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# Interrogating the Concept of Strategy as Practice in the Context of Information Technology for Development

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#### **ABSTRACT**

The concept of Strategy-as-Practice has become prevalent in academic discussions on strategy which try to capture the emergent nature of strategizing in social organizations. While this concept offers the potential to explain and inform some of the many challenges that ICT for development researchers and practitioners face when trying to plan and design interventions, little research has focused on it. In this context, strategizing involves several components, and practitioners in the field are involved in developing, implementing or reacting to a range of strategies from a network of stakeholders. In this paper, we first conduct a review of aspects of strategizing and strategic activity in practice in the area of information technology for development. We further explore these processes in the context of the establishment and ongoing development of initiatives to increase access and usage of information and communication technologies, such as telecentres, community access points, and deployments in schools and libraries. Case vignettes of developing such strategy are described, followed by implications for research and practice.

**Keywords:** ICTs, development, strategy-as-practice, information technology

#### INTRODUCTION

In the past few decades the concept of Strategy-as-Practice has become prevalent in academic discussions on strategy which try to capture the emergent nature of strategizing in social organizations (Whittington, 1996; Jarzabkowski, 2005; Carter et al., 2008). While this concept offers the potential to explain and inform some of the many challenges that ICT for development

researchers and practitioners face when trying to plan and design interventions in national and regional economies, communities and neighborhoods, little research has focused on it. In any developmental context IT4D initiatives are subject to a range of state actors, NGOs, private sector and local stakeholders who envision different futures and have different strategic approaches to IT4D. For example, IT4D practitioners often find themselves reacting to continually evolving national strategies, strategies of particular government agencies, international development partners, private sector, foundations, non-governmental organizations, community-based organizations and members of civil society, developing or doing micro strategies. Consequently practitioners implementing IT4D initiatives must constantly adapt their own strategies to changing environments and pressures from the different stakeholders. This type of dynamic environment with its mix of independent actors with different strategic visions and employing different approaches that interact with and influence outcomes of different strategic initiatives is just what the concept of the Strategy-as-Practice perspective is trying to address (Jarzabkowski and Spee, 2009; Suddaby et al., 2013). When viewed from this perspective it becomes clear that the idea of strategy as "a situated, socially-accomplished flow of activity that has consequential outcomes for the direction and/or survival of the group, organization or industry" (cf. Jarzabkowski et al., 2007, p. 14) is important to research on IT4D. For example, IT4D practitioners and policy makers must often align their strategies with existing goals when designing initiatives, or create new strategies in partnership with a range of actors. Similarly, potential organizational partners and individual donors may base the level and type of their involvement on an overall 'big picture' and strategy, if one exists or is being implemented. Consequently, we view the concept of strategy-as-practice as particularly important to stakeholders of IT4D initiatives who seek to ensure sustainability of development outcomes. In this regard, this idea is central to research on IT4D. As Galliers (2004, p. 237) articulates, "[t]he process of strategizing, with a view to gaining a shared appreciation of the context in which this strategizing is taking place, is just as important, if not more so, than the decisions made as a result". Field research has shown that successful implementation of any IT4D initiative is dependent not so much on decisions, but on making alliances with a range of actors, and the cultivation of much needed social capital for action (Bailey, 2009; Khadaroo et al., 2013; Touray et al., 2013).

In the rest of this paper we present a review of key aspects of strategizing and strategic activity in the practice of information technology for development. We then explore these processes in the context of the establishment and ongoing development of initiatives to increase access and usage of information and communication technologies, such as telecentres, community access points, and deployments in schools and libraries. We use case vignettes to illustrate empirical observations of the strategy-as-practice concept and draw implications for research and practice.

#### STRATEGY IN ICTS FOR DEVELOPMENT

As information technology for development initiatives expand, along with research on this area of practice, it has been recognized over the years that there are factors which influence the planning and implementation of these initiatives. For example, Madon (1999) analyses the strategy of non-governmental organizations (NGOs) in facilitating advocacy and change, while deciding on their involvement at different levels of the process and the related institutional linkages. Strategies may also need to be adjusted as initiatives progress, with changes in approaches based on the context (Madon, 2005). In many cases, initiatives are being considered or implemented in the context of a larger strategy for development (Qureshi, Kamal & Wolcott, 2008).

