

Impediments of Environment Management System (EMS) Implementation in Malaysian Local Authorities – A Preliminary Finding

Nero Madi^{1*}, Corina Joseph¹, and Mariam Rahmat¹

¹Universiti Teknologi MARA Cawangan Sarawak, Kampus Samarahan 1, Sarawak, Malaysia

Abstract. The implementation of environmental management system (EMS) by public sector agencies is in line with the Malaysian Government Transformation Programme (GTP) and the New Public Management doctrine. Local authority is chosen as a sample because of its important role in advancing towards sustainable development. This study aims to examine impediments to the ISO 14001 implementation by Malaysian local authorities using the institutional theory as the underlying framework. The survey instrument was developed and distributed via mail to all 146 local authorities in Malaysia. Finding revealed that the impediments to the EMS implementation were explained by lack of coercive, normative and mimetic isomorphism under the institutional theory. It is expected that the survey findings would fill in the gaps in the literature in better understanding the lack of implementation of ISO 14001 particularly in the emerging economy.

1 Background

Reforms introduced by the Malaysian Government in 2009 and 2010 are set to achieving the nation's bold aspirations of Vision 2020 by joining the high-income nations. The Government has introduced five major initiatives to transform the nation – the New Economy Model (NEM), 1Malaysia, the Government Transformation Programme (GTP), the Economic Transformation Plan (ETP) and the Tenth Malaysia Plan. The NEM lists out 8 Strategic Reform Initiatives (SRI) to drive the Malaysian economy towards a high income, inclusive and sustainable economy. One of the initiatives is strengthening the public sector via numerous public sector reforms agenda, for example, the implementation of environmental management system (EMS), one of the efforts undertaken in advancing sustainable development. The Brundtland Commission defined sustainable development as the “ability to make development sustainable — to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” [1, p.8].

In heading for the developed nation status by 2020, so is the increase in expectation of the more educated societies for efficient service delivery by local government. This is particularly true in the urban local authority jurisdiction areas. [2, p. 8] stated that: "as the

* Corresponding author: neromadi@uitm.sarawak.edu.my

population becomes urbanized, local government grows in direct importance to the welfare and the quality of life experienced by a majority of the citizens ...". In a few years, it is expected that more than two-thirds of Malaysian citizens would reside in the urban areas [3]. The urbanization process would translate to congestion and increased pollution of the water, air, noise and overall environment. It is, therefore, urgent for local authorities to undertake more aggressive and concerted efforts involving the public, in addressing this impending issue.

To forge ahead the several initiatives introduced by the Malaysian government for improved governance and accountability of the administrative system, particularly with regards to environmental responsibilities, the adoption of ISO 14001 Environmental Management System (EMS) is appropriate. However, despite the numerous reports by organisations who have benefitted from implementing the standard (see, for example, the British Standards Institution), only 3 out of 149 Malaysian local authorities are implementing ISO 14001 [4], and the implementation are influenced by merely the internal organizational factors. It is put forward here that, there are possibly several institutional factors that influence the non implementation of EMS by Malaysian local authorities. Hence, this study aims to examine the impediments to the adoption of EMS by Malaysian local authorities

2 Literature review

The implementation of EMS is subject to several challenges. Of concern is the measurement or evaluation of performance [5, 6, 7]. In a survey of ISO 14001 certified companies by [7], the ISO 14001 “does not require companies to reach minimum levels of environmental performances (apart from legal compliance) nor does it supply methods to be used to measure continual improvement”. In the previous study conducted by [8], the two most significant impediments expected by organizations during the EMS planning stage include documentation (costs, time for preparation) and training of employees and there was no significant impediments during the implementation stages as the employees were involved in the decision making process. Other impediments include: lack of support and resources; unclear guidelines for EMS implementation for organisations with mobile workforce, such as the construction sector; lack of set guidelines for setting of objectives and targets and extent of involvement of employees, suppliers and other stakeholders and lack of guidelines on how to accomplish continuous improvement elements of the standard Interpretation of terms present within the standard.

In the study on the EMS implementation in Seberang Perai Municipal Council [9] found that, as a whole, there are no obvious challenges faced in the EMS implementation. The main obstacle leading to MPSP slow progress in implementing EMS at its early stage in 2006 was due to psychological factor i.e. lack of confidence to start off the programme. Another barrier in the EMS implementation is resistance from staff during its inception. From the literature review, it is found that there are limited studies conducted on the implementation of EMS in particularly Malaysia.

