

IPS Journal



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Journal



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The Editorial Board would like to acknowledge the assistance provided by the Department of Information (DOI).

This is a peer reviewed journal that involves a double review.

Dedication and commitment to the Public Services.

Keith Bartolo currently holds the position of principal at the Institute for the Public Services. He strongly believes in fostering a culture of training and development within the public service sector. He believes that training is an essential part of ensuring the success of our public service, and he is committed to providing employees with the necessary skills and knowledge to excel in their roles.

Furthermore, Mr. Bartolo encourages all employees to engage in the training and development programmes and work collaboratively to create an innovative, creative, diverse, and inclusive public service.

I don't need to know everything, I just need to know where to find it, when I need it.

[Albert Einstein]

Nothing is better than reading and gaining more and more knowledge.

[Stephen Hawking]

To fulfil our obligations and serve our communities to the best of our ability, we must prioritise the professional development of our employees. We understand that many of you work tirelessly, showing unwavering dedication and commitment to public service. However, our work demands are constantly evolving, and we must ensure that our employees have the necessary skills and knowledge to face these challenges. We aim to provide the best possible service to our citizens, which can only be achieved by investing in the growth and development of our teams.

Effective training ensures our employees possess the necessary skills and knowledge to excel in their respective roles. It is not just about providing training for the sake of it but rather about providing relevant and engaging training that is tailored to the specific needs of our employees. This involves identifying the knowledge and skill gaps that exist within our Departments and developing training programmes that are designed to address these gaps.

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One of the primary benefits of training is that it helps to improve employee performance. By providing our employees with the necessary tools and resources, we can help them perform at their best, which ultimately benefits the citizens we serve. Additionally, training can enhance employee engagement and retention. Employees who feel that their employer is invested in their development are more likely to be satisfied with their jobs and less likely to leave. Training is an important tool for promoting innovation and creativity within our departments. By exposing our employees to new ideas and approaches, we can help them think outside the box and devise innovative solutions to our challenges. This is particularly important in the public service, where we are often tasked with solving complex and difficult problems.

Moreover, training can also help us to promote diversity and inclusion within our organisations and departments, where all employees feel valued and respected. This is essential if we are to deliver on our mandates and serve the diverse needs of our communities. This approach is a vital investment for the public service. Even though it may be time-consuming and costly, its benefits far outweigh the expenses. For every euro invested in training, the public service sees many significant returns. Apart from the many benefits already mentioned, training can also help to improve employee safety and well-being. Together we can help to prevent accidents and injuries and create a safer and healthier work environment.

In this paradigm, effective leadership is crucial if we want to create a culture of training and development within the public service. Leaders must be committed to training and development and should be willing to invest the time and resources necessary to make it happen. Therefore, I urge everyone to embrace training and development as a crucial component of our work in the public service. Let us prioritise the development of our employees and work together to create a culture of training and development that benefits everyone.



Keith Bartolo

Principal, Institute for the Public Services



Contributor Bios for Academics

Alan Deidun

Prof. Alan Deidun, a marine biologist by training, is Malta's first-ever Ocean Ambassador and, since September 2019, is serving as a member of the EU Commission's Ocean Mission Board. He directs the Malta Training Centre of the International Ocean Institute (IOI) and is a Fellow of the Royal Society of Biology (London). He is also a Full Professor within the Faculty of Science of the University of Malta, where he coordinates the Master of Science in Applied Oceanography course and acts as the Rector's Delegate on the SEA-EU 2.0 (University of the Sea) alliance, which features a Consortium of nine European Universities.

Denis De Lucca

Professor Denis De Lucca is a History of Architecture Professor and the Head of the Department of History of Architecture at the Faculty for the Built Environment, University of Malta. He is an accomplished author with a focus on the Baroque age in architectural history.

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Peter J. Baldacchino FCCA FIA CPA MPhil Ph.D (l'boro) is a distinguished professor of accountancy at the University of Malta. He specialises in auditing, corporate governance, and financial strategy, and has published extensively in related international journals. With significant experience in the governance of large Maltese organisations, including listed groups and cooperatives, he also serves as a non-executive director of the Central Bank of Malta, a member of the Malta Accountancy Board, and a Director of the University of Malta's Group of Companies.

Stefano Moncada

Stefano Moncada holds a Ph.D. in Economics (Melit). He works as a lecturer and researcher with a focus on island studies, development, and climate change. Stefano is the Director of the Islands and Small States Institute at the University of Malta. He also serves as the Coordinating Lead Author for the Mediterranean Experts on Climate and Environmental Change (MedECC) and is an expert reviewer for the Intergovernmental Panel on Climate Change (IPCC).

Contributor Bios for Students

Sarah Agius Underwood

Sarah Agius is an Assistant Director for Logistics and Events at the Office of the Prime Minister. She holds a Diploma in Leadership and Management from The City and Guilds of London Institute and a Master's in Business Administration from the University of Malta. Sarah has been working in various roles at the Office of the Prime Minister for the past ten years, focusing on events and logistics management, marketing and communications. She has a strong interest in digital leadership within the context of public service.

Andre Farrugia

Andre Farrugia started his professional career in the insurance industry and later moved into education and training. He has earned the Fellowship of the Chartered Insurance Institute (FCII-UK) and the Fellowship of the Institute of Risk Management (FIRM-UK). He obtained an MSc in Risk Management from the University of Caledonian in Glasgow, and recently completed a PhD from the University of Malta. Throughout his professional and academic journey, Andre has contributed significantly to the industry by publishing articles, technical write-ups, and delivering a range of career talks and technical seminars.

Stefania Buhagiar

Stefania Buhagiar completed her studies at the Faculty of Architecture and Civil Engineering in 2011 and obtained her Perit warrant in 2013. Her area of expertise is project and construction management, particularly for B2B contracts covering both public and private ventures. In 2024, she was granted a first-class distinction in Executive Master of Business Administration from the University of Malta. Stefania plans to pursue a career in business management within the local manufacturing industry.





