Empowering Low-Skilled Workers Through ICT Training

The fast-changing and uncertain labour markets in this current world economy necessitate a re-think of traditional ICT for Development (ICT4D) strategies, particularly its historical application to developing economies only (Vernon, 2011). As computers and the Internet are becoming essential for getting jobs, seeking professional information; and engaging in entrepreneurship activities (UN-APCICT/ESCAP, 2011), adults who do not possess adequate ICT skills in developed economies will increasingly be side-lined into an undesirable situation of structural unemployment. In a developed Asian economy like Singapore, many of the older adults lack expertise with ICT use, software programmes and social networking, yet most of the jobs now require computer familiarity. In order to ensure successful job placement, ICT4D scholars and practitioners had posited that older adults need some form of computer familiarisation training prior to their job search activities.

The Employment and Employability Institute (e2i) supports and strengthens Singapore's continuing education training policies that assist adults in Singapore who lack job skills to access training. The basic premise is that adults who receive relevant skills training will be able to secure jobs placement and lifelong employability. This policy brief summarises a recent study and recommendations on how ICTs can facilitate and enhance the employability of job seekers in an urban South-East Asia labour market like Singapore.

SUMMARY OF FINDINGS ANDRECOMMENDATIONS

50 unemployed workers went through the process of job training, placement assistance through attending job fairs in e2i, Singapore, in March 2010. The research yielded the following key insights:

1. **Individual's self-efficacy, contributed positively to traineejob placement outcomes while the ICT training did not directly affect their employability.** The research findings suggest that the ICT training effectiveness is primarily determined by the trainees' self-efficacy instead of the training content. In so much that the trainees were indifferent to the actual ICT skills level attained, e.g. exam scores from the ICT training.Instead,the trainees' perception of the skills achieved helped them project greater confidence during the job interviews, in turn securing positive job placement outcomes. The workers' confidence, self-esteem and career opportunities improved together with their basic digital literacy.

2. **The success of future ICT training programmes could be dependent upon the inclusion of modules that focus on increasing self-efficacy techniques together with ICT competency.**Future programmes could adopt a more targeted, realistic approach to increase the employability barriers of this group of unemployed workers, for example, coordinating supplementary training, like increasing the self-confidence of the participant. Upcoming projects could explore the plausibility of interventions for mind-set change, so that there would be accompanying transition in the trainees' mental models and self-assurance towards job search, thereby establishing a positive feedback loop.

THE RESEARCH

I   INTRODUCTION

This research paper investigates the uses of information and communication technologies (ICTs) in empowering low-educated or low-skilled adults, sociologically defined as 'marginalised adults' (Roger & Fricke, 2005). The investigation focused on personal factors related to perceived ease of use, intrinsic and extrinsic motivational factors towards technology adoption and training.

A pilot study was conducted in March 2010, with a group of 50 unemployed Singapore citizens in a not-

for-profit organisation called **e2i** in Singapore. The NGO recruited participants from its internal database of registered job seekers, as well as from a variety of external sources including the internet, newspaper and news stories in the local media. Of the 50 unemployed workers, 72% were previously doing administrative jobs and possessed lower educational qualifications - mostly equivalent to the Cambridge high school "Ordinary" or "Advanced" levels. Their ages ranged between 40 – 70 years old, with only 8 out of the 50 unemployed trainees [e.g. 16% of the cohort] below 40 years of age. 86% of the trainees were female, and

the ethnicity of the class is reflective of Singapore's population of (75.6% Chinese, 10.6% Malay, 10.9%Indian, 2.90% others), as referenced to the 2010 population census data released by the Singapore Department of Statistics 2011 (MTI, 2011).The ICT skills training programme intended to impart entry-level computer skills, such as Microsoft Word, Excel, PowerPoint, Internet and email as well as entry-level office job skills to these out-of-work adults, in the hope of enhancing their job placement success.

II METHOD

Both the quantitative and qualitative research methods were used to investigate this group of 50 participants. To provide reliability, the research investigates and triangulates Rao (2007)'s extended TAM theoretical concept with qualitative interviews and post-training quantitative surveys with the participants.

The researcher observed the group of 50 unemployed workers as they went through the process of coming to e2i for job placement assistance and attending job fairs specifically organised for them to meet potential employers to be interviewed for ICT-related jobs (Refer to Figure 1).Qualitative interviews were conducted with 7 out of the 50 trainees, randomly selected during the job fair.

III RESULTS & DISCUSSION

The first hypothesis predicted that a positive job interview outcome would result from the actual skills learnt from the ICT training, as represented by the participants' ICT exam results. The results of the correlational analyses revealed that there was no correlation between the participants' ICT exam results and job placement outcome. As such, the first hypothesis did not receive empirical support.

The second hypothesis predicted that the participants' perception of the ICT skills training attained will contribute to their job placement outcome. The results of the correlational analyses showed that there was a strong positive correlation between the participants' perceptions of their ICT skills after training and job interview outcomes ($r = .606$, $n = 50$, $p < .0005$) and perception of employability being enhanced towards the job interview outcomes ($r = .440$, $n = 50$, $p < .0005$). Therefore, the second hypothesis is supported.

A few key insights emerged regarding from the qualitative interviews, particularly factors affecting ICT skills adoption,*i) Extrinsic motivations* - the professional need of learning ICT is one of the key determinants for them to take up the course, e.g. these adults believe that, by going through ICT training, they would be able to secure more stable and better paying jobs.*ii) Intrinsic motivations* - these unemployed workers were also hoping to upgrade from their previous low-level administration jobs to higher value-add clerical and office jobs. As they had been unemployed, some for as long as 40 months, the participants felt that the ICT skills training would help them to escape the precarious nature of their previous employment. *iii) Perceived ease of use and user apprehensiveness* - some trainees were still hesitant in utilising their new found ICT skills and preferred to engage in non-ICT mode of communication instead, such as sending in mailed job applications despite the availability of web applications.

Even though the ICT training intervention in this study did not meet the original programme objectives, the research proposes thatfuture ICT for employability intervention could be made more effective by supplementing with soft-skills training, like increasing the self-confidence for these group of marginalised citizens.

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