

A comparative investigation into the diffusion of
management accounting innovations in the
UK, Australia and New Zealand
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1. Project overview

This study examined the influence of contextual factors upon the diffusion of cost and management accounting techniques and procedures. The research involved surveys and interviews with CIMA members in the UK, Australia and New Zealand.

There has been a flurry of studies in the field of management accounting investigating the reasons for the delay in the adoption of management accounting innovations. Some researchers have identified factors such as lack of top management willingness, lack of adequate role models, the emphasis on financial accounting and the dominance of computer based accounting systems. Others have included organisational strategy, structure and the influence of communication channels as factors influencing the diffusion of management accounting innovations. Such studies have been focused on the identification of the impact of some influential factors related to the characteristics¹ of adopters (organisations and managers) on the diffusion of management accounting innovations. However, surprisingly no study of the impact of 'characteristics' of innovations had been reported. Yet the existing literature suggests that the characteristics of innovations have the most significant influence on their diffusion. This represents a serious gap in the knowledge required for understanding the influence of contextual factors on the diffusion of cost and management accounting techniques/procedures to facilitate the diffusion of these new techniques by recognition of obstacles to their diffusion in practice, and provides a focus for this research.

2. Research objectives and approach

The objective of the research was to identify how important the contextual factors (characteristics of innovations) are on the diffusion of cost and management accounting innovations.

This report is based on a survey questionnaire and

subsequent interviews with selected respondents of the survey. The questionnaire was mailed to over 2,000 registered CIMA members in AU, NZ and the UK (1,175 in AU, 366 in NZ and 500 in the UK). Potential respondents were also targeted by email and invited to complete an online version of the questionnaire. The final number of useable responses (both hard copies and online replies) was 584 for all three countries. The response rates were 28.5%, 39.5% and 29% for AU, NZ and the UK respectively.

We also conducted interviews (face-to-face and over the phone) to further our understanding of the changes in cost and management accounting practices in firms and to investigate some of the issues raised in responses to open ended questions.

35.3% of survey respondents were working in manufacturing industries and the remainder (64.7%) were working in service industries. Table 1 gives details of respondents in terms of company size. As shown in the table, the respondents to our survey in NZ were more likely to work in small and medium sized enterprises (SMEs) than those respondents in the UK and AU.

3. Implications of the findings for practical application

The results of the research provide important information to facilitate the diffusion of recently developed management accounting techniques in practice. Such developments are expected to increase the satisfaction of users of current management accounting information. The findings may also be helpful in planning successful implementation of any management accounting change programme.

The research findings suggest that managers and practitioners should seek a better understanding of the nature and characteristics of new management accounting techniques that they are planning to adopt. The findings are also relevant for managers and practitioners working in group organisations, as the research suggests that they need a better understanding of the operations and needs of subsidiary companies.

4. Key findings

4.1 New cost and management accounting practices

The respondents were asked to indicate if their company has (or has not) considered the adoption

¹ Characteristics of the management accounting technique might include its relative advantage, its compatibility, and its complexity, how easy it is to trial and how easily results can be observed.

and implementation of new cost and management accounting practices such as activity based costing (ABC), activity based management (ABM), balanced scorecard, benchmarking, strategic management accounting, target costing or any other practices.

important but interviewees commented that the cost will be offset quickly if the adopted techniques are suitable for the business.

4.1.1 Overall views

The results are summarised in table 2. The survey indicates a growing interest in the adoption of new cost and management accounting practices (e.g. activity based management is the lowest with 20%). This shift in views regarding the new practices might be due to changes in the markets and the need for more advanced costing and management accounting practices. The responses suggest that 'benchmarking' has been the most popular technique for firms as about 52.5% of them had either implemented this technique or introduced it on a trial basis.

Our findings confirm that, with the exception of benchmarking, the overall adoption rates of other five techniques (including trial adopters) are still behind traditional techniques (all under 40%). However, the adoption rates of the new techniques surveyed in this research are still higher than in previous research. Some previous studies report that 'traditional' tools and techniques have been most popular amongst management accountants in recent years, therefore giving a much lower percentage to the adoption of new techniques and practices.

