

THE IMPACT OF IPMA-CERTIFICATION SYSTEM: EFFECTS ON THE EMPLOYABILITY FROM THE POINT OF VIEW OF DIFFERENT STAKEHOLDERS

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Abstract

This study analyses for the first time the effects that the IPMA Project Management Certification has on employability. This analysis started with a participative process in which various groups of experts who are involved in the certification of people were consulted. A personal interview was carried out amongst 46 professionals, all of whom work in certifying bodies, training institutions, the civil service, and international organisations. A survey was carried out amongst 39 professional who are IPMA certified and 1,010 companies were surveyed across Spain. The results show that the IPMA certification emerges as a powerful tool for improving employability. The effects are demonstrated across two complementary aspects: internal company aspects (internal employability) and external aspects relating to the labour market (external employability). Furthermore, it highlights the potential of this model of professional certification as a tool for improving the link between training and employability. However, there is still some way to go and the study detected a lack of information regarding accreditation processes as well as the need for better integration and coordination between the different actors. Finally, by compiling the different agents' opinions, a series of measures emerge for improving the accreditation processes as an employability tool and increasing the mutual learning between public and private actors.

Keywords: *IPMA certification, Project Management, employability, professional skills, certification systems.*

1. Introduction

The link between training, accreditation of professional skills and employment is a subject which has been discussed for some time; however, it is especially pertinent during times of crisis. In an economic environment with such a competitive labour market, staying in a job or finding a new job becomes of paramount importance for many people. In this context, skill-based training has emanated as a key factor for employability at an international level.

On the other hand, since the 1970s, the evolution of integrated economies and societies in the OECD has transformed life-long learning as a key objective for training and education policies. The concept of employability is often raised in international debates, and is understood as the aptitude for working competently within a labour market (OECD, 2008).

Several studies have concluded that the skill level within the population is linked to employability and that these skills should be adapted quickly in order to respond innovatively to the structural changes that are currently being experienced. This so-called life-long learning is in response to said challenge and was adopted as a political objective for the member states of the OECD in 1996 (OECD, 2008).

Certification systems for professional skills are seen as tools that aim to improve people's employability and learning. Therefore, the concepts of life-long learning and employability are strongly linked to these systems which are focused on skills and learning from a particular job (OECD, 2003; OECD, 2004).

Currently, there are several active certification models for personal skills – both professional and industrial – most of which are recognised internationally. In Spain there are currently five certified

organisations for professional skills which are better known and more credible for the following reasons: a) their certifying bodies are internationally recognised and they apply rules at an international level; b) they are accredited by the National Accreditation Body (ENAC), according to the applicable international standard ISO/IEC 17024: 2003 and other stipulated accreditation requirements for organisations that certify people; c) they are based on models which have a voluntary element by which certain professionals improve public recognition of their skills and abilities.

In Spain there are five such certification models for professional skills which meet these three requirements. They are associated with different areas; The European Organization for Quality (EOQ), The International Project Management Association (IPMA), The Project Management Institute (PMI), People CMM, and Coaching. This study will investigate for the first time the effect that the IPMA Project Management Certification has on employability (IPMA's certification model). This model has been present in Spain since the year 2000 through AEIPRO (Asociación Española de Ingeniería de Proyectos, Spanish Association of Project Engineering) and its Project Management Certification Body (OCDP).

This study will analyse the work already carried out, as well as the results of a participative process – including interviews and surveys – carried out with all the agents who are involved in certification processes. An estimate of the effects of the IPMA model is made within the professional context of Spain and partly from the point of view of the various agents involved: companies, people certification organisations, people who are certified, the civil service, international organisations and agents responsible for training. Although the scope of the study focuses on Spain, the views of various international experts have also been incorporated into the study.

The result of the study brings together the lessons learnt regarding the IPMA certification and its positive results as an employability tool. The study has also been used to collate suggestions and proposals – suitable for the Spanish and international context of the IPMA – which help to improve the professional certification systems. These measures are primarily focused on mitigating the lack of information regarding professional certification processes, as well as the lack of integration and coordination between the different actors involved in these processes.

2. Method

At a global level, the regulations for organisations that certify people emanate from the international standard for conformity assessment and general requirements (ISO/IEC: 17024, 2003). This rule sets out the criteria which these certification bodies must comply with for their accreditation. One of these criteria requires the certification body to define a process for pro-actively ensuring that certified people comply with the relevant regulations for that particular certification scheme. In accordance with the international regulation, the control process can include an evaluation process, information from the relevant authorities, structured interviews, and other regular analysis mechanisms, in order to validate the results of the certification scheme (Chambers, 1993).

