Skills-First: What Does It Mean for Me?

Contents

Preface

Globally advanced economies and developing economies are grappling with issues related to economic sustainability and competitiveness amidst externalities and domestic challenges. As a corollary, human capital development and future-skilling have come to the fore on the policy agenda. Often however, issues such as skills mismatch of the economically active and enterprises' inertia to transform their businesses pose challenges to advancing these policy objectives. For the most part, stakeholders have begun to realise that more needs to be done to close the nexus between the supply and demand of skills for the economy. This has resulted in numerous efforts across the globe focusing on skills-based and skills-first conceptions, practices and debates.

Singapore is one of the economies that is enthusiastic about building a skills-first economy. We, from the Office for Skills-First Practices, at the Singapore University of Social Sciences-Institute for Adult Learning, decided to convene global and local experts to kickstart the Skills-First Working Paper Series. The aim is to evoke discussion and identify progressive organisations and individuals to lead change and forge enduring skills-first practices. In particular, the Skills-First Working Paper Series emphasise an ecosystem approach to tackle interconnected structural inefficiencies. The line-up of the series is as follows:

#1 Skills-First: Are We There Yet? (Published on 19 May 2025)

#2 Skills-First: What Does It Mean for Me?

#3 Skills-First: What Does It Mean for My Organisation as an Employer?

#4 Skills-First: Policy and Impact

#5 Skills-First: Opportunities for Collective Action

#6 Skills-First: A Framework for Action

This second paper, "Skills-First: What Does It Mean for Me?", focuses on individuals' agency by delving into the potential barriers that hinder individuals from managing their career planning and upskilling to thrive at rapidly transforming workplaces. The paper further calls for an individual-centric career paradigm to redefine success in education and work, and highlights crucial questions to be addressed from an individual's perspective.

Each paper will be accompanied with a roundtable discussion to deliberate ideas and distil possible skills-first practices for prototyping.

We aim for the Skills-First Working Paper Series to serve as an important conversation starter to align thoughts on how to approach skills-first from an ecosystem perspective, as well as a springboard for experimentation of needle-moving solutions. We would like to express our gratitude to the co-authors who made time to pen the papers and the participants of the roundtable discussions for their generous sharing.

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Abstract

This paper addresses the profound transformations in the world of work, driven by rapid technological change, artificial intelligence, and demographic shifts, which necessitate a redefinition of how individuals learn, work, and plan careers. It highlights that traditional linear career paths are untenable as skill shelf life shrink, generating anxiety among workers. The paper proposes a skills-first lens that prioritises individuals' capacity to manage their productive assets i.e., experience, skills, proficiency, and networks, to acquire, hone, and apply skills pertinent to a dynamic work environment, viewing skills as valuable currency for career mobility.

The paper identifies four persisting and interconnected barriers hindering individuals from effectively upskilling and adapting, contributing to an "agency gap". These include: situational barriers (e.g., external work/life constraints and employer limitations); psychological barriers (e.g., internal attitudes such as fear of failure or negative self-concept); informational barriers (e.g., lack of clear labour market information or information overload); and societal barriers (e.g., gender stereotypes, age-related disadvantages, and the undervaluation of high-skilled trades and craft work).

To overcome these barriers, the paper advocates for an individual-centric career paradigm, emphasising lifelong, self-directed whole-of-life career self-management. This approach empowers workers to align their life-stage, values, interests, personality, and skills with evolving industry needs, supported by enhanced career-learning-skills development with employers and career counsellors and coaches. Ultimately, skills-first readiness through continuous review of life and career goals and proactive skill development is no longer optional in the longevity economy with rapid transformation.

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Introduction:

Workers in a Dynamic and Uncertain World

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Workers in a Dynamic and Uncertain World

The world of work has been experiencing profound transformations, marked by rapid technological change, demographic shifts, and globalisation. Automation and artificial intelligence (AI) are reshaping industries by displacing jobs and creating demand for new ones, while the COVID-19 pandemic and recent geopolitical tensions have accelerated these disruptions. These forces have redefined how people learn, work, and plan their careers (Organisation for Economic Co-operation and Development, 2025).

In Singapore, these global trends are amplified by local factors such as an ageing population, slowing workforce growth, and rising life expectancy (Gog et al., 2024). As a result, individuals are expected to remain economically active for longer periods, often across multiple careers and/or roles. Yet the shelf life of skills is shrinking, with some estimates suggesting that one's technical skills can become obsolete in less than five years (World Economic Forum, 2020). While Singapore's workforce today is highly educated and productive, with more than 40% of workers being degree holders (Ministry of Manpower [MOM], 2024), it may not equate to more resilient skills and knowledge in a dynamically changing work landscape (Organisation for Economic Co-operation and Development, 2024b). This mismatch between longer working careers and durability of acquired skills is generating anxieties among workers, including job insecurity, skills obsolescence, and uncertainty about reskilling or upskilling outcomes (Goh et al., 2025).

The traditional notion of a career as a linear journey within a single role or organisation has become increasingly untenable. Instead, today's workforce is expected to embrace a more fluid, self-directed path—one defined by adaptability, resilience, and lifelong learning. New work trends including the pervasive use of general-purpose technologies like generative AI and agentic AI, the rise of gig work, freelancing, and remote work, have transformed the boundaries, definitions, and spheres of the traditional career.

Today, workers often experience multiple episodes of transitions throughout their career-lifespan across job functions or roles. Workers can no longer leave their career-skills-learning planning entirely to their employers but instead need to think more about how to manage their own careers (Strohl et al., 2024).

These challenges underscore the urgency of reimagining individuals' career-skills-learning development through a skills-first lens. This approach prioritises individuals' capacity to manage their productive assets, i.e., experience, skills, proficiency and network of peers, in alignment with personal career aspirations (Gratton & Scott, 2016), and their ability to acquire, hone, and apply skills most pertinent to participate and lead change in a rapidly changing work environment (Gog et al., 2025).

