

## **Unlocking Workforce Intelligence: Using SkillsFuture Singapore's Jobs-Skills Dashboards for Organisational Decision-Making**

### **Abstract**

The increasing availability of labour market data presents new opportunities for organisations to adopt evidence-based workforce strategies. SkillsFuture Singapore (SSG) has introduced a suite of Jobs-Skills dashboards to provide insights into job roles, skills demand, and workforce trends. This practice brief examines how these dashboards function as practical tools for workforce planning, particularly for small and medium enterprises (SMEs). Drawing on consultancy engagements, practitioner workshops, and multi-sector observations, the brief highlights how organisations leverage the dashboards for skills-based workforce planning, job redesign, and capability development. It further strengthens the evidence base through indicative adoption metrics and expands the academic grounding through literature on workforce analytics, digital HR maturity, and skills-based workforce planning. Sector-specific challenges are discussed to enhance applicability. A conceptual “Insight–Interpretation–Action” model is proposed to guide organisations in translating data into workforce strategies. The brief concludes that while the dashboards represent a significant step towards a skills-first ecosystem, their impact depends on organisational capability to operationalise insights into action.

**Keywords:** workforce intelligence, skills-based planning, workforce transformation

### **1. Practice Context and Problem**

The increasing availability of labour market and skills-related data has created new opportunities for organisations to strengthen workforce decision-making. However, access to data does not automatically translate into improved outcomes. Many organisations—particularly SMEs—continue to rely on intuition, historical hiring practices, or ad hoc training approaches rather than structured, data-driven workforce planning.

A key challenge is the translation gap between data and action. While labour market insights may be available, organisations often lack the capability to interpret and apply these insights in a meaningful and timely way. This results in several practical issues:

- Workforce planning remains reactive rather than strategic
- Training investments are not always aligned with emerging skill needs
- Job roles evolve informally without structured redesign
- Internal talent development is underutilised

In the Singapore context, where workforce transformation and skills-first practices are national priorities, this gap limits organisations' ability to respond effectively to technological change and shifting industry demands.

The introduction of the SSG Jobs-Skills dashboards aims to address this challenge by providing integrated, accessible workforce intelligence. However, their effectiveness depends not only on the quality of data but on how organisations use them in practice.

## **2. Practice Insight: Dashboards as Workforce Intelligence Tools**

The Jobs-Skills dashboards developed by SkillsFuture Singapore provide an integrated view of the relationships among jobs, skills, tools, and wages (SkillsFuture Singapore, 2024). Unlike traditional static labour market reports, these dashboards are interactive, allowing users to explore data dynamically.

From a practice perspective, the dashboards can be understood not merely as information repositories, but as decision-support tools. They enable organisations to:

- Identify in-demand roles and emerging job clusters
- Understand the skills associated with specific job roles
- Explore wage benchmarks and labour market competitiveness
- Examine technology and tool adoption linked to jobs

This integrated approach supports a shift from role-based to skills-based workforce planning, reflecting broader developments in labour market intelligence (Schleicher, 2021). The adoption of workforce analytics tools has been associated with improved decision-making, particularly when analytics capabilities are embedded within HR processes (Marler & Boudreau, 2017).

However, many organisations remain at early stages of digital HR maturity, where data is available but not systematically translated into action (Bersin, 2020). This “last-mile problem” is especially pronounced among SMEs. Concurrently, the shift towards skills-based workforce planning is gaining traction globally, with organisations increasingly

using skills rather than job titles as the primary unit of workforce analysis (Cappelli & Keller, 2017). The SSG dashboards can therefore be understood as enabling infrastructure for this transition.

### **3. Practice Application: Use Cases for SMEs**

The use cases presented in this section are derived from consultancy engagements with SMEs, facilitated workforce transformation workshops, and practitioner observations across multiple sectors, including professional services, retail, and training providers in Singapore. While not based on formal experimental research, the insights reflect recurring patterns observed across multiple organisations adopting labour market intelligence tools in practice.