Greening the public service..... a noble delusion or an achievable milestone?

Prof. Alan Deidun

The dire need to address pressing environmental challenges, notably the climate change and biodiversity loss ones, amongst others, has led to the introduction of increasingly ambitious targets and to even more strident political commitments.

The dire need to address pressing environmental challenges, notably the climate change and biodiversity loss ones, amongst others, has led to the introduction of increasingly ambitious targets and to even more strident political commitments. The sheer deluge of pro-environment discourse within the media is sometimes overwhelming, leading many to resort to cynicism about the achievability of these targets, translating eventually into despondency and an unengaged attitude. Concomitantly, as aptly elaborated upon by newly-appointed President Miriam Spiteri Debono, greed is eclipsing our natural environment and heritage.

The aim of this article is to demonstrate, pragmatically and non-patronisingly, how any individual in the public service, irrespective of rank and file, can contribute, through eight achievable measures, to achieving the onerous environmental targets which invariably become more exacting with the passage of time. Implementing at least some of the measures should ensure the creation of de facto effective environmental ambassadors within different Ministries rather than just tokenisms. The much-touted achievement of the UN's Sustainability Development Goals (SDGs) starts from here (Mori Junior et al., 2019)

1. **Reducing consumption is key and is easy to achieve**

Flipping a switch (even for computer monitors) is what it often takes to slash wasteful electrical use within offices during lunch breaks and hiatus intervals. The ‘think global, act local’ mantra can also be implemented through a reduction in the consumption of energy-guzzling resources, most notably water (approximately 5% of our national electrical output is destined towards powering our four desalination plants) and paper. Turning down the airconditioning cooling system by just one degree during the balmy summer mornings, coupled with the installation of more efficient window shades also goes a long way towards reducing a workplace’s electrical consumption.

2. **Enforce religiously green public procurement measures**

Green public procurement (GPP) measures have been formalised in 2011 and are nowadays one of the planks of procurement within the public service (Testa et al., 2016). The religious implementation of the same measures is one way through which the public sector can ensure the lowest carbon footprint contribution of its operations. The carbon footprint, loosely translated into the total greenhouse emission contribution, of any item is represented by various components of its life cycle, including shipping origin of the final product, origin of its components, the composition itself as well as the energy-consumption of the manufacturing protocols that went into its making. The GPP philosophy predates the contemporary ESG

(environmental, social and governance) standards that are being imposed on both public and private entities (Li et al., 2021) and their rigorous adoption can represent a tangible contribution by the public sector towards slashing its greenhouse emissions.

3. **Planting trees without proper irrigation defeats the purpose**

Despite the fact that tree cover still accounts for less than 5% of the total surface area of these islands, afforestation efforts have ratcheted up in recent years. The bane that afflicts mostly such efforts is the lack of follow-up when it comes to watering the same trees, with most saplings being left to their own devices during the first three crucial arid seasons. Consequently, a shockingly-high number of saplings shrivel up within the first few seasons, resulting in a drain of the resources invested in their planting as well as in a missed opportunity. Before investing in more tree-planting efforts, security of the necessary human resources and freshwater supply must be guaranteed, all the more considering the pronounced variability in annual rainfall counts our islands have been experiencing.

4. **Traffic-related emissions can be mitigated through non-costly measures**

Despite sizeable financial subsidies being in place, the purchase of electric vehicles is still a white elephant for many. The yet-to-materialise electrification of the private car fleet has also been pinned on the restricted availability of public electric charging stations. Emissions generated by



the daily commute to work can still be mitigated through simple, less exuberant measures which have been bandied about on numerous occasions but which still need harping upon. Whilst a greater use of the public transport service and of alternative means of transport, such as cycling, might seem esoteric or even outlandish to many, carpooling is definitely feasible, especially when it involves colleagues from the same workplace,

having the added benefit of slashing parking slot identification time.

5. **Recycling and re-use can be an organised affair**
Our islands, along with seventeen other EU member states, are slated to default on the 2025 recycling targets set by the European Commission (2018). Despite a marked increase in national recycling rates, we are still light years away from





reducing the amount of waste we landfill to just 10%, as is being proposed by the Commission. The imminent development of the energy-to-waste and organise waste plants will contribute, in no insignificant way, to slashing our current land-hungry landfilling rates. But these plants are still in the pipeline and we have to up the ante when it comes to recycling if we are to avoid the pecuniary measures (e.g. the ‘pay-as-you-throw’ system) the Commission wants to introduce to forcibly enforce the attainment of set targets.

Packaging waste (65% of which needs to be recycled as per 2025 Commission targets) as well as office-related waste (notably shredded paper) can plausibly be collected in an organised fashion for recycling purposes, even through the introduction of a healthy competitive element (EU Commission, 2018). Re-use of spent office resources is possible through an iota of intuition. For instance, the freshwater held within an office aquarium is laced with nitrates and other dissolved nutrients, making it ideal for irrigation

purposes upon a tank water change. The residue from the coveted office pressurized coffee machine makes for excellent solid fertiliser too. There are countless other acts of wise frugality one could adopt and which collectively contribute towards a more resource-efficient workplace.

6. Tap into European funds

The European Union is not just about mandatory targets and standards. A myriad of EU funding programmes, including ERDF, Interreg Europe, Interreg NEXT MED, Interreg Italia-Malta and Erasmus+, are accessible to the public sector. Despite representing the key regulatory and policy-making profiles which are often sought within these funding programmes as they generally ensure legacy and efficacy at the implementation stage, the public sector's involvement rate is still below par. Consequently, our national absorption rates of funds available through competitive calls is low. There are probably a number of legitimate reasons behind this low rate of participation, not least the administrative burden that such participation normally brings upon the participating offices. Individuals tasked with managing the participation of a public entity, such as an environmental agency, within an EU-funded project are generally overwhelmed by the experience, precluding their involvement in similar future ventures. The University of Malta was afflicted by a similar malaise up till fifteen years ago, when a financial incentive system was established for its resident academics participating within externally-funded

projects. Admittedly, introducing such a system within the public sector will take extensive toing and froing, given that it will impact most probably on collective agreements in vigour, but is probably one of the few ways through which the current predicament can be addressed as it would incentivise individuals ready to go the extra mile in implementing EU-funded projects locally. We need a pro-active public sector within EU funding calls, as a partner to academia and to industry but most importantly to lead projects on its own steam.

