Association of Southeast Asian Nations

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INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) was established 40 years ago on 8 August 1967 with five founding members. Today ASEAN has 10 Member States: Brunei Darussalam, the Kingdom of Cambodia, the Republic of Indonesia, the Lao People's Democratic Republic, Malaysia, the Union of Myanmar, the Republic of the Philippines, the Republic of Singapore, the Kingdom of Thailand, and the Socialist Republic of Vietnam. It covers 'a population of about 550 million, a total area of 4.5 million square kilometres, a combined gross domestic product of about USD 1 trillion and total trade of more than USD 1.4 trillion' (ASEAN Doc. #19226 n.d.).

On the occasion of its 30th anniversary in 1997, the Association embarked on the serious task of building the ASEAN Community by 2020. This signals the gradual expansion of regionalism in ASEAN beyond the traditional boundaries of market integration to include the political, social, and cultural spheres.

This chapter takes a closer look at the regional aspirations expressed in the vision of an ASEAN Community and the role that information and communication technologies (ICTs) can play in its realization. It proposes a conceptual framework, consisting of interrelated concepts of a regional learning and innovation culture, sustainable knowledge systems, and communities of practice, for building the ASEAN Community. Regional development is a complex undertaking for which many concepts will have relevance. This chapter limits itself to outlining only a few of these concepts.

ENVISIONING AN ASEAN COMMUNITY

In 1997, ASEAN Leaders articulated a vision of ASEAN as 'a concert of Southeast Asian nations, outward looking, living in peace, stability and prosperity, bonded together in partnership in dynamic development and in a community of caring societies' (ASEAN Doc. #5228 n.d.). This is consistent with ASEAN's desire to be a region that represents the 'collective will of the nations of South-East Asia to bind themselves together in friend-ship and cooperation and, through joint efforts and sacrifices, secure for their peoples and for posterity the blessings of peace, freedom and prosperity' (ASEAN Doc. #1212 n.d.).

ASEAN is further guided by a set of fundamental principles agreed upon by its members under the Treaty of Amity and Cooperation in Southeast Asia signed in 1976 and affirmed under the Bali Concord II signed in 2003. These principles, which together comprise the code of conduct governing relations between states, are stated in the ASEAN Charter as follows (ASEAN Doc. #1217 n.d.; ASEAN Doc. #21069 n.d.):

- respect for the independence, sovereignty, equality, territorial integrity, and national identity of all ASEAN Member States;
- shared commitment and collective responsibility in enhancing regional peace, security, and prosperity;
- renunciation of aggression and of the threat or use of force or other actions in any manner inconsistent with international law;

- reliance on peaceful settlement of disputes;
- non-interference in the internal affairs of ASEAN Member States;
- respect for the right of every Member State to lead its national existence free from external interference, subversion, and coercion; and
- enhanced consultations on matters seriously affecting the common interest of ASEAN.

In 2003, ASEAN Leaders also resolved that 'an ASEAN Community shall be established comprising three pillars, namely, [the] ASEAN Security Community, ASEAN Economic Community and ASEAN Socio-Cultural Community' (ASEAN Doc. #147 n.d.). The ASEAN Security Community (ASC) is 'envisaged to bring ASEAN's political and security cooperation to a higher plane where countries in the region live in harmony with one another and with the world-at-large' (ASEAN Doc. #17359 n.d.). The ASEAN Economic Community (AEC) is envisaged to be 'a single market and production base, characterized by the free flow of goods, services, investment and skilled labour, and freer flow of capital by year 2020' (ASEAN Doc. #15065 n.d.). The ASEAN Socio-Cultural Community (ASCC) is envisaged as a 'community in consonance with the goal set by ASEAN Vision 2020, in which we would be bonded together in partnership as a community of caring societies. Through the ASEAN Socio-Cultural Community, we could foster our cooperation in social and rural population, and at the same time, seek the active involvement of all sectors of society, including women, youth and community groups' (ASEAN Doc. #15259 n.d.). These communities are to be 'closely intertwined and mutually reinforcing for the purpose of ensuring durable peace, stability and shared prosperity in the region' (ASEAN Doc. #15159 n.d.).

MOVING TOWARD THE ASEAN VISION

In 2007, ASEAN proudly celebrated 40 years of regional collaboration and cooperation with the signing of the ASEAN Charter at the 13th ASEAN Summit.² The Charter introduces significant institutional changes within ASEAN, and gives ASEAN 'for the first time after 40 years of existence ... the legal personality of an Inter-Governmental Organization' (ASEAN Doc. #21088 n.d.). The Charter also stipulates the following:

ASEAN Foreign Ministers will form the ASEAN Coordinating Council (ACC) to assist ASEAN Leaders in preparing for Summits, with the support of the Secretary-General (SG) of ASEAN and the ASEAN Secretariat (ASEC).