Information and communication technologies are recognized as having the potential to enhance social and economic development, particularly through universal access initiatives. There is ongoing debate in the literature on the impact that has been achieved so far with initiatives that have been implemented (Kleine, 2010). In addition, the ways in which the impact is evaluated has to be carefully assessed (Kleine, 2010). There have been calls for research on ICTs for development with focus on context-specific issues (Walsham, 2005). We examine the discussion of strategy in the literature to explore the issues related to strategy development, strategizing and implementation in this area of community access initiatives.

Telecentres (which are also termed as community access points, community technology centres, kiosks, cybercentres and community multimedia centres) and initiatives in schools and libraries have been developed as strategies for digital inclusion (Gomez, Pather and Dosono, 2012). These strategies are generally developed in the context of wider strategies for national and global

development, however while there may be an awareness of the strategy, synergy with the overall strategy may not be a focal point of new initiatives. Researchers have argued for the use of a community informatics approach to ensure that the strategies utilized by the various initiatives are working towards a common goal (Gurstein, 2003). Support strategies are critical in the development of telecentres in rural, remote or small towns (Proenza, 2003). These strategies need to take into consideration issues of sustainability and other alternatives, and types of support and interventions should be determined by setting (availability of connectivity and urban or rural context) (Proenza, 2003). Roman and Colle (2002) highlight the need for training of telecentre staff in development strategies.

Abbott and Yoong (2005) describe the strategies employed during key phases of the development of a telecentre in New Zealand. The strategic planning and resulting activity also reflect the collaborative aspect of several telecentre developments, between business and community and the establishment of public-private partnerships. This collaborative aspect is one of the key elements in strategy considerations in telecentre development. In re-developing their telecentre initiative, partners in Southern Uganda re-strategized as a collective to develop a new approach to align the goals of the telecentre's activities to the needs of the farmers that were served (Masuki et al., 2011). This alignment also relates to the process of aligning the information and communication technologies of the collaborating organizations (Chan and Reich, 2007; Sabherwal et al., 2003). Strategizing then has to include these aspects in relation to the telecentre and its user population. This ability to revise and enhance strategies is also an important aspect in strategizing, and has been the focus of some telecentre coordination agencies seeking to achieve their mandate of community development (Gomez et al., 2012). Partnerships and social sustainability are key elements of strategy for community access points (Bailey, 2009) and the overall development strategy is key (Curley, 2005; Forestier et al., 2003; Ngwenyama et al., 2006; Proenza et al., 2001).

Research and monitoring and evaluation strategies are important as well in the ecosystem of strategy development and strategizing for public access initiatives.

Strategies of the target population for the telecentres also have to be considered, as they may make strategic decisions on how they will use information and communication technologies to gain access to information (de Angoitia and Ramirez, 2009). The prevalence of mobile technologies and possible usage for mobile banking and e-commerce transactions (Donner, 2007) also reflects an area where telecentre stakeholders need to plan for any needed assistance for community members.

Given the multiple stakeholders and network of organizations that may be involved, the analysis of the development of strategy and strategizing among them is important. Further, each organization has its own role to play in the process. For example, Madon (1999) highlights the potential role of the international NGOs in bridging the local and international contexts in the development process. Even at the individual level, a telecentre has to consider the effects of network interactions (Mayanja et al., 2009). This was illustrated by Rachman (2009) in his articulation of seven strategies for successful telecentres. Depicting the inter-relatedness of the strategies as a puzzle with interlocking pieces, Rachman (2009) highlights the following strategic areas: access, shared vision, social entrepreneurship, social networking, capacity building, infomobilization and demand-driven services. In the area of sustainable development, there are typically several organizations with different perspectives deploying different strategies (Nugroho, 2010). The field of practice in this area is refocusing on the concept of networks in fulfilling goals (Mayanja et al., 2009). While telecentre implementations involve networking among stakeholders, networks are emerging among telecentres themselves, which further add to the strategies and strategizing involved in addressing needs. With a mix of distinct and overlapping strategies and strategy practices, a research focus which examines the interactions of those involved in doing strategy in this area would be useful (Jarzabkowski et al., 2007; Whittington, 2002).

The range of strategies employed separately or in partnership by governments, international development partners, private sector entities and their foundations focusing on corporate social responsibility, NGO partners, community-based organizations and all the related networks is substantial (Trotman et al., 2012; van der Velde et al., 2012).

#### RESEARCH DESIGN

This research on strategy as practice in information technology for development initiatives uses a longitudinal qualitative approach over an eight-year period, and includes participant observation and retrospective observation, which are useful in strategy and strategy-as-practice research (Jarzabkowski and Seidl, 2008; Regnér, 2003, Yin, 2009). Case vignettes are useful in illustrating and analyzing phenomena (Merali, 2000) and cases were selected for this study using purposive sampling.

