Executive Summary
Cambodia ICT Market Landscape Study

Macroeconomics & IT Spend

Cambodia's economic growth has been one of the fastest among Asia's developing economies, with a steady 7.0% GDP's growth in 2015. However, economic growth is not without risk given the heavy reliance on selected industries, like garment, tourism, construction and rice export, and other external ODA and WB funding

Deflation was seen in 2015, with inflation falling to 1.2% by end 2015 from 3.7% in 2014, reflecting the recovery in food prices and stabilization of global energy prices.

Cambodia attracted around US$4 billion of foreign direct investment (FDI) in 2014, and FDI grew 18% year-over-year in 2015 due to increased investment from China, Malaysia and Japan.

Cambodia has continued facing with the large trade deficit since 1993, widen from US$185 million in 1993 to US1.3 billion in 2014. In the first six months of 2015, despite Cambodia's exported products in equivalent to $4.13 billion, up 9.5% from $3.77 billion over the same period last year 2014, its value exceeded by the imports (US$5.62 billion). Europe, US, China, South Korea, Japan, Thailand, Vietnam, Singapore and Malaysia are major trading partners of Cambodia.

Cambodia had trade deficit from 1993; its import has been expanding as its economy cannot satisfy its own domestic demand. Most manufacturing investment are in garment or footwear industries. Therefore, almost all consumer products are imported.

To combat the trade deficit, the Cambodian government focuses on 4 key strategies:

- mobilizing and attracting foreign investments as well as private domestic investments by focusing on large industries, expanding markets and enhancing more technology transfer

- developing and modernizing small and medium enterprises (SMEs)

- revisiting the regulatory environment so as to strengthen the country competitiveness

- coordinating supporting policies, development of support infrastructure such as transportation/logistics and information and communication system (ICT), supply of electricity and clean water, and public, social and financial services

It is widely recognized that ICT will be a key driving force in all aspects of development in the next few decades, as it always has been since the information revolution. ICT is a well-known engine of growth since ICT is one of the key economic sectors as well as an enabler to increase competitiveness of other sectors in economy. ICT is powerful and effective means for achieving social integration and enhancing quality of life. There is also increasing demand for adoption of 3rd Platform technologies like cloud, mobility, and analytics.

The Korea International Cooperation Agency (KOICA) and the Ministry of Posts and Telecommunications (MPTC) officially launched the "Cambodia ICT Masterplan 2020", the final product of US$2 million grant aid from the government of Korea, on August 20, 2014.

Cambodia's ICT Masterplan for 2020 aims to build an "ICTopia" that supports the country's push toward intelligence.

It has 5 priority actions have been identified by the government, including development of an e-government framework, strengthening of cyber-security, e-education, e-commerce and e-tourism. The National Institute of Posts Telecommunications and ICT was also established in early 2014, which aims to leverage ICT to strengthen the education system, improving government efficiency and enhancing ICT literacy in the private sector.

Cambodia's ICT Master Plan 2020 sets objectives as following:

- **Empowering People**: become Top-tier country of ICT Human Resource Development in Southeast Asia and 70% of Cambodian people are able to access the Internet by 2020

- **Ensuring Connectivity**: Improve service accessibility of telecom and broadcasting for all the people; expand ICT infrastructure through government assistance and activating private investment and set base environment for diverse ICT convergence such as voice & data, wire & wireless, and telecom & broadcasting

- **Enhancing Capabilities**: Cambodian's own ICT ecosystem have to be integrated into the global ICT ecosystem; Standardization is top priority; need to Increasing the number of participation; Enhancing ICT technological capacity through R&D and to help reinforce national competitiveness

- **Enriching e-Services**: has 5 priority actions including development of an e-government framework, strengthening of cyber-security, e-education, e-commerce and e-tourism

In Cambodia, there is no consistent legal framework for the ICT industry. In September 2012, the government established Telecom Regulator of Cambodia (TRC). Most of ICT policies and related laws are still in draft form or are still pending in the Cambodian legislature or executive agencies. As of now, Telecom Law has not been passed.