- There will be a Committee of Permanent Representatives (PRs) to ASEAN that shall take over the functions of the ASEAN Standing Committee. The PRs shall be appointed by each Member State.
- There will be a new ASEAN human rights body.
- The ASEAN Foundation will be accountable to the SG of ASEAN
- Decision-making will continue to be based principally on consultation and consensus. Where consensus cannot be achieved, the ASEAN Summit may decide how a specific decision can be made.
- Flexible participation, such as the ASEAN Minus X formula, may be applied where there is a consensus to do so.
- The mandate and role of the SG of ASEAN shall be enhanced especially in interpreting the ASEAN Charter if and when requested, and in advancing the interest of ASEAN and its legal personality.
- Four Deputy Secretary-Generals (DSGs) shall be appointed.
 The three ASEAN Community Councils will be headed by one DSG each and the fourth DSG may concentrate on ASEC affairs and on narrowing the development gap among ASEAN Member States.
- There shall be no change to the equal sharing of contributions to the annual operating budget of the ASEAN Secretariat.

Another landmark ASEAN event in 2007 was the issuance of the Declaration on the ASEAN Economic Community (AEC) Blueprint. This stipulates the creation of a single ASEAN market and production base and the establishment of the ASEAN Economic Community by 2015 (ASEAN Doc. #21082 n.d.). In essence, the single market and production base of the AEC comprises five core elements: free flow of goods, free flow of services, free flow of investment, freer flow of capital, and free flow of labour. The single market and production base shall also include the priority integration sectors and food, agriculture, and forestry.³

The ASEAN Charter and the AEC Blueprint are intended to improve institutional mechanisms to allow ASEAN to be better prepared for the 21st century. ICTs have an important role to play in their implementation. The key ICT-related areas and opportunities within the AEC Blueprint/Priority integration sectors are shown in Table 11.1.

The strategic directions outlined in Table 11.1 build on previous accomplishments in ICT-related aspects of the work of ASEAN. For example, the 6th ASEAN Telecommunications and IT Ministers (TELMIN) meeting was held in September 2006 with the theme of 'Enhancing ICT Competitiveness: Capacity-Building'. The focus of the meeting was to address common issues relating to 'creating a conducive, competitive

Table 11.1
ICT-related areas and opportunities within the AEC blueprint/priority integration sectors

	Priority actions				
Strategic approach	2008–2009	2010–2011	2012–2013	2014–2015	
B. Toward a highly	competitive region				
B4. Infrastructure de	evelopment				
Information infrastructure Brunei action plan of ICT ICT focus	 Implement the ASEAN Telecommunications Regulators Council (ATRC) Mutual Recognition Arrangement (MRA) on conformity assessment for telecommunication equipment Promote and deepen policy and regulatory measures to deal with the opportunities and challenges in the area of Next Generation Networks (including the issue on broadband penetration and communications in rural areas, etc.) 	ASEAN-wide implementation of the ASEAN MRA on conformity assessment for telecommunication equipment Implement regional measures to extend connectivity, capacity, and access in and between member countries via high-speed networks between national information infrastructures Enable the interoperability of products/services, information systems and networks, in a convergence environment			
	 Develop a general framework or guidelines for coordinated ASEAN e-government programs for efficient delivery of public services, and to facilitate regional trade, investment and other business activities Activate the ASEAN e-Government Forum, among others, to identify key public services for ICT applications, including capacity building activities Intensify capacity building and training for national computer emergency response teams (CERTs) and strengthen cooperation and coverage of an ASEAN regional cyber-security network 				
Content industry	 Develop an action plan for MRA and/or Certification of ICT professionals in ASEAN Develop an action plan for developing ASEAN content, Web services and online application industries 				
B6. e-Commerce	Member countries to enact their e-Commerce laws	Update and/or amend relevant legislation in line with regional best practices and regulations in e-Commerce activities	•	A harmonized legal infrastructure for e-Commerce fully in place in ASEAN	
	 Adopt regional framework and strategy for the mutual recognition of digital signatures Continued capacity building and information sharing for Member Countries on e-Commerce legal infrastructure activities (e.g. PKI, institutional strengthening for CAs, etc.) 	 Advancing cross-border electronic transactions, through pilot implementation of mutual recognition of foreign digital signatures 			

Note: For details of the strategic schedule for the AEC, see ASEAN Doc. #21161.

and sustainable ICT environment; developing digital content; ensuring network security as well as important initiatives for strengthening human and institutional capacities in the ASEAN ICT sector.' The Brunei action plan, a focused formal agreement, was a significant outcome of this meeting (ASEAN Doc. #18849 n.d.; Sonny 2006).

