The Challenge of Creating Talent Marketplaces

Complexity, Understanding, and Consumer Expectations

It is hard to fix something complex if it is not understood at its core.
Imagining and building talent marketplaces is a laudatory goal.
But how that happens is not clear.
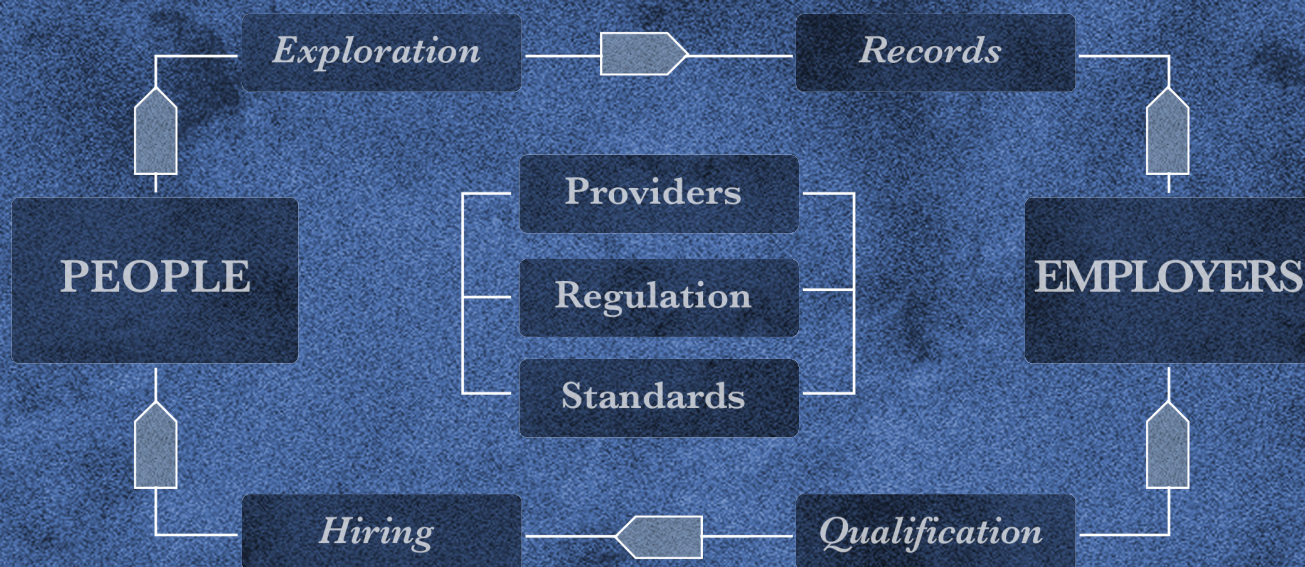
Exploration — *Records*

PEOPLE

Providers

Regulation

Standards

EMPLOYERS

Hiring — *Qualification*

Structural Constraints on Marketplace Adoption

Executive Summary (Introduction)

States, employers, and institutions across the United States face a persistent and growing paradox: millions of job openings coexist with millions of individuals who cannot clearly identify or access pathways to stable, well-paying employment. Despite decades of investment in education reform, workforce development programs, and employer partnerships, outcomes remain uneven, fragmented, and difficult to measure at scale.

This white paper argues that the core challenge is not a lack of programs, funding, or intent, but the absence of functioning talent marketplaces centered on individuals.

Education, workforce development, and employment systems operate as separate establishments with distinct rules, incentives, and data structures. Individuals are expected to navigate these systems without a unifying interface, while employers struggle to signal demand clearly and policymakers lack real-time insight into labor market dynamics.

At the same time, consumer expectations have shifted. In nearly every domain—travel, commerce, healthcare, and public services—digital platforms organize complexity and enable individuals to act as informed agents. Human capital systems have not undergone a comparable transformation. Artificial intelligence further accelerates this gap by reshaping job roles faster than traditional institutions can respond.

Drawing on marketplace models such as Expedia and Amazon, this paper proposes a new category of state-and sector-level talent marketplaces that integrate skills, credentials, training, and employment into a unified digital environment. These marketplaces would not replace existing institutions, but would provide the connective tissue that allows individuals, employers, and policymakers to interact through market signals and shared data.

Complexity, Understanding, and Consumer Expectations

It is hard to fix something complex if it is not understood at its core. Imagining and building talent marketplaces is a laudatory goal, but how that happens is far from clear. What is known are the desired outcomes: greater employment, better employment, and a broader concept of opportunity that includes non-college and alternative pathways. At a conceptual level, this makes great sense. Yet we live in a society, culture, and economy that rarely succeeds in solving complex problems through government action alone.

