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Investigating the rationale for adopting an internationally-recognised project management methodology in Ireland: The view of the project manager

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Abstract

As businesses become more dependent on technology, effective project management has been recognised as a necessity, in order to lead and deliver quality software applications on time and within budget. One possible option in software projects is the use of a project management methodology. This exploratory research examines why organisations with an existing project management methodology are transitioning to an internationally-recognised methodology, and why organisations that do not have a project management methodology are implementing an internationally-recognised methodology. Results of five case studies suggest that while an in-house project management methodology can work well within an organisation, the benefits of using an internationally-recognised methodology should be considered. These include: the assurance that the organisation is using what is considered to be best-practice; demand from external customers that a recognised methodology is used; assistance with external recruitment; and the availability of suppliers of the methodology for training and support.

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Keywords: IS project management; Methodology; Project management certification; PMBoK; PRINCE2

1. Introduction

The growth and acceptance of project management of Information Systems (IS) projects in organisations is on the increase and has come about more through necessity than through desire (Abbasi and Al-Mharmah, 2000; Crawford and Pollack, 2007; Kerzner, 2006b). More and more organisations are under pressure to develop and execute innovative business strategies and projects in order to stay competitive (Srivanna-boon and Milosevic, 2006). Increasingly, information systems are being used to carry out these business strategies, and as a result better planning skills are required (Brancheaum and Wetherbe, 1987). Management are realising that to remain competitive their organisations must implement good project management practices as an organisation may find that they are no longer competitive on price or quality and that it may be

cheaper to outsource project work (Kerzner, 2006b). As a result, organisations are forced to look internally for a solution to execute these projects effectively. One possible solution is project management, as using good project management practices can help organisations to better plan, organise, manage and control work, which leads to better performance and increased productivity (Abbasi and Al-Mharmah, 2000; Loo, 2002).

The fundamental objective of project management is to deliver a project within time, cost and to specification (Jurison, 1999). Yet, it is well known that many IS projects exceed their budget and time schedule (De Meyer et al., 2002). Various studies have found that between 40% and 50% of these projects fail to meet estimates and that the degree of overspend can exceed 200% (Keil et al., 2000; Robey and Keil, 2001). In 2004 the StandishGroupInternational (2004) conducted one of the most extensive and often cited studies which showed that only 29% of all the projects surveyed succeeded (i.e. were delivered on time, on budget, with required features and functions) with 18% of projects failing (cancelled prior to completion or delivered and never used).

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Brock et al. (2003) are of the opinion that these IS project performance problems could be addressed by having better implementation procedures and better management of projects while Milosevic and Patanakul (2005) have identified the use of project management processes as a factor affecting the success of IS projects. Research by Parker and Skitmore (2005) and Wateridge (1997) has also shown that IS projects that do not have a project manager or do not follow a methodology or a defined process are more likely to fail as ultimately, the project manager is responsible for the delivery of a project and is fundamental to ensuring that the project is a success.

2. Motivation for the research

Many organisations have developed their own project management methodology for managing IS projects, but Forrester (2005), a US-based, independent technology and market research company has found that organisations are tending to move away from internally-developed project management methodologies towards more broadly recognised approaches. In the USA, project management training and certification is on the rise in public and private companies (Pappas, 2005). This is also evident in Ireland where the number of individuals completing project management certification programmes is increasing year on year (IPMA, 2005). It is likely that many organisations in Ireland still use an in-house project management methodology or no methodology at all, although there is no data available to validate this claim.

The existing literature focuses on various elements of project management methodologies including: why a project management methodology should be adopted; the benefits and drawbacks of adopting a project management methodology; and more recently on the value of specific project management tools and techniques that are employed by project managers (Besner and Hobbs, 2006, 2008). Yet, little research has sought to determine why organisations transition from an in-house project management methodology to an internationally-recognised alternative. This is surprising given that such a transition is rarely trivial, and often requires substantial commitment of resources and upheaval. In addition, the new commercial methodology rarely caters for the needs and nuances of the organisation in the same way the in-house methodology would have done. Likewise, little research has tried to determine why organisations without a project management methodology are choosing accepted methodologies over internal alternatives, which can be simpler, require fewer resources, and are always tightly aligned to the organisation.

This study aims to address this gap by attempting to gain an understanding as to:

- i. Why organisations in Ireland with an existing project management methodology in place for managing information systems projects are transitioning to an internationally-recognised project management methodology (IRPMM).
- ii. Why organisations that currently do not have a project management methodology in place for managing information systems projects are choosing to implement an

internationally-recognised project management methodology rather than developing an in-house methodology.

To address these questions five exploratory cases studies were conducted. In the next section of this paper the background literature is reviewed. The research approach is then explained. This is followed by a presentation of the findings and an analysis and discussion of the results. The paper ends by identifying some limitations in the research and making some suggestions for further research.