7. Sponsor an environmental NGO

Non-Governmental Organisations (NGOs) are often viewed with suspicion within public administration given their vociferous nature in decrying shortcomings in the running of the country. Environmental NGOs probably carry the greatest brunt of such distrust on these islands, given the deluge of environmental infringements they witness and report. Despite NGOs generally being wary of getting too close to government entities, by virtue of their very own autonomous ethos, a number of fruitful collaborations between public entities and environmental NGOs have been forged over the years, involving mainly the education and environment Ministries. Environmental NGOs very often execute a role which is onerous for any public administration to carry out (McCormick, 2023), that of managing in the field nature reserves (e.g. Natura 2000 sites), manning visitor centres within the same protected sites, rescuing injured wildlife and partaking in



environmental education activities. Hence, rather than some sort of bete noire, environmental NGOs should be viewed as partners to the public sector in the drive to achieving our elusive environmental targets. Whether it is through the payment of an annual membership fee, through participation in regular activities organised by the same NGO or through simply notifying the same NGO of any public funding or participation opportunities which are available out there, it would behove the public sector to take the vast experience and expertise that environmental NGOs have accrued over the years in managing aspects of our natural or built environment.

8. Shaft plastic

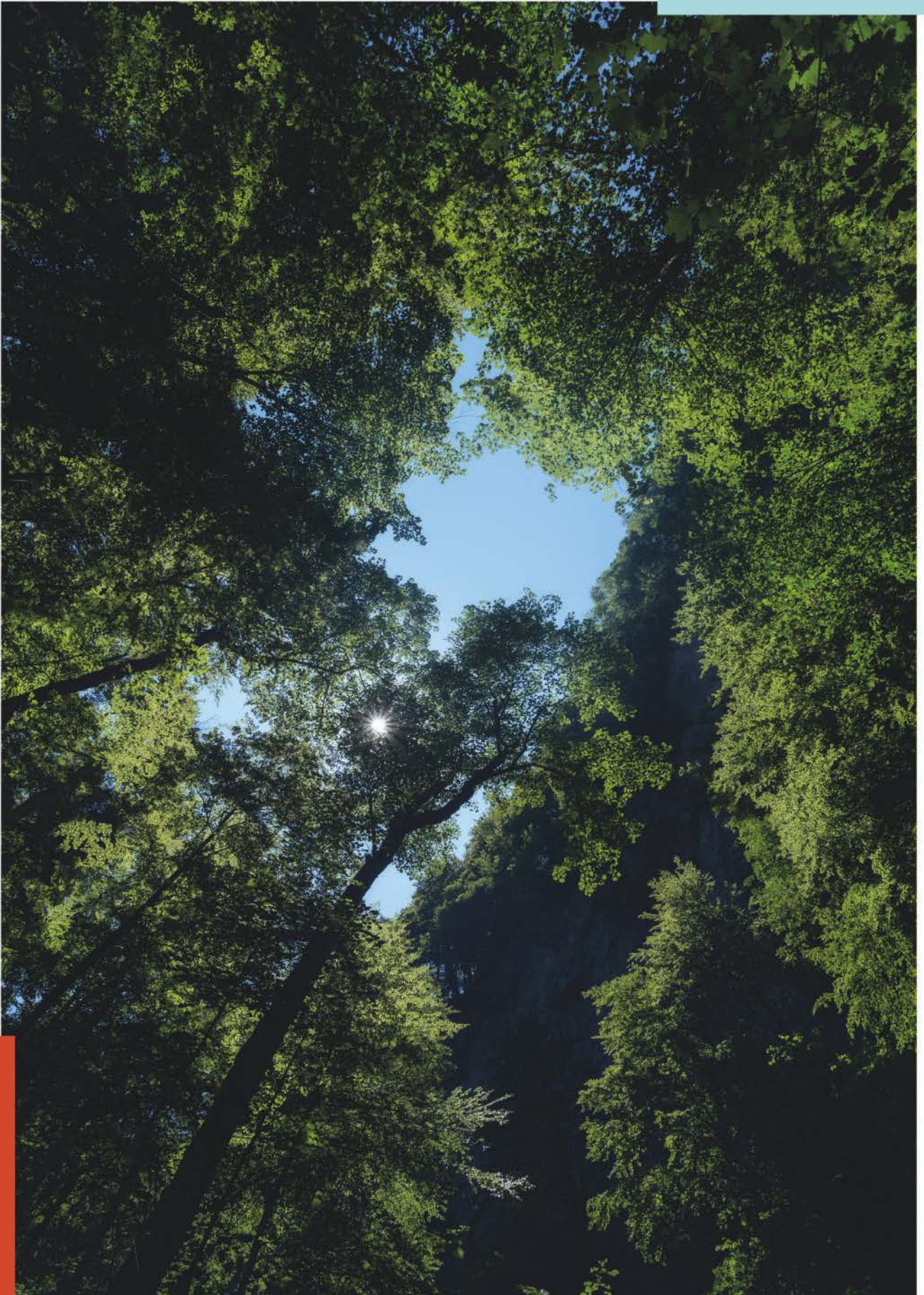
The insidious hazard posed by plastics, by virtue of their durability and recalcitrant nature, within

the environment (and especially within the marine one) has been amply demonstrated to all. Despite this, plastic is convenient, versatile and cheap. Hence, obviating it entirely from the workplace might not be entirely feasible, but reducing our dependence on it is. Water dispensers are composed of plastic but their adoption still cuts down on our consumption of plastic bottles. Wooden utensils within workplace kitchenettes can easily replace plastic one, as the market alternatives to plastic increase.

