

12-10-2017

# Understanding challenges in the use of information systems in aid management: Cases of Southeast Asian countries

KYUNG RYUL PARK  
*LSE, k.park5@lse.ac.uk*

Moonjung Yim  
*University of Washington Information School, mjyim@uw.edu*

Follow this and additional works at: <http://aisel.aisnet.org/globdev2017>

---

## Recommended Citation

PARK, KYUNG RYUL and Yim, Moonjung, "Understanding challenges in the use of information systems in aid management: Cases of Southeast Asian countries" (2017). *GlobDev 2017*. 6.  
<http://aisel.aisnet.org/globdev2017/6>

This material is brought to you by the Proceedings Annual Workshop of the AIS Special Interest Group for ICT in Global Development at AIS Electronic Library (AISEL). It has been accepted for inclusion in GlobDev 2017 by an authorized administrator of AIS Electronic Library (AISEL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Understanding challenges in the use of information systems in aid management: Cases of Southeast Asian countries

**Kyung Ryul Park**, London School of Economics and Political Science, [k.park5@lse.ac.uk](mailto:k.park5@lse.ac.uk)<sup>1</sup>  
**Moonjung Yim**, University of Washington Information School, [mjyim@uw.edu](mailto:mjyim@uw.edu)

**Paper Category:** Research Paper

## ABSTRACT

Since the endorsement of the Paris Declaration on Aid Effectiveness in 2005, increasing attention has been paid by the development community on the significance of effective aid management and coordination. Amidst growing interest towards how information and communication technologies (ICTs) can be utilized to promote aid effectiveness, ICT-enabled aid management initiatives have proliferated. As we recognize scant previous work on the use of ICT in international aid governance. This study investigates the use of information systems in aid management and the challenges in their sustainability in the particular focus on Southeast Asian countries. In addressing these questions, we employ international relations (IR) constructivist lens and examine cases from Cambodia, Thailand, Indonesia, Viet Nam, Laos, Myanmar, and the Philippines. We find that, while localization of aid effectiveness norm has taken place across the countries, there were contrasting results in terms of sustainability of national information systems in aid management. We address socio-technical factors and attempt to analyze norm diffusion and its localization dynamics at the state level.

**Keywords:** Information and communication technologies and development (ICTD), information systems, open data, aid effectiveness, Southeast Asia

---

<sup>1</sup> The data collection of this research paper is based on the doctoral research work of first author.

## **INTRODUCTION**

The endorsement of the Paris Declaration on Aid Effectiveness (hereafter the Paris Declaration) in 2005 brought development community's attention to the significance of effective aid management and coordination between donor and partner countries. Amidst growing interest in the utilization of information and communication technologies (ICTs) as a mechanism for promoting aid effectiveness, the use of information systems has proliferated with implementation in over 70 countries, with the goal of improving aid coordination and development performance while avoiding duplication (Park, 2017). Moreover, as a form of open data provision, there have been high expectations that the use of information systems would enhance transparency and accountability of development practices.

Despite vigorous scholarly discussions on the use of ICT in the public sector, there is scant work on the use of ICT in international aid. This study investigates the use of information systems in aid management and explain factors influencing their sustainability in Southeast Asian countries. In addressing these questions, we employ an international relations (IR) constructivist lens. We choose to examine cases from Cambodia, Thailand, Indonesia, Viet Nam, Laos, Myanmar, and the Philippines. The rationale for this focus largely emanates from two aspects which offer spectra concerning our topic of interest. First, the listed Southeast Asian countries consist of a mixture of former and current borrowing countries of the International Development Association (IDA) which implies varying experiences related to aid reporting and monitoring. Second, it was previously found that countries in the region widely vary in the way how they gather and disseminate official data (Stagars, 2016).

In the sections which follow, we provide brief overview of the recent discussion of ICT in the public sector and identify major lacuna in the literature. Then, we move on to explain our conceptual framework through IR constructivist lens and the notions of norm diffusion and localization. After covering methodology, findings, and discussion, we conclude with the contributions and limitations of this study and possible future research areas.

## **ICT IN AID MANAGEMENT**

There has been wide discussion on the use of ICT in the public sector as a means to achieve government efficiency (Kettani & Moulin, 2014), transparency (Bertot, Jaeger, & Grimes, 2010; Sturges, 2004), improve service quality (Brown, 2015; Jaeger & Thopmson, 2003) and citizen engagement (Avila et al., 2010; Medagila, 2012). The notion of good governance, as envisioned by the prescriptions of New Public Management (NPM), has promoted the use of ICT in aid management in developing countries. Although the concept of ‘good governance’ and NPM has increasingly been challenged theoretically, the practices based on the concepts are internationally institutionalized and might continue in practice (Dunleavy, 2005). Scholars have often investigated ‘good practice’ of transferring and adopting technology by analysing the socio-organizational conditions of developing countries (Al-Gahtani, 2003; Lin, Fofanah, & Liang, 2011; Rogers, 1995). ICT and development (ICTD) scholars challenged the technical-rational assumption that ICT is intrinsically beneficial in public governance from socio-technical perspective (Ciborra, 2005; Madon, 2009). A further shift has been made away from a dominant a-contextual and a-political view by conceptualising ICT initiatives as socially embedded actions, which are based epistemologically on social constructionist view (Avgerou, 2001). More nuanced research based on case studies in the context of developing countries reflecting global changes has been discussed (Avgerou, 2002; Qureshi, 2013; Walsham, 2001).