3. Project management methodology

Before proceeding any further it is important to explain what a methodology is in the context of this research. A methodology is a structured approach for delivering a project, and consists of a set of processes, with each process having clearly defined resources and activities (Turner, 2000). A project management methodology will set out what an organisation regards as best practice; improve inter-organisational communication; and minimise duplication of effort by having common resources, documentation and training (Clarke, 1999). Although, research by Payne and Turner (1999) has shown that project management practices can vary significantly from one project to another. However, Kerzner (2001) believes the best way to increase the likelihood of an organisation having a continuous stream of successfully managed projects is to develop a good project management methodology in-house that is flexible enough to support all projects. Some organisations adapt their project management methodology from external standards such as the Project Management Body of Knowledge (PMBok), as project life cycles and management structures are different in every organisation (Zielinski, 2005). The amount of time and effort needed to develop a methodology will vary from company to company depending upon factors such as the size and nature of projects, competitive pressures and the number of functional boundaries to be crossed (Kerzner, 2001).

For those that do not wish to develop their own methodology, there are internationally-recognised project management methodologies available which are supported by accreditation. Two most commonly known methodologies are the Project Management Body of Knowledge (PMBok), developed by the Project Management Institute (PMI) and Projects IN Controlled Environments (PRINCE2) developed by the Office of Government Commerce in the UK (McManus and Wood-Harper, 2002). The focus of this research is on organisations who have adopted either of these two project management methodologies.

4. Adopting a project management methodology

The project management methodologies of most organisations are fairly standard with most using a common project-management language and framework across the organisation, often adapted from external standards like those of the PMI. However, project life cycles and management structures are different in every organisation and therefore one project

management methodology does not fit all. Selecting a standard methodology that does not fit within the framework of the organisation will not achieve its promised benefits (Garcia, 2005). A tailored version of a standard methodology will provide an organisation with the flexibility to adapt the methodology to their own specific requirements (Kerzner, 2006a, p154; Zielinski, 2005). Both PRINCE2 and the PMBoK are flexible in their design and can be customised to suit the needs of any organisation with many organisations selecting, adapting and implementing only processes from the PMBoK methodology that suit their needs (Forrester, 2006).

The existing literature recognises the benefits of implementing and using a project management methodology, and does not distinguish between project management methodologies that are internally developed or internationally-recognised. Deploying a project management methodology can have a positive impact on an organisation, as the standards set out can reduce the time to deploy new practices by providing a common reference point for those developing the infrastructure to support the standard (Garcia, 2005). Organisations are becoming increasingly aware of the benefits that a single, common, structured method for project management can bring (OGC, 2002), as according to Abbasi and Al-Mharmah (2000), the lack of use of a project management methodology can contribute to poor overall performance of projects and lack of organisation in a project. The benefits to the organisation of using a project management methodology include: effective management and planning of the project; the controlling of budgets and resources (Zmud, 1980); and the provision of a consistent method of reporting across all projects, allowing staff to move between projects without having to relearn the management approach. A common language is needed so that all team members can understand each other (Clarke, 1999). The use of project management methodologies also helps to manage change effectively by providing appropriate tools and techniques (Kerzner, 2001). However, the project manager must be willing to manage within the guidelines, policies, procedures, rules and directives of an organisation to achieve this (Kerzner, 2001).

While the impact of using a project management methodology is generally found to be positive, there are also some negative effects. Methodologies for project management range from rigid policies and procedures, which may require extensive tracking, sign-off and maintenance, to more informal guidelines and checklists (Dicks, 2000; White and Fortune, 2002). The amount of documentation required and its generation can be very time consuming and is the biggest drawback to rigorous project management methodologies (Abbasi and Al-Mharmah, 2000; Kerzner, 2001). There is also a need to continuously evaluate and improve the methodology, which takes time and effort and adds to the cost of using a project management methodology (Dicks, 2000). However, despite the time required to implement and maintain project management methodologies, the many advantages can outweigh the disadvantages, especially when increases in customer satisfaction are taken into account (Naughton and Kavanagh, 2005).

5. Project management methodologies currently used in Ireland

A study carried out in 2001 and 2002 by the International Project Management Association (IPMA) showed that Ireland was ranked second, behind Sweden, and ahead of the United Kingdom, Norway, Denmark, Hungary, Austria, Romania and Latvia in the practice of project management (Naughton and Kavanagh, 2005). This research team (Naughton and Kavanagh, 2005) believe that a key attribute of this high ranking is a result of the demands from many of the US multi-national companies operating in Ireland. The research would also tend to indicate that the increase in the use of project management is helping Irish organisations to deal with at least three of the strategic challenges that face all organisations: how to manage complexity, how to manage time and how to manage cost (Dutta et al., 1998).

At this point, no reference has been found in the literature to indicate what project management methodologies are currently in use in Ireland. However, during 2004 and 2005 the Institute of Project Management Ireland (IPMI) and the Department of Management and Marketing in University College Cork conducted a survey of middle to senior management and project managers in Ireland, the results of which were made available by the IPMI to the researchers. Of the 200 responses that were received, 25% of organisations used the PMBoK methodology, while 5% used the PRINCE2 methodology. The remaining organisations used other project management methodologies, which were not specified. Information on the use of specific processes, tools, or techniques used by these project managers was not provided. This survey also showed that 47% of the individuals interviewed believed that certification of project managers are important to senior executive management in the organisation. More recent figures from the IMPI indicates that in 2008 there were approximately 1500 project managers certified with the IPMA in Ireland (IPMI, 2008).

