ICT SKILLS / COMPETENCIES IN THAILAND

Objectives

The development of Thailand's ICT capabilities and of its ability to compete regionally and globally will depend on accomplishing two key objectives:

- the free movement of skills – the ability to hire and deploy skilled people of any nationality, wherever they are needed, and
- making Thai nationals more employable in the market for ICT services, in Thailand as well as throughout the region.

A necessary first step for this is the establishment of an ICT Competency Framework, allowing employers and employees to share a common reference point in defining the skills required for specific ICT jobs.

What a competency framework is (and what it isn't)

An ICT competency framework is simply a set of definitions allowing people in different industry sectors and in different countries to effectively communicate about ICT job requirements and work experience. The purpose of a competency framework is to facilitate an efficient job market as well as to provide direction and guidance to those seeking academic and/or on-the-job training in building their careers as ICT professionals.

A competency framework is not a certification protocol. An effective, market-based system already exists for assessing and certifying technical competency in specific ICT skills. Vendors such as Cisco, Microsoft, SAP, and others create technology-specific and industry-recognized assessments, which they also maintain to reflect the most current versions of their hardware and software. For "soft skills", there also already exist globally recognized third-party certifications such as PMP (Project Management Professional) and ITIL (Information Technology Infrastructure Library) maintained by vendor-neutral, professional organizations.

Why the correct approach matters

There is a tendency in the public sector to assume a need for government-defined and administered certification standards. For professions such as medicine, where there is a direct impact on public safety, this makes sense. For ICT skills, however, a centralized certification structure is not only unnecessary but would be counterproductive for the following reasons.

1) **A centralized, government-run certification protocol will never be up-to-date.**
   Technology is constantly changing and evolving; new releases of existing software and hardware, or indeed, completely new technologies, are constantly being introduced. Predicting which ones will have a market big enough to justify creation of a certification standard, and then developing and administering tests quickly enough to meet market demand, is impossible.

2) **A government-run certification protocol may not reflect actual industry needs.**
   In a market-driven approach, when new hardware and software are released by a vendor, a set of core skills emerges based on actual implementation and use. The vendor may summarize those skills in its own certification standards for the product, or the job market may simply place a premium on those who best understand the technology and have demonstrated an ability to work effectively with its key features.

   Rigid certification requirements, if imposed as a limit on the right to work, affect the ability of companies to move their existing staff where they are most needed. An employer may be happy with the skills of its ICT staff but if they are not acceptably certified for work in certain countries, despite having the more important knowledge of their company's actual business needs, they would be prevented from doing their jobs.

3) **Different certification standards are unlikely to be standardized across markets.**
   Government-created certification standards will differ significantly from country to country – some may be quite detailed and demanding while others less so. Attempting to reconcile disparate standards will add a layer of complexity and make it even more difficult to keep pace with rapidly changing technology. Similarly, a Mutual Recognition Arrangement (MRA) approach as is used for some professions in an AEC context would also be unworkable for ICT skills. An incompatible set of competing certification standards (and likely in different languages) would hinder, not support, the movement of skills across the region.

Summary and Recommendations

We do not see any value in the creation of a centralized certification protocol for ICT skills. In fact, we believe that it would significantly hinder Thailand's complementary domestic and AEC-related goals of promoting the free movement of skills and of developing human capital. Basing the right to work in the ICT field on one or more separate sets of government-mandated certifications would not only create additional bureaucratic and logistical hurdles but would also wastefully attempt to duplicate an existing (and already effective) set of vendor-managed standards. The rapidly changing pace of technology, and the time required to create, approve, administer, and maintain an assessment infrastructure, would doom any such centrally managed certification protocol to being always out of date, and out of step with actual industry needs.

Certifications in and of themselves do not increase the actual skill level of practitioners. As anyone with ICT management and implementation experience knows, certification without the concurrent, hands-on job experience of applying that knowledge, does not guarantee competency.

1) Create an ICT Competency Framework
Thailand would be well served by the development of an ICT Competency Framework allowing employers and employees to have a common point of reference for the movement and development of ICT skills. One example of such a framework is Singapore's National Infocomm Competency Framework (http://www.ida.gov.sg/Collaboration-and Initiatives/Initiatives/Store/National-Infocomm-Competency-Framework-NICF).

2*) Support the acceptance of independent, globally recognized and market-driven standards*
Vendor certifications define industry-specific technology standards, whether related to domestic or overseas employment. However neither vendor certifications nor any government-mandated or other centralized, external certification protocol should be used for determining eligibility for cross-border work.

3) Encourage the development of human capital, via harmonized definitions
A competency framework serves as a common definition, while allowing the actual users of the resources to determine which combination of skills they need. It is internationally portable and not language dependent. It helps promote skills development by giving ICT professionals a framework in which to further develop their skills, and it allows employers to publicize their skill requirements with the confidence that those requirements will be universally understood.

4) Attract the "best and brightest" to work in Thailand
In the interests of promoting Thailand's economic development perhaps that focus could include a "made in Thailand" marketing approach whereby the world's best ICT talent, including both Thai citizens and foreigners, are encouraged to develop ICT services here, whether for local or for global customers. Attracting greater activity to the ICT services sector would also encourage knowledge sharing, producing even more short term and long term benefits. Thailand is well-positioned to take this step.

5) Facilitate regional resource availability
A competency framework is relatively easy to agree on, and will provide the needed cohesion and structure, while helping prevent a drift towards inefficient and incompatible, country-specific certification "standards". Finding and applying technical resources across the region is already difficult; achieving the stated goal of allowing a free flow of skilled professionals is already a challenge. Adding yet another layer of bureaucracy will only make that situation worse.

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