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## Employability and Traits of Singaporean Workers

Koh Lay Tin

### ABSTRACT

Lifelong employability is an aspiration of many employees of knowledge societies. These expectations are held in labour markets that have been shaped by advancing technology and rapidly developing information systems that compel changes in the skill composition and the acquisition of relevant competencies of workers. In this paper, the author analyses this important lifelong employability trait in the 'Singaporean worker' and compares it with workers in four other developed countries. Comparisons with other countries, skills and competencies could identify gaps, which inevitably would affect human resources development in Singapore. The findings are discussed in terms of implications for Singaporean organisations.

### INTRODUCTION

Singapore is a small island republic that is highly dependent on its human resources. Indeed, the success of the Singapore economy relies heavily on the talents and skills of its people (Choon 2003). Unlike its neighbouring countries, such as Malaysia, Indonesia, and India, Singapore has few natural resources. Yet, Singapore has consistently ranked as one of the most competitive countries in the world (Toh & Tan 1998, Koh & Lim 2002), a feature attributed to the efficacious utilisation of the human capital of the Republic.

Like many industrialised countries, Singapore is facing major labour related challenges. The intense globalisation and rapid technological advances that are taking place in the knowledge society has led to swift changes in the Singapore economy and the labour market (*A Turning Point* 2003). In fact, the entire employment landscape of the Republic is changing. This position was contended by Ho (2004) who wrote, " Our employment landscape is increasingly characterised by greater volatility and more frequent job displacements ..." (p. iv). Moreover, fierce competition from overseas and an unstable domestic job market have placed new challenges and demands on Singaporean workers who need to realign attitudes and expectations by adopting new attitudes of flexibility when searching for job opportunities (Ho 2004, Aggarwal & Seet 2005). Consequently, retraining and lifelong learning have become a necessity.

Recently, two significant government contributions have confronted the relativity of investment in human capital and higher employability. For instance, in a speech by the Minister of State for Manpower, Mr Othman Haron Eusofe, stressed that Singapore's workers must be ready for the paradigm shift from lifelong employment to lifelong employability (*Ministry of Manpower* 2000). And in December 2001, the Singapore government established the Economic Review Committee (ERC) with the aim to review Singapore's development strategy, and consequently, to formulate strategies to upgrade, transform and revitalise the economy (*Ministry of Trade and Industry* 2003). A fundamental scenario that the ERC evaluated was that of enhancing human capital and ensuring that Singapore's workers are imbued with skills and competencies for lifelong employability. These two initiatives clearly demonstrate that the Singapore government considers lifelong employability as a salient challenge to be addressed if the Republic is to enjoy economic prosperity.

It is apparent that lifelong employability has become an important and necessary trait that any worker should aim to possess in this rapidly globalising economy. This paper endeavours to analyse this particular trait in the Singaporean worker and compares it with workers in four other leading industrial countries. A set of indicators is used to compute a composite index on lifelong employability and calculated for four benchmarked countries – United States, United Kingdom, Sweden and Hong Kong – followed by a discussion on whether the Singaporean worker has ' what it takes ' for lifelong employability, and which aspects of this trait are lacking when measured against workers in the four benchmarked countries. Finally, the paper will draw upon the findings of the lifelong employability trait, to contend how the Singaporean worker might sustain lifelong employability and set new heights for the Singaporean economy.

### LIFELONG EMPLOYABILITY AND THE SINGAPOREAN WORKER

Verhaar and Smulders (1999) stated that ' employability ' was the latest ' buzz ' word in the labour market, and defined it as the capacity of an individual to get or hold employment. Despite the term being used extensively in government statements and programmes in many countries, there is no single definition to ' lifelong employability ' . In fact, the concept has been in use for many years and given multiple meanings (Finn 2000). In general, lifelong employability is the capacity to be productive and to hold rewarding jobs during a working life, and to be equipped with up-to-date skills and competences (McKenzie & Wurzburg 1997).

