



The Government of the Republic of Trinidad and Tobago
MINISTRY OF EDUCATION



SIM

FINDINGS OF TRINIDAD AND TOBAGO'S

SOFTWARE & WEB DEVELOPMENT

SECTORAL INNOVATION MAPPING (SIM) STUDY



The potential of Information and Communication Technology (ICT) to transform lives, businesses and economies has been recognised in developed and developing countries alike. Increases in the speed, quality and variety of consumer services, improvements in the productivity and efficiency of enterprises, and the growth of exports and Gross Domestic Product can all result from the uptake and deep integration of ICT into a society.

In Trinidad and Tobago, a key debate on ICT relates to whether it is primarily an enabler of socio-economic development, or whether it has the potential to constitute an industrial sector in its own right. The purpose of the Sectoral Innovation Mapping (SIM) of the Software and Web Development industry in Trinidad and Tobago is to understand what role the industry currently plays, and the potential role it can play in advancing innovative contributions to this rapidly evolving ICT environment, based on many variables inclusive of stakeholders' capabilities and their linkages that presently comprise its sectoral innovation system.

The SIM identifies the actors involved in the sector: the industry players (firms, their suppliers, and their consumers), the education and research institutes, and the supporting institutions both from the public and private sectors. It provides criteria as well as an assessment of the intensity of the linkages between the different groups of actors, identifying where interactions are strong, moderate or weak.

Critical components of the enabling infrastructure have also been identified, including access to broadband internet, mobile phone penetration, and the technological literacy of the population. Equally important, the SIM features the framework conditions that exist, including trust, visionary leadership, confidence and culture. Although these intangible conditions are often perceived as minuscule, the research seeks to capture its significance and its influence on the behaviours of the actors and by extension its impact on the industry.

The methodology for the study is inclusive. It encompasses a bottom-up approach and is built on the views of practitioners in the industry, as well as, supporting agencies.

In keeping with the nature of the sector, appropriate primary and secondary data collection methods were deployed. The findings unveil that web development firms provide a range of business-to-business services aimed at enhancing the marketing and distribution offerings of their clients. Software development firms, which provide a range of complementary services to boost their earning potential, have shown some capacity to develop innovative products in both the enterprise and consumer spaces. Moreover, some firms have managed to export their products and services, owing in no small part to their abilities to network and integrate themselves into global value chains.

The conduct of the SIM has illuminated some of the key impediments to innovation. Among these are the absence of a comprehensive legislative framework to govern electronic payments and data security, the cost and time involved in integrating junior developers into the workplace environment, and difficulties in accessing resources (especially financing) for innovation.

The documented findings of this micro-level study add to the national research resource pool. The results help to inform and support evidence based decision-making. In light of the current state of the economy, it is anticipated that the SIM will bring about a greater understanding of ICT's role in Trinidad and Tobago's development trajectory, and in so doing identify an appropriate set of initiatives to support the national thrust towards economic diversification.



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