This study focuses on the regulation and quality control system used by AEIPRO's Project Management Certification Body (OCDP), as a body linked to the IPMA in Spain (AEIPRO, 2010). Similarly, the study focuses on the studies carried out by the Consejería de Economía y Empleo del Gobierno Regional de Madrid (Office for Economics and Employment of the Regional Government of Madrid) which it uses to improve its employment policies (UPM – Comunidad de Madrid, 2009).

In this context, the methodological focus was based on the creation of a series of key questions which were answered using participative methods; direct interviews and questionnaires sent to relevant agents (Patton, 1997; Whyte, 1991). The study relied on cooperation with AEIPRO's OCDP, Madrid's regional government and external agents belonging to various certification bodies and international organisations, the IPMA, the private sector, the civil service and universities.

For the first time, this participative method enabled the study to be supported by all the leading figures involved in the project management skills certification system. All their knowledge and experience was analysed and compared in the study. With this participative and pluralist approach (Leviton, 2001; Díaz-Puente, Cazorla, & De los Ríos, 2009) it was expected that all the agents involved would benefit greatly from their participation in the evaluation work (Díaz-Puente, Yagüe, & Afonso, 2008). This approach also enabled the following objectives: a) take advantage of everyone's contributions and ensure that the main source of information is the knowledge and experience of the agents involved (Argyris & Schön, 1978;

Chambers, 1993; Rondinelli, 1993) with skill certification systems; b) facilitate the agents' learning (Preskill & Torres, 1999) by identifying best practice and providing guidance on possible measures for perfecting these actions (Korten, 1980); c) achieve greater involvement from people (Díaz-Puente, Cazorla, & De los Ríos, 2009) and improve links between agents, given that participation is such an important source of dynamics and cooperation; and d) position the analysis of the problems and the effects from the point of view of the beneficiaries of the actions (Korten, 1980; Uphoff, 1985).

2.1. Sources of information

The investigation's methodology combined two complementary information sources. On one hand, a secondary source, consisting of information already generated by other studies, official publications, statistics from the IMPA (IPMA, 2009), scientific documentation and international experiences with regards to professional skills, certification models and project management discipline (Turner, 1996; Winter, Smith, Morris & Cicmil, 2006; Geraldi et al., 2008; Crawford, Hobbs, Turner, 2005; Ono, 1995). On the other hand, a primary source of information, consisting of empirical knowledge based on the leading figures' experiences and perceptions. As previously mentioned, the participative methodology was supported by the five types of agent involved in the process of certifying people: a) professionals who work in companies' human resources departments; b) professionals who work in bodies that certify people; c) training agents; d) public sector agents and those from international organisations; and e) people certified by the IPMA model in Spain. In order to carry out this participative process, three participation methods were designed – a personal interview and two questionnaires – which were sent to 85 experts and professionals, as well as 1,010 companies. Whilst the questionnaires were completed during March and April 2009, the interviews lasted until June 2009.

Table 1: Participative methods used

Method	Sources	Population	Sample
Interview with experts (1.5-2 hours in length)	ENAC, certification bodies, training bodies and civil service	65 national and international experts	46 experts (17 from businesses, 6 from certification bodies, 8 from training bodies, 9 from the civil service and 6 international experts)
Questionnaire for certified people	IPMA Certification Yearbook and ODCP-AEIPRO directories.	282 professionals certified in Spain	39 certified professionals
Questionnaire for companies	DIRCE (Madrid Business Directory)	45,437 Madrid-based companies with over 20,000 employees	1,010 companies

The first method involved personally interviewing experts identified from the information supplied by the ENAC, certification bodies, training bodies and the civil service. These interviews were conducted by a team from Technical University of Madrid (UPM) and on average lasted just under two hours. In total, 46 people were interviewed; 17 from the businesses world, 6 from certification bodies, 8 from training bodies, 9 from the civil service and 6 international experts. The interview script was structured in three blocks of questions which aimed to obtain opinions from three different focus points: a) skills in the labour market; b) the effects that certification has on employability; and c) the link between training-certification-employability.

The second participative method was the questionnaire for IPMA certified people, which was carried out by AEIPRO's Certification Body. The questionnaires sample was extracted from a population of 282 professionals who have been certified by the IPMA system in Spain and appear in AEIPRO's Certification Body directory and the IPMA Certification Yearbook (IPMA, 2009). Of these professionals, less than 1% are level A (Certified Projects Director), 5% are level B (Certified Senior project Manager), 22% are level C (Certified Project Manager) and 73% are level D (Certified Project Management Associate). A total of 39 professionals were asked to complete the questionnaire. The questionnaire was designed with the cooperation of AEIPRO's Project Management Certification Body and was completed by individuals certified in Spain. People's contributions were voluntary and anonymous. The questionnaire was structured in four parts: a) the certified person's personal information ;b) assessment of the general

effects of certifying people; c) assessment of skills with regards to employability; d) assessment of the effects of certification at company level; and e) assessment of the effects of certification on an individual and global level.