However, there is insufficient understanding of the use of ICT in international aid. With considerable international attention brought about by the Paris Declaration in 2005 signed by 138 countries and 28 international organizations, and the huge package of investment that followed, the use of information systems with various NPM promises that they could potentially improve aid management and coordination among stakeholders (OECD, 2005). Powerful actors in the field of development such as the World Bank and the OECD contributed to the spread aid effectiveness norms and promoted the use of ICT in aid management as a model of a ‘good job’ (OECD & UNDP, 2006; UNDP, 2010). The belief that this improvement can be achieved by facilitation of the process of collecting, sharing, and managing aid information. This process of information rationalization is expected to enhance aid transparency and accountability and coordination among stakeholders and enable citizen participation in the development process (Agustina & Fahmi, 2010; Linders, 2013; Wittemyer, Bailur, Anand, Park, & Gigler, 2014). However, there is still major

research gaps in investigating implementation and sustainability of such systems. In particular, there is little research theorizing how international norms are institutionalized in a developing country and how this influence implementation and sustainability of technology.

## CONCEPTUAL FRAMEWORK

Using the IR constructivist lens, we interpret ‘aid effectiveness’ as an external norm that has been established and diffused among Southeast Asian countries. In this view, the information systems implemented for managing aid is conceptualized as a norm supporting system. Constructivist view is regarded as an approach based on two assumptions: (1) agents/states are situated in a setting that is social as well as material (with relatively more emphasis on the former), and (2) this setting influences how agents or states perceive their own interests (Checkel, 1998). Accordingly, in the view of IR constructivists agents/states and structures/international norms interact, and norms are interpreted as “collective understandings that make behavioral claims on actors” (Checkel, 1998: 327-328). With this significant focus on norms, during the last two decades, there has been growing interest among IR constructivists in examining how norms at international level are diffused and influence the behavior of states (Landolt, 2004; Park, 2006). One of the most frequently cited theoretical frameworks is Finnemore and Sikkink’s notion of the Norm’s Life Cycle and norm entrepreneur (Finnemore & Sikkink, 1998). Scholars refer to this work in the context of Southeast Asian countries (Acharya, 2004; Capie, 2012; Collins, 2013; Hund, 2003; Katsumata, 2003, 2006; Koga, 2010; Poole, 2013; Stubbs, 2008; Tomsa, 2017). Finnemore and Sikkink (1998) explain that there are three stages in the norm diffusion process: *norm emergence* (reaching a point with a critical mass of states embracing new norms), *norm cascade* (norm leaders convince others to become norm followers), and *norm internalization* (norms become taken-for-granted). *Norm entrepreneurs* are key actors who persuade a critical mass to adopt norms during the first stage.

Finnemore and Sikkink’s theoretical framework sheds light on the dynamics surrounding norm diffusion and allows us to move away from understanding the process in a linear manner. Their work focuses on transnational agents and the processes shaping norm diffusion at the international system level, more so than the agency role of norm-takers (Acharya, 2004). In this context, Acharya introduced and formalized the concept of *norm localization* (Acharya, 2004, 2011, 2013). Some studies adopt the notions of norm localization in the context of Southeast Asian countries (e.g. Capie, 2008, 2012; Collins, 2013; Kraft, 2012; Rüländ, 2009). Acharya defines the concept

*Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

as “the active construction of foreign ideas by local actors, which results in the former developing significant congruence with local beliefs and practices.” (Acharya, 2004: 245) The process of localization requires transnational or international norms to be localized to be compatible with “cognitive prior” in a region or state; or be reconciled with pre-existing norms through constructive processes. Moreover, norm localization requires local or regional actors to actively borrow and reconstruct international, outside norms (Capie, 2012). Paying attention to localization offers a shift away from the focus on *international* norm entrepreneurs (*often external to the norm targets*) to *local or regional* agents and norm-takers, such as those in developing countries (Capie, 2008, 2012).

There are several studies that examined norm diffusion dynamics in Southeast Asian countries. Fundamentally, most studies reflect the conflict between externally pressured transnational or international norms and the region’s resistance to external interference and its willingness to preserve sovereignty. The localization of the external norm is commonly emphasized as a key determinant in adhering to transnational or international norms. In the cases of Southeast Asian countries, the principle of non-interference is the cognitive prior that often contends with transnational or foreign norms (Bellamy & Beeson, 2010). Until now there has been scant examination of the diffusion of aid effectiveness as an external norm in Southeast Asian countries.