A skills-first perspective should empower individuals to take greater ownership of their personal career choices by focusing on the acquisition, demonstration, and application of skills and capabilities (Fuller et al., 2022). In this context, skills are increasingly seen as a currency—valuable for career mobility, economic security, and personal agency. The ability to earn, demonstrate and apply skills by showcasing capability and delivering value to employers has become central for navigating today's dynamic job market.

This paper sets out to examine the challenges confronting workers in today's dynamic and uncertain world and explores the collective effort required to overcome these challenges. The concept of 'empowering individuals' will require us to dwell deeper into what barriers hinder their action. Additionally, the paper aims to reframe the notion of success as not mere pursuit of economic outcome. For example, viewing learning as not merely a tool for economic productivity but as a deeply personal, socially embedded journey, shaped by diverse values, interests, personalities and skills.

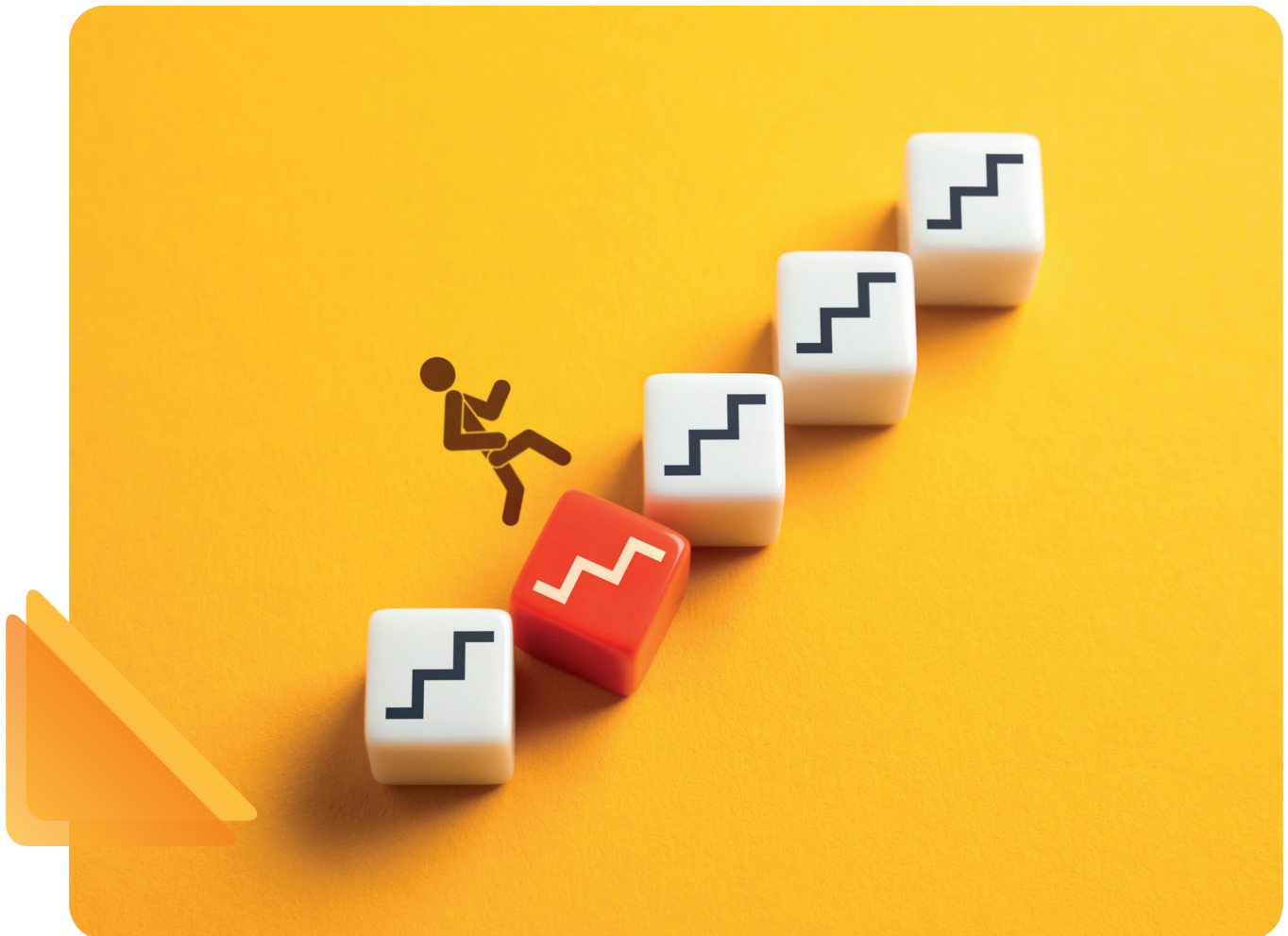> Skills are increasingly seen as a currency—valuable for career mobility, economic security, and personal agency.

What's Holding Individuals Back?

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Barriers to Skills-First:

What's Holding Individuals Back?

Preparing individuals for an impending transition to a skills-first economy will warrant an investigation into the persisting barriers faced in accessing learning and upskilling. These barriers can be categorised as situational, psychological, informational, and societal. Notably, these barriers often do not exist in isolation and are deeply interconnected. For instance, structural limitations can intensify psychological resistance, while informational gaps may reinforce societal norms that discourage continuous learning. Together, these factors contribute to an agency gap—a diminished capacity for individuals to take purposeful action toward their career development (Office for Skills-First Practices, 2025). However, for the purpose of this paper, we will describe each category independently to allow for clearer discussion and analysis.

2.1   Situational Barriers

Situational barriers refer to external conditions at work and in life that constrain the mind-space and the ability to review one's career-skills-learning options and participation to enhance positive outcomes in one's career and life.

Workers may not be aware of their productive assets but instead they habitually resort to outsourcing skills and career development to their employers (Randstad, 2022). The concern is that employers' business priorities (or the lack of capability) may not always align with individuals' career aspiration which in turn may impede individuals' career growth. Studies have shown that workers who have inadequate career-skills-learning planning would typically express uncertainty about what to upskill and their lack of time (Ratanjee, 2025; Teo & Chew, 2023). In contrast, workers who make effort to plan their career, skills and learning tend to progress better in their career and remain resilient against any unexpected adversities or shocks. A study on career mobility of 1621 Singapore workers between the age of 25 and 71 years showed that the median worker made 2.2 moves throughout his/her career, after accounting for age-specific bias for career duration.