IT Spending in Cambodia is expected to grow at a CAGR of 6.6% to achieve US$259.9 million by 2019, pre-dominantly on hardware spending, with an uptick of IT services seen within the next 5 years. Consumer spending accounted for 45% of total IT spending as resulted in the proliferation of smartphone, recorded 85% of contribution in 2015. It resulted that Cambodia's citizens are well poised to play key roles in the mobile first era.

In the enterprise segment, purchasing of PCs registered a large contribution of 56.1% in total hardware spending in 2015. The domestic private sector does not represent a significant customer base as yet, as private enterprises are not currently operating on a sufficient scale as to require major PC purchases. Although FDIs have increased in the past year, actual implementation of IT projects has not yet begun for many of the companies involved.

Cambodia's IT spending is heavily focused on hardware consumption with low level of technology applications. IT hardware spending in Cambodia is expected to reach $162.57 million in 2015. IDC's research indicates that the hardware spending will continue to increase in the next five years due to organizations expanding as well as the increasing ICT adoption awareness in enterprises.

As Cambodia is an emerging market, revenue for System Infrastructure Software still represents the largest segment of the market, followed by Applications. Within the Infrastructure market, system software is still leading the software market. However, IDC witness that security software is one of the software has a healthy growth in next 5 years. IDC believes that the software market will continue to grow over the forecast period as the IT infrastructure is being built out. Over that period, we still see system infrastructure software as the dominating segment of the packaged software market.

BFSI & infrastructure business (telco) are among top business end-users in Cambodia indicated increase in IT spending in 2016, 74.3% and 58.4% respectively. Large enterprises (over 500 employees) in Cambodia also indicated more willing to increase IT spending in 2016, at 52.8%, compared to its smaller-size counterparts. Majority of companies offered strong indication to increase or at least maintain IT budgets for 2016.

Security enhancement and IT consolidation are the top concerns of IT services spending within local Cambodia enterprises.

IT Services Market Overview

In 2015, IT service spending just increased 5.8% growth, reached US$28.92 million due to shortage of large scale and number of big projects. The slight growth came from the increased demand for migration from older to newer IT infrastructure as well as demand of centralized information processing.

IDC expected that healthy spending for hardware and software deploy services and security services will help service market to strongly increase in coming years. The main increase will come from banking and government sectors. It also witnessed a stronger demand for education & training services to improve database management skillsets for tax system, core banking and ERP system.

IT services is expected to grow due to 3rd platform investment within Cambodia enterprises. BFSI, government, communications and media sectors are expected to be among early adopters on this trend.

Cambodia IT Services market dominated by few strong SI players with business generating largely from key contracts in banking, government, and telecoms sectors. Majority of SIs play pre-dominantly into hardware, with a few SI companies such as FPT IS Cambodia, MDP and Campura that focus on pure services.

The competitive landscape is becoming increasingly intense as local system integrators (SIs) seek more revenue sources in order to maintain growth and strengthen their competitiveness. There are consulting needs in SI projects that are high in contract values. Aside from hardware and software product offerings, local IT service players now are starting to introduce data center solutions, training and other managed services

Most SI companies are low innovation in shifting into the 3rd platform and focus mainly on hardware rather than other IT Services products. The increase in foreigner competitions with higher value consulting service providers as well as the pure-play systems integrators will threat these current SIs in Cambodia.

The top local SIs in Cambodia by estimated 2015 revenues in US$ millions are First Cambodia (16-18), DEAM (15-17), FPT Information Systems Cambodia (13-15), Campura (10-12), Thakral One (8-10), ICE Electronics (8-10), Anana Computer (8-10), Net I Solutions (5-7), MDP Cambodia (3-5), and Trust Global Service (3-5).

Market Entry Strategy

There are some opportunities for foreign technology companies accessing this market through partnerships with local SIs in Cambodia; leveraging the advantages of local SIs, such as client base, government relationship, local culture knowledge as well as existing IT resources. Due to lack of consistent legal framework in Cambodia, so partnering with local SIs can provide quick go-to-market strategies and learning curves. Using local SIs will help to localize and bridge the language barrier (Khmer language) for specific solutions.