One reason is that the United States functions fundamentally as a consumer society with consumer expectations. In the age of the internet—and now on the doorstep of an AI-enabled future—individuals expect to know where to go to find what they need, whether that is a product, a service, healthcare, or increasingly, training and career advancement. These expectations are shaped by web platforms and applications that organize complexity behind the scenes while presenting clear choices to users. Human capital systems have not kept pace with these expectations.[1][2][3]

AI and the Shifting Employment Landscape

These challenges are unfolding as artificial intelligence disrupts long-standing assumptions about work. Few predicted that middle-management and analytical roles might be automated early, while many entry-level and human-intensive jobs would grow. As the employment landscape shifts, so too does the nature of education, training, and credentialing required to participate in it. Governments at both the federal and state levels recognize this reality, and the march is underway to add marketplaces to the mix.[4][5][6]

Marketplaces as a Concept—and Their Limits

Marketplaces are not new. For centuries, they have served as mechanisms for matching supply and demand in dynamic environments. This model works well in financial markets and in markets for goods and services. It works far less well when mediating between heavily regulated educational institutions, legislatively constructed agencies, and powerful nonprofits and philanthropies that can shape public debate without producing measurable outcomes.

Over time, substantial public and philanthropic capital has been expended across the opportunity ecosystem with relatively few durable results.[7][8][9]

Structural Constraints on Marketplace Adoption

A deeper structural analysis is required to determine whether the current opportunity landscape can support functioning marketplaces at all. At their core, marketplaces require people who know they exist, understand how to use them, and are motivated to participate.

Government agencies, philanthropies, and nonprofits struggle to achieve participation at scale. Adoption generally occurs through incentives or cultural shifts driven by the web, apps, and social media—domains not typically controlled by public institutions. Wellmeaning programs cannot substitute for mass, user-driven engagement.[10][11][12]

Why New Doors Are Hard to Open

Opening new pathways for opportunity in dynamic labor markets requires new kinds of doors. These doors are unlikely to be opened by Silicon Valley, where investment capital lacks patience for long-horizon human capital systems. They are unlikely to be opened by vendors, since courting individuals does not raise stock valuations. And they are not naturally opened by governments or foundations, whose track records show large investments with limited scalable outcomes.

Human Capital Stakeholder Cultures and Tiers

At the highest level, four stakeholder cultures dominate the human capital system: government, philanthropy, institutions, and employers. These cultures coexist across three largely independent tiers—education, workforce development, and employment— each with its own funding streams, rules, and performance metrics. The individual is expected to navigate this landscape without a unified interface or clear market signals.[13][14][15]

The Central Question: The Individual

The central question becomes one of navigation. How do individuals move through three establishments—education, workforce, and employment—while interacting with four stakeholder cultures that are not aligned with one another?

Why Dialogue Is Not Enough

The answer cannot be more dialogue, convenings, or white papers. Solutions must mirror how individuals already function in society: through web- and app-based systems that organize complexity and enable personal agency. This transformation has occurred in travel, commerce, healthcare, and public services. In education and employment, individuals are rarely their own agents unless they already possess sufficient capital to navigate the system.

Limits of AI Alone

Even with artificial intelligence, fragmented systems remain fragmented. AI does not resolve misaligned environments or entity boundaries on its own. Market structures must exist before intelligence can be effectively applied.

The Travel Marketplace Metaphor

Before platforms like Expedia or Kayak existed, travel agents assembled trips across airlines, hotels, and car rentals—industries governed by separate rules and systems. Expedia unified these categories into a single market structure centered on the individual traveler, with data flowing both to individual providers and across the entire system.

Applying the Model to Human Capital

A similar structure could exist for human capital, where individuals—represented by skills, credentials, interests, and experience—coexist alongside education, training, certification, and jobs in a unified marketplace. The agent would not be a counselor, but a digital platform aligned with labor market data and user behavior.

Why This Does Not Yet Exist

Such systems do not exist because institutions and agencies are regulated, philanthropy rarely builds mass platforms, commercial providers cannot justify the timelines, and only rare nonprofit or quasi-public examples—such as Wikipedia or Craigslist—have achieved scale.

Toward a Marketplace-Centered System

The solution likely lies in a new category of public-private or mission-aligned commercial systems that mediate across existing entities. Amazon did not adapt to legacy rules; it set new standards and data systems within which commerce operated. A similar model may be required for human capital.