In the same study which uses the Labour Mobility Index to measure career moves and progression, only 25% demonstrated thoughtful and deliberate moves that resulted in above average mobility-career outcomes in terms of both income and job hierarchy over the career lifespan (Toh, 2022).

Research in the future of work suggests that prevailing employers' talent management models could be a barrier or enabler to employees' participation in enhancing career life options. Studies show that workers in innovation-intensive workplaces are more likely to have the opportunity to participate in work-related learning, for the practical reason that work requirement is stronger. However, the chances to participate in innovation work activities are unevenly distributed, with managerial roles having the largest involvement while rank-and-file roles have the least involvement (Brown et al., 2018; SkillsFuture Singapore [SSG], 2025b). These findings call for a review of enterprises' talent management practices, some of which focuses on 10% to 20% of the workforce due to the perceived value they bring to the organisation, as compared to a more inclusive approach that seeks to empower a broader proportion of the workforce by developing their capabilities, skills and competencies (Sadik, 2023).

Considering such situational barriers, this paper seeks to spark dialogue and discussions about strategies to encourage every individual in the labour force to take stock of their productive assets, and where possible, to craft their own learning pathways and deliverables that create value for employers while simultaneously enhancing their long-term, lifelong outcomes. At the same time, employers could develop and use skills of employees more effectively through thoughtful work design and engage employees in innovation projects.

❓ Reflective Questions

1. **How can we create the mind-space and opportunities for individuals to review their productive assets at career intervals?**

2. **How can we avail milestone career-health[1] check to all in the workforce?**

One promising example of addressing such barriers is Stanford University's Life Design Lab (Burnett & Evans, 2016). The Life Design Lab, based on design thinking principles, offers a highly scalable approach to career and life planning by emphasising human-centred, iterative decision-making. Its modular curriculum and train-the-trainer model enable widespread adoption across universities and workforce programmes, while digital formats such as MOOCs and virtual workshops extend its reach to adult learners and professionals.

Singapore Public Service Division under the Prime Minister's Office coordinates and avails free one-on-one career coaching services and career planning workshops to all public service employees. The service is made possible through consistently training and developing a pool of volunteer career coaches drawn from public service officers. Public service officers use Workpal app to book career coaching sessions with trained career coaches. The career planning workshops allow public service officers to understand the skills they have acquired through work and certification, and afford the space to do forward planning of their careers.

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[1] Career-health refers to the overall well-being and sustainability of an individual's career.

2.2 Psychological Barriers

Psychological barriers refer to internal attitudes, beliefs and behaviours that cause adult learners to be reluctant to participate in upskilling or reskilling, such as a fear of failure, anxiety, a lack of motivation, stress, harbouring a negative career identity or negative self-talk that negates oneself from opportunities.

One reason adults may hesitate to learn is the misinformed belief that our cognition inevitably declines with age due to the natural ageing process. In reality, science of learning research shows that the brain can continue to grow and change even in adulthood (Walhovd et al., 2023).

While it is true that some mental abilities may slow down, this decline is not guaranteed or steady for everyone. In fact, new brain cells can still form (neurogenesis) in the part of the brain (the hippocampus) that helps us learn and remember (Chen & Goodwill, 2023; Spalding et al., 2013).

A second barrier relates to the influence of social cues. Psychological motivation is often shaped by the behaviours of those around us. When we see our peers investing in their growth, taking on new skills, or making bold career moves, it creates a powerful social signal: "If they're doing it, maybe I should too". But the reverse is also true: if no one in our circles is learning or talking about growth, the urgency to act diminishes.

Another psychological barrier is complacency—the mistaken belief that academic achievements or current job roles will continue to guarantee future success. Some individuals, particularly those who have held stable jobs or attained higher qualifications, may feel little urgency to upskill or adapt. This false sense of security can lead to inertia, where workers underestimate the speed at which job requirements evolve. Complacency can be just as limiting as fear because it creates blind spots that hinder readiness and response to disruption.

Science of learning studies suggest that the more tightly-linked the learning and career identity is with the tasks-on-hand, the lower the psychological pushback to participate (Billett et al., 2023; Kraiger & Ford, 2021). For example, in a study of small and medium enterprises in Singapore, it was found that the success of initiating and sustaining innovations such as 3D printing was primarily due to work-related learning, often involving interactions between workers, supervisors and/or managers, and co-workers, that allows workers to adapt and tailor the innovations to meet the specific needs of the workplace (Billett et al., 2023). Hence, workplace affordances are critical to practical skills development.

Career development research has indicated that individuals' self-concept has a positive impact on how they self-manage various career planning tasks and behaviour, which includes selecting training and influencing job decision effectiveness (e.g., Weng & McElroy, 2010). Skills engagement, upskilling or reskilling is a natural byproduct and occurrence in career conversations when individuals work with their career coaches or career counsellors. These conversations may involve raising awareness of one's critical thinking skills, whether for training needs analysis, job selection, or identifying learning paths where new skills can enhance performance and productivity in a specific sector. They may also address developing capability to monitor well-being, practise self-care, and adapt when experiencing work withdrawal symptoms that could lead to burnout. These are skills articulated in SSG's 16 Critical Core Skills which includes self-management.

Just as the world of work and the global economy goes through cycles, so does every individual who needs to muster and shape both their productive and psychological assets within themselves to navigate the uncertainties in today's labour market. This means our skills-first effort would also need to galvanise with enhanced life-stage career development and guidance capabilities that tailor to individuals' needs. For some individuals, a skills-first thrust would mean receiving guidance from the right mentor or career development professional trained to address the individual's skills-psychology continuum which may involve career counselling or career coaching.