The third method was a questionnaire for companies carried out by the University of Alcalá, within their research about occupations in the Madrid region. This questionnaire was carried out amongst a sample of 1,010 companies with over 20,000 employees in Madrid's Business Directory (DIRCE). This questionnaire was designed to obtain organisations' perceptions in three sections: a) assessment of skills with regards to employability; b) assessment of training needs for the company's employees; and c) assessment of the effects of global certification.

2.2. Verification of the representation

The participative process covered all aspects of the certification process: business environment, certification bodies, training bodies, public organisations and international experts, as well as certified individuals.

Within the business environment 17 people were interviewed, including representatives from professional associations and several companies: PMM Institute for Learning, ARPADA S.A, Coca Cola España, CRM-ERP España, PM&B Consulting Group, PMM Institute for Learning, SELCO, ALSTOM, Buró HEADHUNTING, IDOM, INDRA, Cedetel, Connectia Solutions, Lanbase S.L.U, TRW Automotive, Bucero Consultores, UNISYS España, Empresa CVP, SA, AEIPRO, AEDIP (Asociación Española de Dirección Integrada de Proyectos, Spanish Association of Integrated Project Management), AEC (Asociación Española para la Calidad, Spanish Association for Quality) and the COTEC Foundation for Innovation. All those interviewed hold director positions within these organisations. In addition, results were added from 1,010 questionnaires sent to companies from a diverse range of industries, through their human resources departments.

Six face-to-face interviews were carried out with the directors of the certification bodies of institutions that are currently accredited by the ENAC for meeting the criteria required for certifying people. Although there are other bodies, only these institutions which carry the quality seal, which the ENAC imposes in order to recognise the international standard (ISO/IEC 17024:2003), are considered. International and national experts who belong to the following certification bodies were also interviewed: CESOL, PMI, SEDIGAS, ENAC (Department for Certification and Verification), AEC, IPMA (experts were interviewed from Spain, Germany, France, UK, Portugal and Switzerland), and PM Consultant.

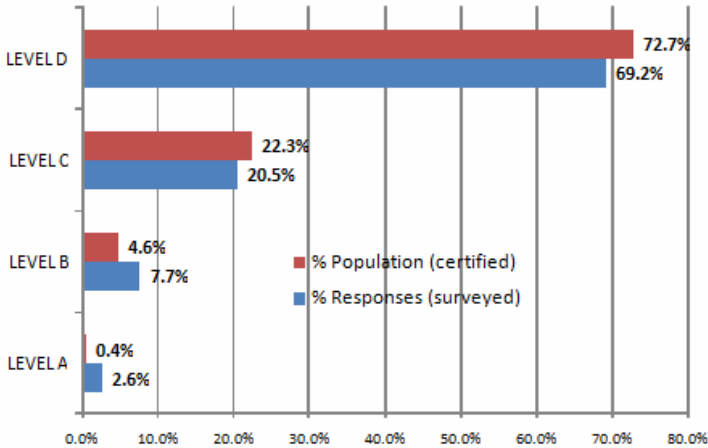
In order to complement the focus of the companies and certification bodies, interviews were carried out with directors and service managers from the civil service belonging to the Agency for the Quality, Accreditation and Prospective of the Madrid Universities (ACAP), and the Regional Institution of Qualifications of the Madrid region (IRCUAL), and members of international organisations such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) and Foundations specialising in the certification of people (COTEC Foundation and Tripartita).

Additionally, experts from the following training bodies were interviewed: E-Magíster, University of Castilla La Mancha, University of La Rioja, University of Valladolid, University of Zaragoza, URBALID XXI S.L., University of Piura, Technical University of Madrid, Technical University of Valencia, Foundation University Enterprise, Institute of Knowledge Engineering, Autonomous University of Madrid, and the Colegio de Posgraduados of México. The people interviewed in this area were vice-chancellors and directors of Universities (public and private), directors of innovative education programmes, entrepreneurial programmes and schemes for establishing relationships between businesses and universities.