The 7th ASEAN TELMIN meeting was held in August 2007 with the theme 'ICT: Reaching out to the rural'. Ministers at this meeting adopted the Siem Reap Declaration on Enhancing Universal Access to ICT Services, which provides 'policy direction toward developing affordable access to ICT services in rural communities and remote areas in each ASEAN member country' (ASEAN Doc. #20878 n.d.; *Brunei Times* 2007). An important step taken at this meeting was the agreement to promote partnerships and shared responsibilities between the private and public sectors, and international organizations and agencies. ASEAN is moving toward the deployment of ICT for social and cultural development, as well as improving institutional mechanisms for the coordination, management, and implementation of ASEAN ICT cooperation work projects and programs.

The 8th ASEAN TELMIN meeting was held in August 2008 with the theme 'High Speed Connection to Bridge ASEAN Digital Divide'. Ministers adopted concrete measures for enabling ICTs for ASEAN Economic communities, promoting high speed connections to bridge the digital divide, and improving ASEAN ICT integration activities. A key focus of the meeting was 'incorporating high speed connection for most affordable telecommunication/ICT access and services' (ASEAN Doc. #21916 n.d.).

Improvements in institutional mechanisms and the design of supporting programs, especially in the designated areas of science and technology, trade, social and cultural domains, and ICT-related fields will influence and shape the engineering of the ASEAN Community. ASEAN Leaders have agreed to begin with the building of the AEC and related supporting programs. These are important starting steps in the formative phase. However, as 2010 draws near, ASEAN also needs to give due consideration to the equally important pillars of social and cultural development in the ASEAN Community and harness informal networks and communities. This is discussed further in this chapter.

BUILDING THE ASEAN COMMUNITY

The idea of an ASEAN Community is not just a change in direction and form. More importantly, it is a change of mind-sets — that is, a paradigm shift from 'a loose grouping of member states' to an integrated and cohesive community. This shift will take place through planned, incremental changes in

varying stages, rather than through a sudden, revolutionary change. It is also a shift or transformation that would require not only institutional mechanisms and policies but also the broad participation of various stakeholders in knowledge creation and innovation. ICTs can be used to enable this broad participation.

Leveraging ICTs

The potential of ICT to foster development is well documented by leading agencies. For instance, the Global Information Technology Report of 2006–2007 indicates that 'there is growing evidence that ICT is driving innovation' (Dutta and Mia 2007). A recent OECD report states:

... new ICT applications have significant potential and may well have strong economic and social impacts in the near future; ICTs also play a fundamental role in the interlinking and convergence of different technologies. Among these emerging technologies are ubiquitous networks, which make it possible to follow persons and objects and provide real-time tracking, storing and processing of information. Applications of enabling network technologies such as radio frequency identification (RFID) and other sensor technologies are increasingly affordable, investment is rising and applications are moving into commercial use. (OECD 2006, pp. 19–20)

Many would agree that ICT is a key enabler and driver of productivity and growth. But just as important is the potential of ICTs to help build communities. ICTs enable new ways of accomplishing work, delivering services, and enabling social participation. Indeed, the perspective on ICT in the region has shifted from 'what we have' to 'what we are doing with it' to 'what it means to us' — essentially the 'softer' socio-cultural aspects of technology. This shift from a technology-centric to a socio-culture-centric view reinforces the significant role of technologies in fostering learning and innovation for social change.

Fostering an ASEAN Regional Learning and Innovation Culture (RLIC)

Learning and innovation have recently become the focus of development research. 'Innovation and learning are closely linked' (Cooke et al. 1997, p. 484). They are essential for resourceful thinking and creative problem solving at the individual level and for collective enhancement of social capital at the group level. With regard to the ASEAN Community, it

is useful to focus on learning, innovation, and social capital at the group level.

Adler and Kwon (2002, p. 17) describe social capital 'as the goodwill that is engendered by the fabric of social relations and that can be mobilized to facilitate action'. Fukuyama (1999) defines social capital as 'an instantiated informal norm that promotes cooperation between two or more individuals'. These definitions are relevant to ASEAN community building: they imply that '... involvement and participation in groups can have positive consequences for the individual and the community' (Portes 1998).