6. Research design and methodology

The implementation of an IRPMM to manage information systems projects is relatively recent to organisations in Ireland and, following a review of the literature, it was apparent that there is a lack of both qualitative and quantitative research in this area. As the subject under investigation is new and there was little existing research, the objectives of this study highlighted the need for exploratory research. Therefore, case study was selected as the research strategy in this instance. Case studies provide the researchers with an opportunity to understand the conditions present in a particular situation (Yin, 2003) and they are particularly appropriate for researching concepts that are at an early stage of maturity (Benbasat et al., 1987). Multiple case studies, as opposed to a single case study, were conducted to obtain a broader view of practices in several organisations. For the purposes of this research five case studies were employed as according to Yin (2003) five or more cases should be used for a high degree of accuracy and replication.

7. Target profile of organisations

The target profile of participant organisations for this research was:

- (1) Organisations in Ireland that employ more than 50 individuals, on the assumption that organisations smaller than these would not have dedicated project managers or may not have a project management methodology in place.
- (2) IS project managers in the selected organisations were required to have completed either the PMI or PRINCE2 certification programme within the previous three years.
- (3) As a result of IS project managers completing a project management certification programme, organisations were required to have implemented either PMBoK or PRINCE2 for their information systems projects, or implemented an adapted version of PMBoK or PRINCE2.

8. Selection of organisations

The organisations were selected by a number of different means. The first attempt at identifying organisations was to review the list of companies on the IPMI website that had participated in their project management training. Several of these organisations seemed to fit the required criteria and they were contacted. Two organisations were obtained from this list. The remaining organisations contacted by this means did not wish to participate or did not fit the required criteria. As this would have limited the research to organisations that had only completed the PMI certification program from the IPMI additional organisations were selected through personal contacts in the software industry.

10. Organisation profile

A high-level profile of each of the participating organisations is detailed in Table 1. Some of the organisations have several office locations within Ireland or have offices in multiple locations around the world. As practices could vary across locations within the same organisation, for the purposes of this research the findings relate to the location in which the interview was conducted.

Case A was a long-established financial services organisation based in the UK, employing 4500 staff. Its Irish office employs approximately 65 staff. The organisation is a provider

of investments, pensions and protection products for employers and individual consumers.

Case B was a building society that employs approximately 1000 staff country-wide. The building society provides a range of savings, investment, mortgage and insurance products and services to personal and business customers.

Case C was a technology services provider with numerous offices worldwide that employs approximately 4000 people. There are a number of office locations based within Ireland, one of which participated in the research. This office employs 50 people. The site that participated in the research had operated as an independent company prior to its acquisition a number of years ago. This division of the organisation specialises in quality assurance, testing, consulting and applications maintenance services.

Case D was an Irish organisation operating in the financial services industry. It employs approximately 2500 staff in Ireland and operates in key locations around the world through a range of specialist business units and subsidiary companies. The organisation provides a comprehensive range of financial services to domestic and international corporate organisations.

Finally, Case E was an Irish insurance provider with approximately 2000 employees based in several offices in Ireland. This organisation offers a variety of insurance products to both personal and business customers ranging from general insurance, life assurance, pensions, investments, to personal financial services.

11. Participant profile

The level of experience of the project managers interviewed varied across the organisations, as did the number of projects that they managed before and after the implementation of the new project management methodology. A high-level profile of these project managers is displayed in Table 2.

12. Data collection

As the researchers wished to gather detailed opinions and perspectives on the subject of project management methodologies in information systems projects, the primary method of data collection was a semi-structured personal interview. An interview guide was developed to facilitate this. The interview guide contained a number of sections related to the research question and objectives with each section containing a number of questions. These questions were created following a review

t1.1 Table 1
t1.2 High-level profile of organisations.

t1.3	Case A	Case B	Case C	Case D	Case E
t1.4	Financial services	Building society	Technology services	Financial services	Insurance
t1.5	65	1000	420	2500	2000
t1.6	14	80	50	200	170
t1.7	Ireland and UK	Ireland	Worldwide	Ireland, Europe and USA	Ireland
t1.8	Internal to the organisation	Internal to the organisation	External to the organisation	Internal to the organisation	Internal to the organisation

t2.1 Table 2

t2.2 High-level profile of project managers interviewed.

	Case A	Case B	Case C	Case D	Case E
t2.4 Years of experience as a project manager	1.5	9	9	8	7
t2.5 Number of projects managed before the implementation of the methodology	3	50	4	5	20
t2.6 Number of projects managed after the implementation of the methodology	2	6	2	2	5

356 of the existing literature and the research questions. The aim of
 357 the interview questions was to ensure that there was sufficient
 358 detail and coverage of the research questions (Eisenhardt,
 359 1989). A sample of the interview questions asked is detailed in
 360 the Appendix. Using open-ended questions provided the
 361 researchers with the opportunity to gather detailed information
 362 and it gave the researchers more control over the data collection
 363 than other types of data collection methods. It also provided the
 364 researchers with the opportunity to ask additional questions, if
 365 necessary (Cooper and Schindler, 2001).

366 Participants were interviewed at their place of work.
 367 Interviews were recorded and lasted between one and two
 368 hours. The project manager in each of five organisations was
 369 interviewed for the purposes of this exploratory research as the
 370 study focused on the perspective of the project manager.
 371 Consequently, the findings of this research are based on the
 372 opinions and experiences of the each of the project managers
 373 within the context of their own organisation.