Wenjie* had been in the same job for nearly eight years with no career growth due to consistent underperformance. He confided in his career counsellor that he had been stagnating in his career without career growth for years. After receiving a 12-month performance warning, he was moved from a permanent role to a lower-paying contract role, leaving him disheartened. Through career counselling, it became clear Wenjie had developed learned helplessness after years of repeated stressful experiences with no effective coping strategies. He had internalised a sense of powerlessness that eventually led to his demotion. With support, he began reframing his negative career beliefs and rebuilding his skills portfolio to regain confidence and performance.

Shahrul*, on the other hand, was a diligent and well-liked employee who regularly worked overtime to support his team. However, he was overlooked for promotion. Through career coaching, he realised that while he was reliable, he had not acquired new, value-adding skills. His peers, who had invested in digital tools and automation, surpassed him. Shahrul also lacked clarity on what to train for or how to align his strengths with future roles. His coach guided him through a 360-degree career stocktake and skills analysis. This helped Shahrul uncover his untapped potential, identifying a future path as a technical expert and results-driven leader. He began building communication and digital design skills essential for supply chain management.

Both Wenjie and Shahrul were blindsided, unaware of their internal career narratives and the shifting environmental demands. With the help of career practitioners, they gained clarity, self-awareness, and strategic direction. Their journeys reflect how a skills-first approach must integrate not only skills development but also well-being and identity work to support meaningful career progression.

* To protect the individuals' privacy, pseudonyms are used.

Beyond skills and competencies, an individual's identity—how they see themselves in relation to work—shapes their motivation, learning behaviour, and career choices. For many, career identity is tied to job titles, credentials, or long-held roles, which can create inertia when change is needed. Workers may resist upskilling or transitioning not due to a lack of ability, but because it challenges their sense of self. Identity work—understanding and reshaping how one sees their value, strengths, and potential—is a crucial but often overlooked part of career development.

In Europe, support for lifelong learning and careers is exemplified by the European Association of Regional and Local Authorities for Lifelong Learning (EARLALL)'s strategic plan from 2023 to 2038, which aims to promote upskilling and reskilling throughout an individual's life to meet the evolving demands of the labour market (EARLALL, 2025). The initiatives place a renewed focus on skills that enable individuals to craft new career identities for social mobility, opportunity matchmaking through study visits, job shadowing, experience exchange and even facilitating internationalisation through collaboration, knowledge exchange, and lifelong learning.

To ensure quality delivery of career services, the Lifelong Guidance 5.0 project was launched to enhance the skills of career guidance counsellors and their clients for the future, especially in digital skills and the use of digital tools (Lifelong Guidance 5.0, 2025). A new generation of counsellors will be equipped with future-ready competencies to address both the mindset and skills of learners, supported by online learning environments that curate targeted career learning activities.

This section highlights how psychological barriers such as low self-concept, lack of awareness of one's skills, negative self-beliefs, complacency and influence of social cues, can hinder adult learners from upskilling. Contrary to common misconceptions, evidence from science of learning research shows that the adult brain remains capable of learning and adapting. When learning is closely tied to one's career identity and job relevance, engagement improves. Career development plays a crucial role in bridging skills and mindset, supporting individuals in aligning personal growth with evolving workplace needs.

Reflective Questions

1. **How can we help individuals develop lifelong career identities and career adaptability?**

2. **How can workplaces create safe spaces for employees to explore life-stage career needs?**

2.3 Informational Barriers

Informational barriers refer to the lack of accessibility to authoritative and consumable labour market information about career and training options.

The individual may not be up to date with the fast-changing job requirement, for example, employers expect workers to be adequately capable in the use of AI-embedded apps. Although there are abundant resources in facilitating career-skills-learning planning, they are not well utilised by individuals.

In Singapore, education and career guidance are offered to students during their formative years, and career advice is also available to youths in institutions of higher education. For adults, career advisory services are offered by Workforce Singapore (WSG), National Trades Union Congress' Employment and Employability Institute (NTUC's e2i), and private sector service providers. SGEnable offers career advisory services to persons with disabilities.

There are also online services such as MyCareersFuture portal, MySkillsFuture portal, and Jobs-Skills Portal (SSG) which offer a variety of resources that assist individuals in their career-skills-learning decision-making. For example, the Skills and Jobs Mobility Dashboard on the Jobs-Skills Portal (SSG) is useful for individuals who are planning for career move, while the Job Requirements Dashboard is useful for individuals who are interested to evaluate their skills relevancy.

While Singapore has no shortage of career advisory services, the take-up rate among working adults remains lackluster. One possible reason may be the limited accessibility or visibility of these services. Increasing the availability of touchpoints, such as placing them near workplaces or incorporating them into the services offered by education and training providers, could help improve uptake.

Another aspect of informational barrier is the lack of insights on the contextual requirements for a new job role and the work context for career switchers. At times, this result in unsuccessful career switch that cause disappointment for both employers and career switchers. This is particularly important when programmes are designed for career transition. Could programme design simulate closely the real work environment? Should there be screening tools to minimise transition risk for both employers and individuals? Could workplaces offer work-attachment opportunities for career switchers?

As workplace requirements evolve rapidly, individuals should be proactive in acquiring and demonstrating skills that meet emerging demands. Beyond course completion, individuals can signal their capabilities by developing themselves as productive assets, for instance, through showcasing verifiable credentials, participating in industry-relevant projects, or contributing to applied work. Tools like the Careers and Skills Passport can support this process but their value depends on alignment with employer-recognised standards.

Ultimately, signalling is a two-way street. While individuals must learn to better communicate their evolving capabilities in a form recognised by employers, policy efforts should also facilitate clearer pathways for workers to understand and align with changing workplace needs.

This reciprocity reinforces the fact that career development is not just a personal undertaking but part of a dynamic exchange within the broader ecosystem of work (Tomlinson, 2017).