The mundane context of an office might not sound as the most germane of platforms for environmental activism.....through audacity and a 'can-do' mentality, the office can become the crucible for effective contributions towards the green cause.

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How Baroque Architecture can effectively be of interest on a national scale and how the Public Service can be instrumental to achieve the ultimate aim of promoting it

Prof. Denis De Lucca



On the recommendation of the academic Senate of the University of Malta, the Council of this university, at its meeting of 28 September 2023 approved the setting up of a new department within the University of Malta whereby the former International Institute for Baroque Studies at the same university has now been incorporated within the Faculty for Built Environment of the same university and has been renamed the Department of History of Architecture.

Besides inheriting the teaching and research in Baroque studies that, since 1996, had been the responsibility of the former International Institute or Baroque Studies, the new department at the university of Malta will be ultimately tasked with disseminating knowledge about the overall history of the European architectural heritage of mankind with particular reference to the origins and sequential development of architectural scenarios in the Maltese islands during the two golden ages of their manifestation – Prehistory and Baroque, the latter coinciding with the period of the rule of the Hospitaller Order of St John then known as the *Sacra Religione Militare di Malta* (Dal Pozzo, 1703-1715) when the building of Valletta created the right environment for a rich urban setting for the mushrooming of several Baroque buildings and art collections with a marked concentration in unique specimens of architecture such as the Conventual church of St John the Baptist and the Magisterial Palace of Grand Masters drawn from the most influential noble houses of Baroque Europe (Bonello et al., 2018; De



One of the finest manifestations of late Baroque architecture in Malta – The Auberge de Castille in Valletta

Lucca, 2004). In respect of knowledge about the Baroque, it is envisaged that the new Department will continue promoting the very necessary inter-disciplinary and contextual approach to teaching and research about Baroque architecture in Maltese archipelago, as a prominent part of the European Baroque heritage of which Malta in the past formed a part despite the dangers of its constant struggle with the Ottoman Empire. In this respect, the new department will also continue to promote both undergraduate and postgraduate teaching at pre-tertiary, diploma, taught masters, masters by research and doctoral levels. In this respect, the department of History of Architecture will also provide an opportunity for motivated students to embark on a research experience concerned with all that was happening in Europe during that specific time frame of human history ranging from the sixteenth to the eighteenth centuries. In this respect, all courses and research programmes concerned the Baroque age, now inherited by Council decree, from the former institute by the new Department, will continue to examine at an in-depth level the thinking processes, designs and mentalities of the powerful patrons and pioneers of the visual and performing arts and explore in the process the significance of Baroque architecture in relation to the political, religious, social and economic context of the time. New insights on key personalities of the Baroque age – architects, artists, patrons shall in this respect be given priority as instruments of all that was good in the Baroque age which one book has succinctly described with the words in the Italian language: *“Il barocco e un inno all'occhio e alla teoria della vision”* (Rizza, 1985). If there was a time in the long history of architecture when one could be entertained with a veritable feast of beautiful things, particularly in the visual and performing arts, that would have been the Baroque as well explained in the book *The Baroque Mind* (De Lucca, 2018). This was the age of Borromini, Bernini, Caravaggio and Vivaldi!

It is envisaged that a major challenge of the new department will be to disseminate updated academic knowledge among its students but also among the public at large. Knowledge targeted on answering the often-asked question on how Baroque Architecture can effectively be of interest on a national scale. In this respect the new department will initiate a workable programme of public lectures and seminars intended to instil an awareness of aspects of the Baroque age crystallised in its art and architecture and also engage in continuing its former publishing role and its relationship with the social media, particularly with purposely devised television programmes on specific subjects concerning the Baroque patrimony of Malta and its conservation for posterity but also about significant landmarks in the exciting history of its architecture.

In this respect, it is not be hard to understand why and how the Public Service can be instrumental to achieve such aims, particularly through its very successful operating unit known as 'Heritage Malta', responsible for the safeguarding for posterity of all aspects of the National Heritage, tangible and intangible. As a successful national agency concerned with all historical aspects of our built heritage, Heritage Malta has also been committed to bringing culture closer to the people through facilitating interpretation and accessibility, both physical and intellectual, and curating our museums and historic sites into spaces for the exchange of ideas and knowledge, thus supplementing all teaching and learning processes embraced by the new Department and others at the university of Malta and acting as a consultant to the activities of the Publishing Unit of Heritage Malta which is a fully-fledged publishing house producing a comprehensive range of titles including the history of our cultural heritage, research, conservation, collected papers on the subject, monographs, conference proceedings, site guidebooks, exhibition catalogues, journals, children's books, as well as the provision of didactic resources for students, educators and the general public. This is obviously contributing towards the development and production of quality designed merchandise to enrich the many museum Shops of Heritage Malta, frequented by the general public and tourists alike.

With its professional team of highly respected curators and archaeologists, architects, digital and scientific experts, conservators, and restorers, Heritage Malta stands to gain immensely by the presence of researchers of Maltese architectural history and architects who would have been well versed in the history of architecture



It has often been said that architecture engages a culture's deepest social values and expresses them in material and aesthetic form.



The power of the Baroque as seen today in the restored The Magisterial Palace of the Grand Masters of the Hospitaller Order of Malta in Valletta

which will now be the responsibility of the new department of History of Architecture. Does this not imply that students of a new Department of History of Architecture specialising in Baroque studies can provide a valuable source of recruitment for the Public Service all field of operation associated with the rich architectural and artistic patrimony of Malta?

Another public service institution that can benefit from the presence of the new department would be the 'Superintendence of Cultural Heritage' which has as its mission the fulfilment of the duties of the State in ensuring the protection and accessibility of Malta's cultural heritage, as defined by the Cultural Heritage Act. This operating unit of the public service is responsible for the surveillance of activities related to the control, direction, monitoring, regulation, investigation and recording of cultural heritage.