374 13. Data analysis

375 Each interview was transcribed as soon as possible after the
 376 interview as recommended by Miles and Huberman (1994). The
 377 interview transcriptions were read several times in order to
 378 become familiar with the data in greater detail (Eisenhardt,
 379 1989). A detailed summary of each case study was written and
 380 re-read several times. Notes were made and the main points
 381 made in relation to each of the research questions were
 382 highlighted for each case (Miles and Huberman, 1994). These
 383 were organised into separate sections as suggested by Yin
 384 (1981). Cross-case analysis was then conducted with similar-
 385 ities and differences across cases highlighted.

t3.1 Table 3

t3.2 Project management methodology used.

	Case A	Case B	Case C	Case D	Case E
t3.4 Original project management methodology	Internally developed	None in place	Internally developed	None in place	Internally developed
t3.5 Project management methodology implemented	PMBok	Adapted from PRINCE2	PMBok	Adapted from PMBok	Adapted from PRINCE2
t3.6 Champion/Driver of the project management methodology implementation	Project manager	Senior management	Senior management	Senior management	Senior management
t3.7 Number of years since project management certification was obtained at time of interviews	1	3	2	3	1
t3.8 Time to implementation	1 month	6 months	Ongoing	Unknown	Ongoing

14. Findings

386

387 This section presents the findings of the research. Each
 388 project manager was asked if a project management method-
 389 ology was in use prior to the adoption of an IRPMM. As can be
 390 seen from Table 3 the use of project management methodol-
 391 ogies varied across the organisations.

392 Two of the larger organisations (Cases B and D) had no
 393 methodology in place prior to the adoption of an IRPMM.
 394 Project management in these cases was very haphazard and
 395 varied from project manager to project manager or project to
 396 project. Of the three organisations that had a methodology in
 397 place, two organisations, both of which were small at the time,
 398 had a methodology in place that was developed internally and
 399 was used consistently across all projects. As both of these
 400 organisations had a small IS department, it may have been
 401 easier to make a decision internally to use and implement a
 402 project management methodology than in the larger organisa-
 403 tions where such a decision would affect a lot more personnel
 404 and agreement would have to be reached between all affected
 405 departments. The remaining organisation (Case E) followed an
 406 in-house methodology imposed on them by their parent
 407 organisation that had annual reviews and releases. However,
 408 it was used inconsistently across departments due to the
 409 changing structure of the organisation. In recent years this
 410 particular organisation has had to contend with a lot of new staff
 411 who had worked with different methodologies or with no
 412 methodology at all and it was taking a considerable amount of
 413 time for all staff to become accustomed to the in-house
 414 methodology.

15. Reasons to adopt an IRPMM

415

416 All of the organisations that participated in the research made
 417 a decision in the last number of years to implement an IRPMM
 418 for the first time or to transition from their internally-developed
 419 methodology to an IRPMM.

420 As can be seen from Table 3 the drive for the implementation
 421 of an IRPMM mainly came from senior management (the four
 422 larger organisations). Consistency in the management of
 423 projects was the main reason for implementing an IRPMM as,
 424 even where organisations had previously used an in-house

methodology, it was not always used consistently and it was also considered inflexible when trying to tailor the methodology for smaller projects (See Table 4). As stated by one project manager “if we are going to do things [manage more IS projects] we need to do them in a consistent manner”. Cost savings were also a factor as it was believed by one organisation that implementing a standard project management methodology that would be used consistently across the organisation would save money in the long term by helping to bring projects in on time and within budget.

Two of the larger organisations (Cases C and E) were also driven by their desire to obtain Capability Model Maturity Integration (CMMI) certification, of which a requirement is to have a project management methodology in place. An IRPMM would reduce the overhead of training new staff in an internal methodology as it would now be possible to recruit staff with experience in the IRPMM. Case C, whose customers were external also saw certification of their project managers and the use of an IRPMM as a potential differentiating factor when competing with other vendors for business. The project manager in this case believed that their customers would see the value in having certified project managers and that there “was a pursuit of certification [at organisational level] to ensure that we were getting projects”. This organisation was also driven to a certain extent by demand from their customers to have a standard methodology in place, which may be due to the industry (technology services) that this organisation operates in.

In the smallest organisation (Case A) it was possible for the project managers to directly influence management and to set out a business case for obtaining certification, which would progress their own careers, yet at the same time have a positive impact on the organisation. The decision to implement a methodology was made within a very short timeframe in contrast with the longer timeframe required for the larger organisations. This may be due to the smaller size of this organisation and the higher level of complexity that such a task entails in larger organisations.

All project managers believed that the implementation of the new methodology improved the quality of the projects delivered and increased the success rates of projects even though none of the organisations formally measured this. In two cases (Cases B

and D) both project managers agreed that “it [project management methodology] helped to identify issues earlier on a project” resulting in the cancellation of one project in each of these two organisations before too much money was committed to the project.

While there was some interest in the personal development and training of staff in all organisations, this seems to have been only a minor consideration. However, the introduction of the methodology did formalise the role of the project manager (Cases B, D and E) by detailing competencies that must be achieved in order to hold the position. This has made it more desirable as a position as it is now seen as an opportunity for career progression.