Finally, a specific group of people were interviewed, all of whom are certified by AEIPRO's Project Management Certification Body. These certified professionals are people who have demonstrated their competency in project management, through an external evaluation. The interviews with this group were carried out in partnership with the certification body itself - AEIPRO's Project Management Certification Body – which agreed to assist with the investigation on the condition that the certified people's information would remain confidential. This survey offers a basic, empirical understanding of this particular group of certified people's view of the value of the effects of the IPMA certification. The Project

Management Certification Body (OCDP) sent this survey to 224 people. By the end of the information gathering phase the number of questionnaires received was 18%. Similarly, 21 questionnaires were sent internationally to people certified by the IPMA model in Germany, Switzerland, France, UK, Portugal, Mexico, Peru and Chile. The questionnaire was sent to a total of 245 people, with a response rate of 24% (Cea, 2001). The professionals interviewed are all at different stages of the IPMA model. The representation of the sample was analysed and compared with the percentage of certified people according to the different levels, as per IPMA's directories (IPMA, 2009). Figure 1 shows this comparison. It is evident that the distribution of answers from the questionnaires and the distribution of the certified population at the various IPMA levels is very similar.

Figure 1: Percentage of replies and percentage of the population that are certified for each IPMA level in Spain



Source: Survey of IPMA AERIPRO certified people, 2009.

Amongst the professionals that were surveyed, 64% have been IPMA certified for over a year, 20.5% of the sample completed their certification over 5 years ago and just 15% over 2 years ago. With regards to professional experience, 69% have over 10 years of experience, whilst 12% have less than five years of experience. This group has a mainly technical background (71% are engineers), although it also includes professionals with a non-technical background (29% are graduates). All the people surveyed are currently working, which demonstrates that this professional certification can guarantee ongoing employment. Although those people surveyed who are at Level D (69%) are not required to have professional experience in project management to become certified, all those surveyed have applied the knowledge they have acquired during certification to real situations from their work life.

3. Results

This section examines the results of the assessment of the effects that certification has on employability, according to the various agents involved.

3.1. The effects that the IPMA certification has on employability

All the experts that were interviewed across the various areas involved agree that the certification of skills is a good tool in terms of employability. 50% of the experts that were interviewed valued the way in which the certification helps when it comes to making up for any shortfalls in employees' behavioural and contextual skills. Behavioural skills are the most highly rated by all the experts and they highlight ethics and appreciation of values as areas for improvement. 45% of the experts consider that the certification processes have effects on continuous development and improving employees' competitive advantage; something that is considered necessary for maintaining employability.

Similarly, nearly all of the companies surveyed (93%) consider that the process of certifying people is a tool for improving employability and they have a great usability potential. These companies value the fact that the certification of people can be a tool for improving employability with regards to aspects such as improving skills-based training, and employees' motivation and experience. These surveys show a

greater need for applying certification amongst employees with a more technical background. It is evident that at these levels there is a lack of training in personal and contextual skills. At management level it is considered that there is a sufficient level of training and professional skills. Other factors were also identified with regards to the potential of certification and its positive effects on employability; from facilitating the identification of suitable professionals during the recruitment process to enhancing training, improving the match between professional performance and the needs of the company, and the possibility of improving employees' salaries.

Table 2 shows the ratings of the effects that the IPMA certification has on employability, according to the opinions of the certified people that were surveyed. 100% of these professionals consider that the IPMA certification has positive effects on their own employability and on their work environment. When the opinions are broken down according to certification level, it is interesting to see certain similarities and differences. Those surveyed across all IPMA levels agree that one of the most valued effects of certifying people is that of improving team working efficiency within companies or institutions that operate a certification culture. In contrast, people with level D place more value on the effect it has on improved job performance in the company or institution. Amongst people with level C certification, the most valued aspect is the effect it has on improved skill-based training and quality of education. Professionals certified at level A & B, occupying more senior management positions, value the impact on a company's competitiveness as the most important aspect (51%).

It is evident that as the level of responsibility increases (i.e. at higher certification levels), organisational-wide effects become most relevant, followed by the level of team working; whilst effects at an individual level become less valued. This confirms the idea that the certification culture has effects that go further than employees' personal benefits, and indeed affects the institution or company as a whole, starting with the improvements in human resources (Moreau & Leathwood, 2006; Brigstock, 2009). Furthermore, the average global rating of the effects increases gradually as we move from the levels with least responsibility (level D) to the highest certification levels (level A).

Approximately 85% of those surveyed consider – with a medium (33%) or high (51%) rating – that certification enables organisations to improve competitiveness (both companies and institutions). The rating for this effect increases as we move from the levels with least responsibility (level D) to the highest certification levels. At level D there is medium rating of 3.9, a rating of 4.4 at the average of levels B & C, whilst the highest rating is at level A.