This section discusses informational barriers that can hinder individuals from engaging in training or career development due to a lack of accessible, relevant, and authoritative labour market information. In Singapore, while various public and private agencies provide training and career support, participation remains uneven, partly due to information overload and fragmented systems. The newly launched CareerHealth portal which hosts a collection of resources, tools and labour market insights show promise in improving skills signalling but their success depends on clear alignment with evolving employer needs. Effective career development requires both individuals, employers and institutions to participate in a shared, responsive signalling ecosystem.
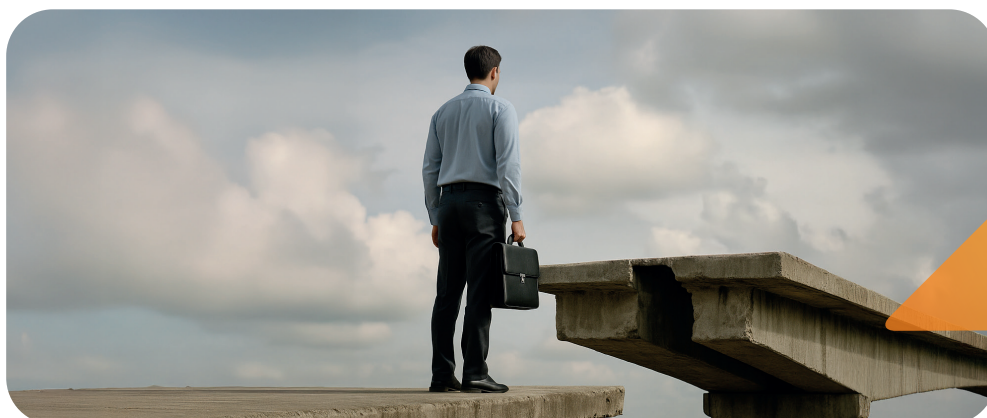
SSG's newly launched Careers and Skills Passport is a centralised, career record and skills repository system that consolidates individuals' careers and skills data. This tool holds promise for improving labour market signalling and enabling skills-first hiring. However, its effectiveness depends on a nuanced understanding of individuals' informational needs and a more seamless user experience.

Generation is a global nonprofit network that supports people to achieve economic mobility. They deploy a 7-step process that ensures employers' requirement are addressed, learners recruitment is based on intrinsics and efforts, a tight programme that builds profession-specific technical, behavioural and mindset for success, close post-programme follow-up with employer and trainees, and a data driven approach to measure return on investment.

NTUC's e2i is enhancing career-skills-learning planning through technological innovation and community outreach. Its newly launched AI-powered Virtual Career Coach draws on labour market data to analyse individuals' resumes and personal profiles, providing tailored job matches and course recommendations that enable more targeted career guidance. Additionally, e2i brings job opportunities and career advisory directly into the heartlands (neighbourhood) through initiatives such as the Heartland Job Portal and localised job fairs, making resources more proximate and visible for individuals.

Using advanced labour market analytics, the Burning Glass Institute has identified which credentials yield wage gains, facilitate career transitions, or lead to advancement, showing stark disparities between top and bottom-tier programmes. The report showed that while some credentials can be transformative, most fail to deliver promised outcomes, especially for underserved populations (Sigelman et al., 2025).

❓ Reflective Questions

1. **Can data and technology (AI-for-good) be deployed to trigger reminders to individuals for career-health check?**

2. **How can we design seamless and effective interventions to support individuals' career-skills-learning decision-making?**

2.4 Societal Barriers

Societal barriers such as language differences, discrimination, and stigma can limit participation in upskilling and reskilling.

Broader social contexts and norms can disadvantage some individuals over others. For example, female learners may feel uncertain or discouraged to take up courses in male-dominated fields. A study by LinkedIn Economic Graph Research Institute (2023) showed that among male dominated occupations, a skills-first approach would increase 10% of the female talent pool. New entrants to the labour market, back-to-work individuals, seniors and disabled workers may encounter difficulties in entering certain occupations or industries. Some mid-career and older workers may be less familiar with emerging skills such as generative AI and user experience (UX) design. To encourage these workers and boost their confidence, WSG's Career Starter Programme for fresh graduates and WSG's Career Conversion Programme can be reviewed to better support new entrants and career switchers to enter unfamiliar industries or roles, and align their skills with the demands of emerging sectors. This includes measures such as pre-screening job suitability and helping individuals to explore different career paths at various life stages.

Around the world, there are examples of strong career planning practices that support these transitions. Uniformed services like the military and police, for instance, often have well-structured systems to help personnel prepare for life after service. Singapore Ministry of Defence's Career Transition Resource Centre plays a key role in facilitating the transition of officers, providing them with career counselling and career coaching support. In the case of the Singapore Public Service Division, a suite of services including career coaching is available to over 154,000 officers to create a safe space for them to discuss career-skills-learning options (Yau, 2025). These examples highlight the importance of intentional, long-term career planning. Without deliberate planned support, mature workers are likely to feel that their many years of service is not recognised and appreciated. These interventions not only support veterans in finding meaningful work but also help employers to tap into a valuable and often underutilised talent pool.

Without deliberate planned support, mature workers are likely to feel that their many years of service is not recognised and appreciated.

A lighthouse example is the UK military Career Transition Programme which provides career support to help retiring military service personnel transition successfully to civilian employment. It highlights how tailored human resource management interventions can address the unique challenges that veterans face such as skill transferability, cultural adjustment, stereotyping and social stigma. Examples of effective human resource management practices include assigning mentors especially those with military backgrounds to guide veterans through workplace assimilation, using skills matrices that map the individual's military-acquired skills and competencies to civilian roles, offering guaranteed job interviews to uncover overlooked talent, and coordinating with public career services to create employment pipelines for long-term unemployed veterans (Flynn et al., 2025).

Another societal barrier is the persistent undervaluation of high-skilled trade and craft roles.

Some essential workers such as technicians, plumbers, chefs, crane operators, and aircraft mechanics are vital to daily life, yet their roles continue to be socially and economically under-recognised. In Singapore, a longstanding emphasis on professional careers has overshadowed the value of vocational career pathways.