4.1.2 Views within the UK, Australia or New Zealand

Table 3 summarises the adoption of new cost and management accounting techniques in each of the three countries. One might expect a relatively low up-take of new techniques in NZ due to a higher percentage of respondents there working in SMEs in comparison to UK and AU (see table 1). This is because previous research has suggested that the new techniques are less appropriate for SMEs. However, the current study reveals the balanced scorecard is the only technique which has a considerable low take-up in NZ in comparison to the other two countries (25.7% in NZ, 45.4% in UK and 40.3% in AU). The respondents in NZ present relatively similar adoption rates of other techniques when they are compared with responses from UK and AU firms.

It is possible that this finding indicates a growing interest in the adoption of new cost and management accounting techniques in SMEs. This is an issue that was further investigated when we interviewed some CIMA members in these three countries. It is interesting to note that some of these SMEs, and in particular those having more than 50 employees, were not concerned about the cost of implementing new techniques. The cost issue is still

4.1.3 Views within independent and dependent (subsidiary) companies

The research also sought to examine whether the extent of diffusion of new cost and management accounting techniques in independent organisations differs from that in dependent organisations. On average, 73.5% of respondents in the three surveyed countries were working in independent companies while 26.5% of them were working in dependent companies, i.e. as part of group companies (see table 4). The study found that the role of parent companies is significant in the adoption and implementation of new techniques within their subsidiary companies.

The study reveals that group organisations are keener to adopt new techniques than independent companies (see table 5). Indeed, with the exception of target costing (23.7% in dependent firms and 24.7% in independent firms), the rates of adoptions of other new techniques are higher than the adoption rates of the techniques in independent companies. This is in contrast to several other studies claiming that group organisations are slow in adopting new techniques. This study explored the possible reasons for the higher adoption of new techniques in dependent companies in interviews with respondents. Interviewees highlighted the role of parent companies in adoption and implementation of new techniques. They argued that there are instances where they have to prioritise the expectations of headquarters above the needs of the subsidiary companies. As one interviewee commented 'this may benefit them, but costs us'.

4.2 Current cost and management accounting practices

The respondents were asked to indicate their level of satisfaction with their current cost and management accounting practices (see table 6). More than 44% of respondents stated that they are either fully or moderately satisfied with the existing cost and management accounting practices in their firm. However, it is particularly important to recognise that current management accounting practices in 41.5% of the targeted firms require improvement to meet their organisational need, and that these practices in more than 14% of the targeted firms require fundamental change to meet the need of their organisation.

As table 7 shows, about 51% of respondents in the UK and just about 50% in NZ are 'very' to 'moderately'

satisfied with their implemented cost and management accounting practices while just over 38% of respondents in AU expressed their satisfaction with their implemented systems. However, the extent of dissatisfaction with implemented cost and management accounting systems in all these three countries is under 20%. A significant percentage of respondents in all three countries (49% in AU, 30.9% in NZ and 35.4% in UK) believe that their implemented systems need improvement.

A further analysis of the results indicates that this dissatisfaction is mostly expressed by those firms which were using the traditional systems. But does this mean that these firms need to improve their existing systems or should they adopt new cost and management accounting techniques? Clearly this requires a detailed study of each firm's operations and costing systems. It is worth emphasising, however, the needs of subsidiary companies as discussed at 4.1.3.

4.3 Importance of innovation characteristics

The study went on to examine which attributes or characteristics are important in companies' decisions to implement a new cost and management accounting technique in their organisations (see table 8). It is not surprising to see that the respondents agreed that the decision to implement (or not) any cost and management accounting innovation is significantly influenced by the attributes of such an innovation. However, respondents only considered the following two attributes to be 'very important':

- it's ability to improve the quality of the job/service
- it's ability to increase the overall effectiveness of the job/service.