The effect that certification has in terms of an organisation's productivity is another of the most valued factors – with a medium-high rating amongst 87% of those surveyed – which indicates that professionals consider that certification represents a contribution to an organisation's performance, from the point of view of improving the efficiency and effectiveness of their workforce. The rating for this effect also increases as we move from the levels with least responsibility (3.85 at level D) to the higher levels (4.10 at the average of levels B & C, reaching a rating of 5 at level A).

Table 2: The effects that certification has on employability

The effects of certification	Low (1-2)	Medium (3-4)	High (5-6)	High – Very High
Improved employee performance	8%	28%	59%	87%
Improved skill-based training	8%	36%	51%	87%
Improvements in companies' competitiveness	10%	33%	51%	85%
Improved career progression	5%	44%	46%	90%
Increase the company's credibility	5%	46%	44%	90%
Improved efficiency of team working	5%	49%	41%	90%
Improved communication	3%	51%	38%	90%
Improve the company's productivity	8%	54%	33%	87%
Improved conflict management	5%	59%	31%	90%
Improved employment policies	15%	51%	23%	74%

Note: Scoring was carried out on a scale of 1 to 6: Low (1-2), medium (3-4) and high (5-6).

Source: Source: Survey of IPMA AERIPRO certified people, 2009.

Approximately 90% of those surveyed consider that certification has an important effect on the reliability of an organisation (company or institution). The rating for this effect also increases as we progress through the levels of responsibility (from a rating of 3.8 at level D to a rating of 6 at level A).

In terms of personal factors, approximately 90% consider that certification plays an important part in improving personal performance within an organisation. Similarly, 90 % of certified people highly rate certification in order to advance or achieve promotion, as well as for developing skills. Other positive effects of certifying people that those surveyed give a high rating to (approximately 90%) include: effective team working, followed by improvements in communication and conflict & crisis management.

3.2. The effects that a ‘certification culture’ has on employability

The general results of the three participative processes – interviews with experts, the survey for certified people and the survey for companies – demonstrate that the incorporation of an IPMA certification culture within companies has effects on two complementary factors with regards to employability. Firstly, there are effects that influence internal factors in terms of the employees’ professional profile, which will be referred to as the effects on internal employability. Secondly, there are effects that are linked to the level of employees’ competitiveness in the context of the labour market, which will be referred to as effects on external employability.

Table 3 shows the global results of the ratings made by the certified professionals who were surveyed on the different effects which were considered. Those surveyed placed a high value (in first place) on professionals’ public recognition, followed by improvements in the company’s productivity. Other effects that were highly valued include: facilitating the recruitment and selection processes, improving the quality of education and the development of personnel.

Table 3: The effects that an ‘IPMA certification culture’ has on employability

The effects of a ‘certification culture’	Low (1-2)	Average (3-4)	High (5-6)	High – Very High
Improve training and learning processes	5%	49%	41%	90%
Improve public recognition for professionals	5%	33%	56%	90%
Progress towards an understanding of total quality	5%	54%	33%	87%
Improve efficiency in the civil service	8%	62%	23%	85%
Improve the quality of the civil service	8%	59%	26%	85%
Improve the management of human resources in companies	10%	49%	36%	85%
Enhance recruitment and selection processes	8%	44%	41%	85%
Improve companies’ productivity	15%	72%	10%	82%
Improve employment policies	10%	56%	23%	79%
Higher expectation of employees’ performance	13%	41%	38%	79%
Enhance international business, and relationships	5%	41%	36%	77%
Increase focus on consumers’ rights	15%	46%	18%	64%

Professionals who are certified at higher levels, with greater professional experience (levels A, B & C), give a high rating to the effects linked to the context of the organisation, such as the improvements in the company’s productivity and international relationships. On the other hand, people certified at the lowest level (IPMA level D) give a higher rating to personal effects, such as the improvements in training and professional performance.

The professionals certified across all levels agree that the IPMA certification is a tool that provides benefits, given that it represents a higher requirement and commitment in terms of the employees’ performance, enables the incorporation of a total quality culture in institutions and improves the efficiency of the services provided. Another aspect which coincides is the improvement in personnel management in companies, as a result of having certification mechanisms (IPMA levels) at their disposal, which provide

information regarding employees' technical & contextual skills and behaviour. Similarly, at all certification levels high importance is placed on the value of the improvements to training and the quality of education. As certification is a process which a professional voluntarily chooses to undertake, it has effects which are also valued in a global context, and which exceed the benefits just for the actual employee in the company.