The reasons for non disclosure of sustainability information on Malaysian local authority websites using the institutional theory were explored by [10]. Lack of support from management towards achieving sustainable development may explain the lack of normative isomorphism. The lack of monitoring by higher authority towards the implementation of the sustainable development program also affects the non-reporting of sustainability information on the websites. This could possibly explain the lack of coercive pressure by higher authority. Hence, drawing from [10], this paper used the isomorphism conception to explain the impediments of EMS implementation.

3 Theoretical framework

To investigate impediments of EMS implementation by the 146 Malaysian local authorities, this study employed the institutional theory, which has been used by many researchers to understand various organizational and individual practices and activities. The process by which organizations tend to adopt the same structures and practices is labelled as 'isomorphism' [11, 12].

Identified by [12], the three forms of institutional pressures causing organisations to conform are coercive, mimetic and normative isomorphism. Coercive isomorphism is the most cited type of institutional pressures. According to [12, p. 149], the pressures can be "exerted by other organizations on which an organization may be dependent, as well as cultural expectations in which the organizations operate". It is advanced in this paper that lack of formal pressure from relevant authority possibly explains the non-existence of coercive isomorphism, in line with [10]. The second type of institutional pressure is mimetic isomorphism. Mimetic isomorphism suggests the 'copying' of best practice of "those organizations perceived to be legitimate and successful" [12, p.150]. The final isomorphism category is normative isomorphism. This element of pressure is normally developed by professional and occupational groups [13]. [12] argued that the more highly professionalized a workforce becomes in terms of academic qualifications and participation in professional and trade associations, the greater the extent to which the organization becomes similar to other organizations in the same field. Further, this paper used the concept of isomorphism to explain the impediments for EMS implementation due to the nature of the local government and because of "organizational competition for political power, social fitness, and institutional legitimacy" [14, p. 566]. The proposed framework for impediments of EMS implementation based on [4, 9] and other literature is presented in Figure 1.

- - No penalty
 - No directive from authority
 - No pressure from stakeholders
 - No political influences
 - No EMS certification for quality or excellence award criteria assessment
- - EMS not widely used
 - Implementing agencies not benefiting greatly from EMS
 - Do not want to learn from others
 - No reason for imitating private agencies
 - Few role models for EMS implementation
- - Lack of specific training, seminar, knowledge sharing relating to EMS within the organization
 - Lack of knowledge sharing via conference with other people outside the organization
 - Lack of effective communication
 - No need to consult expert and professional body
 - Management not actively involved in occupational groups in promoting EMS implementation

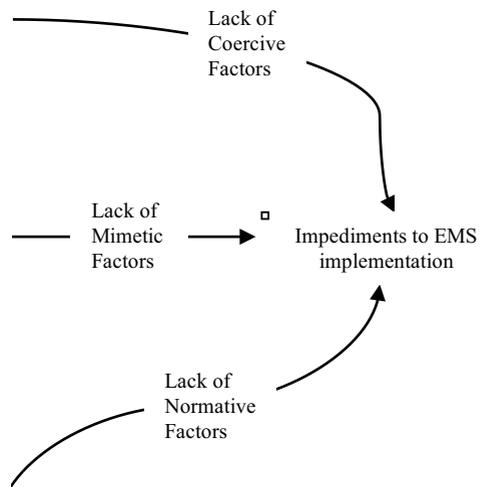


Fig. 1: Framework for impediments of EMS implementation

4 Research methodology

The research instrument was developed based on the findings from [4, 10] that examined the implementation of EMS in selected local authorities in Malaysia, using the institutional theory, particularly the isomorphism mechanisms. The questionnaire consists of three sections: i) Section A (demographic profile of the respondents); ii) Section B (impediments to the adoption of ISO14001 using the three isomorphism mechanisms – coercive, mimetic and normative) and attitudes by using 5-point Likert scale (1=strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree); and Section C which captures the respondent's readiness to implement EMS.

The pilot test was carried out involving councils from Sabah, Sarawak and Selangor. Changes were made to the survey instrument based on the feedbacks to make it more respondent-friendly. In the actual data collection, the questionnaire was mailed to the person in charge of the Quality Management Unit, of all 146 local authorities from April to June 2016. The list of local authorities was available from the Ministry of Urban Well Being, Housing and Local Government Malaysia. Data was analysed using the Statistical Package for Social Sciences (SPSS) Version 20.0. The results are explained in the following sections.