Through participant observation, interviews, document analysis and retrospection, case vignettes were produced individually or for a combination of the organizations that were purposively selected – a not-for-profit organization, a non-governmental organization, a private sector foundation, two community-based organizations/ community access points, a tertiary institution, and a regional networking organization.

Extended and immersive participant observation is seen as a good approach which complements the strategy as practice perspective, providing a detailed view of the actors and actions, strategy praxis and practitioners in the research context (Laine and Vaara, 2007; Orlikowski et al, 2010; Rasche and Chia, 2009; Whittington, 2007). It enables an exploration of the communicative ecologies which support strategy praxis.

#### **CASE VIGNETTES**

#### **Not-for-Profit Organization**

The first case involves a not-for-profit organization which has been working in the area of information and communication technology for development for nine years. The organization's strategic activities are undertaken by a board of directors, and members of the organization.

Development of strategy is impacted by the environment in which the organization exists. In the earlier years of its existence, the organization received funding from international partners and a government agency. The day-to-day activities focused on the development of several initiatives in rural and low-income communities utilizing and promoting the benefits of information and communication technologies.

With several success stories in its portfolio, the organization is now strategizing on issues such as sources of new funding for new and existing projects and organizational overheads, sustainability, and building local and international partnerships. For each project, strategizing includes the selection of ideal community partners, decisions on the mode of intervention, types of technologies to be utilized, training and sustainability. Strategies of the partnering organizations may impact the development of strategy within the organization.

The strategizing process for this cycle entailed a strategic planning retreat. Members pointed out that this had to be a more interactive process both in developing the strategy and strategizing during phases of implementation. A previous plan was used as the basis for the strategic action plan, with members volunteering to be team leaders for several key components. Teams plan to work together circulating ideas, updates and plans online, and the entire group meets monthly to provide feedback on action items. Some members have suggested that updates on all teams are circulated during the month, so that the feedback is received more regularly.

One of the key strategies being discussed is the need to promote the success stories so as to encourage additional support and funding for the organization through increased visibility. It is felt that the initial strategy of focusing on project implementation within specific communities has to be combined with a focus on national visibility so as to attract increased participation and funding. These 'felt needs' influence decisions on the type of partnerships actively sought by the not-for-profit, including conferences and expositions for information sharing, and raising awareness and funding opportunities.

#### Non-governmental organization

A non-governmental network organization was formed out of a project initially funded through a partnership with an international development partner and the government. This network organization emerged in support of the nodes – telecentres - that had been implemented across the country through the initial project.

In the initial stages, strategies were based on existing strategies of the headquarters of the international development partner, as other such networks had been established in developing countries around the world. Network nodes were carefully selected based on the track record of community based organizations which was used to gauge the potential for developing the telecentre or community access point. As the project activities unfolded, and seed funding neared an end, strategies were developed to try to ensure sustainability of the projects.

The lead organization in the network was able to partner with a government agency to provide training for several of its employees, in exchange for space to host the telecentre's activities. This arrangement eventually ended which has resulted in the lead organization not being able to continue serving its role in the network or to local clients.

Some of the telecentres in other locations have remained viable, due to their own internal strategies and alliances with community based organizations, while others which were dependent on the lead organization, have also closed.

#### Private Sector Foundation, CBO and Tertiary Institution

Building on its corporate social responsibility and community development strategies, a private sector foundation established the first of several community access points to assist with community development. The strategy focus of the foundation was to create a sustainable entity which could be handed over within one year to be managed by a community group.

Working with the community, the strategies employed were successful in ensuring a viable entrepreneurial base which provided much needed services and empowerment to community members. A community organization was identified to support the operations of the community access point.

In strategizing, linkages were noted with a tertiary institution's outreach programme in the community, which also had developed strategic interventions in various aspects of the community's development, including a technology intervention in the primary school.

In the ongoing development of strategy for the way forward for the community access point and community development programme, the community access point was handed over to the outreach programme of the tertiary institution for ongoing development.

#### **Regional Networks**

Many development initiatives rely on promoting interaction and knowledge sharing among stakeholders across several related areas, sectors, countries or regions. In this vignette, we look at stakeholders in the field of agriculture as they contemplated the development of a regional network. Key elements related to the planning of the network included the participants - individuals and organizations from government, private sector, agro-processing and agricultural organizations, the development partner community, the academic community, related industries such as the hotel industry and NGOs and community based organizations.