## **METHODOLOGY**

This study adopts a multiple cases study design, where the findings are likely to be more robust through cross-case synthesis (Yin, 2009). Seven cases of the use of ICT in aid management in Southeast Asia are illustrated: Cambodia, Thailand, Indonesia, Vietnam, Laos, Myanmar and the Philippines.

Data collection was conducted via secondary sources including international aid agreement, government regulations, websites, official project documents and technical documents for information systems, policy reports published by governments, donor agencies, service providers, as well as media articles. Early data collection constituted from archival research on the cases mainly from January to August in 2015. Close investigations and further data collection were conducted on the websites of the systems during the period of August 2015 to August 2016.

Founded on the conceptual framework discussed, findings are analyzed in two levels: international  
*Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

and local. That is to say, the authors focus on the international norms, in which all the case countries are embedded, but not necessarily equally accepted. Each individual case is also treated as a separate study at the same time (Yin, 2014). In order to analyze the data collected, findings across individual cases are aggregated, categorized, and cross-compared. Under the emerging themes, the authors provide extensive findings from diverse sources of data, within each case. Some segments of the findings are summarized for analysis, including implementing governmental agency, local initiatives, participation in aid effectiveness agenda, year of implementation, funder, and service provider.

## FINDINGS & ANALYSIS

### *Cambodia*

The Cambodia ODA Database (<http://odacambodia.com>) was implemented in 2005, in recognition of the Paris Declaration.<sup>2</sup> Localization of the aid effectiveness norm was evidenced in October 2006, when the local government and its development partners signed a local Declaration—Declaration by the Royal Government of Cambodia and Development Partners on Enhancing Aid Effectiveness—that commits all parties to the implementation of the Harmonisation, Alignment and Results (H-A-R) Action Plan.<sup>3</sup> Moreover, the country set out the National Strategic Development Plan (NSDP) providing the overarching framework for conducting development activities and for planning and allocating domestic and external resources in Cambodia.<sup>4</sup> Thus, the establishment of the ODA database was a part of a series of effort by the Cambodian government to localize the aid effectiveness norm.

The ODA database system is maintained by the Council of the Development of Cambodia (CDC) (Global Facility for Disaster Reduction and Recovery, 2008). The sustainability of the ODA database requires close coordination with development partners and data input because development partners have the responsibility for entering data.<sup>5</sup> The system is currently in service (as of August 2017).

---

<sup>2</sup> Retrieved May 18, 2016, from <http://www.cdc-crdb.gov.kh/database/index.htm>

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

### ***Thailand***

As one of the Tsunami-affected countries in December 2004, an information system for aid management was launched in 2005 specifically to track international assistance to Thailand's Tsunami recovery effort, using Synergy International's platform Development Assistance Database (DAD) (<http://dadthailand.mfa.go.th>). At the launch ceremony of DAD Thailand, Deputy Permanent Secretary of the Ministry of Foreign Affairs, Thakur Phanit, mentioned that the system was expected to significantly contribute to aid coordination and enhance synergy of projects without experiencing unnecessary duplication (UN Development Programme, 2005). Therefore, we can deduce that there was a local initiative to borrow and frame the norm during the post-Tsunami phase to resolve concerns surrounding the coordination and monitoring of the international aid influx and meet the expectations of both the donors at the international level and the affected communities at the domestic level.

The Thailand International Development Cooperation Agency (TICA) spearheaded the online database with support from the UNDP. Similar to Cambodia's case, DAD Thailand's success and sustainability had been very much dependent on all partners contributing accurate and updated information at least once a month (UN Development Programme, 2005). The system is no longer in service (as of August 2017).

### ***Indonesia***

After Tsunami struck Indonesia, the local government set up Rehabilitation and Reconstruction Agency (BRR: Badan Rehabilitasi dan Rekonstruksi) for Aceh-Nias, on April 2005, in order to oversee the coordination of the post-Tsunami rehabilitation and reconstruction program. The Indonesian government chose to implement the DAD platform, developed by Synergy International. The system was customized and finally inaugurated in November 2005 and re-named as Recovery Aceh-Nias Database (RAND). Similar to Thailand's case, Indonesia's need for aid coordination amidst aid influx led to localization of aid effectiveness norm. This resulted in the creation of an institution (BRR) and adoption of RAND which was actively supported by the government.

The story on the system from the field sounds contradictory ("Part VI:EDFF, the Multi-Donor Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017

Fund, and the case of the vanishing databases,” 2014)—assessments of the use of technology have been largely varied and mixed with accolades and critiques. The RAND system is still accessible at <http://rand.bappenas.go.id>, but have not been being used since the recovery process ended.