Equally important for building the ASEAN Community is an understanding of the sources of social capital. Portes (1998) and Adler and Kwon (2002) identify the following sources of social capital: the structure of relationships, authorities, informal norms, and culture. For ASEAN, it is the strength of the social capital embedded in social networks that will further integration and social cohesion of the ASEAN Community. Informal norms and culture are especially important. As Fukuyama (1999) notes, 'The fact of the matter is that coordination based on informal norms remains an important part of modern economies, and arguably becomes more important as the nature of economic activity becomes more complex and technologically sophisticated.' In the ASEAN region, close family ties and formal and informal connections contribute to the enhancement of social capital.

Another important source of social capital in ASEAN is education. Indeed, the value for education is common to ASEAN cultures. Anecdotal evidence suggests that many families give priority to education and training over other needs, such as taking a major family vacation or purchasing luxury goods. The importance of education and training is recognized at the regional level and ASEAN Leaders in 2005 institutionalized the ASEAN Education Ministers Meeting (ASED) as a regular ASEAN meeting to address key education issues.

The premium placed on social networks and education in ASEAN communities bodes well for the formation of a regional culture of learning and innovation that in turn could be the foundation of the ASEAN Community.

Nurturing Sustainable Knowledge Systems (SKS)

An ASEAN RLIC would lead to the creation and regional embedding of knowledge and knowledge systems. SKS in particular should form part of the foundation of the ASEAN Community.

In regional studies, it is not uncommon to find regional innovation systems (RIS), clusters, and learning regions mapped to real-world regions. However, the analyses tend to have a more technical bias, particularly when the knowledge that is produced or learned is deemed to be coming from firms or industrialized regions geared toward greater competitiveness. For ASEAN, the useful knowledge gained within the ASEAN Community is not just technical or commercial knowledge. An ASEAN RLIC would and should generate social and cultural knowledge as well. The collective and generic term 'knowledge systems' takes into account the diversity of knowledge generated. The term 'system' is slightly modified from Lundvall (1992) and in the ASEAN context it is taken to mean a collection of distinct entities with defined relationships and interactions. Knowledge systems in the ASEAN context therefore refer to the knowledge content derived from defined relationships and social interactions. These knowledge systems become sustainable when resources are properly managed; stakeholders from public, private and civil society organizations, and communities have well-defined roles and relationships; and relevant stakeholders take appropriate ownership.

The RLIC and the SKS complement each other and underpin the building of the ASEAN Community. The RLIC creates and produces useful knowledge while the SKS maintains and ensures sustainability. These also correspond to two orders of change in systems theory (Watzlawick et al. 1974). First order change involves a change of system artefacts, while second order change is aimed at the systemic level. Applied to the ASEAN context, ICT for development in first order change improves the quality of created knowledge, and in second order change improves the knowledge creation process. ICT-enabled informal communities of practice play important roles as suppliers of knowledge and domain information and, together with other key ASEAN stakeholders they can implement the necessary first and second order change. The challenge for ASEAN is how to nurture the right communities and SKS and engage in the appropriate level of change.

Building Communities of Practice (CoPs)

To further operationalize the concepts of ICT-enabled RLIC and SKS in the ASEAN Community, let us turn to the relatively new field of Community Informatics. Community Informatics is interested in how to effectively use ICT in evolving communities — that is, communities of practice (CoPs) and interest, as well as geographically-based communities (de Moor and De Cindio 2007).

CoPs are not a new phenomenon (Wenger and Snyder 2000). CoPs are groups 'of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (Wenger et al. 2002, p. 4). CoPs create and manage knowledge and drive innovation (Lesser and Storck 2001; Swan et al. 2002).

How can ASEAN build CoPs that will develop a regional culture of learning and innovation and build sustainable knowledge systems?

Now that it has completed a number of key ICT infrastructural projects, developed digital content, trained professionals, compiled databases, and adopted best practices, ASEAN is ready to build CoPs. ASEAN websites and Web portals in particular could support the building of CoPs.

ASEAN Websites for CoPs

In ASEAN, as elsewhere, the Internet is an important and effective tool for managing information, stimulating participation, and embedding and sharing knowledge. Websites and Web portals are frequently used as a common interface and tool in the management process of many ASEAN meetings. Moreover, many ASEAN sectors have a website. These include: ASEAN Secretariat (www.aseansec.org), ASEANconnect (www.aseanconnect.gov.my), ASEAN Science and Technology Network (www.astnet.org), ASEAN Supporting Industry Database (www.asidnet.org), ASEAN Centre for Energy (www. aseanenergy.org), ASEAN Culture and Information (www.aseaninfoculture.org), ASEAN Tourism (www.asean-tourism.com), ASEAN Tourism Association (www.aseanta.org), ASEAN Inter-Parliamentary Organization (www.aipo.org), ASEAN University Network (www.aun-sec.org), ASEAN Production Houses and Broadcasters (www.aseanmediadirectory.com), ASEAN Foundation (www.aseanfoundation.org), Southeast Asian Fisheries Development Centre (www.seafdec.net), Southeast Asian Ministers of Education Organization (SEAMEO, www.seameo. org), and SME Networks (www.aseansec.org/12877.htm).

