specialist mentors.

Chapter 7

Feasibility, Evaluation, and Risk Management

This chapter shows how DTT moves from concept to an implementable pilot. It first assesses technical, operational, behavioral, and institutional readiness, then presents evaluation indicators, scaling thresholds, and a risk register so it is clear when the project should continue, be revised, or pause.

7.1. Pilot Feasibility

Pilot feasibility follows PMI logic as a stage-gate check: before entering the pilot, scope, stakeholders, deliverables, measurement, and risks must be ready (Project Management Institute, 2021).

Table 14. Feasibility readiness

Dimension	Readiness Evidence	Passing Criterion	Decision if Weak
Technical	Voice MVP, movement detection, lightweight dashboard, minimal data storage	Stable operation without increased safety risk	Remove risky feature
Operational	Two opportunity pathways, independent recruitment, clear roles	Service flow and partners are defined	Downsize or change partner
Stakeholders	Driver, guide, training provider, employer, and support institution defined	Consent, data rules, and complaint channel ready	Stop recruitment until protocol is complete
Behavioral	Content is short, voluntary, and user-controlled	Real use appears in early testing	Redesign voice experience
Measurement	KPI, baseline, waitlist group, unit economics, and follow-up defined	Required data can be collected without privacy breach	Remove ambiguous indicator
Risk	Main risks have owners, warnings, and responses	High risks have active responses	Delay pilot

7.2. Evaluation Indicators

The table below shows the pilot's main KPIs from registration to economic and safety outcomes.

Table 15. Evaluation indicators

Measurement Area	Proposed KPI	Pilot Target	Required Data
Access	Registration and onboarding	120 recruited; 60% onboarding completion in intervention group	Product and consent data
Equity of access	Low-income, women, and access-constrained users	No severe entry/use gap	Anonymized self-report
Engagement	Weekly voluntary use	Meaningful use without coercion	Logs and short survey
Discovery	Profile, asset map, preference signals	About 45/60 intervention users	Voice, feedback, basic finance data
Micro-experience	Two micro-experiences completed	About 35/60 intervention users	Product and mentor data
Pathway choice	Focus pathway and learning contract	About 25 intervention users	Pathway report, mentor confirmation
Training and connection	Training, project, or internship entry	20-22 intervention users	Course/project/referral records
Primary economic outcome	Verified project, work, internship, or net income gain	18 valid economic opportunities	Follow-up and partner verification
Agency	Real options and perceived control	Improvement from baseline	Short pre/post survey
Primary safety outcome	Moving-mode interaction, distraction, accident, or near miss	No increased risk vs. baseline/comparison	User report, logs, monitoring
Human quality	Human guidance at sensitive points	Escalation in risky or ambiguous cases	Mentor/referral dashboard

This evaluation measures the full DTT service package: voice mentor, micro-experiences, human guidance, training voucher, and demand bridge. The first-year pilot is not designed to isolate the independent effect of AI. The primary economic and safety outcomes are registered before final

recruitment so that indicators are not changed after results are known.

7.3. Criteria for Moving to Scale

The table below defines minimum thresholds for continuation, revision, or stopping after the pilot.

Table 16. Scaling criteria

Decision Criterion	Minimum Threshold for Continuation	Decision if Not Met
Safety	No meaningful increase in distraction or risk reports while driving	Stop or limit moving-mode content
Real use	At least 60% of the intervention group completes discovery	Redesign onboarding and audio content
Micro-experiences	At least 40% complete two micro-experiences	Simplify exercises and reduce time per task
Opportunity connection	20-22 enter training/project and about 18 valid economic opportunities are created	Revise pathways, demand map, and voucher/mentoring model
Unit economics	Cost per economic opportunity around USD 500 or less	Reduce mentoring cost, increase partner share, or stop low-yield pathway
Equity	No severe gap for low-income or low-literacy users	Increase human support and baseline subsidy
Demand quality	Acceptable satisfaction among users and employers	Stop weak pathways and negotiate new partners
Data governance	No serious violation of consent, data sale, or punitive use	Stop data sharing and revise protocol

7.4. Risk Register

DTT uses a PMI-style risk register to prioritize pilot risks, responses, owners, and warning signs (Project Management Institute, 2019).