The lead organization in this endeavour brought together a small group of individuals representing partner organizations in the development of the network. Existing related regional networks were identified, and their supporting development partners. Interviews were conducted with several stakeholders in existing regional and national networks along with potential participants in the new regional network.

The role of ICTs in supporting the network was a major discussion point, in terms of technologies, content, access and promotion of usage and interaction. Key strategic decisions centered around whether the network which was discussing an issue related but different to that of other networks create its own supporting infrastructure, or should it rely on and discuss issues within existing networks which used a mailsery discussion format.

#### **Community based organizations**

Organizations at the community level which are implementing initiatives may adapt existing strategies or have flexible strategies to work with partner and funding organizations. For example, a community-based organization found that a number of organizations and individuals, both local and overseas-based, including members of the Diaspora, would contact them trying to find the best strategy for donating equipment to support ICT usage in schools and communities. Given the requests, they noted that there was no designated national coordinating initiative, although strategies for national ICT implementation had been articulated in various forms and documents, with government ministries and supporting government agencies and committees charged with implementing different aspects.

Over time the organizations have noted that they have had to strategize on the best approaches to obtain funding for their projects. For example, one coordinator noted that "It depends on the call [for proposals]. If they want a project with focus on HIV, we are there, if they want a project with focus on environment, we are there; we just have to tailor the aspects of development we focus on and use ICTs to support them". Another coordinator observed, "We have worked hard over the years and since we now look like we are self-sustaining and managing on our own, it is difficult to receive funding, so we have to come up with different strategies".

#### DISCUSSION AND IMPLICATIONS FOR RESEARCH AND PRACTICE

The case vignettes illustrate the range of actors – strategy practitioners and praxis that exist in the field of information technology for development initiatives. The level of collaboration and interaction among organizational actors positions the cases in various sectors of the typology outlined by Jarzabkowski and Spee (2009). Strategy as practice in ICT for development typically includes interactions among many organizations. One of the organizations may serve as the focal organization with the involvement of other organizations who are designated as 'extra-organizational aggregate actors' in the typology, engaging in micro, meso or macro levels of strategy praxis. An examination of the way in which these groups undertake strategy practice is important for research and practice, and also holds implications for policy.

Using community access initiatives as an example, Figure 1 below illustrates the levels of strategy that interact in strategizing for community access initiatives. Strategies are developed in the context of any policies that have been established through national strategy, whether there has been active involvement in that aspect of strategizing, or a conscious effort to coordinate with those strategic objectives. The case vignettes depict cycles of interactions that occur among stakeholders as they work on developing strategies and strategizing on joint collaborative initiatives. The main implementing organization may focus on specific localized strategies, while collaborating on and being guided by related strategies of partner organizations and in the national and regional contexts.

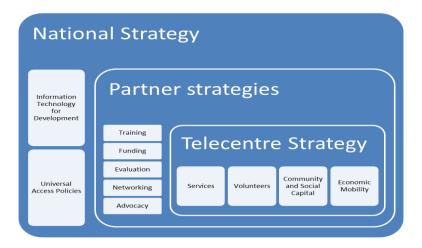


Figure 1: Levels of Strategy in Practice

With the various strategies and strategy praxis also influencing the developmental and ongoing strategies for the ICT for development initiatives, the role of scenarios can also be important (Wright, 2005). The case vignettes developed in this study reflect some of the ongoing strategizing and decision making scenarios faced by practitioners and policy makers in the use of information and communication technologies for development. As organizations involved in this sphere continue to explore strategies for sustainability of their initiatives and their own operations, further research in this area through the strategy as practice perspective may help to guide the advice and knowledge shared among researchers, practitioners and policy makers in the ICT for development community.