In a changing world of work, lifelong employability has become an important trait that workers in knowledge societies aspire to

possess. According to Garavan, Morley, Gunnigle and Collins (2001), there is increasing evidence that individuals now focus on their capital worth and employability. Garavan, et al. (2001) contended that changes in organisational structures have propelled a situation where job insecurity is common, and consequently, individuals are required to take ownership and responsibility for career management. In addition to these responsibilities, individuals are also confronted with new kinds of tasks and approaches, which are substantially different to traditional work that is routinised, repetitive, and organised along hierarchical lines, in the modern workplace. In these new work environments, work is problem oriented, flexible, and often organised in teams, and labour is not a cost, but an investment (Cotton 1993). Indeed, Bagshaw (1997) argued, the world of work is going through turbulent times and the old ethos of employers looking after workers' welfare in exchange for lifelong loyalty is void. Job security has been replaced with the cruel realities of " ... cut and thrust of redundancies and cutting costs ..." (Bagshaw 1997: 187). Consequently, a loss of job security is inevitable. Nevertheless, Bagshaw (1997) challenged that it can be replaced by a new form of security - wider employability. Certainly, as employers adopt flexible and adaptable working patterns across the working week and working year (Finn 2000), and with rapid technological advances invading all aspects of life, it is important for a person to be equipped with the capacity to be productive and hold rewarding jobs over one's working life, and hence, lifelong employability is indeed a necessity for a worker to survive and for an economy to prosper.

Lifelong employability constitutes a set of work skills and competencies. Governments and labour organisations have responded to the employability trend by formulating lists of work skills needed for lifelong employability. For instance, the International Labour Organisation (ILO) highlighted that core work skills such as competence in reading, writing and computing; effective listening and oral communication skills; adaptability through creative thinking and problem solving; personal management; interpersonal skills; the ability to work in teams or groups; basic technology skills; and leadership effectiveness have become crucial for the individual's employability (ILO 2003). The Workforce Development Agency (WDA) of Singapore also formulated a list of skills needed to enhance employability, including improving literacy and numeracy, IT skills, problem solving and decision making, and better communication (Ramesh 2004). In addition, Clarke (1997) from the Industry and Parliament Trust, London, has also asserted that the employable person is motivated, self confident, committed, adaptable and flexible. Moreover, the Conference Board of Canada (2003) also formulated a list of employability skills that are grouped into three main categories: fundamental skills, teamwork skills and personal management skills. These competencies include communication, problem solving, positive attitudes and behaviours, adaptability, working with others, and science, technology and mathematics skills. Coincidentally, these employability skill sets that are developed by different organisations do not differ too much in scope. In general, the identified employability skills comprise both soft skills (interpersonal skills such as communication, positive attitude, flexibility) and technical skills (fundamental skills such as literacy, IT skills, problem solving).

## The Singaporean Worker

Generally, Singaporean workers are recognised as one of the most industrious in the world, in terms of their productivity, attitude and technical skills (Gross 1999). They are also reputed to be highly disciplined, diligent, skilful, productive, and cooperative. In a tight labour market, though, they are likely to manifest organisational disloyalty and are given to job hopping (Tan 2000). These are some of the frequent comments heard of Singaporean workers.

A number of surveys have been conducted with Singaporean workers. These studies have provided a range of interesting characteristics of the Singaporean workers. According to a Gallup Organisation survey conducted in May 2002, 12 per cent of Singaporeans are highly disenchanted at work (12% of Singaporeans 2002). This contention was supported by other reports (International Survey Research 2002, Gopal 2003), which found that Singaporean workers were ranked among the least committed in the workplace, despite a subsequent study (International Survey Research 2004) that showed an increase in the level of work commitment in Singaporean workers.

Singaporean workers are often labelled as selective and fussy when it comes to job search. For example, Chia (2002) reported that there were about 7,500 job vacancies in the manufacturing sector, but only a few of these job positions were acceptable to the Singaporean worker. In another instance, 23 Singaporeans walked away from a promising job offer in a wafer fabrication plant immediately on learning that they would have to work shifts and in clean rooms that required them to wear certain attire. In fact, there were only 19 Singaporeans, as compared to 151 Malaysians, who took up the job offer, which required some 400 workers (15 Working Days 2002). From these reports, it appears that Singaporean workers have higher job expectations in terms of pay and working environment. Indeed, the Singaporean worker is by no means fussy, inflexible and unrealistic about salary and other such materialistic aspects, but the economic downturn has produced a shift in attitudes, with both the employed and unemployed showing more flexibility (Chia 2004).