One way to shift societal perceptions is by promoting entrepreneurship among trades and crafts workers, positioning them not just as employees but as skilled business owners and innovators. Supportive ecosystems such as advisory and mentorship from successful entrepreneurs and professional body representing the trade-craft, and platforms to market their services, can empower these workers to build sustainable enterprises. Celebrating and enabling trade-based entrepreneurship is one approach to elevate the status of skilled trades, foster economic diversity, and inspire a new generation to view craftsmanship as a viable and respected career choice.

This section highlights societal barriers that affect individuals' participation in upskilling and career transitions, such as gender stereotypes, age-related disadvantages, and the undervaluation of trade and craft work. While there are existing schemes like the WSG's Career Conversion Programme and structured support in the military and public service for career transitions, such practices are not yet widespread across the broader workforce. Youths, mid-career and older workers may still face confidence gaps and uncertainty when exploring unfamiliar or emerging job roles. International models, such as the UK's veteran career transition programme, reinforce the value of intentional, long-term planning, highlighting how structured and personalised interventions can support successful career shifts later in life. Additionally, persistent societal bias against vocational roles continues to undermine the contribution of high-skilled trades and craft-based workers. Promoting entrepreneurship among these individuals and creating supportive ecosystems can help to elevate their status and encourage broader participation in diverse career pathways.

❓ Reflective Questions

1. **What social norms or stigma might be discouraging certain groups of individuals from exploring new skills or careers?**

2. **What can we do to challenge the undervaluation of high-skilled trade and craft skills?**

An Individual-Centric Career Paradigm

An Individual-Centric Career Paradigm

A study by Sung and Freebody (2017) examined Delors' (1996) four pillars of lifelong learning in Singapore: *learning to know* (formal learning often linked to qualifications and mastering learning tools for the growth of future knowledge), *learning to do* (learning closely linked to vocational and professional needs as well as innovation and adaptation), *learning to be* (learning as personal growth not necessarily defined by economic gains), and *learning to live with others* (individual competence and resilience to social issues such as inequality, charity, and inclusion). The study found that compared with OECD countries, Singapore was above average in 'learning to know' and 'learning to do' but below average in 'learning to be' and 'leaning to live with others'. The lower scores for 'learning to be' and 'learning to live with others' suggest that compared to developed countries, learning in Singapore has generally been more focused on being productive agents in the economy and securing employment than on matters pertaining to learning for personal growth over the lifespan, for one's happiness and well-being, and to gain social skills such as respect for others and appreciating diversity. For the next bound of SkillsFuture, an individual-centric approach should therefore focus on individuals taking ownership of their personal productive asset, enhancing their career self-management, and attaining intellectual fulfilment, personal growth, career development, and overall well-being.

A 2017 study found that compared with OECD countries, Singapore was above average in 'learning to know' and 'learning to do' but below average in 'learning to be' and 'learning to live with others'.

An individual-centric career paradigm already exists in Singapore. The Ministry of Education has incrementally pushed the "joy of learning" narrative in mainstream education over the past decade. At the launch of SkillsFuture Credit in 2016, then Deputy Prime Minister, and now President, Tharman Shanmugaratnam, emphasised the importance of an individual-focused approach to lifelong learning:

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> It also does not matter where you start from. Whether you are a graduate or someone with a master's degree, or you started work straight after leaving school, it does not matter. SkillsFuture empowers all of us to go further. And to renew ourselves as we go through life. After all, no one can seriously tell what they will be doing ten or twenty years after leaving school. What we learn when we are young is just the start of a journey of personal learning and self-renewal. We adapt to changes in the job market, and we discover new strengths in ourselves as we go through life.
>
> (Shanmugaratnam, 2016)
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> "

Learning builds confidence, purpose, and communities, gains which are not captured by economic metrics but essential to social reproduction, with the potential to address poverty, inequality, and even global challenges like the climate crisis. These narratives, however, can be better translated into related policies and resources in the Singaporean context. A skills-first economy will compel us to redefine success in education and work. Traditionally, success has been equated with academic qualifications, job titles, and income. In an individual-centric paradigm, success in skills development and learning can include enhanced confidence, the ability to mentor others, or the satisfaction of personal interests and intellectual curiosity. This will have strong implications for policymakers on how learning outcomes are measured, the return on investment of course funding as well as manpower planning.

With the rise of non-linear career pathways and multiple transitions over the career (Katz & Krueger, 2017), workers can no longer rely solely on companies for their skills and career development. Contemporary perspective of individual's own career refers to a lifelong, self-directed process, involving the self-management of one's skills acquisition and career in an ever-evolving world of work (Canadian Education and Research Institute for Counselling, 2025; National Career Development Association, 2024). Workers need to be more agile and adaptable as they navigate the challenges they may face, taking control of their own skills and career development, and actively managing their career path. This requires individuals to be cognisant of their career values, interests, personality and skills or competencies (VIPS) in an evolving and unpredictable world of work. In a multi-portfolio career, a whole-of-life career self-management approach enables individuals to undertake a process of intentionally building, maintaining, and using various personal and contextual career resources through processes such as career-life designing, goal-setting, mapping the environment with their career VIPS and then monitoring and adapting their actions through co-occurring career actions over a period of time, and where necessary, with mental health support (Hirschi, 2020; Hirschi et al., 2022; Savickas, 2011). This approach dovetails with the National Mental Health and Well-Being Strategy launched in 2023. Together, it ensures that our workers are empowered with the necessary physical and mental resources to remain resilient as they acquire new skills for the future.

Career self-management, upgrading and government programmes that support career mobility are found to be among the key drivers of mobility (Toh, 2023). Workers who proactively future-proof their careers in skills-first readiness by whole-of-life career self-management can sustain their employability with good career options throughout their life course, supported by career development professionals to deliver these new frontiers of career capabilities and practice. Instead of reactive measures, deliberate strategies can assess, advance, and adapt to workers' personal and professional well-being at each stage of their career. Whole-of-life career self-management also enables workers to proactively leverage the opportunities and resources in the career ecosystem, and develop strategic career foresight with skills-first readiness. Mastering skills and competencies ahead of the curve can lead to career reinvention, new job roles, career satisfaction, and greater resilience and confidence in one's career regardless of what lies ahead. It is pertinent, therefore, for individuals to continually hone their career self-management skills and upgrade regularly in relevant skills and knowledge to ensure their employability, adaptability and career success.