Table 17. Risk register

Priority	Risk	P / I	PMI response & designed action	Owner	Warning signal
High	SAFETY Driver distraction	**M / VH**	**Avoid/mitigate** - Stop-only interaction; controlled safety tests	Product/safety	Near miss or use while moving
High	DATA AND RIGHTS Privacy breach or passenger data capture	**L / VH**	**Avoid** - No passenger data; consent; minimization; raw-audio deletion	Data lead	Complaint or unclear consent
High	PLATFORM GOVERNANCE Punitive use of learning data	**M / H**	**Avoid** - Separate learning data; no default platform access	Governance committee	Partner access request
High	LABOR MARKET No real demand for pathways	**M / H**	**Mitigate** - Validate demand first; stop weak pathways	Market lead	Few project/employer links
High	WORK ETHICS Trial work becomes unpaid labor	**M / H**	**Avoid/mitigate** - Set duration, output, pay, and exit rights	Market/ethics lead	Complaint or unpaid task
Medium	FINANCIAL Training creates financial pressure	**M / M**	**Avoid/mitigate** - Free discovery; non-cash voucher; no income deduction	Finance lead	Low-income drop-off
Medium	FINANCIAL Cost per opportunity exceeds USD 500	**M / H**	**Mitigate** - Cut low-yield costs; add partner funding; improve conversion	Finance/market lead	Unit cost rise
Medium	BEHAVIORAL Low driver participation	**H / M**	**Mitigate** - Short audio, podcasts, user control, gradual rollout	Product team	Low discovery completion
Medium	AI Wrong or opaque recommendation	**M / H**	**Mitigate/transfer** - Editable hypotheses, human review, escalation	AI/guidance team	Complaint or review request
Medium	EXECUTION Dependence on one partner	**M / M**	**Mitigate** - Multiple recruitment and delivery channels	Pilot manager	Delay or withdrawal
Medium	QUALITY Weak course or mentor	**M / M**	**Mitigate/transfer** - Vet providers; monitor outcomes and satisfaction	Quality lead	Low satisfaction
Low	EQUITY Exclusion of vulnerable groups	**M / M**	**Mitigate** - Track gaps; adapt design; co-create with diverse users	Evaluation lead	Completion gap
Low	MACRO ECONOMY Inflation or exchange-rate volatility	**H / M**	**Accept/mitigate** - Phase spending; use local resources; adjust costs	Finance lead	Unit cost increase

P / I = probability / impact: VH very high · H high · M medium · L low.

Chapter 8

Innovation and Scalability

8.1. Scalability

The stable core is:

Figure 10. The stable core of the model - preserved across countries, while localization layers (language, platform, opportunity clusters, certification, data rules, financing) change around it

This core is suitable for countries with three shared features: widespread platform work, a high share of informal or non-standard employment, and limited worker access to workplace training and career progression pathways. The model can therefore be tested in comparable urban economies, but transfer requires separate analysis of labor markets, data regulation, credentialing systems, and dominant platforms.

Transferring the model does not mean copying Iran's pathways. Localization layers include language and tone, platform type, opportunity clusters, credentialing systems, data laws, financing structure, and local partner networks. In one country, the entry point may be ride-hailing; in another, it may be motorcycle delivery, home services, small online sellers, or digital freelancers.

DTT's scalability is not simply about downloads. The model is scalable only if users can change platform, city, or employer without losing learning history, skill evidence, and training credit. For that reason, the core model must remain independent of a single platform and able to cooperate with multiple skills institutions, employers, and funders.

8.2. Innovation

DTT's innovation is not the invention of a completely new technology; it is the connection of scattered components into an operational chain. The proposal creates four shifts: from training to discovery, from personality tests to micro-experiences, from skill supply to demand bridging, and from forced exit from platforms to agency.