### ***Viet Nam***

Unlike the DADs of the Tsunami-affected countries, the motivation behind Vietnam’s DAD came from the necessity to track ODA flows (Global Facility for Disaster Reduction and Recovery, 2008). Shortly after their endorsement of Paris Declaration in March 2005, a draft of *the Hanoi Core Statement on Aid Effectiveness* was tabled, of which the final version highlights the significance and potential of aid effectiveness to strengthen governance and development performance in Viet Nam (United Nations Viet Nam, 2005). The DAD for Viet Nam (<http://dad.mpi.gov.vn/>) was launched in October 2005 by Viet Nam's Ministry of Planning and Investment (MPI). Therefore, we can see that Viet Nam had a local initiative to borrow and frame the external norm of aid effectiveness and partly reconstruct it to fit into the local context. In this setting, the DAD Viet Nam was a demonstrative product of norm localization.

The DAD Viet Nam was intended to improve the government's ability to obtain updated ODA information and enhance aid coordination and management.<sup>6</sup> However, challenges arose because Vietnamese DAD was dependent on external organizations including UNDP in receiving data.<sup>7</sup> The system is no longer in service (as of August 2017).

### ***Laos***

With UNDP as a norm entrepreneur, the Aid Management Platform (AMP) of Lao PDR (<http://amp.mpi.gov.la>) was introduced in 2011. As a background, there was a sense of willingness by the local government for successful AMP operation as it was expected to help centralize the ODA data management and support the realization of the principles underlying the Vientiane Declaration on Aid Effectiveness (Ministry of Planning and Investment of Lao People’s

---

<sup>6</sup> Retrieved August 24, 2016, from [http://www.mofahcm.gov.vn/en/tintuc\\_sk/nr051026103018/news\\_object\\_view?newsPath=/mofa/nr040807104143/nr040807105001/ns051004144840](http://www.mofahcm.gov.vn/en/tintuc_sk/nr051026103018/news_object_view?newsPath=/mofa/nr040807104143/nr040807105001/ns051004144840)

<sup>7</sup> Ibid.

Democratic Republic, 2013). The evidence of aid effectiveness norm localization was reflected in the subsequent launch of the AMP Laos Public Portal (<http://ppamp.mpi.gov.la/portal>)—a user-friendly extension of the AMP system—in 2013. The launch of Public Portal was regarded as a strong demonstration of the government’s commitment to the aid effectiveness and transparency agenda espoused in the Paris Declaration and subsequent high-level forums on aid transparency in 2008 and 2011 (Vota, 2013).

Laos experienced some technological challenges, although it was later addressed—connectivity between government offices and the AMP system server had some issues when the government data center moved to a different building (Calabrese, 2010). Both the AMP system and the Public Portal are still accessible (as of August 2017) using AMP version 2.10.32 updated in July 2015, with the most recent actual disbursement data input in 2017.

### ***Myanmar***

With the democratic political transition and socio-economic reform program in 2011 and subsequent lifting of EU sanctions in 2013, Myanmar experienced a massive inflow of foreign assistance (European Commission, 2016). Concerns surrounding effective aid tracking was reflected in the Nay Pi Taw Accord for Effective Development Cooperation endorsed in 2013 (“Case study: Mohinga—Myanmar’s home-grown Aid Information Management System,” 2015). In this setting, Myanmar’s Mohinga (<https://mohinga.info/en>) was launched in February 2015. Thus, Myanmar’s socio-political reformation naturally generated circumstances favourable to accept and borrow the norm of aid effectiveness which eventually led to norm localization efforts in Myanmar, especially by the local government officials. This context was particularly evident in the Nay Pi Taw Accord, and in the design and implementation process for home-grown information system.

The country also faces some challenges in managing the system. It is designed so that data is directly fed in from the International Aid Transparency Initiative (IATI) Registry, but many partnering organizations were found to be not reporting with accuracy or detail (or at all) to IATI (European Commission, 2016). Mohinga is still accessible (as of August 2017) with recent disbursement data input in 2017.

### ***The Philippines***

In the aftermath of the super typhoon Yolanda in November 2013, the local government bureaucracy and external stakeholders were mobilized to support recovery and reconstruction in the Philippines, leading to the establishment of the Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR). OPARR then developed the e-Management Platform: Accountability and Transparency Hub for Yolanda (eMPATHY; <http://empathy.oparr.gov.ph>) to track Yolanda recovery activities (Global Facility for Disaster Reduction and Recovery, 2015) and had eMPATHY went online by October 2014 (“Online database for ‘Yolanda’ reconstruction efforts to go live by Oct,” 2014). eMPATHY is currently no longer in service (as of August 2017). In November 2013, the local government had also launched an online portal to track foreign aid for the victims of Typhoon Yolanda named Foreign Aid Transparency Hub (FAiTH; <http://www.gov.ph/faith>). FAiTH is no longer maintained by the new administration and the URL is inaccessible (as of August 2017). We can see that the aid effectiveness norm was localized in the Philippines as a part of facilitating effective recovery process and as a reciprocal action to the development partners’ assistance.