Singapore's workforce has consistently been highly rated. This claim has been demonstrated by Business Environment Risk Intelligence (BERI), which uses the specially developed Labour Force Evaluation Measure (LFEM) to derive a rating for each country. Moreover, Singapore claimed the number one spot again, among the 49 countries evaluated by BERI's LFEM in 2005 (BERI 2005). Singapore is also known for its skilled workforce. The Republic was positioned ahead of 53 countries in the skilled labour ranking by IMD International in 2004 (IMD World Competitiveness Yearbook 2004). Furthermore, Singapore was ranked in the eighth position, ahead of the United States, Finland, Switzerland, Netherlands, Sweden, Taiwan, Ireland, Japan and Hong Kong. Despite a great deal being written about the traits of the Singaporean workers, there is scant information in terms of the rising job expectations and whether the Singaporean worker has the capacity to meet the stringent requirements of job market and the lifelong employability challenge in the knowledge era.

## METHODOLOGY

This study uses a set of indicators to compute a composite index on lifelong employability. The index could be used to assess the employability of Singaporean workers and compare it with workers in four other developed countries, namely the United States, the United Kingdom, Sweden and Hong Kong.

## Procedure

A preliminary search was conducted on the Web, databases and print materials to scope the dimensions of employability. Then another independent study was conducted on the Web to identify some developed countries to be benchmarked for employability. Based on the dimensions of employability, a list of indicators was identified so that the countries can be measured by these indicators, and hence, workers can be evaluated for their employability. The evaluation of these indicators was undertaken by the processes of data collection, computation and analysis.

## Site

Four countries are compared: United States, Sweden, United Kingdom and Hong Kong – all of them share common characteristics such as developed economies and a certain emphasis on lifelong employability.

### United States

Its adults are educated for the longest time (Average Years 2000). The United States has been studying the health of its national education system for some time.

### Sweden

Ranked first for adults with high literacy and has the most number of students from households with study desks (Literacy - Adults 1998, Students From 2002). In addition, Sweden was ranked first for its lifelong learning participation in the 2004 European Innovation Scoreboard (Participation in Life-long 2004).

### United Kingdom

The concept of lifelong learning has been extremely prevalent in the United Kingdom throughout the last decade in terms of governmental policy as well as management theory (Symon 2001).

### Hong Kong

An Asian country, whose population size and economic structure are similar to that of Singapore (Shoichi 2002), and whose government also advocates lifelong learning (Robinson 2005).

## Measures

A set of 11 indicators were employed to develop a composite index. The indicators were developed by the author after a comprehensive investigation of the relevant literature. These indicators are categorised into (1) Education and Literacy, (2) Long Term Unemployment, (3) Lifelong Learning, (4) Labour Force Attributes, and are given different weightings, as shown in Figure 1.

Figure 1  
Composition of Lifelong Employability  
Indicators

Indicators	Weightings (%)
Education and Literacy	15
Long term Unemployment	25
Lifelong Learning	30
Labour Force Attributes	30
Total	100

### Education and Literacy (15%)

- Average years of schooling of adults
- Education index
- Expenditure on education
- Reading literacy
- Mathematics literacy
- Scientific literacy

These six indicators, which made up the Education and Literacy indicator, are used based on the assumption that better educated individuals have higher rates of participation in the workforce, lower unemployment and higher earnings – in general, more employable. However, it was noted that educational qualification is not a good indicator of whether one has skills that increase productive capacity (Counting Heads 2004). Therefore, a relatively low weighting of 15 per cent is given to the Education and Literacy indicator.

### Long term Unemployment (25%)

- Long term unemployment

The long term unemployment indicator is used, based on the assumptions that if a population registers high long term unemployment, the population is less employable. This indicator is allocated a 25 per cent weighting.

### Lifelong Learning (30%)

- Lifelong learning participation

This is used as a strong indicator of lifelong employability. It is based on the assumption that if a population is actively participating in lifelong learning activities, the commitment towards lifelong employability is high, and as a result more employable. This indicator is given a 30 per cent weighting.

#### Labour Force Attributes (30%)

- Labour productivity
- Flexibility and adaptability of people
- Availability of skilled labour

These three indicators have strong implications on the lifelong employability trait. This is based on the assumption that if the labour force is productive, skilled, flexible and adaptable, it will be highly employable. As such, this Labour Force Attributes indicator is given a 30 per cent weighting.

#### Analysis

Statistics for all the indicators are first obtained from various statistical sources for each of the five countries (including Singapore). A score of one to five is then computed for all the indicators across the five countries, to allow for relative comparison (ranking) among the countries. The score is interpreted in such that the higher the value, the better is a country's relative position in lifelong employability. The score is derived using the formula:

$$4[(X-L)/(H-L)] + 1$$

Where X is the value to be converted to score; L is the lowest value for that indicator; and H is the highest value for the indicator.