#### REFERENCES

- Abbott, J. and Yoong, P. (2005). The stages of telecentre development: the case of the Kapiti Telecentre. Technovation, 25(4), pp. 421-431.
- Bailey, A. (2009). Issues affecting the social sustainability of telecentres in developing contexts: A field study of sixteen telecentres in Jamaica. Electronic Journal of Information Systems in Developing Countries, 36(4), 1–18.
- Bailey, A., and Ngwenyama, O. (2009). Social ties, literacy, location and the perception of economic opportunity: Factors influencing telecentre success in a development context, Proceedings of the 42nd Hawaii international conference on system sciences, HICSS-42, January 5 8, Hilton Waikoloa Village, Island of Hawaii (pp. 1–11). Washington, DC: IEEE Computer Society Press.
- Carter, C., Clegg, S., & Kornberger, M. (2008). Strategy as practice. *Strategic organization*, 6(1), 83-99.
- Chan, Y. E., & Reich, B. H. (2007). IT alignment: what have we learned? Journal of Information Technology, 22, 297–315.
- Colle R.D. and Roman R., Communication Centers and Developing Nations, A State-of-the-Art Report.
- Curley, M. (2005) Innovation to improve access to ICT in education. In B. Bracey & T. Culver (Eds.), Harnessing the potential of ICT for education: A multi-stakeholder approach (pp. 153–157). NewYork: UNICT Task Force.
- de Angoitia, R., & Ramirez, F. (2009) Strategic Use of Mobile Telephony at the Bottom of the Pyramid: The Case of Mexico. *Information Technologies & International Development*, 5(3), pp. 35 53.
- Donner, J. (2007, May) M-Banking and m-payments services in the developing world: complements or substitutes for trust and social capital. In Preconference on Mobile Communication at the 57th Annual Conference of the Int. Communication Association.
- Ernberg, J. (1998) "Universal Access for Rural Development: From Action to Strategies", First International Conference on Rural Telecommunications, Washington 30 November 2 December 1998.
- Forestier, E.; Grace, J. & Kenny, C.(2003) 'Can information and communication technologies be pro-poor?', *Telecommunications Policy*, Vol. 26, pp. 623-646
- Galliers, R. D. (2004) Reflections on Information System Strategizing, in 1st edition C. Avgerou, C. Ciborra, and F. Land (Eds.) The Social Study of Information and Communication Technology, London: Oxford University Press, pp. 231-262.
- Gomez, R., Pather, S. and Dosono, B. (2012) Public Access Computing in South Africa: Old Lessons and New Challenges, *Electronic Journal of Information Systems in Developing Countries*, 52, pp. 1 16.
- Gurstein, M. (2003) Effective Use: A Community Informatics Strategy Beyond the Digital Divide. First Monday, 8, 12. http://www.firstmonday.org/issues/issue8\_12/gurstein

- Harris, R., Kumar, A. and Balaji, V. (2003) Sustainable Telecentres? Two Cases from India, in The Digital Challenge: Information Technology in the Development Context, Krishna, S. and Madon, S. (eds.), Chapter 8, 124-135.
- Jarzabkowski, P. (2004). Strategy as practice: recursiveness, adaptation, and practices-in-use. *Organization studies*, 25(4), 529-560.
- Jarzabkowski, P and Spee, A.P. (2009) "Strategy-as-practice: a review and future direction for the field," *International Journal of Management Reviews*, (11:1), pp. 69-95.
- Jarzabkowski, P. & Seidl, D. (2008) The role of strategy meetings in the social practice of strategy, *Organization Studies*, 29,11: 1391-1426.
- Jarzabkowski, P., Balogun, J. and Seidl, D. (2007) "Strategizing: the challenges of a practice perspective," *Human Relations*, Vol. 60, No 1, pp. 5-27.
- Khadaroo, I., Wong, M. S., & Abdullah, A. (2013). Barriers in local e–government partnership: evidence from Malaysia. *Electronic Government, An International Journal*, 10(1), 19-33.
- Kleine, D. (2010). ICT4WHAT?—Using the choice framework to operationalise the capability approach to development. *Journal of International Development*, 22(5), 674-692.
- Laine, P. M., & Vaara, E. (2007). Struggling over subjectivity: A discursive analysis of strategic development in an engineering group. *Human Relations*, 60(1), 29-58.
- Latchem, C. and Walker, D. (2001) "Telecenters: Case Studies and Key Issues Management | Operations | Applications | Evaluation." The Commonwealth of Learning, Vancouver.
- Madon, S. (2005). Evaluating the developmental impact of e-governance initiatives: An exploratory framework. *The Electronic Journal of Information Systems in Developing Countries*, 20.
- Madon, S. (1999) "International NGOs: Networking, Information Flows and Learning," Journal of Strategic Information Systems (8), pp 251-261.
- Masuki, K., Mowo, J., Sheila, R., Kamugisha, R., Opondo, C. and Tanui, J. (2011) Improving Smallholder Farmers' Access to Information for Enhanced Decision Making in Natural Resource Management: Experiences from Southwestern Uganda, in Innovations as Key to the Green Revolution in Africa, Part 4, pp. 1145-1159
- Mayanja, M., Acevedo, M., Caicedo, S. & Buré, C. (2009). A Guidebook for Managing Telecentre Networks: Engineering a New Phase of the Telecentre Movement. Ottawa: IDRC.
- Merali, Y. (2000) "Individual and Collective Congruence in the Knowledge Management Process, *Journal of Strategic Information Systems* (9:2-3), 2000, pp. 213-234.
- Mphahlele, M. and Maepa, M., Critical success factors in telecentre sustainability: a case study of six telecentres in the Limpopo Province, *Communicatio*, 29, 1&2, 2003, pp. 218 232.
- Ngwenyama, O., Andoh-Baidoo, F., Bollou, F., Morawczynski, O. (2006) Is There a Relationship between ICT, Health, Education and Development? An Empirical Analysis of Five West African Countries from 1997 2003, *Electronic Journal of Information Systems in Developing Countries*, 23, 5, 1-11.
- Nugroho, Y., 2010. NGOs, The Internet and sustainable development: The case of Indonesia. *Information, Communication and Society*, 13(1), 88-120.