The Superintendence of Cultural Heritage is a designated statutory consultant to the Planning Authority on cultural heritage. The role of the Superintendence includes advising and coordinating with the Planning Authority on issues regarding the use of land use and its development as well as to safeguard cultural heritage when considering applications for planning permission addressing all kinds of development effecting objects, sites, buildings, or landscapes, which form part of threatened cultural heritage. This onerous and sometimes difficult

responsibility of the Superintendence emanates from both the Development Planning Act, 2016 and the Cultural Heritage Act, 2019 which envisage that the Superintendence will be consulted on all full development applications received by the Planning Authority as well as other application types such as Development Notification Orders, Regularisation applications, Dangerous Structures, which may have a bearing on the appreciation by posterity of our cultural heritage.

Since May 2016, the Superintendence of Cultural Heritage has benefited from the recommendations of a Cultural Heritage Advisory Committee which is chaired by the person occupying the role of Superintendent of Cultural Heritage who is also notified by an Environment and Planning Review Tribunal of any appeals against decisions taken. The Superintendence is also consulted by other entities on various matters in its remits, such as Transport Malta, which consults on all road works applications received, and the Environment and Resources Authority, which consults the Superintendent on Project Description Statements and Environment Impact Assessments.

Since the Superintendence of Cultural Heritage has been designated to serve as the National Coordinator for European Heritage Days, a contribution of the new department of History of Architecture in this respect is envisaged. European Heritage Days are a joint Council of Europe and European Union programme when participating countries, all party to the European Cultural Convention, organise events centred around the free access to sites (which are not usually accessible to the public) and the relevance to a common theme which would have been selected for a particular year. In the case of themes that may be selected related to architectural history, the contribution of the new university department to the inter-disciplinary research involved in the selection of such themes will be invaluable, particularly so since the aim of these events is to encourage European citizens to learn more about their shared cultural heritage thus creating an awareness about the need to protect cultural heritage against emerging threats, this often requiring a higher level of tolerance in Europe beyond national borders. Such events today boast of attracting up to 20 million visitors every year, making these European Heritage Days one of the most significant European Cultural projects shared among the people of Europe.

One must finally address the contribution of the new Department of History of Architecture by the continued massive contribution of the academic staff associated with the former International Institute for Baroque Studies to the television media operating under the aegis of the Public Broadcasting Authority (namely, a series of 13 TVM programmes entitled *Il-Barokk*).

In this sphere, the frequently used teaching tools used by department academics consisting of [a] a collection of researched images of historic buildings - and related material used to emphasise inter-disciplinary approaches to the subject [b] images of old documents in public and specialised libraries in Malta and abroad and [c] edited video clips derived from a vast range of virtual reality programs of historic buildings of the type used in the university and public lectures of the departmental staff to ensure a better and stimulating understanding of history of architecture. Past television use of such teaching and learning tools - with special reference to various

aspects on the contextually-treated Baroque age in Malta - have proved to be invaluable in enriching the content of such a public service.

It has often been said that architecture engages a culture's deepest social values and expresses them in material and aesthetic form. In this respect, the newly established academic operating unit within the University of Malta, known as the Department of History of Architecture shall be promoting inter-disciplinary teaching and research that concern the history of architecture as viewed in the light of its ability to inform us about the lifestyles, aesthetic beliefs, design principles and constructional practises of our past so as to help us understand how the architecture of the past has influenced present day architecture, this by creating a sense of continuity and connection, since contemporary international research programmes have repeatedly revealed that since antiquity, the titans of architectural thought and practice have all carved their niches in the world of architecture, as a result of being well-versed in its backstory. In so doing, it is envisaged that all architectural history courses associated with the various study units and research efforts of controlled by the new Department - will promote an innovative and enjoyable teaching and research experience about the basic root concepts and developments of architecture, scrutinizing in this process, the ideologies of different movements and styles and the way they changed with the passage of time. Students will thus be encouraged to familiarise themselves with the history of architecture through lectures, debates and publications about the iconic buildings and structures of successive periods, positioned in their proper social-economic context, in view of well-known fact that all works of architecture, including those which are thousands of years old, tend to reflect the way of life, culture, and beliefs of those who built them. Having said this, it would not be hard to understand how Baroque Architecture, which occupied a sometimes under-estimated time frame of great importance in the history of Malta, can effectively be of great interest on a national scale. In this respect, the Public Service can be instrumental in promoting Baroque as an important phenomenon of its commitment to the Maltese society it is meant to serve.



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Major Determinants of Effectiveness in the Composition of Public Sector Boards of Directors: A Maltese Viewpoint

Prof. Peter J. Baldacchino



Introduction

As is the case with all listed entities, good corporate governance (CG) practices within public sector entities (PSEs) are essential for such entities to attain long-term growth (Kaufmann et al., 2005). In this connection, Matei and Drumasu (2015) also emphasize the significance of such practices in PSEs for achieving success and thus preventing considerable losses being unfairly borne by the taxpayers. The purpose of this article is to discuss one important aspect of these practices, that is, the effective composition of PSE Boards of Directors (*"Boards"*). It overviews some of the

major determinants of such composition effectiveness based mostly on recent research studies in which the author has been involved relating both to those entities listed on the Maltese Stock Exchange (*MLEs*) and to Maltese PSEs (*MPSEs*). The latter consist of entities which are directly or indirectly controlled by the Maltese government, and which are established under the Companies Act (Cap. 386 of the Laws of Malta). The determinants to be included are Board diversity, Board independence and mix, Board size and the links between the Chairperson and the Chief Executive Officer (CEO).

Board diversity

A major pre-requisite for any Board to be appropriately effective and for its members to be sufficiently fit and proper is for it to be made up of members with a diversity of characteristics including judgment, experiences, knowledge and qualifications (Baldacchino et al., 2021). This is because such diversity will have a significant impact on the Board's expertise in corporate governance and will indicate collective board effectiveness and competency



in dealing with issues such as market reactions, the challenges of financial targets and any major repercussions of current developments on stakeholders. Contrastingly, Board members with the almost similar characteristics and viewpoints may thwart debates, and hinder innovative solutions (Rao & Tilt 2016). One implication of this is that, in making its recommendations or decisions, the person/s or committee nominating or selecting Board members has to look into each candidate's level of expertise and to such candidate's potential contribution to the collective expertise of the Board. Furthermore, while specific formal qualifications may be highly desirable for Board membership, their need and nature necessarily differ among different entities. Therefore, Board effectiveness is probably best ensured if public sector entities in general are allowed to be flexible in their approach as to the qualifications/experience mix of their Board members rather than to be constrained, by, say, the introduction of any regulatory requirement for a general minimum qualification for Board membership.