However, a reverse formula:  $4[(X-H)/(L-H)] + 1$  is used to calculate the score for long term unemployment, in which a low value denotes a high lifelong employability. Finally a composite index is determined for each country based on the scores. The Composite Index is derived using the formula:

$$\text{Lifelong Employability Composite Index} = (15\% \text{ of Average Education and Literacy score}) + (25\% \text{ of Average Long Term Unemployment score}) + (30\% \text{ of Average Lifelong Learning score}) + (30\% \text{ of Average Labour Force Attributes score})$$

## RESULTS

Table 1 provides country relevant information pertaining to the four main categories of indicators: Education and Literacy, Long term Unemployment, Lifelong Learning, and Labour Force Attributes. It presents the detailed statistical findings for the various lifelong employability indicators and shows the actual statistics obtained direct from statistical sources. Contained within parenthesis, for each indicator, are the respective scores (range from 1 to 5). In addition, the higher the score, the better is a country's relative position in various aspects of lifelong employability. In the Education and Literacy indicator, the United States achieved the highest in terms of the average years of schooling of adults; United Kingdom and Sweden both top the education index; Sweden achieved the highest reading literacy; while Singapore scored the highest in both Mathematics and Scientific literacy. In the Long Term Unemployment indicator, Singapore performed the best in having the lowest long term unemployment rate. In contrast, the United Kingdom suffered the longest long term unemployment; and for the Lifelong Learning indicator, the United States triumphed in its lifelong learning participation. However, it is noteworthy that the United States does not have a lifelong learning participation statistic; the nearest equivalent is participation in adult education, which indicates the percentage of the population age 25 and above participating in adult education. This has affected the employability scores to some extent. In order to fully comprehend the relative ranking of countries in the area of 'lifelong learning', one should note that there is no single statistical source that provides the lifelong learning statistics for all countries. In addition, there are variations in definitions of the lifelong learning equivalent statistics in different countries, which contribute to the big differences in the absolute statistics for each country. In the Labour Force Attributes indicator, the United States topped in terms of the labour productivity of workers; Hong Kong achieved best for the flexibility and adaptability of its people and Singapore scored highest for the availability of skilled labour in the country.

Table 1  
Statistics and (Scores) for Each Indicator by Country

	Indicator	United States	United Kingdom	Sweden	Hong Kong	Singapore
Education & Literacy	Average years of Schooling of Adults, 2000 <sup>1</sup>	12 (5.0)	9.4 (2.9)	11.4 (4.5)	9.4 (2.9)	7.1 (1.0)
	Education Index, 2004 <sup>2</sup>	0.97 (4.4)	0.99 (5.0)	0.99 (5.0)	0.86 (1.0)	0.91 (2.5)
	Expenditure on Education (% of GDP), 1999-2001 <sup>3</sup>	5.6 (2.7)	4.6 (1.6)	7.6 (5.0)	4.1 (1.0)	4.1 <sup>4</sup> (1.0)
	Reading Literacy, 2001 <sup>5</sup>	542 (2.7)	553 (4.0)	561 (5.0)	528 (1.0)	528 (1.0)
	Mathematics Literacy, 2003 <sup>6</sup>	504 (1.2)	498 (1.0)	499 (1.0)	586 (4.3)	605 (5.0)
	Scientific Literacy, 2003 <sup>7</sup>	527 (1.2)	544 (2.5)	524 (1.0)	556 (3.4)	578 (5.0)
Long Term Unemployment	Long term Unemployment (%), 2003 <sup>8</sup>	22.0 (4.9)	37.3 (1.0)	35.4 (1.5)	36.0 <sup>9</sup> (1.3)	21.6 <sup>10</sup> (5.0)

Lifelong Learning	Lifelong Learning Participation (%), 2004 <sup>11</sup>	46.6 <sup>12</sup> (5.0)	21.3 (1.8)	34.2 (3.5)	14.6 <sup>13</sup> (1.0)	33.4 <sup>13</sup> (3.4)
Labour Force Attributes	Labour Productivity, 2003 <sup>14</sup>	41.744 (5.0)	34.887 (3.7)	39.202 (4.5)	20.497 (1.0)	21.845 (1.3)
	Flexibility and Adaptability of people, 2003 <sup>15</sup>	7.65 (4.7)	6.33 (1.0)	6.86 (2.5)	7.76 (5.0)	6.88 (2.5)
	Availability of Skilled Labour, 2003 <sup>16</sup>	7.23 (4.5)	4.78 (1.0)	7.19 (4.5)	7.06 (4.3)	7.57 (5.0)