16. Selection of an IRPMM

There were differing reasons as to why a specific IRPMM was chosen for implementation (see Table 5). Two of the project managers interviewed (Cases A and B) were involved in the decision as to which methodology was selected. In both cases the project managers selected a project management methodology that was recommended to them by colleagues. Four of the five project managers interviewed (Cases A, B, C and E) were aware of the reasons for selecting the particular project management methodology adopted by their organisation. The decision on the methodology selected in the Case D was made by a separate team within the organisation, who were given the task of choosing an appropriate methodology for the organisation. This was then adapted to suit the needs of the organisations and imposed on all project managers.

There was a general requirement for a methodology that is widely recognised by other organisations. For the larger organisations, it was important that the methodology could be tailored to the needs of the organisation. In Case C where CMMI was being implemented, CMMI recommended the implementation of the project management methodology from the PMI certification programme. This organisation was partly influenced by this requirement and partly influenced by its parent organisation in the United States where the value of PMI certification was seen in other US-based organisations. Case E is also implementing CMMI, but this organisation does not appear to have been influenced by the recommendation of CMMI. The main focus in this organisation related to having a methodology where certification, training, assistance and

t4.1 Table 4
t4.2 Reasons to adopt an IRPMM.

	Case A	Case B	Case C	Case D	Case E
t4.3					
t4.4	x	x	x	x	x
t4.5	x	x	x	x	x
t4.6		x		x	x
t4.7			x		x
t4.8			x		
t4.9			x		
t4.10	x				

t5.1 Table 5
t5.2 Selection of an IRPMM.

	Case A	Case B	Case C	Case D	Case E
t5.3					
t5.4	x	x			
t5.5			x		
t5.6			x		x
t5.7				x	
t5.8		x		x	x
t5.9					x

508 support can be provided by more than one supplier. As a result,
509 PRINCE2 was selected because of the availability of numerous
510 training providers.

511 17. Analysis of findings

512 Even though some of the organisations studied in this
513 research previously used their own internally-developed
514 methodology, there was still a desire within these organisations
515 to implement an IRPMM. The main reasons for implementing
516 an IRPMM included: an assurance that best-practice was used
517 within the organisation; the lack of availability of more than one
518 supplier for the methodology previously used; and demand
519 from external customers to have an IRPMM in place. While the
520 decision to implement a methodology was supported by
521 management in all cases, management was not always the
522 initial driver (see Table 3).

523 The decision to implement a methodology was made within
524 a very short timeframe in the smallest organisation, which was
525 to be expected, as smaller organisations tend to be more flexible
526 with their decision-making. This contrasted with the longer
527 timeframe required for the larger organisations. The larger
528 organisations tended to adapt the methodology to suit their
529 business needs and conducted customised training courses for
530 project managers whereas the smallest organisation completed
531 the certification programme with a recognised training provider
532 and implemented the methodology without any adaptation. This
533 organisation was easily able to modify their existing processes
534 to fit with the new methodology. While a quicker implementa-
535 tion is possible if an organisation does not adapt the
536 methodology, the larger organisations needed to adapt the
537 methodology to fit with their existing established business
538 processes and wanted it to be an organisation-wide methodol-
539 ogy as opposed to an off-the-shelf methodology.

540 The two methodologies implemented differed in terms of
541 their flexibility on smaller projects. The larger organisations,
542 that implemented the PMBoK methodology, did experience
543 difficulties with the flexibility of the methodology in relation to
544 its use on small projects. Even though one of the large
545 organisations had adapted the PMBoK methodology, the
546 adaptation was still very closely aligned with the standard
547 methodology. In contrast, another large organisation that
548 implemented an adapted version of the PRINCE2 methodology
549 did not seem to experience the same difficulties. However, this
550 organisation did have an issue with their old in-house
551 methodology, which was similar to PRINCE2, and was
552 imposed on them by their parent company. Project managers
553 found it difficult to scale the methodology down to meet the
554 needs of the projects that were conducted in Ireland, which
555 tended to be significantly smaller in size than projects in the
556 parent organisation. This could suggest that in order to have
557 flexibility, it is necessary to adapt a methodology, regardless of
558 the actual methodology that is employed.

559 Four organisations had customers who were internal to the
560 organisation (i.e. the customer was another department/business
561 unit within the same organisation) and one organisation had
562 customers who were external. The organisation with the

external customers faced greater demand from their customers 563
for project management certification and the use of an IRPMM. 564
This demand was also driven internally by senior management 565
in the organisation, as they wanted to obtain any possible 566
competitive advantage when competing with other vendors for 567
projects. An additional difficulty facing this organisation was 568
that they required buy-in from their external customers when 569
implementing their new project management methodology. The 570
organisation encountered several problems when trying to use 571
the new methodology on existing projects as customers did not 572
wish to change from the old internally-developed methodology. 573
Some customers also wanted to use their own methodology, 574
resulting in conflict between the two methodologies, which had 575
to be resolved individually with each external customer. 576

577 While three of the project managers detailed that it did take
578 some time for project team members to become familiar with
579 the methodology, no resistance was reported by members of the
580 project team to the implementation of the methodology. Instead,
581 the benefits that resulted were welcomed by the project team.
582 However, there was some resistance from the external
583 customers in Case C who used their own methodology and
584 did not wish to change. 585

585 18. Discussion of findings

586 These cases studies are a step in providing an insight on
587 project management practices in Ireland, from the project
588 manager's perspective, specifically in relation to the imple-
589 mentation and use of an IRPMM following project management
590 certification.