MDEC should develop a strategy to create demand for Malaysian IT goods and services by providing training and financial resources that are tied to the beneficiaries of these programs commitment to acquire Malaysian IT solution offerings.

In order to penetrate Cambodia's market, IDC recommends three go-to-market strategies for MDEC to consider.

Focus on partnership models

When entering Cambodia's market, partnership models are highly determined as the key consideration. System Integrators and similar companies will look at how the partnership is offered by MDEC's MSC companies. Building sustainable partnership models are preferable as it is expected to be driven by future focus and management of the companies. Aligning vision, mission and objectives in the partnership will be critical in order to build and sustain profitable business models.

Focus on programs that encourage the use of Malaysian IT goods and services, not just partnerships with specific SI providers (Malaysia is among top 2-3 FDI country in Cambodia); inflows of IT goods/services currently are from Singapore, Thailand, and Vietnam. Consider a joint-development program to work with Cambodia government on building local ecosystem and addressing IT education/training for future workforce whilst positioning MDEC as a key gateway fostering IT development exchanges between the 2 countries. Malaysia-based SMART Axiata is already in Cambodia; offers good initial network for market guidance.

Business Fundamentals

Partnership with reputable and tenure local SI players; looks for extensive vendor partnership & skilled IT staffs as key competitive advantages

Key Products

Industry-based solutions will be an advantage for Cambodia. From IDC's Cambodia End-users/SI interviews in 2016, Operating Systems and subsystem software is the number 1 software solutions mentioned by the respondents as top investment priority for the next 5 years in Cambodia.

Other mentioned software solutions in-demand including Financial Applications, Services Operations Management, Authoring and Publishing Software, and Relational Database Management Systems, round up to make the top 5 investment priorities, respectively.

Cambodia software solutions market is to expect a stronger growth due to infrastructure investment as well as increasing disruptive technologies such as 3rd platform solutions; expect stronger growth for security solutions in the upcoming years.

As the Cambodian software market is heavily pirated, this poises a major challenge for a healthier growth; this market needs to become more matured and enforced with legislative compliance and IP guidance, then solutions market will be better positioned for growth and sustainability.

Key Verticals

BFSI, telco and public sectors are looking towards more ICT adoption push

Looking ahead to the future, the different verticals that present different opportunities for MSC exporters are as follows.

- **Hot Vertical.** BFSI and Communications & Media are high potential growth verticals in terms of ICT adoption in the future. Since joining WTO, banking sector enjoyed a period of liberalization and growth. The sector is to continue growth momentum with ATM buildout, consumer acquisitions, retail banking expansion, and infrastructure upgrade. Innovative service offerings such as mobile banking, mobile payment, etc. are the next wave of initiatives. Security compliance to international standards is also the next hurdle of

investment. With the entry of foreign competitors, local telco players only focus on upgrade data centres but also launching much new IT services especially cloud and mobility services.

- **Warm Vertical**. Government is included as the second layer of vertical that can be prioritized for market penetration. Although Cambodia government are pushing across many e-Government initiatives by 2020, such efforts may slow down due to upcoming commune (in 2017) and national elections (in 2018). Many policymakers at both the national and local levels have not been trained to use IT to deliver public services; implementing e-government services requires sufficient knowledge, infrastructure and manpower.

- **Cold Vertical.** Manufacturing is considered a low priority. Low technological knowledge and skills training has not met the demand by manufacturing businesses in Cambodia. However, if manufacturing export growth continues and more entrants of FDI players coming in Cambodia, expect the sector to rely on IT solutions for logistics and operational improvements.

The following table lists the more prominent System Integrators in Cambodia for MSC companies to consider potential partnership.