The proposal's three signature mechanisms are **voice discovery and user-controlled preference signals**, **micro-experiences for low-risk pathway testing**, and **voluntary, multi-source training vouchers**. These mechanisms have developmental value only when connected to demand bridges, transferable credentials, and human guidance; otherwise, the proposal would become an ordinary learning app.

Chapter 9

Conclusion

Figure 11. The DTT chain - from fragmented time to the power to choose

The future of work is not only about technology or job loss; it is about whether people can build options, make their skills transferable, and move from today's work toward tomorrow's opportunities.

DTT responds to several future-of-work challenges at once: platform work without progression, weak links between training and demand, invisible informal skills, unequal access to reskilling, and the risk of algorithmic systems reducing worker agency. It does not propose another generic course. It proposes a chain that understands the driver, makes existing assets visible, tests pathways at low risk, and connects the person to training, credentials, projects, employers, or customers.

If successful, DTT can help platform work become more than daily income. For some drivers, it may support gradual exit; for others, supplementary income, reduced dependence, a transferable credential, or a more informed decision to continue. Morteza may still drive, but if he can also take repair orders through a tested pathway, he no longer has only one option. That is the central promise of DTT: not guaranteed jobs for everyone, but a practical way to build real occupational choices in Iran and similar economies.

AI Use Statement

GPT-5.5 was used for English translation, language editing and structural revision in the Abstract and Chapters 1–9. It was also used to generate alternative formulations for interface descriptions and implementation tables. Fable 5 was used to produce visual layouts and data visualizations.

References

1. Autor, D. (2022). *The Labor Market Impacts of Technological Change*. NBER Working Paper 30074.
2. Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. (2018). *Digital Labour Platforms and the Future of Work*. International Labour Organization.
3. Christensen, C. M., Hall, T., Dillon, K., & Duncan, D. S. (2016). Know Your Customers' Jobs to Be Done. *Harvard Business Review*.
4. Card, D., Kluve, J., & Weber, A. (2018). What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations. *Journal of the European Economic Association*, 16(3), 894-931.
5. Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360-1380.
6. Gruber, M., & Tal, S. (2017). *Where to Play: 3 Steps for Discovering Your Most Valuable Market Opportunities*. Pearson.
7. International Labour Organization. (2018). *Women and Men in the Informal Economy: A Statistical Picture*.
8. International Labour Organization. (2024). *Global Employment Trends for Youth 2024*.
9. International Labour Organization. (2016). *Non-Standard Employment around the World: Understanding Challenges, Shaping Prospects*.
10. International Labour Organization. (2024). *World Social Protection Report 2024-26: Universal Social Protection for Climate Action and a Just Transition*.
11. International Labour Organization. *Algorithmic Management in the Workplace*.
12. Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice, and Performance. *Journal of Vocational Behavior*, 45(1), 79-122.
13. OECD. (2024). *OECD Employment Outlook 2024*.
14. Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26(2), 243-263.
15. SkillsFuture Singapore. *SkillsFuture Credit*.
16. Thaler, R. H., & Benartzi, S. (2004). Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving. *Journal of Political Economy*, 112(S1).
17. World Bank. (2023). *Working Without Borders: The Promise and Peril of Online Gig Work*.
18. World Economic Forum. (2025). *The Future of Jobs Report 2025*.
19. World Health Organization. (2011). *Mobile Phone Use: A Growing Problem of Driver Distraction*.
20. Snapp 1403 Annual Performance Report.
21. Statistical Center of Iran, Labor Force Survey and Household Income and Expenditure Survey.
22. Geneva Graduate Institute. (2026). *Geneva Challenge 2026: Rules, Regulations and Call for Proposals*.
23. Project Management Institute. (2019). *The Standard for Risk Management in Portfolios, Programs, and Projects*.
24. Project Management Institute. (2021). *A Guide to the Project Management Body of Knowledge (PMBOK Guide) - Seventh Edition*.