As with a few other countries, there have been some challenges and limitations in implementation. First, eMPATHY's roll-out required orienting all partners (“Online database for ‘Yolanda’ reconstruction efforts to go live by Oct,” 2014). Second, in the case of FAiTH, the system only records assistance as declared or pledged by the development partners (Republic of the Philippines National Government, 2015).

The following table (Table 1) summarizes the findings and analysis for this section, covering the information for each country case including whether they were signatories to the Paris Declaration, participated in the Paris Declaration Survey, and had a domestic aid effectiveness framework as well as the name of donor focal point, name and launch year of information system in aid management, local implementing governmental agency, and service provider.

**Table 1. Summary of findings: Aid effectiveness norm and implementation of information system in aid management in Southeast Asian countries**

Country	Paris Declaration	PD Survey			Domestic Aid Effectiveness Framework (Year)	Donor Focal Point	AIMS	Year	Implementing Governmental Agency	Service Provider	Funder
		2006	2008	2011							
Cambodia	✓	✓	✓	✓	Declaration by the Royal Government of Cambodia and Development Partners on Harmonization and Alignment (2004)	UNDP and UK (2008); UNDP and Sweden (2011)	Cambodia Official Development Assistance (ODA) Database	2005	Cambodian Rehabilitation and Development Board (CRDB) / Council of the Development of Cambodia (CDC)		N/A
Indonesia	✓	✓	✓	✓	Jakarta Commitment (2009)	Canada (2008); UNDP (2011)	Recovery Aceh – Nias (RAN) Database	2005	Reconstruction and Rehabilitation Agency of the Government of Indonesia (BRR)	Synergy International Systems	MDTF
							AIMS (Aid Information Management System)	2009	Ministry of National Development Planning (Bappenas)		GTZ
Laos	✓	✓	✓	✓	Vientiane Declaration on Aid Effectiveness (2006)	UN (2008); UNDP and EU (2011)	AMP (Aid Management Platform)	2011	Department of International Cooperation, Ministry of Planning and Investment	Development Gateway	MDTF (UNDP, World Bank, and OECD)
Myanmar					Nay Pyi Taw Accord for Effective Development Cooperation (2013)		Mohinga	2015	Ministry of National Planning and Economic Development	Catalpa International	EU
Philippines	✓	✓	✓	✓		ADB (2008)	eMPATHY (Electronic Monitoring Platform Accountability and Transparency Hub for Yolanda)	2014	Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR)	Synergy International Systems	UNDP
							FaiTH (Foreign Aid Transparency Hub)	2013	FAiTH Task Force		N/A
Thailand	✓						DAD (Development Assistance Database)	2005	Thailand International Development Cooperation Agency (TICA) - Ministry of Foreign Affairs	Synergy International Systems	UNDP
Vietnam	✓	✓	✓	✓	Hanoi Core Statement on Aid Effectiveness (2005)	Australia (2008)	DAD (Development Assistance Database)	2005	Ministry of Planning and Investment (MPI)	Synergy International Systems	UNDP

## DISCUSSION

The cause for initiating discussions on the aid effectiveness norm and the use of information systems in aid management varied across Southeast Asian countries, ranging from natural disasters to political transformation. Leading up to the implementation of information sharing platform, some countries had clearer cognitive prior which aligns with the aid effectiveness norm—such as Viet Nam’s Hanoi Core Statement—whereas others had rather abrupt motivation due to unforeseen incidents—like the case of Tsunami- or typhoon-affected countries which saw the need for aid coordination and management along with the influx of foreign assistance. Despite how the process varied, in general, we have seen in the previous section that aid effectiveness norm has been localized across the Southeast Asian countries in ways that are specific to local circumstances. This was evidenced in the form of domestic aid effectiveness framework establishment (Cambodia, Indonesia, Viet Nam, Laos, Myanmar), adoption of the external norm in response to growing aid tracking and coordination concerns from in and outside the country (Thailand, Philippines), and the effort to design information systems that align with local specificity (Myanmar). However, despite norm localization, the technological initiative supporting the aid effectiveness norm and the norm’s localization—is no longer operating in some of Southeast Asian countries, i.e. Thailand, Indonesia, Viet Nam, and the Philippines (as of August 2017). From this examination, we find the limitations of norm diffusion and localization in fully explaining the sustainability of norm-supportive technology.

To overcome the limitations of the IR constructivist lens in understanding the sustainability failures in some of Southeast Asian cases, we suggest looking at socio-technical factors. First, there have been challenges from systems design which reflect the lack of full ownership by locals. To start, data input practices have been heavily donor-dependent. This dependence was noticed in most countries we examined, e.g. DAD Thailand required accurate data input from donors at least once a month and Viet Nam’s MPI received information from UNDP. Related to this, as it was seen in the case of the Philippines, the rollout sometimes required orienting the development partners for data input which necessitates much understanding and coordination effort. These issues surrounding ownership reflect a combination of cultural/social and technological sustainability failure in Kumar and Best's (2006) Sustainability Failure Model.