In Singapore, mobility of workers has been shown to vary according to four main archetypes: Stable Achievers who achieve strong career progression like Adroit Achievers but with fewer job transitions, and Explorers who experience comparatively weak career progression despite making frequent job transitions, as with Early Careerists/Plodders who make few moves with comparatively weak outcomes (see Figure 1, Toh, 2023). These archetypes are distinguished by their agency and career self-management skills, involving developing, implementing and monitoring one's career goals and strategies: it is high among Achievers but weak among the other cohorts.

For certain cohorts of individuals that may face challenges in their career decision-making readiness (i.e., the ability to make appropriate career choices, taking into account external influences) and career self-management, career advisory support is critical in helping them to overcome barriers to agency, self-awareness, career goal setting, and other aspects of career self-management that are necessary for employability, adaptability and career resilience. It may be particularly helpful for workers in different moments in life, such as Early Careerists (early-stage career), Explorers (early- to middle-stage career), and Plodders (middle- to late-stage career) whose inadequate agency and decision-making readiness hinder their ability to achieve more successful career outcomes. Ultimately, equipping individuals with strong career self-management skills is crucial for enabling them to adapt to change, pursue meaningful opportunities, and sustain employability in a rapidly evolving labour market.
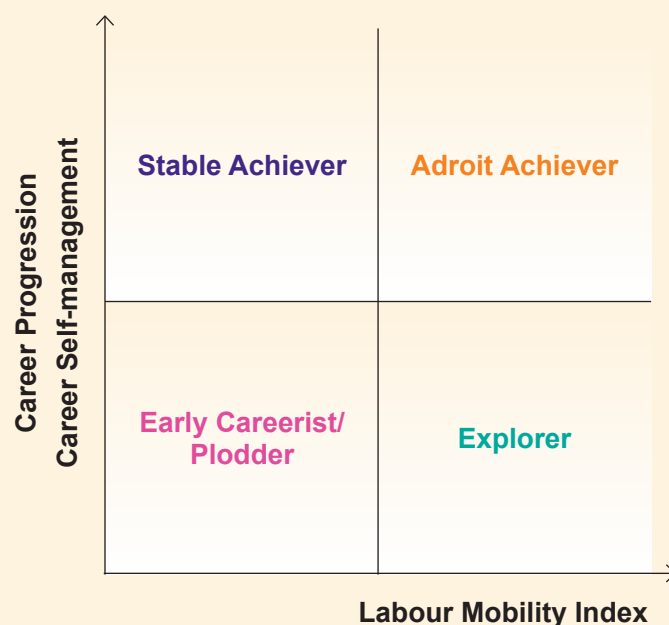

Figure 1: *Mobility Archetypes*
Source: Toh (2023)

Finally, we need to consider the perspectives of underserved groups which, despite various efforts to empower individuals to navigate their careers, continue to face systemic barriers that hinder their career development (Pitesa & Pillutla, 2019). These individuals include those from lower-income backgrounds, with caregiving responsibilities or who possess lower educational attainment, and may lack the time, resources or networks to actively engage in career planning. Despite the availability of government support schemes and training subsidies, such individuals may struggle to access or benefit from learning opportunities due to digital literacy gaps, information asymmetries, social barriers or competing life priorities. This highlights the need for a more inclusive and empathetic approach to career development—what some have termed as "compassionate meritocracy" (Tan, 2024) where merit is not viewed solely through performance or productivity, but through the lens of access, support, and structural disadvantage. By recognising the uneven starting points of individuals and providing tailored, targeted support, career development systems can become more equitable and better positioned to help every worker succeed (Organisation for Economic Co-operation and Development, 2024a).
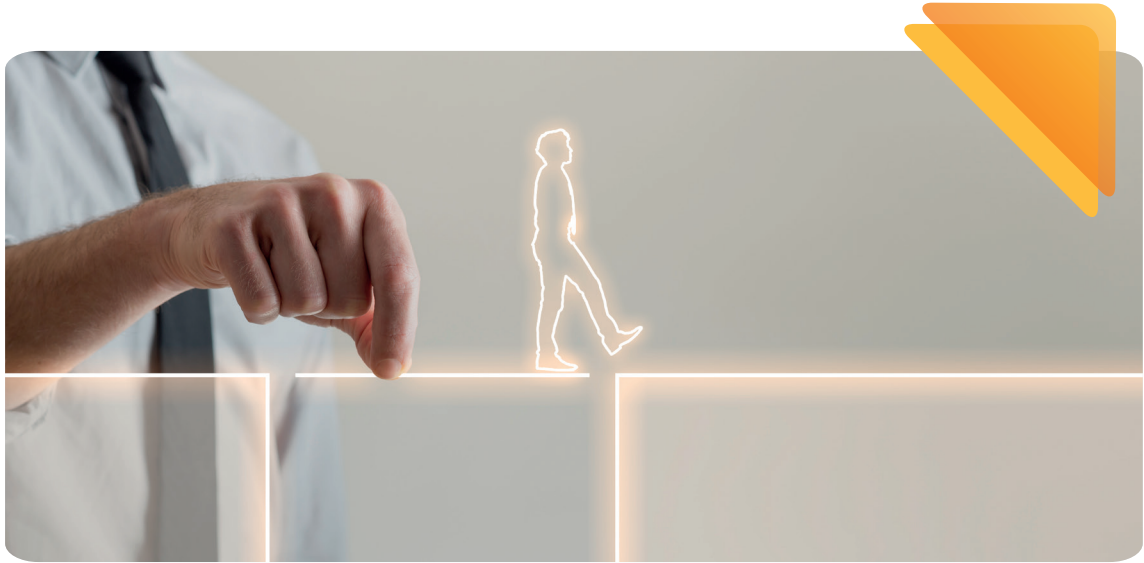