5 Result and Discussion

Only 43 (out of 146) questionnaires were completed and returned. This represents 29.5% response rate. The Cronbach Alpha was conducted to examine the internal consistency of all items related to the three isomorphism categories namely: coercive, normative and mimetic. The coefficients for all the three categories were above 0.7 and considered acceptable. Table 1 summarizes the level of agreement of impediments to the EMS implementation.

Table 1. Level of agreement of impediments to the EMS implementation

Isomorphic Pressure	Elements	S D	D	N	A	S A	Total
Coercive	No directive	6	5	11	10	11	43
	No Penalty	2	6	12	8	15	43
	No Pressure	2	6	15	10	10	43
	No Political Influences	1	7	9	11	15	43
	No EMS Certification required for quality competition award criteria assessment	4	7	19	9	4	43
Mimetic	EMS not widely used	2	2	6	21	11	42
	Implementing agencies not benefiting greatly from EMS	6	15	15	5	2	43
	No intention to learn EMS	11	12	15	4	1	43
	No reason to imitate implementing agencies	8	13	13	7	2	43
	Few role models as benchmark for EMS	4	4	19	8	8	43
Normative	Lack of sharing values within organization	5	3	11	16	8	43
	Lack of sharing values & norm with outside organization	5	2	11	17	8	43
	Lack of effective communication	3	4	12	18	6	43

No need consultation with professional bodies	8	12	16	5	2	43
Inactive management involvement with occupational group	4	6	15	14	4	43

Constructed scale: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree

Table 1 reveals that more than 46% of the respondents agree that the impediments for the EMS implementation are due to 1) no directive from authority; 2) no penalty; 3) no pressures from shareholders, and 4) no political pressures. Lack of formal pressure from relevant authority possibly explains the non-existence of coercive isomorphism, in line with [10]. As suggested by [10], penalty or sanction could be considered by the higher authority, for example, the Ministry of Urban Well Being, Housing and Local Government for the local authorities that are not implementing any sustainable development initiatives, such as, the EMS. The lack of pressures from stakeholders to explain the impediments for EMS implementation is not consistent with [9] that indicate the community played a major role in pushing the organization to be socially and environmentally responsible. [9] found that educated people surrounding the councils tend to coerce the councils to accept responsibility and be accountable for sustainable development issues, including environment issues. Meanwhile, the results on the agreement that the political pressure does influence the impediments to EMS implementation clearly supported the coercive isomorphism tenet, whereby organizations are competing for political power [14].

Majority of the councils (76%) agreed that EMS is not widely used. However, more than 46.5% disagreed that the impediments for the EMS implementation are due to: 1) Implementing agencies not benefiting greatly from EMS; 2) No intention to learn EMS and 3) No reason to imitate implementing agencies. The findings that there is absence of mimetic isomorphism among the local councils in Malaysia refer to councils known for their advanced sustainability development initiative, which is not consistent with [15]. This indicates the in-sensitivity of the peers' action or activity among councils in the same organizational field [16].

As for the normative isomorphism, more than 46% of the respondents agree that the impediments for the EMS implementation are due to 1) Lack of sharing values within organization; 2) Lack of sharing values & norm with outside organization, and, 3) Lack of effective communication. The above findings support the argument for absence of normative isomorphism which, when applied, indicates that the EMS activity has not become a shared norm of organizational members and therefore no acceptance within organizations. This is not consistent with [17, p. 21]] finding that "there was a process of osmosis and the willingness of key Triple Bottom Line (TBL) reporting instigators to try something new". The findings suggest that the EMS has not been institutionalized within the Councils as it has not become shared values within the organization.

6 Conclusion

The aim of this paper is to examine the impediments to the adoption of EMS by Malaysian local authorities using the institutional theory. The institutional theory offers insightful explanation on the impediments to EMS implementation. The absence of coercive isomorphism is supported by :1) no directive from authority; 2) no penalty; 3) no pressures from shareholders, and 4) no political pressures. The lack of mimetic isomorphism is supported by: 1) EMS is not widely used; 2) Implementing agencies not benefiting greatly from EMS; 3) No intention to learn EMS and , 4) No reason to imitate implementing agencies. Finally, the non-presence of normative isomorphism is due to: 1) Lack of sharing

values within organization; 2) Lack of sharing values & norm with outside organization, and, 3) Lack of effective communication.