System Integrators	Strengths & Weaknesses	Opportunities	Go-to-Market	Key Verticals & Solutions	IDC Opinion
First Cambodia	Popularly known as a pure-play SI provider in Cambodia Strong reputation serving the BFSI sector Strong IT professional resources Lack of expertise on handling SI project in other verticals except BFSI. There is no good policy to keep and attract talents	The company has attempted to explore beyond BFSI, especially in government and service industry	Core banking system remains to be the key product to offer in the market, especially for big banks in the market. Compliance and risk management are most of the times offered in a package solution The company is looking to expand its solution offerings based 3rd platform to expand their focus across the financial services value chain By leveraging key partnership with large IT vendors, it has created immense opportunities for First Cambodia especially in customer acquisition	Verticals: Banking, Government, Communications & Media Solutions Focus: E-Government Solutions Banking Solutions Hospitality Solutions Enterprise Solutions ICT Infrastructure Services & Support Application Development Managed Services Training	Being one of the stronger players in the BFSI space, IDC is of the opinion that it is a good opportunity for MSC companies to be pivotal for a foray into this sector. In addition, this rapport also helps them to expand into government and hospitality sectors thanks to the diversify solution and vertical portfolio.
DEAM	Pioneer and the leader of SIs providers in Cambodia Have a strong IT professional in providing IT service in segments from banking, government and manufacturing. Low innovation in shifting into the 3rd platform. Enterprise is centrally managed by one director	Have a strong footprint in providing IT service in many segments will help DEAM to increase number of projects as demand for IT services in these sector increase	Focus on providing banking solution and retail with a One-Stop Store offering with secure transaction solutions DEAM works with ISV partner that provide and support both current and future services to their customers Offers a full suite of storage services to meet increased demand and expectations on service level for backup,	Verticals: Banking, Government, Transportation Solutions Focus: Banking & Retail Solutions Payment Solution IT Infrastructure Enterprise Server & Storage Data Center	With more than 20 years has been operating in Cambodia, DEAM can provide access to its existing customers (including government agencies, BFSI, etc.) who are on the next phase of infrastructure and solutions transformation/upgrade. Its revenue is mainly from banking sector with many key customers as Vattanac bank, CAB bank, Maybank, Anz

System Integrators	Strengths & Weaknesses	Opportunities	Go-to-Market	Key Verticals & Solutions	IDC Opinion
	lead to lack of flexibility to deploy new solutions		recovery and compliance missions	Power Solution (UPS & AVR) IP Telephony & UC IT Business Consulting System Integration Managed Security Services Outsourcing Network Management Services Support & Maintenance Services Equipment & Relocation Business Recovery & Continuity	Bank. The partnership with DEAM will help MSC companies to offer new banking services.
FPT Information System Cambodia Pte. Ltd	Strong reputation serving government and banking and telco sectors. Strong in a variety of managed service led by higher-skilled IT staffs from Vietnam. Strong vision to compete beyond traditionally served areas. Focus mainly on big projects from government, telco and banking, while started to lose SMB market segment	The rising prominence of 3rd platform technologies is promoted FPT business	Focus on developing mission-critical solutions for governmental agencies and enterprises that meets international standards for telecommunications, banking- finance, public finance, governmental agencies and enterprises. Enjoys highest success rate for ERP system implementation across Vietnam & Cambodia. Starts to introduce 3rd platform solutions onto existing customers' business processes and operations. Markets its successes in Vietnam & other countries to promote itself in Cambodia.	Verticals: Government, Banking, Communications & Media Solutions Focus: Providing project-based IT services and solutions for key government and enterprise projects Custom IT solutions development System Integration Managed Services Banking Solutions Telecommunication Services E-Government Services	FPT IS Cambodia is a subsidiary arm of FPT company in neighboring Vietnam. With the strong support from the parent company from finance as well as human resource, it brings wealth of SI experience into Cambodia and was able to win large IT projects, notably in government sector and BFSI sector. IDC recommends that MSC companies should partner with FPT in Vietnam to provide IT services in Cambodia market.