In order for such websites to serve as spaces for building CoPs, they need to meet the criteria of 'participatory coverage' and 'content generation'. Participatory coverage takes into account membership and thematic focus, while content generation refers to a website's potential for learning, innovation, knowledge sources, and sharing. Using these criteria to assess the ASEANconnect and the ASEAN Science and Technology (AST) Network websites yields the following observations (see Table 11.2).

Both websites are intended for related groups of people in the ASEAN Member States. ASEANconnect (www.aseanconnect. gov.my) is an ICT portal for members of TELMIN, TELSOM, ARTC, and invited groups while the newly revamped ASEAN Science and Technology Network (www.astnet.org) is intended for the S&T community. Both websites feature databases in selected fields. They form an important foundational layer of networks and servers that could be upgraded to allow for Internet content integration, user interaction, and user management. Indeed, as announced at the Thirteenth ASEAN Summit in 2007, 'USD 240,500 was given to the ASEAN Secretariat to upgrade its Information Technology, archival and depository systems' (ASEAN Doc. #21093 n.d.). While this amount may not be sufficient to also build CoPs, it is an opportunity for ASEAN to take advantage of the work window and incorporate the required technology infrastructure that would allow integration and develop CoPs where needed. Combined with a consultative and participatory approach at an appropriate level and with suitable stakeholders, it would enable ASEAN to reap the benefits of additional knowledge creation.

However, some conditions that are useful for building CoPs could also limit them. When knowledge is seen as a 'public good

Table 11.2
Potentials of two ASEAN websites to foster CoPs

Criteria	ASEAN connect (2005)	AST network (2005)
Participatory coverage: Membership	Participation or membership is by invitation. The coverage is the whole of ASEAN and invited	Membership and participation is restrictive even with the Community Forum feature.
	groups.	Non-members cannot post to the forum. The
	There is restricted access to the members' only	coverage is the S&T of ASEAN plus invited
	areas (TELMIN, TELSOM, ARTC, ASEC, and invited	groups.
	groups). New or other interested stakeholders	
Participatory coverage: Thematic focus Content generation: Learning	cannot sign up to join from the Internet. Single theme, ICT. The information presented is situated within the	Single theme, S&T. The community forum is a good venue
	ICT theme and focus. Learning potential exists.	for limited interaction and sharing. Higher
Content generation: Innovation	Fostering of innovation is limited to email	learning can be expected. Fostering of innovation is limited to email and
	exchanges.	forum exchanges.
Content generation: Knowledge	Digital divide database, news and discussion	S&T Indicators' database, forum, reports,
sources	papers.	news.
Content generation: Knowledge sharing	Average, not fully interactive.	Average, not fully interactive.

belonging to the whole organization, knowledge flows easily'. But individuals tend to shy away from contributing knowledge for a variety of reasons (Ardichvili et al. 2003). The challenge is how to encourage knowledge sharing particularly in formal and hierarchical contexts. Malpractice can also curb knowledge sharing (Pemberton et al. 2007). In short, CoPs need to be carefully managed. Once the appropriate CoPs are in place, ASEAN can look forward to greater participation in the creation and exchange of useful knowledge.

CONCLUSION

This chapter has focused on ASEAN's vision of an integrated and cohesive ASEAN Community and how ICT can be used to turn this vision into reality. Given ASEAN's 40-year history in building regional institutions and adopting regional policies, the vision of an ASEAN Community must necessarily go beyond what ASEAN has achieved in the political and economic spheres to the social and cultural levels. In this age of rapid change, ASEAN needs to build a stronger regional learning and innovation culture and sustainable knowledge systems that will serve the needs of the people of ASEAN and enable them to participate in the building of an ASEAN Community as members of local and global communities of practice.

NOTES

- ASEAN was established on 8 August 1967 in Bangkok by the five original Member Countries, namely, Indonesia, Malaysia, Philippines, Singapore, and Thailand. Brunei Darussalam joined ASEAN on 8 January 1984, Vietnam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999 (ASEAN Doc. #147 n.d.).
- The 13th ASEAN Summit was held on 18–22 November 2007 in Singapore. The ASEAN Charter was signed on 20 November 2007.
- For full details, readers can refer to the entire Blueprint ASEAN Doc. (n.d.q), ASEAN economic community blueprint.

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