In interviews, respondents indicated that the new techniques should add to the company's value and that accountants now mainly support the adoption of those techniques that let them be more effective in their companies and to be viewed as a 'value adding unit' in their firm.

Surprisingly, the respondents were not concerned about whether the new techniques 'fit well with the way they or their organisation like to work' or 'fit into their organisation work style'.

4.4 Importance of other factors

The accumulated body of literature on diffusion indicates that much effort has been devoted to studying of the

² The respondents to our survey still gave more support to 'the ability to afford the amount of investment required to adopt the innovation' than to the importance of 'human resources'. This is in contrast to the finding of the study of the diffusion of e-commerce in UK SMEs carried out by Wilson et al (2008).

impact of behavioural, social and environmental factors on the diffusion of innovation. Respondents were therefore asked about the influence of 13 such factors on the decision to implement (or not) cost and management accounting innovations (see table 9).

The respondents strongly supported the role of management and their commitment towards the adoption and implementation of cost and management accounting innovations. As top management support is generally found to be a strong influence both on adoption of techniques and on their success, this is not a surprising finding. However as Wilson et al. (2008, p.505) question: 'is this top management commitment backed up by sufficient top management insight?'

We got varying answers from the interviewees. The interviewees in independent organisations strongly supported the view that top management had sufficient insight about the new techniques. However the interviewees in dependent companies did not share a similar view. Some interviewees stated that the new techniques were not suitable for them but they had to follow the instruction of headquarters. They believed that top management (headquarters based) did not know their operations in detail. They did not know what type of cost and management accounting techniques would be more suitable for the subsidiary in order to run day-to-day business operations effectively. This led to difficulties in the adoption, implementation and use of the new techniques. Sometimes this resulted in using the old system for the subsidiary company and a new system for the parent company ('decoupling') - 'which was a pain!', as one interviewee said. This highlights how important it is for headquarter based managers to understand subsidiary companies' operations and people, before adopting and implementing new techniques. Although this may not guarantee the success of a new system, it will remove some of the barriers and possible resistance.

Within the survey, social, cultural and institutional pressures for innovation were not rated as highly important factors. Nor was the level of employment of management consultants to facilitate implementation. However, a different perspective emerged from the interviews. For example, the interviewees supported the importance of social and cultural issues and also the role of parent companies (as an institution at macro level for subsidiary companies) in adoption and implementation

of new techniques. They also highlighted the importance of human resources, both internal and external such as consultants in supporting new systems development and implementation.²

5. Conclusions

The findings suggest that top management commitment and support is a key factor in adoption and successful implementation of new cost and management accounting techniques. However, the top management commitment and support will be more effective if it is backed up by sufficient top management insight. They need to know about the new techniques being implemented in their company and be able to communicate this to others.

The findings also indicate a growing interest in adoption and implementation of new cost and management accounting techniques in SMEs.

The study highlights the role of human resources, both internal and external, in the adoption and successful implementation of new techniques. However, the availability of financial support still plays a role.

The study also highlights the role of parent companies in the adoption and implementation of new techniques in subsidiary companies. It is suggested that the managers in group headquarters need to be aware of the type of techniques which can be useful for both parent and subsidiary companies. Without this, the change may not result in success, with many studies reporting failures.

6. References

Wilson, H., Daniel, E. and Davies, I. A. (2008) *The diffusion of e-commerce in UK SMEs*. In *Journal of Marketing Management* 24(5-6) pp.489-513.

7. Other useful references:

Askarany, D., 2006. Characteristics of adopters and organizational changes.

Thunderbird International Business Review 48, 705-725.

Askarany, D., Smith, M., 2008. Diffusion of innovation and business size: a longitudinal study of PACIA. *Managerial Auditing Journal* 23, 900-916.

Askarany, D., Smith, M., Yazdifar, H., 2007a. Attributes of innovation and the implementation of managerial tools: an activity-based management technique.