- Orlikowski, W. J., Golsorkhi, D., Rouleau, L., Seidl, D., & Vaara, E. (2010). Practice in research: phenomenon, perspective and philosophy. *Cambridge handbook of strategy as practice*, 23-33.
- Proenza, F. (2003) A public sector Support Strategy for telecenter development: Emerging lessons from Latin America and the Caribbean. In: Badshah, A., Khan, S., Garrido, M. (eds.) Connected for Development. Information Kiosks and Sustainability. New York: UN ICT Task Force. pp. 9–14.
- Proenza, F., Bastidas-Buch, R., & Montero, G. (2001). Telecenters for socioeconomic and rural development in Latin America and the Caribbean: Investment opportunities and design recommendations, with special reference to Central America. Washington, DC: FAO, ITU, IADB.
- Qureshi, S., Kamal, M., & Wolcott, P. (2008, January). Sustainability of Information Technology therapy on Micro-enterprise development. In *Hawaii International Conference on System Sciences, Proceedings of the 41st Annual* (pp. 409-409). IEEE.
- Rachman, Z. (2009) 7 Strategies for Building Successful Telecentres, Retrieved from http://community.telecentre.org/profiles/blogs/7-strategies-for-building
- Rasche, A., & Chia, R. (2009). Researching strategy practices: a genealogical social theory perspective. *Organization Studies*, *30*(7), 713-734.
- Regnér, P. (2003). Strategy creation in the periphery: Inductive versus deductive strategy making. *Journal of Management Studies*, 40(1), 57-82.
- Roman, R. and Colle, R. (2002) Themes and issues in telecentre sustainability, Development Informatics Working Paper Series Paper, No. 10, Institute of Development Policy and Management, University of Manchester.
- Suddaby, R., Seidl, D., & Lê, J. K. (2013). Strategy-as-practice meets neo-institutional theory. *Strategic Organization*, 11(3), 329-344.
- Sabherwal, R., Hirschheim, R. & Goles, T. 2003, 'Information Systems Business Strategy Alignment: The dynamics of alignment:insights from a punctuated equilibrium model', in B. Galliers & D.E. Leidner (eds), Strategic Information Management: Challenges and Strategies in Managing Information Systems, 3 edn, Butterworth-Heinemann, Oxford, pp. 311-46.
- Touray, A., Salminen, A., & Mursu, A. (2013). ICT Barriers and Critical Success Factors in Developing Countries. *The Electronic Journal of Information Systems in Developing Countries*, 56.
- Trotman, A., Garcia, K., Mitchell, S., Peter, S., and Thaman, R. (2012) Responses of SIDS States to the Impacts of Global Environmental Change. Planet under Pressure conference, March 25-29. London.
- van der Velde, M., Overmars, M., Manu, V. and Clothier, B. (2012) Integrated natural resource management and economic development on SIDS. Planet under Pressure conference, March 25-29. London.
- Whittington, R. (1996). Strategy as practice. Long range planning, 29(5), 731-735.
- Wright, A. (2005). The role of scenarios as prospective sensemaking devices. *Management Decision*, 43(1), 86-101.

- Walsham, G. (2005), "Development, global futures and IS research: a polemic", *Journal of Strategic Information Systems*, Vol. 14 No. 1, pp. 5-15.
- Whittington, R. (2002) "Practice perspectives on strategy: unifying and developing a field", Best Paper Proceedings, Academy of Management, Denver.
- Whittington, R. (2007). Strategy practice and strategy process: family differences and the sociological eye. *Organization Studies*, 28,10, 1575-1586.
- Yin, R. K. (2009). Case study research: Design and methods, Sage.