In this context, Board member diversity may be split into two different aspects, namely the readily detectable ones and the underlying ones. As their name implies, readily detectable aspects consist of those attributes which are noticeable within a short period of time of meeting a director (Jackson et al., 1995) and include tenure, age, nationality and gender. Conversely, underlying attributes consist of aptitudes that directors gain throughout the years, based on their experiences and skill-sets. They include industry-specific, accounting and finance, legal and human resource (HR) competencies.

In the Baldacchino et al. (2021) study, of all the eight attributes stated above, both the readily detectable one of tenure diversity and the underlying one of industry-specific competency were found to be most influential on the corporate governance of Maltese entities. Therefore, priority is best given to the presence of both these aspects in any Board, although, importantly, care must still be taken for such a presence not to be overdone to the detriment of the other attributes. On their part, both age and nationality aspects were also found to be beneficial in view of



On their part, both age and nationality aspects were also found to be beneficial in view of the different perspectives and skills they tend to bring about.

the different perspectives and skills they tend to bring about. Furthermore, when taking decisions, accounting and finance competencies were found to enrich Board quality while the possible presence of limited legal competency - say that of one director or two - was also found to bear a positive influence on the Board. Notably, while directors competent in human resources may also help to augment their Board's effectiveness, their contribution on the Board was found to be less of a priority once the respective entity's human resource section is functioning well enough. With respect to gender diversity, this attribute was perceived in the Baldacchino et al. (2021) study as being one of the most popularly demanded particularly on the part of the public. Therefore, although it was found to be somewhat less important in practice than the aforementioned aspects, it still deserves special considerations.

In fact, another recent Maltese study relating specifically to Board gender diversity by Baldacchino et al. (2022) showed this attribute as meriting such special considerations as it might still bear considerable influence on Board composition effectiveness. Clearly, women have been and continue to be under-represented on Maltese corporate Boards and in Malta are less represented than the EU average (10.7% in Maltese Boards v 33% in EU Boards in 2019). Interestingly, entities having more women on Boards have typically been found to typically found to acquire a number of benefits leading to increased Board effectiveness. These include more creativity, more understanding of clients and markets, the acquisition of a stronger social and civic ideal, more variety in leadership styles and often also a positive influence on entity performance, the latter benefit being confirmed by another recent study in Europe (Tillenius & Lango, 2018). Furthermore, gender diversity was claimed to introduce broader viewpoints and aids in addressing a larger range of topics. However, it is important to emphasize that, if gender diversity is introduced by compulsory quotas, some Board members may end up inexperienced, this probably impacting adversely on-Board performance (Ahern & Dittmar, 2012).

The current situation both in Malta and elsewhere indicates that, whilst few persons, if any, argue against the idea of including more diversity in Boards, it seems that having a Board composed of a well-rounded variety of Board members is as yet not being given as much importance as it should.

Board independence and the Board executive/non-executive member mix

For the Board to perform its duties effectively, there also needs to be sufficient Board independence of management and other third parties in both fact and appearance. (Baldacchino et al., 2020). Such independence will go a long way to ensure that the Board is in an overall good position to deliberate freely and not only take its decisions with

objectivity and integrity but is also *seen* to be doing so. Thus, the Board can implement appropriately the due care and skill expected by the entity's stakeholders.

Board members need to exercise the following important characteristics among others:

- adopting independent thinking without undue bias from others;
- having interests aligned with those of the entity and its shareholders and not with those of any particular shareholder or group

In connection with this much needed Board independence, the executive/non-executive/independent Board member mix becomes relevant (Caruana et al., 2023). Directors may be executive, that is, in addition to their directorship they also have a full-time management contract with their entity; or non-executive which means having no such links with management; or even fully independent, which means with no links at all with their entity except for their participation in Board meetings and its sub-committees such as in the audit committee. For the sake of effective Board composition, a reasonable balance needs to be maintained among these three different types of directors as each type is normally needed.

Board size

The size of an entity's Board is another major determinant of its competence to carry out its monitoring and advisory functions. Size renders the Board more effective if it takes appropriately into account factors relating to its entity such as its size, scope, operations, shareholding and corporate governance structures. A Maltese study by Baldacchino et al. (2020) also indicates that Board size has its implications on Board effectiveness. The typically average Board size of many Maltese corporate entities was estimated to be circa seven Directors and major implications of different Board sizes were noted.

Smaller Boards typically benefit from more cohesion, constructive interactions, and the ability to better reach consensus. Furthermore, their ability to reach consensus is more determined by the personalities that make up the Board and they often suffer from resource limitations. On their part, larger Boards typically benefit from more access to resources, better distribution of work, greater perspectives and more effective oversight. They are typically less efficient than smaller Boards and may suffer from the free-rider problem, this affecting the effectiveness of its monitoring procedures. (Baldacchino et al., 2022).

THE Chairperson/CEO links

The Chairperson is meant to act as leader of the Board (Kakabadse et al., 2010), while the CEO is meant to act as leader of the entity (Lorsch & Zelleke, 2005). Following recent corporate scandals, regulators are continuously





demanding that the roles of the chairperson and CEO are held by different persons (Wilson, 2009) as an additional measure to ensure that the Board is independent from the company's management. This measure is meant to ensure that there is no role duality which resulting in one peson having "*unfettered powers of discretion*" (MFSA 2021) and therefore dangerous concentration of power. (Lorsch & Zelleke, 2005). Yet, the separation of the two roles may have its negative implications on Board effectiveness. (Baldacchino et al., 2020; Scicluna 2023). These include the possibility that with such role separation conflicts on business issues or even of personalities may arise. Additionally, concentrating authority on one top person may be crucial for effective management especially in times of crises wherein the need for a clear single boss may merge. This would tend to accelerate decision-taking and to better ensure that lines of authority are clear, allowing even shareholders to know who is ultimately accountable. Furthermore, if the CEO, while no longer the Chairperson, still remains a Board member, s/he may exert influence on both Board and management matters, thus rendering the Board weak, if at all, effective. One may therefore consider retaining the CEO only as Board participant, and consequently while not empowered to vote at Board level yet s/he still attends its meetings at the discretion the Board.