591 Kerzner (2001) and Milosevic (1996) identified several
592 reasons why organisations decide to implement a project
593 management methodology with which this study agrees. This
594 study found that the main driver in larger organisations for the
595 implementation of an IRPMM, was a desire by senior
596 management to have a uniform approach to project management
597 across the organisation. As a result, management provided their
598 full support for the implementation and they also provided the
599 time, money and the resources required for the implementation,
600 which is in line with the existing literature (Brown, 1999; Loo,
601 1996). Yet, it must be noted that if an organisation decides to
602 customise a project management methodology this can take a
603 substantial amount of time and money, and this should be taken
604 into consideration. In contrast, the main driver in the smallest
605 organisation was the personal desire of the project manager to
606 enhance her career prospects and her knowledge of project
607 management, while at the same time considering the benefits to
608 the organisation. This was not identified as a driving factor in
609 the existing literature. This may suggest that project managers
610 in smaller organisations can have more direct influence on
611 management to obtain their support, which can benefit both the
612 project managers and their organisation.

613 The findings of this study also suggest that when a
614 recognised methodology is implemented in an organisation,
615 the support and input of the various divisions within the
616 organisation is needed to ensure a successful adoption of the
617 methodology. This concurs with the findings of Blackburn 617

(2002), Brown (1999) and Loo (1996). Where customers who are external to the organisation are required to use a methodology, this study shows that their support is also required for a successful implementation. This requirement has not been highlighted in the literature to date.

Many organisations adapt an IRPMM to their own specific requirements, as project life cycles and management structures are different in every organisation (Zielinski, 2005). The organisations in this study that tailored the methodology to meet their needs were large organisations that were well-established and have been in existence for over fifty years. This may suggest that in order for the methodology to be successful, large, well-established organisations require a methodology that can be modified to fit with their existing business processes. This agrees with the findings of Garcia (2005) who states that if a standard does not fit within the framework of the organisation it will not achieve its promised benefits. The organisations that adapted the methodology also tended to have a condensed version of the methodology for smaller projects, which made the methodology more flexible in terms of its use for projects of all sizes. This suggests that adapting an IRPMM may improve the flexibility of a methodology, and so, could resolve the problems identified by White and Fortune (2002) who find that sometimes a methodology can be difficult to model to the 'real world', or can require too much documentation.

One project manager believed that there were no major additional benefits following the implementation of their new IRPMM after the completion of the certification programme, as they had a good methodology in place previously. This organisation had already recognised the benefits of using a standard methodology. As a result, in this organisation there was no evidence to suggest that the new methodology was more effective than the old methodology, which concurs with Kerzner (2001) who states that it is not important which methodology is used so long as the project team can use the methodology. However, this study identified a number of benefits to using an IRPMM rather than an in-house methodology (an area not covered in existing literature). These included: the assurance that the organisation was using what was considered to be best-practice within the industry, which should provide a competitive advantage when competing with other suppliers for projects; the expectation of external customers that their suppliers would have a recognised project management methodology in place; the availability of several suppliers of the methodology for training and support; and assistance with external recruitment, resulting in a reduction in the overhead of training of new staff members. This suggests that while using an in-house project management methodology can benefit an organisation and can work well within an organisation, as was seen in the organisation that had a successful internal methodology prior to certification, the benefits of using an IRPMM should be considered by organisations when deciding on a project management methodology.

In conclusion, organisations considering implementing an IRPMM need to think about their reasons for doing so. It is possible that if a good project management methodology

already exists and is used consistently across an organisation that there may not be a requirement to implement an IRPMM. However, in the event that an organisation intends to implement an IRPMM senior management must be committed and supportive of the implementation in order for it to be successful. Management must also obtain the support of all staff, and possibly customers, to ensure that the methodology is used on projects. In the event that the methodology requires customisation, additional time and money must also be made available for this and also to allow time for staff to receive training on the methodology. This may result in a longer implementation period, which may have an impact on the decision to customise. Selection of the most appropriate project management methodology can depend on factors such as the availability of project management certification providers for training and support; the ease with which the methodology can be adapted to suit the business; and the flexibility of the methodology in practice across projects of different sizes.

19. Limitations of the research

This research was limited by the fact that it employed case study as its research approach. As a result, the findings are only representative of the five organisations studied at a particular point in time in a particular location. Practices may have varied across office locations within Ireland or across countries. The findings were also based on the opinion of one project manager in each of the organisations interviewed. If additional project managers in each organisation had been interviewed they may have had differing opinions, depending on their level of experience and the division of the organisation in which they worked. Further research should address this limitation and it should also consider the viewpoint of other stakeholders within the organisation.

Four of the five cases studied were large organisations. As only one of the organisations that participated in the study was small the findings relating to the small organisation cannot be directly compared or contrasted with any of the other organisations studied.

This research focused on project management certification from providers of the PMBoK and PRINCE2 methodologies, as both of these methodologies are internationally recognised. Other methodologies and certification programs could also have been considered in order to examine project management methodologies and project management certification more broadly. Caution should be exercised in relating the findings in this research to contexts other than to similar organisations that use the PMBoK or PRINCE2 project management methodologies.