❓ Reflective Questions

1. **How can we re-imagine models of long-lasting individual capacity in learning and career planning, focusing on fostering adaptability, continuous learning, personal development, and individuals' VIPS?**

2. **What kind of coordinating mechanism is needed to support individual-centric career paradigm and practices?**

Conclusion

4

Conclusion

As Singapore reaches a decade in the SkillsFuture movement, emerging trends of greater job uncertainty and non-linearity in career pathways call for a skills-first approach to skills development that prioritises the acquisition, use and recognition of skills as a central aim, taking ownership to review and refresh one's productive asset; along with life-stage career development and career guidance where needed. In considering the meaning of the skills-first approach for individuals, this paper highlights the following crucial questions:

? Reflective Questions

1. **How can individuals be supported to take stock of their productive assets and craft personalised learning pathways?**

2. **What beliefs and psychological barriers limiting growth must individuals unlearn to embrace lifelong learning and career adaptability?**

3. **How can labour market information be made more accessible, personalised, and actionable for diverse learners?**

4. **What societal norms and structural biases must be challenged to embrace diversity of success?**

5. **How can supervisors, mentors and career development professionals be better equipped with the resources needed to support individuals' career-skills-learning planning?**

In the next bound of the lifelong learning movement, possessing skills-first readiness through continuous learning and developing in-demand skills will become the hallmark of career success, resilience, and employability. This is sustained by self-directedness in a whole-of-life career self-management. Individuals' career-skills-learning supported by career guidance professionals plays an important role in this approach, especially for individuals in the early stages of their career or who require help in navigating the myriad challenges impacting their life.

Singapore's strong tripartism relationship among the government, labour movement and employers is instrumental in driving the skills-first approach. For example, the government provided S$100 million to the labour movement in 2022 and a further S$200 million in 2025 for company training committees (CTCs) and CTC grant for business and workforce transformation, in recognition of the importance of industry-specific training and planning for enterprises' future while benefitting workers with wage increases, structured career development plans and skills allowances.

Many individuals today face the need (or desire) to switch careers at different life stages, whether due to industry disruptions, personal growth or changing life circumstances. Programmes like the WSG's Career Conversion Programme and the SkillsFuture Career Transition Programme are designed to support such transitions. Yet amidst rapid transformation, workers often encounter uncertainty and hesitation when making these shifts. Hence, improvements to such programmes should include ensuring real-world applicability by fostering stronger partnerships between skills training and industries to design programmes that directly address diverse workforce needs (Tay, 2025). Crucially, individuals need more than just training. They need to explore, carve new career paths aligned with their evolving skills, interests, and life goals or reshape their mindset, and supported by career guidance, coaching or counselling where necessary. In this respect, workers could be given the option to tap on SkillsFuture credits for career coaching, counselling and mentorship (Tay, 2025). Supporting career transitions as a normal part of working life is key to building a resilient and adaptable workforce.

In addition, Career Health SG, a joint initiative by the MOM, WSG and SSG, was launched in 2025 to help individuals chart long-term career pathways through career coaching and deepening of one's skills and knowledge with insights on growing industries through proactive steps in training, on-the-job learning, and intentional career moves (Ministry of Manpower, 2025). Enhanced adaptability and employability through whole-of-life career self-management will likely become more prominent in the near future as workers strive to future proof multi-stage careers with skills-first readiness.

As career paths grow more non-linear and job uncertainty rises, a skills-first approach offers a more adaptive way to recognise and empower workers. To navigate transitions effectively, individuals need to continuously upskill, reskill and deepen their skills and knowledge. They need clear labour market signals, strong career self-management, career guidance, and support systems that reflect evolving industry demands. Embracing skills as a currency enables people to make informed, strategic moves across job roles and careers, building resilience and relevance in a fast-changing world of work.

Glossary

Agency: Individual capacity to act and to stimulate change by meaningful choices made (Hefler et al., 2023)

Career Counselling: A professional relationship that empowers diverse individuals, families and groups to accomplish mental health, wellness, education and career goals. It addresses not just the skills-psychology dimension but also the whole-of-life needs holistically (National Career Development Association, 2011).

Career Coaching: A process that stirs up creativity, fuels personal growth, and maximises both professional and personal potential (International Coaching Federation, 2025). It blends traditional coaching methods with career development theory and labour market expertise, enabling individuals to make informed career decisions, manage transitions, and take agency over their lifelong employability (Yates, 2022).

Career Self-Management: A self-directed process through which individuals plan, implement, and adapt their career goals and learning activities in response to changes in their values, interests, personality, skills (VIPS), and the labour market (Wilhelm et al., 2024).

Career VIPS: An acronym for Values, Interests, Personality, and Skills/Competencies—the personal dimensions that shape one's career choices, learning needs, and job satisfaction (Workforce Singapore, 2025b).

Digital Literacy: The ability to use digital tools, platforms, and information technologies effectively, increasingly essential for the labour force of today.

Learned Helplessness: A psychological state where individuals feel powerless to change their situation due to repeated past failures or negative experiences, often leading to inaction (Rizvi & Sikand, 2020).

Productive Assets: Refer to an individual's accumulated skills, knowledge, experiences, social networks, and capabilities that contribute to their employability and career value (Gratton & Scott, 2016).

Self-Efficacy: An individual's belief in their ability to successfully perform specific tasks or handle challenges in a given context (Bandura, 1997).

Skills Currency: The notion that skills can function as a transferable asset or 'currency', exchangeable for job opportunities, promotions, or career shifts, independent of formal credentials (Estrada, 2020).

Skills-First: A skills-first approach prioritises the identification (or articulation), acquisition, demonstration, use, and recognition of skills as the central aims of workforce development, including recruitment, job design, learning and career advancement (Gog et al., 2025).

Skills Signalling: The act of communicating one's competencies and value to the labour market through credentials, portfolios, or demonstrable work outputs (OECD, 2025).

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