System Integrators	Strengths & Weaknesses	Opportunities	Go-to-Market	Key Verticals & Solutions	IDC Opinion
Campura	Known as one of the local SIs providers with authorization from technology principal to offer training and certification for IT professionals Low innovation and weak focus 3rd platform	The strong IT professionals is advantageous in the pursuit for clients that look for industrial expertise.	Partner with the world's renowned top technology providers such as Microsoft, VMWare, IBM, Cisco, ComScope, Oracle, Diebold, etc. to offer IT business solutions to specific industries. Trying focus is on ERP implementation carrying both Oracle and SAP suites. Targeting services sector with strong hospitality solutions based on ERP solutions and POS system Develop maintenance support team to provide competitive SLAs.	Verticals: Banking, Services, Retail Solutions Focus: Banking Solutions Hospitality Solutions Enterprise Solutions Telco Infrastructure Services ERP/CRM/HRM SharePoint Solutions Data Center Solutions	Besides key customers from Banking, Campura's client list comes from various sectors, including hospitality, healthcare, and education and government. IDC is of the opinion that its business strategies offer needs for vertical-specific solutions that could partner well with Malaysia solutions providers.
Thakral One	Focus on emerging ASEAN countries, it is deep understanding of the needs and realities of Cambodia Key strategic partnership with large IT vendors Lack of local skilled resources Revenue contribution stream mainly from hardware rather than other IT Services product	Leveraging its footprint across ASEAN and strategic partnership/alliances with IT giants like Cisco, IBM, SAP, HP, CheckPoint and etc.	System Integration is considered one of its strongest suites. Sales contribution is still dominated by existing customers at 70% of its revenue. Establishing long-term relationships with customers and suppliers to ensure mutual ongoing benefits. Leveraging its footprint across ASEAN and strategic partnership/alliances with IT giants like Cisco, IBM, HP, CheckPoint	Verticals: Banking, Banking, Communications & Media, Government Solutions Focus: Business Solutions Business Intelligence & Analytics IT Infrastructure Services Application Management Services IT Staff Augmentation	Has a strong footprint across ASEAN and strategic partnership/alliances with large IT vendors, Thakral One also has a large pool of IT talents in Cambodia. With the experience from overseas as well as having a regional presence can help Thakral One to expedite its go-to-market efforts. IDC is of the opinion that MSC companies should partner with Thakral One to provide both technology and education.

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ICE Electronics	There are 3 branches in Cambodia and strong support from ICE distributions. Key strategic partnership with large IT vendors, especially from Dell Revenue contribution stream mainly from hardware rather than other IT Services product.	It has an advantage to reach strong end-user base due to strong partnership with their distributors/channel partners.	Take advantage of vendor distribution/partnership to offer diverse solutions; compete on low pricing offerings. Became the technical specialist for Matrix and PC Studio in the advertising and movie industry Introduced digitalized CCTV capture and positioned for this future market's needs Have strong supports from 3 offices in Phnom Penh; this help to provide fast turn-around time for development and customer supports	Verticals: Banking, Government, Retail Solutions Focus: PC and Laptop Installation, Support and Maintenance for SMB (HW, SW & License) Web solutions (Design and Hosting) CCTV & VOIP solutions Network and Server Installation, Support and Management	ICE electronics was one of the largest IT distributors in Cambodia which is premier partners of many large vendors such as Dell, Cisco, Lenovo, Sony. A very dominant distribution/VAR player, which offers strong customer reach and ICE can offer a potential marketing partnership.
Anana	Known as one of Cambodian pioneer in ICT industry Strong strategic alliances with numerous technology vendors. Among the country's first ISP player It is both a distributor and SI companies. Revenue contribution stream mainly from hardware rather than other IT services product	It has a competitive advantage to reach into end-user market due to strong channel partnership and broadband Internet services.	Provides a full range of products and services to both consumers and enterprises; bundled package of solutions has been determined to be the key approach to end-users Hardware deployment is considered one of its strongest suites; its sister company, Mekong Net is Cambodia's leading ISP & business solutions provider. Take an advantage of distribution/partner with diverse products/solutions in providing IT services to customers.	Verticals: Banking, Constructions, Retail Solutions Focus: System maintenance and customized service support: hardware diagnosis, warranty escalation, IT equipment repair and restoration System Integration Software Supports Managed Services Data Center ICT Solutions Cloud Services	Anana is not only a strong PC distributor but also provides a full range of products and services to both consumers and enterprises. However, it is not a pure SI company at the moment.