NLET and a Ground-Level Approach

The National Laboratory for Education Transformation (NLET) has worked on these challenges since early philanthropic support, including an initial Gates Foundation grant. NLET is assisting the development of state-level and sector-level talent marketplaces designed to operate like consumer platforms. The only way to evaluate this model is to bring people into the market and observe outcomes—from input to output to results.
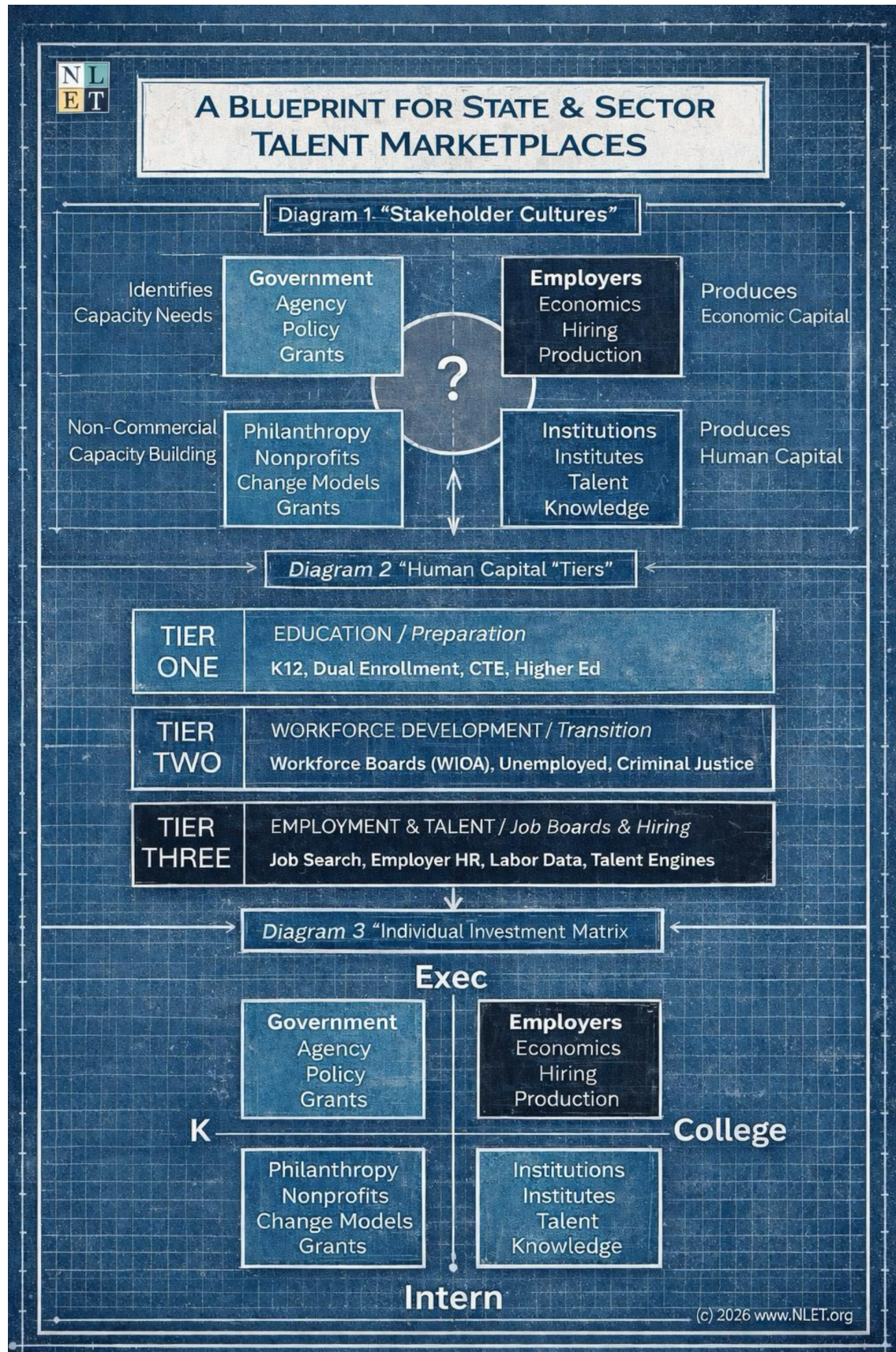
Graphic of the Problem Case (See the graphic below with three key diagrams):

1. Stakeholder Cultures: A Talent Marketplace would need to be the connective tissue between the stakeholders who finance human capital formation: governments, foundations, institutions and employers. However, they are not in a position separately or in concert to operate a marketplace which, by definition, needs many, many people to function as a market. Those people would need structures more akin to what is common on the Web or in apps and the incentives to visit. Stakeholders cannot do this.

2. Human Capital Tiers: Human capital production, as opposed to finance, is divided between a) education institutions, b) secondary producers (workforce boards, agencies, nonprofits) and c) employers. There is little or no crosstalk between them. If individuals complete college or gain certification, they can move toward employment. If they don't locate opportunities, they are left in, or out of, government or nonprofit programs. The workforce boards (WIOA) should provide these functions but they are not organized to follow individuals they service and there no consumer-oriented technologies to assist individuals once programs end.