International Journal of Business and Systems Research 1, 98-114.

Askarany, D., Smith, M., Yazdifar, H., 2007b. Technological innovations, activity based costing and satisfaction. *JABM: Journal of Accounting, Business and Management* 14, 53-63.

Askarany, D., Yazdifar, H., 2007. Why ABC is not widely implemented? *International Journal of Business Research (IJBR)* 7, 93-98.

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Appendices:

Table 1: Company size of respondents, by country

Number of employees	UK (%)	NZ (%)	AU (%)	Total (%)
1-50	11	38	19	22
51-200	29	21	20	22
201-500	60	41	61	56
Total	100	100	100	100

Table 2: The overall status of new management accounting techniques (%)

	ABC	ABM	Balanced scorecard	Benchmarking	Strategic management accounting	Target costing
Discussions have not taken place regarding the introduction	39.9	54.0	34.1	24.7	41.9	57.0
A decision has been taken not to introduce this practice	14.8	9.3	8.6	2.1	6.2	5.8
Cumulative %	54.7	63.3	42.7	26.8	48.1	62.8
Some consideration is being given to the introduction of this	17.5	16.5	19.4	20.7	21.6	13.8
This practice has been introduced on a trial basis	6.5	5.8	10.3	11.3	6.9	5.7
This practice has been implemented and accepted.	21.3	14.4	27.6	41.2	23.4	17.7
Cumulative %	27.8	20.2	37.9	52.5	30.3	23.4
Total	100	100	100	100	100	99.95

Table 3: The overall status of new management accounting techniques in each of the three countries

Type of cost and management accounting practice	Country	Discussions have not taken place regarding the introduction of this practice	A decision has been taken not to introduce this practice	Cumulative %	Some consideration is being given to the introduction of this practice	This practice has been introduced on a trial basis	This practice has been implemented and accepted	Cumulative %
Activity based costing (ABC)	UK	34.8	18.2	53	19.7	12.1	15.2	27.3
	NZ	45.1	15.5	60.6	12.7	4.2	22.5	26.7
	AU	39.6	13	52.6	18.8	5.2	23.4	28.6
Activity based management	UK	47	9.1	56.1	19.7	9.1	15.2	24.3
	NZ	60.6	8.5	69.1	8.5	5.6	16.9	22.5
	AU	53.9	9.7	63.6	18.8	4.5	13	17.5
Balanced scorecard	UK	30.3	9.1	39.4	15.2	13.6	31.8	45.4
	NZ	38.6	8.6	47.2	27.1	4.3	21.4	25.7
	AU	33.8	8.4	42.2	17.5	11.7	28.6	40.3
Benchmarking	UK	24.2	4.5	28.7	24.2	12.1	34.8	46.9
	NZ	31	1.4	32.4	22.5	9.9	35.2	45.1
	AU	22.1	1.3	23.4	18.2	11.7	46.8	58.5
Strategic management accounting	UK	47	12.1	59.1	16.7	9.1	15.2	24.3
	NZ	49.3	1.4	50.7	16.9	4.2	28.2	32.4
	AU	36.4	5.8	42.2	26	7.7	24.7	32.4
Target costing	UK	51.5	7.6	59.1	15.2	9.1	16.7	25.8
	NZ	64.8	2.8	67.6	11.3	2.8	18.3	21.1
	AU	55.8	6.5	62.3	14.3	5.5	17.9	23.4

Table 4: Independent and dependent (subsidiary) companies in the survey

Ownership type %	UK	NZ	AU	Total
Independent	73.8	84.5	61.6	69.9
Dependent	26.2	15.5	3.4	30.1
Total	100	100	100	100

Table 5: Adoption of the new cost and management accounting techniques in independent and dependent companies

New technique	Ownership type	Introduced on trial basis or implemented (%)
ABC	Independent	26
	Dependent	34
ABM	Independent	20
	Dependent	24
Balanced Scorecard	Independent	35
	Dependent	50
Benchmarking	Independent	51
	Dependent	64
SMA	Independent	30
	Dependent	34
Target costing	Independent	25
	Dependent	24