#### **3.1 Workforce Planning Without Dedicated Analytics Capability**

SMEs often lack access to advanced HR analytics tools or dedicated workforce planning teams. The dashboards provide an accessible alternative by offering pre-analysed labour market insights across a range of segments.

In practice, SMEs can use the dashboards to:

- Identify roles experiencing growth within their industry
- Benchmark required skills against industry norms
- Anticipate future capability needs

This enables SMEs to make more informed hiring and workforce-planning decisions without a significant investment in analytics infrastructure.

#### **3.2 Supporting Job Redesign and Work Transformation**

One of the more advanced applications of the dashboards is in supporting job redesign initiatives. By analysing the skills and tasks associated with roles, organisations can reconfigure work to improve productivity and value creation. Organisations can:

- Identify tasks that are likely to be automated or augmented by technology
- Reallocate work between employees and digital tools
- Introduce higher-value tasks into existing roles

For example, administrative roles in SMEs have been re-scoped to include data analysis and stakeholder coordination tasks, increasing overall job value and productivity. This aligns with broader national initiatives focused on productivity and job transformation, where redesigning work is a key lever for competitiveness.

### **3.3 Enabling Targeted Training and Capability Development**

A common challenge in workplace learning is the tendency towards generic training programmes that are not closely aligned with business needs. The dashboards enable a more targeted approach by identifying role-specific skill requirements.

Organisations can:

- Prioritise high-demand and transferable skills
- Align training investments with business strategy
- Develop structured capability-building pathways

This supports a shift towards skills-based learning, where training is directly linked to organisational needs.

### **3.4 Supporting Internal Talent Mobility**

The dashboards also provide insights into career pathways and adjacent roles. This is particularly valuable in tight labour markets where external hiring is constrained.

SMEs can use these insights to:

- Identify potential career transitions for existing employees
- Develop internal talent pipelines
- Reduce reliance on external recruitment

This contributes to workforce resilience and supports employee retention.

### **3.5 Indicative Outcomes from Practice**

Across my recent practitioner engagements with SMEs, several indicative outcomes have been observed:

- Approximately **25–35 SMEs** demonstrated initial adoption of dashboards in structured workforce planning discussions

- Organisations typically redesigned **1–3 roles** per initiative to incorporate higher-value or digitally augmented tasks
- Training alignment improved, with a shift from generic programmes to **role-specific capability development**
- Organisations identified **5–10 critical skill gaps per job family**, enabling targeted intervention

While indicative, these figures highlight the practical impact of dashboard use in enabling more structured workforce decisions.

#### 4. What Worked and What Did Not

##### What Worked for users

- Integrated data view enabled a more holistic understanding of jobs, skills, and wages.
- Accessibility of dashboards allowed SMEs to engage with workforce data without specialised tools.
- Relevance to real-world decisions supported applications in hiring, training, and job redesign

##### What Did Not Work for Users

- The complexity of data interpretation created barriers for non-HR users
- Limited contextualisation reduced applicability for specific organisational scenarios
- The static nature of insights did not always reflect rapid changes in technology or market conditions

These observations suggest that while the dashboards are valuable, their practical impact depends on user capability and contextual application.

#### 5. Reflection on Practice

From an action-oriented perspective, the dashboards highlight several key insights.

##### 5.1 Data Alone Does Not Drive Action

Access to workforce data does not automatically lead to better decisions. Organisations must develop the capability to interpret and apply insights in context. Without this, dashboards risk being underutilised.

## **5.2 Translation to Business Context Is Critical**

The dashboards provide macro-level insights, but organisations operate at the micro level. The ability to translate industry-level data into company-specific actions is a key challenge.

## **5.3 Capability Building Is Required**

Effective use of the dashboards requires a baseline level of data literacy among managers and HR practitioners. Without this, insights may be misinterpreted or ignored.

## **5.4 Integration with Organisational Processes**

The dashboards are most effective when integrated into existing processes, such as:

- Workforce planning cycles
- Learning and development strategies
- Job redesign initiatives

Standalone use limits their impact on the organisation.