Conclusion

Clearly, any Board needs to be carefully composed as to its diversity, independence and member mix, as well as its size and top management links if such Board is to be effective in driving its entity forward. While these composition components remain valid irrespective of the type of entity, it is hoped that, in particular, the ultimate shareholders of MPSEs will take them into account especially when appointing or renewing their Boards. In particular, it is recommended that, with respect to Board diversity and mix, all the eight main attributes and the three Board member types referred to in this paper are carefully considered for possible Board membership inclusion insofar as

is practicable. Furthermore, periodic reviews - say every three years - of the size of each Board could also contribute significantly towards the retention and possible improvement of Board effectiveness. It is also recommended that, in the interest of Board effectiveness, the interlinks at the top echelons of each MPSE are also kept under review - this, say, as part of regular exercises involving Board and senior management performance evaluations. One may consider implementing these recommendations by means of independent consultants, or specifically, as part of the value-for-money assignments carried out by the National Audit Office.

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Small Island States – Stronger by Design

Dr Stefano Moncada



Introduction

Small Island States among vulnerability and resilience

The world can count on a total of 61 Small Island developing States (SIDS) and Small Island States (SIS), recognized by the United Nations Department of Economic and Social Affairs (UN-DESA), 41 of which are full UN members, and an additional 20 Small National Island Jurisdictions (SNIJs), that are associate or non-UN members (Moncada & Randall, 2022). These islands and small states are found throughout the oceanic world, including in the Caribbean Sea and the Pacific, Atlantic, and Indian Oceans, as well as the South and East China Seas, and the Mediterranean Sea. Over and above these sovereign island states and the group of 20 SNIJs, there are further semi-autonomous islands that are exceptionally important in the world by any measure (Stuart, 2009). Some scholars have often argued that the number of sovereign and non-sovereign island entities represent a typical size in a global classification, whereas large states seem more “an anomaly” (Baldacchino, 2008, p. 40).

There is general agreement that islands and small states tend to be disproportionately more vulnerable to external shocks when compared to larger countries, or to the mainland. This is due to a series of inherent factors, among which smallness, isolation, proneness to disasters and limited resource endowment (Briguglio et al., 2020). Besides vulnerability to external shocks, over which they tend to have little control, islands and small states also exhibit further characteristics associated to the concept of the indivisibility of the overhead costs, which generally make them more costly to be administered and governed, when compared to larger states and the mainland. In fact, per capita costs on small island states are higher than in many larger states, putting small island governments at an initial disadvantage (Srinivasan, 1986).

Public administrations in small island states can potentially endure limited funds available to develop all the necessary soft and hard infrastructures needed to manage and develop the State's bureaucracy, with more optimization needed in the allocation of funds, and higher costs to fully expand human resource training and development among their officials (Sarapuu, 2010).

However, notwithstanding these inherent vulnerability, many small island states have developed resilient societies and economies, and an effective public administration, often excelling in providing services to their citizens and spearheading technologies and advanced programmes. A large number of SIS have achieved a relatively high level of economic success, while maintaining strong and long-lasting democratic records (Corbett and Veenendaal, 2018). There are, in summary, three possible ways to interpret this 'paradox' of being highly vulnerable but also resilient. The first understands that small island states are no different from larger ones in this profile (Aiyar, 2008; Easterly & Kraay, 2000). The second argues that, although small states face inherent obstacles, they also hold intrinsic advantages, with the latter outweighing the former (Baldacchino and Bertram, 2009). A third reading goes to posit that major challenges, including the management of public administrations, can be offset by appropriate and pro-active policy measures (Briguglio et al., 2009). Irrespective of whether small island states adopt what Baldacchino and Bertram (2009, p. 154) refer to as people's "resourcefulness," or implement suitable "policy-induced measures" as suggested by Briguglio et al. (2009), many SIS when impacted by external negative events, for example, recessions, pandemics and climate change, often develop the ability to build long-lasting resilience and strengthen individual, collective, and institutional responses to these shocks (Tandrayen-Ragoobur et al., 2021).

The next section illustrates examples where SIS have built effective resilience in the face of external shocks, and strengthened their capacity to address inherent vulnerabilities, such as high costs associated to running and develop their public administration.

Punching above their weight or establishing a new norm?

A recent publication by Baldacchino (2023), entitled 'The Success of Small States in International Relations - Mice that Roar?', includes peculiar and mostly successful stories where small island states have shown to overturn the stereotype that defines them as 'weak' and marginal in international relations. From Iceland victory in the 'Cod Wars' with the United Kingdom, passing through Malta's neutrality as a strategic characteristic that allowed her to succeed in what was

labelled as a 'showdown' with NATO and Britain, and the role that Marshall Islands has been playing within the International Maritime Organisation (IMO). The many examples provided in this publication demonstrate that small states have often successfully come out of disputes with larger states, and where the resilience of communities and governments, including an efficient public administration, have played a central role in advancing their case.