3. Individual Investment Matrix: The matrix intersection which can be anywhere on this diagram points out where an individual is in terms of where their support, guidance or opportunity come from. Every person has a point on this matrix. The pathway programs could be tracked with every person indicated, times all people. This data analysis would serve individuals, providers, employers and state agencies. However, individuals do not own all of their data. A marketplace, by definition, would provide it to them.

A BLUEPRINT FOR STATE & SECTOR TALENT MARKETPLACES

Diagram 1 "Stakeholder Cultures"

Identifies Capacity Needs

Government
Agency
Policy
Grants

Employers
Economics
Hiring
Production

Produces Economic Capital

?

Non-Commercial Capacity Building

Philanthropy
Nonprofits
Change Models
Grants

Institutions
Institutes
Talent
Knowledge

Produces Human Capital

Diagram 2 "Human Capital "Tiers"

TIER ONE — EDUCATION / *Preparation* — K12, Dual Enrollment, CTE, Higher Ed

TIER TWO — WORKFORCE DEVELOPMENT / *Transition* — Workforce Boards (WIOA), Unemployed, Criminal Justice

TIER THREE — EMPLOYMENT & TALENT / *Job Boards & Hiring* — Job Search, Employer HR, Labor Data, Talent Engines

Diagram 3 "Individual Investment Matrix"

Exec

Government
Agency
Policy
Grants

Employers
Economics
Hiring
Production

K — College

Philanthropy
Nonprofits
Change Models
Grants

Institutions
Institutes
Talent
Knowledge

Intern

(c) 2026 www.NLET.org

References

1. Brookings Institution, *Understanding the Skills Gap* https://www.brookings.edu/articles/understanding-the-skills-gap-and-whatemployers-can-do-about-it/

2. Brookings Institution, *Skills and Opportunity Pathways* https://www.brookings.edu/research/skills-and-opportunity-pathways/

3. U.S. Chamber of Commerce, *Closing the Skills Gap* https://www.uschamber.com/workforce/closing-the-skills-gap

4. World Economic Forum, *The Future of Jobs Report 2023* https://www.weforum.org/reports/the-future-of-jobs-report-2023/

5. World Economic Forum, *Jobs Expected to Change* https://www.weforum.org/press/2023/05/future-of-jobs-2023/

6. McKinsey & Company, *Middle Managers and Generative AI* https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/middle-managers-hold-the-key-to-unlock-generative-ai

7. ManpowerGroup, *Talent Shortage Survey* https://www.manpowergroup.com/workforce-insights/expertise/talent-shortage

8. U.S. Chamber of Commerce Foundation, *Talent Pipeline Management* https://www.uschamberfoundation.org/talent-pipeline-management

9. Reuters, *Firms Bridge Skills Gaps* https://www.reuters.com/world/companies-bridge-skills-gap-training/

10. U.S. GAO, *WIOA Performance Reporting Challenges* https://www.gao.gov/products/gao-15-764r

11. U.S. Department of Labor, *WIOA Implementation Study* https://www.dol.gov/agencies/oasp/evaluation/wioa

12. The Century Foundation, *WIOA Reauthorization Shortcomings* https://tcf.org/content/report/wioa-reauthorization-fails/

13. Georgetown University CEW, *The Great Misalignment* https://cew.georgetown.edu/cew-reports/the-great-misalignment/

14. Urban Institute, *Apprenticeship and WIOA* https://www.urban.org/research/publication/challenges-expanding-registeredapprenticeship-wioa-title-i

15. Inside Higher Ed, *Credentials and Jobs Misaligned* https://www.insidehighered.com/news/2024/02/02/report-finds-misalignmentbetween-credentials-and-jobs

About the Author

Gordon Freedman is President and Founder of the **National Laboratory for Education Transformation** (www.NLET.org). He is a longtime innovator at the intersection of education, workforce systems, media, and technology, and the producer of *A Brief History of Time* with Stephen Hawking. Freedman has advised foundations, governments, and institutions on large-scale education-to-employment transformation for more than two decades.

Wikipedia: https://en.wikipedia.org/wiki/Gordon_Freedman

LinkedIn: https://www.linkedin.com/in/gordonfreedman/

About the National Laboratory for Education Transformation (NLET)

The National Laboratory for Education Transformation (NLET) is a nonprofit organization founded in 2011 to design, test, and scale new models that connect education, workforce development, and employment. NLET focuses on building data-driven, marketplace-based systems that improve individual agency, employer alignment, and policy insight. Its work spans state and sector initiatives, research, pilots, and public-private partnerships. Website: https://www.NLET.org