20. Implications for practice and recommendations for further research

It is the researchers hope that the findings reported here will complement existing research in the area of internationally-recognised project management methodologies and will be of interest to practice. The results recognise that there are benefits

to using an IRPMM over an in-house methodology. The findings may provide an indication as to when an organisation should customise a methodology or when they should implement a standard methodology. The research also identifies issues that project managers may need to consider when implementing an IRPMM, which may help organisations to have a more successful implementation.

Future research, either quantitative, or qualitative, needs to further examine the drivers of implementing an IRPMM. In addition, as all of the organisations that participated in this study only implemented a methodology recently and they have not yet reached the point where updates and revisions to the methodology are required the time and effort to continuously evaluate and improve the methodology was not identified as a problem. However, future research may address this and also verify some of the other findings across a broader range of organisation sizes and industry sectors.

Appendix

Sample questions asked during the semi-structured interviews are detailed below:

- (a) Why did you/the organisation decide to obtain project management certification?
- (b) How was approval obtained?
- (c) What project management certification program was chosen, and why?
- (d) Was a project management methodology adopted following the completion of the project management certification program?
- (e) Was implementing a project management methodology considered at management level/any level?
- (f) Who made the decision to implement the methodology?
- (g) What steps were involved in implementing the project management methodology following the completion of the project management certification program?
- (h) Was the project management methodology implemented in its entirety?
- (i) Was the methodology adapted to suit the needs of the organisation?
- (j) Were there any issues with implementing the project management methodology?
- (k) What should be done to address the difficulties faced in attempting to implement the methodology?
- (l) How has the use of a project management methodology impacted on your project team in terms of the attempt to implement the methodology?
- (m) What benefits do you attribute to the use of a project management methodology in terms of the attempt to implement the methodology?
- (n) What difficulties/downsides were experienced when implementing a project management methodology?
- (o) What difficulties/downsides were experienced when using a project management methodology?
- (p) How were these difficulties/downsides dealt with, or how are you currently trying to deal with them?

- (q) How do you define a successful project? 782
- (r) How has the use of a project management methodology affected the success rates of projects? 783
- (s) What effect has the use of a project management methodology had on the quality of projects delivered? 784

References

- Abbasi, G.Y., Al-Mharmah, H., 2000. Project management practice by the public sector in a developing country. *International Journal of Project Management*. 18 (2), 105–109.
- Benbasat, I., Goldstein, D.K., Mead, M., 1987. The case research strategy in studies of information systems. *MIS Quarterly*. 11 (3), 368–386.
- Besner, C., Hobbs, B., 2006. The perceived value and potential contribution of project management practices to project success. *Project Management Journal*. 37 (3), 37–48.
- Besner, C., Hobbs, B., 2008. Project management practice, generic or contextual: a reality check. *Project Management Journal*. 39 (1), 16–33.
- Blackburn, S., 2002. The project manager and the project network. *International Journal of Project Management*. 20 (3), 199–204.
- Brancheaum, J.C., Wetherbe, J.C., 1987. Key issues in information systems management. *MIS Quarterly*. 11 (1), 23–45.
- Brock, S., Hendricks, D., Linnell, S., Smith, D., 2003. A balanced approach to IT project management. *Proceedings of the 2003 Annual Research Conference of the South African Institute of Computer Scientists and Information Technologists on Enablement through Technology*. Sandton, South Africa, pp. 2–10.
- Brown, C.J., 1999. Towards a strategy for project management implementation. *South African Journal of Business Management*. 30 (2), 33–38.
- Clarke, A., 1999. A practical use of key success factors to improve the effectiveness of project management. *International Journal of Project Management*. 17 (3), 139–145.
- Cooper, D., Schindler, P., 2001. *Business research methods*, eighth ed. McGraw Hill, London, England.
- Crawford, L., Pollack, J., 2007. How generic are project management knowledge and practice? *Project Management Journal*. 38 (1), 87–96.
- De Meyer, A., Loch, C., Pich, M., 2002. Managing project uncertainty: from variation to chaos. *MIT Sloan Management Review*. 43 (2), 60–67.
- Dicks, R.S., 2000. The Paradox of Information. *Control Versus Chaos in Managing Documentation Projects with Multiple Audiences* *Proceedings of the 18th annual ACM International Conference on Computer Documentation. Technology & Teamwork* Cambridge, MA, USA, pp. 253–259.
- Dutta, S., Van Wassenhove, L. N. and Kulandaiswamy, S., 1998. Benchmarking European Software Management Practices. *Communications of the ACM* 41 (6), 77–86.
- Eisenhardt, K.M., 1989. Building theories from case study research. *The Academy of Management Review*. 14 (4), 532–550.
- Forrester, 2005. *Stabilizing IT With Process Methodologies*. [Online] [Accessed August 8th, 2007] Available from the World Wide Web: <http://www.forrester.com/Research/Document/Excerpt/0,7211,37030,00.html>.
- Forrester, 2006. *What Successful Organisations Know about Project Management*. [Online] [Accessed February 4th, 2010] Available from the World Wide Web: http://www.forrester.com/rb/Research/what_successful_organizations_know_about_project_management/q/id/39493/t/2.
- Garcia, S., 2005. How standards enable adoption of project management practice. *IEEE Software*. 22 (5), 22–29.
- IPMA, 2005. *International Project Management Association*. [Online] [Accessed 16th January, 2006] Available from the World Wide Web: <http://www.ipma.ch/asp/default.asp?p=90>.
- IPMI, 2008. *Significant Changes Affecting Project Management*. [Online] [Accessed November 12th, 2008] Available from the World Wide Web: <http://www.projectmanagement.ie/images/assets/pdf/significantchanges.pdf>.
- Jurison, J., 1999. *Software Project Management: The Manager's View*. *Communications of the ACM*. 2(3), Article 17.