There are several implications from the findings of this paper. Firstly, to promote coercive isomorphism among local authorities to undertake the EMS implementation, the regulatory authority could be more proactive by including the implementation of EMS or other sustainable development best practices in the award assessment criteria, for example, the PBT Star Rating or Accountability Rating. Secondly, to promote the mimetic isomorphism, the Ministry may encourage the EMS implementing agencies to be the role model for other local authorities. This may promote the learning activity among the councils in the same organizational field. Similarly, benchmarking the role model could also be included in the performance evaluation criteria for local authorities. Finally, normative isomorphism can be promoted by consultation with accreditation body, professional networking via conference presentation and also regular training. This may promote the institutionalization of EMS as the norms and values will be shared among the internal and external participants of the organizations.

It is expected that the survey findings would fill in the gaps in the literature in better understanding the ISO 14001 adoption stage. The findings of this paper are important as no other similar study has been undertaken documenting the impediments to the adoption of ISO 14001 in Malaysian local authorities. Our findings are expected to have practical implications for public sector organizations and government departments implementing sustainability agenda. Our findings also aim to contribute towards the theoretical perspectives that are relevant to encourage the ISO 14001 implementation in developing countries.

This study has thrown up several questions in need of further investigation. A potential avenue for future research is to conduct a longitudinal case study in the council to have more insights into the reasons for not implementing EMS. A longitudinal analysis may encourage research engagement with practitioners and provide opportunity to anticipate and observe the actual EMS implementation, having access to internal documentations, and to attend the council's meeting. Further, the qualitative method such as interview would enable the researcher to answer the research question 'why', thus, providing richer explanation for the non-observable phenomenon while conducting survey.

Acknowledgement

This research was supported by the Excellent Fund grant (600-RMU/DANA 5/3 (7/2015)) received from Universiti Teknologi MARA (UiTM) through the Research Management Unit, UiTM Sarawak.

References

1. The Brundtland Report Our Common Future: Report of the World Commission on Environment and Development, available at <http://www.worldinbalance.net/pdf/1987-brundtland.pdf> (accessed 1 October 2013) (1987)
2. H. S. Abdullah, M. Kaliannan, ASC, **4 (11)**, 87–92 (2008)
3. L. Junus, Masalah yang Dilupakan: Proses Urbanisasi Meningkatkan Jumlah Air Larian Permukaan. *Utusan Online*. Retrieved from <http://www.utusan.com.my/sains-teknologi/sains/masalah-yangdilupakan-1.60227#sthash.gLUqBFU6.dpuf>. (2015, February 16).

4. C. Joseph, L. Jonathan, E.O. Nichol, *Environment Management System Implementation in Selected Local Authorities in Malaysia*, unpublished research, Research Management Unit, Universiti Teknologi MARA, Sarawak. (2014a),
5. D. Nawrocka, T. Parker, JCP, **17**, 601–607 (2009)
6. E.Perotto, R. Canziani, R.Marchesi, P. Butelli, JCP, **16**, 517–530 (2008)
7. C. Comoglio, S. Botta, JCP, **20**, 92–102 (2012)
8. A. Zutshi, A. Sohal, Technovation, **24**, 335–357 (2004)
9. C. Joseph, L. Jonathan, E.O. Nichol, *Environment Management System Implementation in a Malaysian Local Government: Isomorphism Perspective*, a paper presented at the *International Conference on Governance, Jakarta, 13 – 14 February 2014*. (2014b)
10. C. Joseph, SMRJ, **8(1)**, 1-13 (2011)
11. J. W. Meyer, B.Rowan, TJS, **83(2)**, 340–363 (1977)
12. P. J. DiMaggio, W. W Powell, ASR, **48(2)**, 147–160 (1983)
13. A. S. Rahaman, S. Lawrence, J. Roper, Crit. Pers. On Acc, **15(1)**, 35–56 (2004)
14. V. L. Carpenter, E. H.Feroz, AOS, **26 (7 and 8)**, 565-596 (2001)
15. C. Joseph, R.Taplin, SRJ, **8 (3)**, 363 – 372 (2012b)
16. J. Bebbington, C. Higgins, B. Frame, AAAJ, **2(4)**, 588-625 (2009)
17. J. Mack. *The Influences on Queensland Local Government Authorities to Adopt Triple Bottom Line Reporting*, Working Paper, Queensland University of Technology, Australia, Brisbane. (2006)