System Integrators	Strengths & Weaknesses	Opportunities	Go-to-Market	Key Verticals & Solutions	IDC Opinion
			Leveraging on Mekong Net's ISP & mobile services to expand market reach		
Net I Solutions	Perceived as able to provide strategy-related advice in perspective of IT infrastructure up to business applications Lack of prominent unique product or service	Proposition as the experts on the resources vertical is advantageous in the pursuit for clients that look for industrial expertise	To be a strong implementation partner in telecommunications projects, working closely with Smart Axiata & Cellcard Company has boosted its system integration with IT education and training and strong support team to end-users. This has been determined to be key approach to end-users Have professionals with technical knowledge and operated an Authorized Testing Center Offering a complete communication solution services	Verticals: Communications & Media, Banking, Government Solutions Focus: Network, Virtualization and Storage Infrastructure & Solutions Video Surveillance Telephone System (PABX, Call Center) Queue Management System (Customer Service solution) Banking solutions Election solutions Software solutions: HRM, Factory Management, Insurance System Mobile Site Services	Net I company range of courses equip a professional computer courses, with well-known local and international certification to work efficiently within IT. Hence, If MSC companies are looking for a top-tier partner in IT training, especially in telco industry, Net I Solution is a good partner.
MDP Cambodia	Has strong partnerships with leading technology vendors such as IBM, Oracle, SAP, F5, Microsoft, Cisco, Barracuda, McAfee and Autodesk	The company has attempted to explore beyond BFSI, especially in construction and retail sectors	MDP Cambodia's go-to-market is based on solution verticals by creating sales team based on customer segments and vertical segments. Build strong partnerships with leading technology companies such as IBM,	Verticals: Banking, Construction, Retail Solutions Focus: IT Consulting Integration Maintenance Implementation	Although MDP Cambodia is a small SI player, its strategy is focusing on IT consulting. Currently, it has lack of IT talents with experience in large projects. Its business still heavily depends on vendors' resources for supports. It is willing to partner with foregin vendors

System Integrators	Strengths & Weaknesses	Opportunities	Go-to-Market	Key Verticals & Solutions	IDC Opinion
	Lack of expertise on handling SI project in other verticals except BFSI		Oracle, SAP, F5, Microsoft, Cisco, Barracuda, McAfee and Autodesk; this help MDP to provide a more complete infrastructure and business solutions to enterprise customers Business consulting is one of the biggest revenue stream contributors	IT Management Services	to provide IT services. Although MDP Cambodia is a small SI player, its strategy is focusing on IT consulting. Currently, it has lack of IT talents with experience in large projects. Its business still heavily depends on vendors' resources for supports. It is willing to partner with foregin vendors to provide IT services.
Trust Global Service Co., Ltd	Strong reputation serving in SMB market. Lack of expertise on handling large SI projects.	The high demand of IT systems in SMB segment are increasing	Has been working with customers from different industry sectors including Banking/MFI, Telco, Hospitality, Government, and construction. Its business focus in key services such as system integration, hardware deployment and support including networking and UC solutions. Key partnership with Kasperky to provide security solution to both consumers and enterprises	Verticals: Banking, Government & Retail Solutions Focus: Complex Networks (WAN/LAN/ VPN) Network Firewall, Security (Spam, Spyware, Web Blocker, Anti-Virus) Structure Cabling: Network, Telephone and Camera PABX Billing System Hospitality Solution Wireless Solutions IT Solution Consultation & IT Maintenance Mail Server Solution Business Printing Solution	Trust Global Service is a small SI player in Cambodia. Its revenue contributed mainly from hardware and software than IT services. It has no clear strategy focusing on IT service for enterprise. IDC is of the opinion that Trust Global Service will not be a good fit for partnership with MDEC's MSC companies.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

IDC Malaysia

Suite 7-03, Level 7 The Pinnacle
Persiaran Lagoon, Bandar Sunway
46150 Petaling Jaya, Selangor
Twitter: @IDC
idc-community.com
www.idc.com