Second, in the case of the Philippines, political circumstances mattered. We found that the new

*Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

administration put an end to the operation of FAiTH and the managing team has left the government. Around the world, the chances exist for abrupt discontinuity of governmental project operations following changes in administration; but in the Philippines' case, the new administration was influential in determining the sustainability of such systems. This closely reflects political/institutional sustainability aspects of what Kumar and Best's (2006) refer to.

Third, information systems implementation in the Tsunami- or typhoon-affected Southeast Asian countries—Thailand, Indonesia, and the Philippines—lacked the momentum to shift away from a narrow humanitarian assistance focus to the broader scope of ODA monitoring and management. Perhaps from the beginning of planning and design stage, the recovery-oriented focus dominated systems implementation in these countries which was difficult to be expanded in the longer term. This aspect also pertains to political/institutional sustainability failure (Kumar & Best, 2006).

The cases we analyzed might reflect particular situations experienced by the selected Southeast Asian countries and therefore may have limitations to be generalized to broader context of developing countries. Nevertheless, we believe that the cases entail implications on the factors that should be considered for effective aid management through ICT—country ownership, political circumstances, and long-term use considerations.

## **CONCLUSION & FUTURE RESEARCH**

In this study, we first employed IR constructivist lens to analyze aid effectiveness as an international norm being diffused across Southeast Asia. Overall, we found that norm localization took place in the countries in different forms, ranging from being signatories to the Paris Declaration to establishing domestic aid effectiveness frameworks. We found limitations in explaining the cases of unsustainability of Southeast Asian cases by solely looking at norm localization aspects; instead, we suggest addressing socio-technical factors covering cultural, technological, political, and institutional aspects.

This study's contributions are largely threefold. Theoretically, this study attempts to examine ICTD practice at the macro level, analyzing norm diffusion and localization dynamics at the international and the state levels. Practically, we demonstrated a way to explain why ICTD practice could fail in terms of sustainability, despite the local alignment with the associated international norms or initiatives. Empirically, this study is among the first to conduct an in-depth examination

*Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

of ICT-enabled aid management in Southeast Asian countries.

We also recognize some limitations of this work. First, the unsustainability of systems implementation might be a temporal or short-term phenomenon. Due to changes in political situations or governmental task priorities, information sharing platform that are currently inaccessible might be restored in the near future. Second, what we examined and found in Southeast Asian countries' aid effectiveness norm diffusion dynamics and information systems implementation might be particular cases in Southeast Asia that may not be generalizable to other countries. Third, the study is mostly focusing on understanding norm diffusion dynamics at the global and the state level, rather than what has happened at the regional level. A possible future research might be looking at the aid effectiveness norm diffusion dynamics at the regional level. Southeast Asian countries have successfully formed and sustained the Association of Southeast Asian Nations (ASEAN) for the last several decades, a regional intergovernmental organization which seeks cooperation across economic, cultural, political, military, and educational areas. One thing to note is that behind the association's stability lies the principle of non-interference. It would be worthwhile to look at how this prior norm of non-interference at the regional level influenced the extent of adherence to the aid effectiveness norm, and if this in turn, has had influence on ICT-enabled aid management initiatives in the past years.

## REFERENCES

- Acharya, A. (2004). How ideas spread: Whose norms matter? Norm localization and institutional change in Asian regionalism. *International Organization*, 58(2), 239–275.
- Acharya, A. (2011). Norm subsidiarity and regional orders: sovereignty, regionalism, and rule-making in the third world. *International Studies Quarterly*, 55(1), 95–123.
- Acharya, A. (2013). The R2P and norm diffusion: towards a framework of norm circulation. *Global Responsibility to Protect*, 5(4), 466–479.
- Agustina, C. D., & Fahmi, A. Z. (2010). Aid Information Systems. In W. Fengler & H. Kharas (Eds.), *Delivering Aid Differently* (pp. 215–240). Washington DC: Brookings Institution Press.
- Al-Gahtani, S. S. (2003). Computer technology adoption in Saudi Arabia: Correlates of perceived innovation attributes. *Information Technology for Development*, 10(1), 57–69.
- Avgerou, C. (2001). The significance of context in information systems and organizational *Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