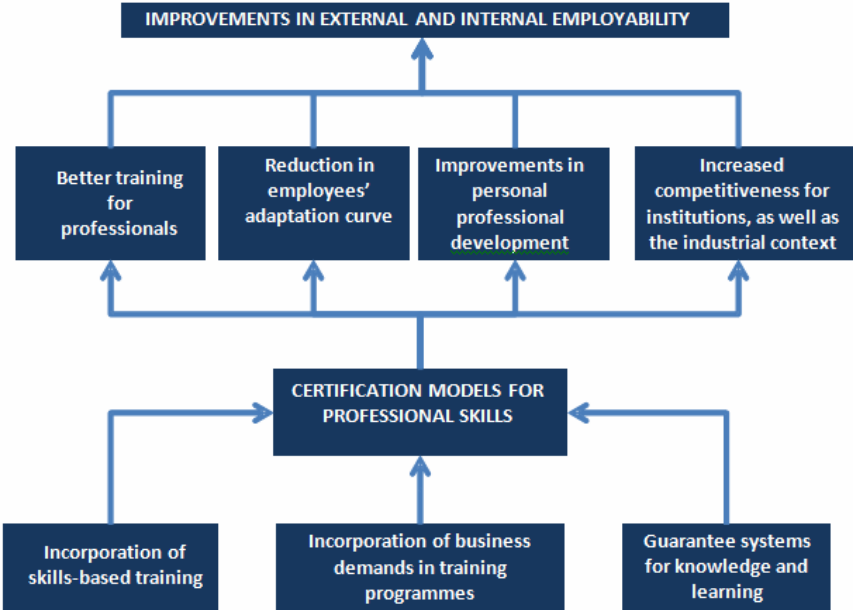
The effects that are most highly rated by certified professionals are the improvements in the recognition of professionals (56% of those surveyed), followed by the improvements in training and employees' learning processes (41% of those surveyed) and the improvements in recruitment and selection processes (41%). In terms of the effects that are most linked to the company or organisation, those with the highest rating (high or very high) are the improvements in recruitment and selection processes (85% of those interviewed), and the public recognition of professionals (90% of those surveyed). This can be turned into a competitive advantage for certification, given that it reduces companies' costs when recruiting and training professionals for a particular position.

The certified professionals who were interviewed award a high score to the effects on improved international relationships and they link the certification with the concept of quality. This can be explained because the IPMA certification is endorsed by an internationally recognised model. A high percentage of the certified professionals who were interviewed (90%) consider that certification could be an improvement mechanism for educational quality and training programmes; whilst 80% consider that it could be a tool for improving employment policies.

The opinions of the experts who were interviewed highlight the opportunities for using certification to establish links between training and employability, whilst improving skill-development training. Experts from all areas who were consulted, recognise that the effects of certification go much further than just the personal benefits for professionals, as they can impact the organisation as a whole, starting with improvements in terms of human resources. The effects are linked to the employees' level of competitiveness within the company or institution and are complemented by other effects linked to improvements in employees' competitiveness in the context of the labour market.

The following diagram shows a summary of the effects that a certification culture has on employability, based on the opinions from the three participative processes (expert/certified people and company surveys). The lower part shows the main objectives of certification: skill-based training, incorporation of business demands into training, and creation of a life-long learning system. The upper part of the diagram shows the benefits of certification with regards to the improvements in employability: Improved training for professionals, reduction in employees' adaptation curve, improvements in personal professional development and the company's/employees level of competitiveness, and improvements in competitiveness for institutions as well as the industrial context.

Figure 2: The effects that a 'certification culture' has on employability



We can conclude that the certification of professional skills – such as the IPMA model- is seen as a strategic element for improving employability, and complements professional development for individuals and organisations. Furthermore, it establishes a link between training processes and the demands of the labour market, building a bridge between training and employment, in line with the trends of the European Higher Education Area.

3.3. Improvements in employability amongst certified people

75% of the experts who were interviewed (who are at the different levels of certification) consider that the IPMA certification can improve employability for graduates; that is, their suitability with regards to meeting companies’ requirements for a particular job role. These experts consider that certification can act as a mechanism for improving employability, establishing a link between training and the demands of the labour market. They argue that the frequent lack of suitability leads to long induction/adaptation periods within the workplace, resulting in associated costs. According to the experts who were surveyed, this adaptation period ranges from 6 months to a year.

Nearly 85% of the people who were surveyed consider that the IPMA certification is a professional tool that has positive effects on their own professional career. As can be seen in Table 4, the most valued effects amongst those surveyed are the improvements in experience and knowledge (49% of those surveyed give a high rating to this effect of certification), improvements to contextual skills for developing their professional activity (44% of those surveyed) and having access to a professional development tool (44%).