Notes:

1. " Average years of schooling of adults" is the years of formal schooling received, on average, by adults over age 15. Retrieved from UNDP (2000) [http://www.undp.org/hdr2001/indicator/indic\\_243\\_1\\_1.html](http://www.undp.org/hdr2001/indicator/indic_243_1_1.html)
2. The Education Index is based on the adult literacy rate and the combined gross enrolment ratio for primary, secondary and tertiary schools. Retrieved from Human Development Report 2004: [http://hdr.undp.org/statistics/data/indic/indic\\_6\\_1\\_1.html](http://hdr.undp.org/statistics/data/indic/indic_6_1_1.html)
3. Retrieved from Human Development Report 2004, except for Singapore: [http://hdr.undp.org/statistics/data/indic/indic\\_180\\_1\\_1.html](http://hdr.undp.org/statistics/data/indic/indic_180_1_1.html)
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14. GDP per person employed per hour, US\$. Retrieved from IMD World Competitiveness Yearbook 2004, p. 647.
15. Refers to the flexibility and adaptability of people in the economy when faced with new challenges. Retrieved from IMD World Competitiveness Yearbook 2004, p. 679.
16. High index indicates skilled labour is readily available. Retrieved from IMD World Competitiveness Yearbook 2004, p. 659.

Table 2 shows the average scores for each of the four categories of indicators. The scores show that Sweden was ranked the highest overall in the Education and Literacy indicator, Singapore performed the best in terms of its low Long Term Unemployment, while the United States scored the highest Lifelong Learning participation rate, and the best Labour Force Attributes.

Table 2  
Average Score for Each Category of Indicators by Country

Indicator	United States	United Kingdom	Sweden	Hong Kong	Singapore
Education & Literacy (15%)	2.86	2.83	3.58	2.27	2.58
Long Term Unemployment (25%)	4.9	1.0	1.5	1.3	5.0
Lifelong Learning (30%)	5.0	1.8	3.5	1.0	3.4
Labour Force Attributes (30%)	4.73	1.90	3.83	3.43	2.93

Table 3 reveals the Lifelong Employability Composite Index for each study country. The Index is the summed products of the Indicator score and the percentage weighting. For example, the United States Lifelong Employability Index is calculated as  $(2.86 \times 0.15) + (4.9 \times 0.25) + (5 \times 0.3) + (4.73 \times 0.3)$ . Overall, the Index ranks Singapore second to the United States, in the workers' general ability to sustain lifelong employability. This is followed by Sweden (3rd), Hong Kong (4th) and the United Kingdom (5th). It was surprising that the United Kingdom was ranked bottom in lifelong employability, given its emphasis on lifelong learning. However, this could be explained by its high long term unemployment rate, the lack of skilled labour, as well as the inflexibility and inadaptability of its people, which all contributed significantly to the employability ranking.



Table 3  
Lifelong Employability Composite Index

Country	Lifelong Employability Composite Index
United States	4.573
Singapore	3.536
Sweden	3.111
Hong Kong	1.995
United Kingdom	1.785

## DISCUSSION

This study evaluated Singapore's performance in the four main areas of lifelong employability and compared the lifelong employability trait of the Singaporean workers against that of workers in the other four countries. The results endorsed Singaporean workers' ability to sustain the lifelong employability trait, as determined by Singapore's ranking in the second position in the overall Lifelong Employability Index (Table 3). Specifically, it was revealed that Singapore has performed relatively well in terms of low Long Term Unemployment and a relatively high Lifelong Learning participation rate. It was also determined that Singapore was, however, relatively poor in Education and Literacy and in Labour Force Attributes (Table 2).