- 845 Keil, M., Mann, J., Rai, A., 2000. Why software projects escalate: an empirical
846 analysis and test of four theoretical models. *MIS Quarterly*. 24 (4), 631–664.
- 847 Kerzner, H., 2001. *Project Management: A Systems Approach to Planning,*
848 *Scheduling and Controlling*, seventh ed. John Wiley & Sons Inc., New
849 York, USA.
- 850 Kerzner, H., 2006a. *Project Management Best Practices*. Wiley & Sons, New
851 Jersey, USA.
- 852 Kerzner, H., 2006b. *Project Management: A Systems Approach to Planning,*
853 *Scheduling and Controlling*, ninth ed. John Wiley & Sons Inc., New York,
854 USA.
- 855 Loo, R., 1996. Training in Project Management: A Powerful Tool for Improving
856 Individual and Team Performance. *Team Performance Management* 2(3), 6–14.
- 857 Loo, R., 2002. Working towards best practices in project management: a Canadian
858 study. *International Journal of Project Management*. 20 (2), 93–98.
- 859 McManus, J., Wood-Harper, T., 2002. *Information Systems Project Manage-*
860 *ment: Methods Tools and Techniques*. FT Prentice Hall, NJ, USA.
- 861 Miles, M., Huberman, A., 1994. *Qualitative Data Analysis: An Expanded*
862 *Sourcebook*, second ed. Sage, London.
- 863 Milosevic, D.Z., 1996. Standardizing Unstandardized Project Management.
864 NorthCon 1996 Conference Proceedings. Seattle, WA, USA, p. 12.
- 865 Milosevic, D., Patanakul, P., 2005. Standardized project management may
866 increase development projects success. *International Journal of Project*
867 *Management*. 23 (3), 181–192.
- 868 Naughton, E., Kavanagh, D., 2005. Is Project Management Deficit a Brake on
869 the Irish Economy?. [Online] [Accessed January 23 rd, 2007] Available
870 from the World Wide Web: [http://www.projectmanagement.ie/articles/](http://www.projectmanagement.ie/articles/ireland_a_leader_in_project_management_practice.htm)
871 [ireland_a_leader_in_project_management_practice.htm](http://www.projectmanagement.ie/articles/ireland_a_leader_in_project_management_practice.htm).
- 872 OGC, 2002. *Managing successful projects with PRINCE2*, third ed. The
873 Stationery Office Books, London, England.
- Pappas, L., 2005. The state of project management training. *PM Network*. 19
874 (8), 59–66. 875
- Parker, S.K., Skitmore, M., 2005. Project management turnover: causes and
876 effects on project performance. *International Journal of Project Manage-*
877 *ment*. 23 (3), 205–214. 878
- Payne, J.H., Turner, J.R., 1999. Company-wide project management: the
879 planning and control of programmes of projects of different type. 880
International Journal of Project Management. 17 (1), 55–59. 881
- Robey, D., Keil, M., 2001. Blowing the whistle on troubled software projects.
882 *Communications of the ACM*. 44 (4), 87–93. 883
- Srivannaboon, S., Milosevic, D.Z., 2006. A two-way influence between
884 business strategy and project management. *International Journal of Project*
885 *Management*. 24 (6), 493–505. 886
- StandishGroupInternational, 2004. 2004 CHAOS Demographics and Project
887 Resolution. [Online] [Accessed 21st January, 2006] [http://www.stan-](http://www.standishgroup.com/sample_research/index.php)
888 [dishgroup.com/sample_research/index.php](http://www.standishgroup.com/sample_research/index.php). 889
- Turner, J.R., 2000. *Project Success and Strategy*. The Gower Handbook of
890 *Project Management*. Gower Publishing Ltd, Aldershot, England. third en. 891
- Wateridge, J., 1997. Training for IS/IT project managers: a way forward.
892 *International Journal of Project Management*. 15 (5), 283–288. 893
- White, D., Fortune, J., 2002. Current practice in project management: an
894 empirical study. *International Journal of Project Management*. 20 (1), 1–11. 895
- Yin, R.K., 1981. The case study crisis: some answers. *Administrative Science*
896 *Quarterly*. 26 (1), 58–65. 897
- Yin, R.K., 2003. *Case study research: Design and methods*, third ed. Sage
898 Publications, Thousand Oaks, CA, USA. 899
- Zielinski, D., 2005. Soft skills, hard truths. *Training*. 42 (7), 18–23. 900
- Zmud, R.W., 1980. Management of large software development efforts. *MIS*
901 *Quarterly*. 4 (2), 45–55. 902

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