- change. *Information Systems Journal*, 11(1), 43–63. <https://doi.org/10.1046/j.1365-2575.2001.00095.x>
- Avgerou, C. (2002). *Information Systems and Global Diversity*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199263424.001.0001>
- Avila, R., Chak, S., Gomicki, J., Victor, K., Presley, S., & Al., E. (2010). *Technology for Transparency: The Role of Technology and Citizen Media in Promoting Transparency, Accountability, and Civic Participation*.
- Bellamy, A. J., & Beeson, M. (2010). The responsibility to protect in Southeast Asia: can ASEAN reconcile humanitarianism and sovereignty? *Asian Security*, 6(3), 262–279.
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264–271. <https://doi.org/10.1016/j.giq.2010.03.001>
- Brown, M. M. (2015). Revisiting the IT Productivity Paradox. *American Review of Public Administration*, 45(5), 565–583. <https://doi.org/10.1177/0275074014523102>
- Calabrese, A. (2010). Strengthening Aid Management in Lao PDR. Retrieved May 19, 2016, from <http://www.developmentgateway.org/blog/strengthening-aid-management-lao-pdr>
- Capie, D. (2008). Localization as resistance: The contested diffusion of small arms norms in Southeast Asia. *Security Dialogue*, 39(6), 637–658.
- Capie, D. (2012). The responsibility to protect norm in Southeast Asia: framing, resistance and the localization myth. *The Pacific Review*, 25(1), 75–93.
- Case study: Mohinga–Myanmar’s home-grown Aid Information Management System. (2015). Retrieved May 19, 2016, from <http://roadto2015.org/mohinga-myanmars-home-grown-aid-information-management-system>
- Checkel, J. T. (1998). The constructive turn in international relations theory. *World Politics*, 50(2), 324–348.
- Ciborra, C. (2005). Interpreting e-government and development: Efficiency, transparency or governance at a distance? *Information Technology & People*, 18(3), 260–279. <https://doi.org/10.1108/09593840510615879>
- Collins, A. (2013). Norm diffusion and ASEAN’s adoption and adaption of global HIV/AIDS norms. *International Relations of the Asia-Pacific*, 13(3), 369–397.
- Dunleavy, P. (2005). New Public Management Is Dead--Long Live Digital-Era Governance. *Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

- Journal of Public Administration Research and Theory*, 16(3), 467–494.  
<https://doi.org/10.1093/jopart/mui057>
- European Commission. (2016). *Myanmar's "Mohinga" Aid Information Management System*. Retrieved from [https://ec.europa.eu/europeaid/file/50811/download\\_en?token=CiHZr7LE](https://ec.europa.eu/europeaid/file/50811/download_en?token=CiHZr7LE)
- Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. *International Organization*, 52(4), 887–917.
- Global Facility for Disaster Reduction and Recovery. (2008). *Tracking the Money: International Experience with Financial Information Systems and Databases for Reconstruction*. Retrieved from [http://www.preventionweb.net/files/2474\\_TrackingMoney.pdf](http://www.preventionweb.net/files/2474_TrackingMoney.pdf)
- Global Facility for Disaster Reduction and Recovery. (2015). *Typhoon Yolanda Ongoing Recovery: Recovery Framework Case Study*. Retrieved from <https://www.gfdrr.org/sites/default/files/publication/rfcs-2015-philippines.pdf>
- Hund, M. (2003). *ASEAN and ASEAN Plus Three: Manifestations of collective identities in Southeast and East Asia?* Universität Trier. Retrieved from <http://ub-dok.uni-trier.de/diss/diss38/20030218/20030218.pdf>
- Jaeger, P. T., & Thompson, K. M. (2003). E-government around the world. *Government Information Quarterly*, 20, 389–394.
- Katsumata, H. (2003). Reconstruction of diplomatic norms in Southeast Asia: The case for strict adherence to the “ASEAN Way.” *Contemporary Southeast Asia: A Journal of International and Strategic Affairs*, 25(1), 104–121.
- Katsumata, H. (2006). Establishment of the ASEAN Regional Forum: constructing a “talking shop” or a “norm brewery”? *The Pacific Review*, 19(2), 181–198.
- Kettani, D., & Moulin, B. (2014). *E-Government for Good Governance in Developing Countries*. International Development Research Centre.
- Koga, K. (2010). The Normative Power of The “ASEAN Way.” *Stanford Journal of East Asian Affairs*, 80.
- Kraft, H. (2012). RtoP by increments: the AICHR and localizing the Responsibility to Protect in Southeast Asia. *The Pacific Review*, 25(1), 27–49.
- Kumar, R., & Best, M. L. (2006). Impact and sustainability of E-government services in developing countries: Lessons learned from Tamil Nadu, India. *Information Society*, 22(1), 1–12. <https://doi.org/10.1080/01972240500388149>
- Landolt, L. K. (2004). (Mis) constructing the Third World? Constructivist analysis of norm
- Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