## **5.5 Opportunity for Behavioural Shift**

Where used effectively, the dashboards can support a shift from intuition-based to evidence-based decision-making. This represents a broader cultural change within organisations.

## **6. Sector-Specific Considerations for SMEs**

While the dashboards provide generalisable labour market insights, SMEs across sectors face distinct challenges in applying them:

### **Manufacturing SMEs**

- Greater focus on technical and operational roles
- Difficulty mapping dashboard skills to shopfloor processes
- Lower digital readiness may limit adoption

### **Retail and Service SMEs**

- High workforce turnover reduces long-term workforce planning focus

- Emphasis on immediate hiring needs rather than strategic skills planning
- Limited time and capability for data interpretation

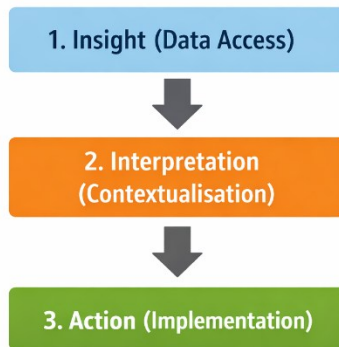
### Professional Services SMEs

- Stronger alignment with knowledge-based roles makes dashboards more immediately relevant
- Greater potential for skills-based career pathway design
- Higher readiness to integrate insights into workforce strategies

These differences suggest that while the dashboards are broadly applicable, sector-specific guidance and contextualisation are necessary to maximise their impact.

## 7. A Practical Model: From Insight to Action

Based on practitioner observations, workforce intelligence adoption can be conceptualised as a three-stage process:



### Explanation

#### 1. Insight (Data Access)

Organisations access labour market data through dashboards to identify trends in jobs, skills, and wages.

#### 2. Interpretation (Contextualisation)

Managers and HR practitioners translate external data into organisational context by:

- Mapping skills to internal roles
- Identifying relevance to business strategy
- Prioritising key capability gaps

### **3. Action (Implementation)**

Insights are translated into concrete organisational actions, including:

- Workforce planning decisions
- Job redesign initiatives
- Targeted training interventions

The key challenge lies not in accessing insights but in translating them into action. This model highlights the capability and process requirements needed to bridge this gap.

## **8. Practical Recommendations**

Based on the observations above, several recommendations can enhance the practical use of the dashboards.

### **8.1 Develop SME-Focused Guidance**

Simplified guidance materials can help SMEs translate data into actionable insights, including:

- "What this means for your business" summaries
- Sector-specific use cases

### **8.2 Integrate Decision-Support Features**

Enhancements such as:

- Skills gap analysis tools
- Job redesign simulators
- Training recommendation engines

These enable users to move the dashboards from insight tools to action tools.

### **8.3 Enhance Personalisation Through AI**

AI-driven features could provide:

- Customised insights based on company profiles
- Predictive workforce trends
- Scenario planning capabilities

## 8.4 Build User Capability

Complementary initiatives such as:

- Microlearning modules
- Guided walkthroughs
- Practical playbooks

These capability-building approaches can improve adoption and effective use.

## 9. Implications for Practice

For HR and L&D practitioners, the dashboards represent a step towards integrating labour market intelligence into organisational decision-making. They support:

- Skills-based workforce planning
- Data-informed training strategies
- More structured job redesign

However, their impact depends on how organisations embed them into everyday decision-making processes.

## 10. Conclusion

The SSG Jobs-Skills dashboards represent a significant advancement in making workforce intelligence accessible to organisations. For SMEs, they provide an opportunity to engage in data-driven workforce planning without heavy investment. However, the key challenge remains translating data into action. Without adequate contextualisation, capability, and integration, the potential of these dashboards may not be fully realised.

Ultimately, workforce intelligence tools create value only when embedded into organisational decision-making processes. Bridging the gap between insight and action requires not only better tools, but stronger practitioner capability and organisational alignment.

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