With specific reference to Singapore's performance in various aspects of Lifelong Employability in Table 1, some significant findings have been observed, which call for improvement in human capital management in the Republic. In the Education and Literacy aspects, Singapore is lacking in the average years of schooling of adults, expenditure in education, and reading literacy of its population. Although the average years of schooling of Singaporean adults has improved over the years (Toh & Yeo 1995), the Republic still lags behind the other four countries. This area calls for some improvement. The other aspects in which Singapore scored lowest is the government expenditure on education, which only accounted for 4.1 per cent of GDP (similar to Hong Kong), as compared to 5.6 per cent in the United States, 4.6 per cent in the United Kingdom, and 7.6 per cent in Sweden. Although government expenditure on education (as percentage of GDP) is the lowest in Singapore as compared to the other four countries, public expenditure on education in Singapore has been improving over the years, from 3.3 per cent in 1999 to 3.6 per cent in 2000 and a further 4.1 per cent in 2001 (Ministry of Education 2004). In addition, the expenditure on education accounted for the second largest share of the total government's spending, after that of the Republic's security and defence spending.

The total government expenditure on education in FY2001 is \$5.41 billion, which accounted for 19 per cent of the government's total expenditure, while that for the security and defence sector was 37 per cent (Ministry of Finance 2001). Singapore has also scored relatively low in terms of reading literacy of its population. The reading literacy score for Singapore is the lowest (similar to Hong Kong), as compared to the other countries. The reading literacy score obtained from the Progress in International Reading Literacy Study (PIRLS) in 2001 for Singapore was 528, as opposed to 561 for Sweden. Indeed, the good reading habit, which is inculcated from childhood, is not as prominent in Singapore as compared to the other developed countries. For instance, the percentage of Singapore children reading books for fun in 2001 on a daily basis was 26 per cent, as compared to 46 per cent in Sweden (Trends in Children 2003). Nonetheless, on average, Singapore pupils read better than those in comparable countries where English is not the first language (Chong & Ang 2005).

As for the attributes of its labour force, Singapore is lacking in labour productivity, and flexible and adaptable people. Indeed, Singaporean workers are often labelled as inflexible and fussy when it comes to job search. This assertion was contended by various reports, as evident in the literature review. In contrast to reports that praised Singapore for its highly productive workforce (Economic Development Board Singapore 2004a, 2004b), the findings in this study demonstrate otherwise when a different productivity indicator is used. The labour productivity indicator used in this finding, reported as GDP per person employed per hour, is US\$21.845 for a Singaporean worker, as compared to US\$41.744 for an American worker, US\$34.887 for a United Kingdom worker, and US\$39.202 for a Swedish worker. Despite these negative findings, this study shows that Singapore has a relatively skilled workforce. Indeed, Table 1 shows that Singapore scored the highest in terms of its availability of skilled labour, when benchmarked against the other four countries. Singaporean workers are also particularly strong in Mathematics and Scientific literacy, as compared to the other four countries – an attribute that is also important for lifelong employability. Concurrently, Singaporean workers are able to find themselves a job after a short episode of unemployment.

## CONCLUSION

The importance of lifelong employability to a worker in the knowledge society is irrefutable. Consequently, it is critical for workers to possess the relevant skills and competencies that will sustain their employability in their entire work life. Like most industrial societies, Singapore is advancing fast into the knowledge era where harsh realities are phasing out workers without the right skills and aptitude. In comparison to Sweden, Hong Kong, and the United Kingdom, Singapore has excelled in its ability to sustain lifelong employability. Nevertheless, there are some competency gaps that the Singaporean workers might reduce to further sustain its lifelong employability trait. Singapore is a small island Republic where success of the economy lies critically in the hands of the people. Lifelong employability is an especially important trait to workers in the small island Republic, which would help to boost the worth of each individual and progress the Singapore economy to new heights. The government and human resource institutions in Singapore have an enormous role to play in retraining workers and fostering the right work environment that stimulates the workers' morale, but the biggest task still lies in individual workers themselves who need to have the right mindset and work attitude. Now is the time for Singaporean workers to 'wake up' to the harsh realities in work life, to be less picky and fussy, to become more flexible and adaptable, as well as more committed and engaged!

## AUTHOR

Lay Tin is a researcher with the Publishing and Research Division of the National Library Board, Singapore. She holds a Bachelor of Arts degree from the National University of Singapore, majoring in Chinese Studies and Mathematics, and a Masters of Science in Information Studies (2001) from the Nanyang Technological University. Lay Tin's research interest focuses on education, employment, human capital and organisational development, and she has undertaken various research projects in these areas for Ministries and Statutory Boards in Singapore.

Email: Lay\_Tin\_KOH@nlb.gov.sg

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