- diffusion: Feature review. *Third World Quarterly*, 25(3), 579–591.
- Lin, F., Fofanah, S. S., & Liang, D. (2011). Assessing citizen adoption of e-Government initiatives in Gambia: A validation of the technology acceptance model in information systems success. *Government Information Quarterly*, 28(2), 271–279.  
<https://doi.org/10.1016/j.giq.2010.09.004>
- Linders, D. (2013). Towards open development: Leveraging open data to improve the planning and coordination of international aid. *Government Information Quarterly*, 30(4), 426–434.  
<https://doi.org/10.1016/j.giq.2013.04.001>
- Madon, S. (2009). *e-Governance for Development: A Focus on Rural India*. London: Palgrave Macmillan.
- Medagila, R. (2012). eParticipation research: Moving characterization forward (2006-2011). *Government Information Quarterly*, 29(3), 346–360.
- Ministry of Planning and Investment of Lao People's Democratic Republic. (2013). *Foreign Aid Implementation Report (FAIR) Fiscal Year 2012/13*.
- OECD. (2005). *Paris Declaration on the Aid Effectiveness*. Paris.
- OECD & UNDP. (2006). *Role of Aid Information Management Systems in Implementing the Paris Declaration on Aid Effectiveness at the Country Level*. Paris.
- Online database for “Yolanda” reconstruction efforts to go live by Oct. (2014, September 11). *Newsbytes Philippines*. Retrieved from <http://newsbytes.ph/2014/09/11/online-database-for-yolanda-reconstruction-efforts-to-go-live-by-oct/>
- Park, K. R. (2017). An Analysis of Aid Information Management Systems (AIMS) in Developing Countries: Explaining the Last Two Decades. In *Proceedings of the 50th Hawaii International Conference on System Sciences*. Hawaii.
- Park, S. (2006). Theorizing norm diffusion within international organizations. *International Politics*, 43(3), 342–361.
- Part VI:EDFF, the Multi-Donor Fund, and the case of the vanishing databases. (2014). Retrieved February 19, 2016, from <http://fromacehtomyanmar.blogspot.kr/2014/10/part-viedff-multi-donor-fund-and-case.html>
- Poole, A. D. H. (2013). *Institutional change in regional organizations: the emergence and evolution of ASEAN norms*. University of British Columbia.
- Qureshi, S. (2013). Information and Communication Technologies in the Midst of Global Change: How do we Know When Development Takes Place? *Information Technology for Proceedings of the 10th Annual Pre-ICIS SIG GlobDev Workshop, Seoul, South Korea, Sunday December 10, 2017*

- Development*, 19(3), 189–192. <https://doi.org/10.1080/02681102.2013.818827>
- Republic of the Philippines National Government. (2015). About FAiTH. Retrieved June 2, 2016, from <http://www.gov.ph/faith/about>
- Rogers, E. M. (1995). *Diffusion of innovations*. Macmillian Publishing Co. <https://doi.org/citeulike-article-id:126680>
- Rüland, J. (2009). Deepening ASEAN cooperation through democratization? The Indonesian legislature and foreign policymaking. *International Relations of the Asia-Pacific*, 9(3), 373–402.
- Stagars, M. (2016). *Data quality in Southeast Asia: Analysis of official statistics and their institutional framework as a basis for capacity building and policy making in the ASEAN*. London: Palgrave Macmillan.
- Stubbs, R. (2008). The ASEAN alternative? Ideas, institutions and the challenge to “global” governance. *The Pacific Review*, 21(4), 451–468.
- Sturges, P. (2004). Corruption, Transparency and a Role for ICT. *International Journal of Information Ethics*, 2.
- Tomsa, D. (2017). Regional party networks and the limits of democratic norm diffusion in Southeast Asia. *International Political Science Review*, 38(1), 128–141.
- UN Development Programme. (2005). Thailand launches new tsunami aid tracking system. Retrieved June 2, 2016, from <http://reliefweb.int/report/thailand/thailand-launches-new-tsunami-aid-tracking-system>
- UNDP. (2010). *Comparative Experience Aid Information Management Systems in Post-Conflict and Fragile Situations*.
- United Nations Viet Nam. (2005). Hanoi Core Statement on Aid Effectiveness. Retrieved August 24, 2017, from [http://www.un.org.vn/en/publications/doc\\_details/16-hanoi-core-statement-on-aid-effectiveness.html](http://www.un.org.vn/en/publications/doc_details/16-hanoi-core-statement-on-aid-effectiveness.html)
- Vota, W. (2013). Announcing the Lao PDR AMP Public Portal. Retrieved May 19, 2016, from <http://www.developmentgateway.org/blog/announcing-lao-pdr-amp-public-portal>
- Walsham, G. (2001). *Making a World of Difference: IT in a Global Context*. Chichester, UK: Wiley.
- Wittemyer, R., Bailur, S., Anand, N., Park, K. R., & Gigler, S. (2014). New Routes to Governance: A Review of Cases in Participation, Transparency, and Accountability. In *Closing the Feedback Loop: Can Technology Bridge the Accountability Gap?* Washington

DC: World Bank.

Yin, R. K. (2009). *Case Study Research: Design and Methods. Essential guide to qualitative methods in organizational research* (Vol. 5).

<https://doi.org/10.1097/FCH.0b013e31822dda9e>

Yin, R. K. (2014). *Case Study Research - Design and methods* (5th ed.). Thousand Oaks: SAGE.