Table 4: Evaluation of the effects that certification has on improving employability

The effects evaluated by different professionals	Level of correlation	Rating (average)
It has allowed me to improve my knowledge and new experiences	Very High	4.8
It has allowed me to improve my behavioural skills	Very High	4.8
It has allowed me to improve my contextual skills	Very High	4.7
It has allowed me to establish new professional contacts	Very High	4.5
It is a professional development tool	Very High	4.5
It has allowed me to improve my technical skills	High	4.3
It has allowed me to improve the quality of my project management	High	4.2
It has allowed me to increase the international aspect of my work	Medium	3.8
It has helped my career progression	Medium	3.4

*Note: Rating was carried out on a scale of 1 to 6: Low (1-2), medium (3-4) and high (5-6).
 Level of correlation of opinions according to people certified at the four IPMA levels
 Source: Survey of IPMA AERIPRO certified people, 2009.*

All of the professionals who were interviewed were already working when they became certified. As a result, the effects that the IPMA certification has on finding a job cannot be quantified. The effects of certification are aimed at improving both external and internal employability. Approximately 45% of those interviewed highly rate certification, as a professional development tool.

There are subtle differences of opinion amongst the certified people who were surveyed, depending on their level of certification. Whilst those professionals certified at a higher level (A, B & C) are all in agreement that certification has allowed them to establish new professional contacts, those certified at level D only give a rating of 3.6 to this effect. This is also the case for the rating given to work promotions: professionals certified at a higher level (A, B & C) agree that the certification helps promotion prospects (with a rating of 4); in contrast, those certified at level D give a low rating to this effect (1.8). Professionals certified at a higher level (A, B & C) consider that certification helps them to improve the international dimension of their professional activity (with a score over 4); however, those certified with less professional experience give a lower rating to this effect (2.1).

The certified professionals who were surveyed (on the four IPMA levels) are very much in agreement that certification has helped them to improve their knowledge and new experiences (4.8), it has helped them

to improve their behavioural skills (a score of 4.8) and improve their contextual skills (4.8). They consider that it is a tool for professional development (4.5) and it has allowed them to make new professional contacts (4.5). These opinions on the effects of certification achieved an average score of over 4.5, and are consistent amongst professionals across the four levels. Table 4 shows the effect that certification has on improved employability, organised according to the average rating and level of correlation.

In order to evaluate the effects that certification has on employability and one's professional career, a further four criteria were considered in terms of following the certified professionals: a) new projects carried out after certification, b) new functions and responsibilities developed after certification, c) extra training carried out and, d) new experiences obtained after certification. In terms of these four criteria, a range of results was obtained. The majority of certified professionals (87%) have taken on new responsibilities in new projects following on from their certification. 72% have taken on new roles and responsibilities in the project/programme/portfolio management field. 80% have improved their training since becoming certified, going on to receive further training. 21% have been involved in higher education through postgraduate study, and 36% through professional specialisation courses. Finally, 70% have increased their area of professional activity with a large range of new experiences, in particular consultancy and advisory roles, project management, teaching and research.

Participants were also asked to rate the skills they value most in terms of employability. The certified professionals who were surveyed consider that the skills that have the most influence on employability are behavioural (4.5), followed by technical (4.3), and contextual (4.1). They highlight 6 behavioural skills: ethics, compromise and motivation, leadership, conflict & crisis management, creativity, and efficiency; and 5 "technical" skills that are strongly linked to the professional capacity for integrating social aspects in the professional arena: team working, problem resolution, relationships with interested parties, project organisation, and communication. Table 5 shows the most valued skills according to their importance with regards to employability.

Table 5: The most valued skills from the point of view of employability

Level A	Level B	Level C	Level D
Openness	Negotiation	Leadership	Team working
Leadership	Team working	Team working	Ethics
Self-management	Openness	Compromise and motivation	Compromise and motivation
Negotiation	Conflict & crisis management	Interested parties	Problem resolution
Team working	Requirements and project objectives	Results orientated	Project organisation
Conflict & crisis management	Communication	Ethics	Creativity
Requirements and project objectives	Leadership	Problem resolution	Conflict & crisis management

4. Conclusion

The global results and opinions of the various agents demonstrate that the IPMA certification is an employability tool that has an effect on two complementary factors: on internal aspects of companies and organisations (internal employability) and on external factors in relation to the labour market (external employability).

From the business world, 93% of the experts stated that the IPMA certification has a high usage potential as an employability tool. It is considered as an added-value tool offered to employees and companies, but at a secondary level when it comes to hiring somebody. There is still a great lack of knowledge about certification systems in the business world. The results of this study support Baker's (1991) findings which state that when candidates are recruited they are evaluated through other mechanisms such as references from previous employers, psychological tests or other internal tools within the company. However, it can be seen that, in accordance with other studies (Birchall, Hee, & Gay, 1982; Cheetham & Chivers, 1996; Bergenhenegouwen, Horn, & Mooijman, 1996), skill-based factors are considered to be important for professional performance within companies and they are considered when it comes to evaluating candidates' employability.