Table 6: Management accountant satisfaction with the current cost and management accounting

Very satisfied	Moderately satisfied	Needs improvement	Dissatisfied	Very dissatisfied
12.4	31.9	41.5	9.2	5.0

Table 7: The levels of satisfaction with implemented cost and management accounting systems in organisations in the UK, NZ and AU (%)

Countries	Very satisfied	Moderately satisfied	Needs improvement	Dissatisfied	Very dissatisfied	Total
UK	12.3	38.5	35.4	12.3	1.5	100
NZ	20.6	29.4	30.9	10.3	8.8	100
	8.7	30.2	49	7.4	4.7	100

Table 8: Management accountants' views about the importance of characteristics of innovations

Type of attributes	Very important	Important	Neutral	Not very important	Irrelevant
Its ability to get the job/service done quicker	39.3	46.7	10.9	2.1	1
Its ability to improve the quality of the job/ service	54.7	40.4	3.9	1.1	
Its ability to do the job/service easier	29.9	48.6	18.7	2.8	
Its ability to increase the overall effectiveness of the job/service	46.8	46.5	5.6	0.7	0.4
Its ability to offer greater control over work processes (job/service)	29.6	48.6	18.7	2.8	0.3
Being compatible with all aspects of existing processes (job/service)	20.1	37	33.8	8.8	0.4
Fitting well with the way I/organisation like to work	15.9	33.6	35.3	14.1	1.1
Fitting into my/organisation work style	9.2	31	41.3	16	2.5
Being easy to learn how to operate	13.8	45.6	29.3	10.2	1.1
Offering clear and understandable interaction with the technique	17.1	51.1	26.8	4.6	0.4
Being easy to use/implement	21.5	54.2	17.6	6.3	0.4
Being easy to get the technique to do what I/ organisation want it to do	23	53.7	20.5	2.8	
Having no difficulty telling others about the results of using the technique	15.4	50	28.2	6	0.4
Being able to communicate to others the consequence of using the technique	22	53.2	18.1	6.4	0.3
Being able to see the results of using the technique clearly	35.8	52.5	9.2	2.5	
Being able to explain why using the technique may or may not be beneficial	19.3	52.1	23.6	3.9	1.1
Being able to try the technique before deciding to implement it (or not)	18	47.9	27.1	6.3	0.7
Being able to use the technique on a trial basis long enough to see what it could do	15.3	45.9	27.9	9.5	1.4

Table 9: Management accountants' views about the importance of other factors

Factor	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Employee/organisation awareness of the benefits of an innovation	30.1	46.5	7.4	12.8	3.2
Employee/organisation awareness of the ready availability of an innovation	12.8	45.6	23.5	16.4	1.8
Employee/organisation awareness of running cost of implementation of the innovation	19.6	44.1	17.8	15.3	3.2
Employee/organisation dissatisfaction with the current system	19.6	43.2	18.9	13.6	4.6
Social, cultural and institutional pressures for innovation	13.2	29.6	36.4	15	5.7
Employee/organisation lack of confidence in the ability of innovation	9.6	26.3	39.5	22.1	2.5
Employee/organisation recognised need for change	19.6	53.7	11.7	11.7	3.2
Employee/organisation ability to afford the amount of investment required to adopt the innovation	26.2	44.7	11.7	11.7	5.7
Employee/organisation level of uncertainty associated with the outcomes of the innovation	9.2	39.7	37.6	10.6	2.8
Employee/organisation ability to afford the amount of time required to implement the innovation	21	46.3	12.1	14.9	5.7
The level of clear commitment from senior management towards the innovation	56	24.8	3.5	5.7	10
The existence of a widely recognised 'champion' of the implementation	33.5	35.2	13.5	11	6.8
The level of employment of management consultants to facilitate implementation	11	25.5	30.1	23	10.3