From within this business environment the benefits of certification which stand out the most are that it improves the company/organisations' competitiveness and it provides the employee and company with

the confidence to perform well. From within this business environment it is evident that there is not a sufficient connection between training and the demands of the labour market (in accordance with the results of Bergenhenegouwen, Horn, & Mooijman, 1996). Similarly, 75% of the experts who were interviewed consider that professionals do not meet the companies' requirements when applying for a job, whilst 50% consider that there is a shortfall in behavioural skills; as explained in a study by Cannon (1995) or the Tunning Project (2006).

Training experts agree that skills certification models such as the IPMA model represent a clear path between skill-based training and employability. The new context of The European Higher Education Area offers opportunities for professional skills to be included in training processes, strives to adapt to the need for comprehensive training (with values) and is orientated towards improving the employability of graduates. Certification is considered as a tool for connecting external agents (across different professional sectors) to training processes. However, for this connection to be efficient it must be accompanied by changes in learning processes (Boyatzis, Stubbs, & Taylor, 2002).

Experts from IPMA bodies in Spain, Germany, France, UK, Portugal and Switzerland consider that the model is clearly expanding and has direct, obvious effects on individuals' employability and on the companies in which the employees are based. The official figures according to the IPMA Certification Yearbook (IPMA, 2009) show the increasing number of professionals and organisations that have become involved in these processes as a strategy for improving performance. The tracking/monitoring of certified professionals by these bodies guarantees the benefits for individuals.

International debates raise the concept of "employability", which is understood as "the aptitude for working competently within the labour market" (OCDE, 2005). The opinions of experts from international bodies – UNESCO, OIT, and OCDE amongst others – reflect the global tendencies for promoting the integration of skills in areas such as education and work (OCDE, 2008). A great deal of emphasis is placed on countries designing and implementing specific strategies that allow improvements in the quality of human capital (Cheetham, G.; Chivers, G., 1998) and the equilibrium of ever-changing labour markets.

Experts from different countries have been interviewed (Switzerland, Germany, France, UK, Chile, Mexico) as well as Quality Agencies, Accreditation, Certification and Testing bodies. Generally, the responses stress the need for linking certification systems with life-long learning and redefining current policies. Amongst these replies, ideas stand out such as the need for motivating employees to gain certification, linking education, certification and employment, embedding measures for increasing the level of voluntary certification, expanding the number of certification systems and making certification systems more transparent, in accordance with international requirements.

Amongst those individuals who are certified, the most valued effect of the IPMA certification (in terms of employability) is the improvement in their own professional development. Approximately 85% of the professionals who were interviewed consider that the IPMA certification tool has an influence on improving their professional career. Furthermore, all the professionals state that the effects of certification go beyond personal benefits and impact other aspects of team working and the company/institution as a whole.

Finally, in addition to collating the opinions of the different agents, a number of proposals are also made for improving certification as an employability tool and for promoting mutual learning between public and private actors. These proposals respond to the main arguments highlighted by all the agents involved; the lack of information regarding professional certification processes (i.e. systems, benefits etc.); and the need for better integration/coordination between the different actors involved and qualification systems/certification processes.

With regards to the lack of information available, it was stressed that there is a need for encouraging employees to become professionally certified. Some ideas are suggested, such as: promoting professional certification with assistance for unemployed professionals, help for companies to reduce the cost of certifying their professionals, or help for companies to increase training programmes which could lead to professional certification. In this respect, there was also talk of investing more resources into educational innovation targeted at gaining professional skills. It is about communicating the benefits of certification in terms of employability and creating a culture that promotes certifications with a voluntary characteristic.

As for the lack of coordination between the different actors involved, they were encouraged to create new mechanisms for linking education, certification and employment; creating strategic alliances between these actors with the purpose of improving employability; unifying evaluation processes for professional skills; diversifying systems for certifying people, increasing options, making them more transparent, in accordance with the international requirements (ISO 17024) and giving them a more progressive characteristic. There was also an emphasis on the need to improve the management of qualification systems and the link to certification systems, in order to improve the relationship between the two. There was a discussion around helping certifying bodies to supervise and monitor their certified professionals, with a view to improving their quality control systems and the way in which the certifications are used.

Until now promotion and dissemination efforts have been focused on each agent's individual initiatives, with the exception of the civil service, whose initiatives have been primarily focused on qualification systems (work skills). The previous proposals are raised in view of the need to incorporate the different agents involved in the certification process (private and public) who have participated in this study.

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