Another example, where small island states have come together to overcome their initial vulnerability and the higher costs associated with maintaining an international diplomatic power, falls within the Alliance of Small Island States (AOSIS). This alliance has been active since 1990, operating in international public diplomacy, achieving important results especially in leading climate change negotiations, and steering international public decision making to champion the interest of small island states. AOSIS has ensured that in many international climate change negotiations the ‘existential’ threat that many SIS experience is often at the centre of the agenda, pushing the international community to move toward the adoption of more stringent actions to curb greenhouse gas emissions, and secure funds to address loss, damage and adaptation. This alliance has also obtained important successes by coming together to elect a number of judges and representatives, often

coming from SIS, in UN structures. Furthermore, recently AOSIS has successfully lobbied UN member states to establish an additional metric that can capture vulnerability to work alongside gross domestic product (GDP), with the objective of integrating vulnerability as further measure to access international concessional funding.

Malta is a further excellent example of a state that notwithstanding its high initial vulnerabilities has managed to achieve high levels of wellbeing, and increased both the presence and the efficiency of its public administration. The steady increase in standards of living that Malta has been experiencing for the last 20 years, has been possible also due to a forward-looking resilience policy. The strategic choice to attract niche industries, coupled with the drafting of ad-hoc pieces of legislations by taking advantage of its flexible



policy making, has allowed Malta to increase foreign direct investments and the movement of capital and high skilled workers. In some instances, like the case of ledger technologies, Malta has also inspired the EU general legislative process, which builds on Malta's original legislation (Biedermann & Moncada, 2024). These positive looking trends were possible also due to the development of an efficient public administration, capable to use the latest technologies to advance services to citizens, private sector and civil society at large.

In more recent years, Malta has also been championing the interest of islands and small states in the international arena, becoming a crucial player alongside traditional and more established larger international players. Many initiatives, spearheaded by the Ministry of Foreign and European Affairs and Trade (MFET), have led Malta to increase its international status,

being increasingly associated to be a trustworthy and reliable partner, going beyond the already excellent alliance with other small states. These actions include emergency assistance to fellow islanders in case of disasters (i.e. the volcano eruption in St Vincent and the Grenadines) or emergencies (i.e. provision of vaccine doses to fellow small island states), co-chairing the UN Steering Committee on Partnerships for SIDS, hosting the Commonwealth Small States Centre of Excellence, among others. In partnership with the Islands and Small States Institute of the University of Malta, MFET has also been offering scholarships to students hailing from SIDS, strengthened the cooperation with the Organisation of African Caribbean and Pacific States (OACPS), and leading training and research in the area of climate change associate to small island states, increasing the international status of both Malta and its national University.

Conclusions

The promising examples illustrated above seem to be even more relevant when considering the high costs associated to develop and maintain public administrations in small island states. This specific aspect is often not accounted for when measuring the magnitude of the actions being undertaken by small island states, which tend to be at times tenfold more expensive. In spite of this, the common thread that accompanies the success story hailing from small island states points toward an active and resilient forward-looking policy. Issues such as isolation, insularity, small domestic markets and limited resource endowment, among others, can be successfully addressed if policy measures conducive to resilience are adopted, creating suitable enabling environments. It is increasingly more evident that such new instances are often spearheaded by small island states, and in certain cases *copied* by larger states. This confirms a recent tendency, also highlighted by academic literature, which sees small island states taking the central stage in carving, often creative, solutions amid resource constraints and higher administrative costs. Finally, regional and international organisations do not seem to pay sufficient importance to the heavier financial burden suffered by small island states, often not recognising that SIS succeed in spite of their initial challenges, and if supported by the adoption of tailor-made solutions many of these SIS could provide an even more significant contribution to national, regional and international development.

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The effects of transformational leadership and digital leadership on public service motivation and job satisfaction: The mediating role of public service motivation

Sarah Agius Underwood



1. Introduction

The Public Service of Malta is the largest local employer, with about 35 thousand employees in government departments and around 16 thousand in public sector entities, making up 19% of the total employed (Jobs, 2003; National Statistics Office, 2021). It comprises nineteen ministries and various departments and several levels of leadership positions (Servizz Pubbliku, 2023). Conventionally, it grapples with demographic, technological, and societal challenges, necessitating effective leadership to improve service delivery (Bezzina et al., 2021). This study evaluates how Transformational and Digital Literacy impact Public Service Motivation (PSM) and Job Satisfaction amid ongoing technological advancements and the five-year Strategy for the Public Service (Government of Malta, 2021). Moreover, a new Public Administration Data Strategy 2023-2027 was launched to underscore the importance of good governance in digital solutions (Government of Malta, 2023). Understanding current public service leadership practices becomes crucial for Malta to adapt to technological demands and European regulatory perspectives.

Transformational Leadership (TL) and Digital Literacy have distinct implications for public service functionality, supported by evidence of their positive effects on employee motivation and job satisfaction (Bass, 1985; Behn, 1998; Bezzina et al., 2021; Kane et al., 2019). This quantitative study covers salary scales 1 to 18, examining the interaction between transformational / digital leadership, PSM, and Job Satisfaction, and exploring PSM's potential mediating role in such relationships.

2. Literature Review

2.1 Public Service Motivation (PSM)

PSM, a topic of scholarly interest since the early 1900s, refers to individual's inclination to respond to motives rooted in public institutions. Perry and Wise's (1990) define it as motives like civic duty and compassion, while Vandenabeele (2007) proposes a broader definition, encompassing principles transcending self-interest. PSM correlates with positive behaviours, including job performance, commitment, satisfaction, and ethical conduct. Despite ongoing evolution, challenges faced by public services prompt the need for a deeper understanding of PSM, considering factors like gender, employment duration, and age.

2.2 Job Satisfaction

Job Satisfaction has been defined as the "pleasurable or positive emotional state resulting from the appraisal of one's job or job experience" (Locke, 1976, p. 1300). Taylor and Westover (2011) found that job satisfaction in the public sector is not determined merely by extrinsic workplace attributes and identified the opportunity to work autonomously and a good relationship with co-workers as important determinants of job satisfaction. A more recent study by Wright and Davis (2023) reported that specific job characteristics (namely, routines, job goal specificity and HRD) and work context commonly associated with the public sector significantly affected employee job satisfaction.

2.3 The Relationship between PSM and Job Satisfaction

The literature indicates a nuanced link between PSM and job satisfaction. While some studies posit job satisfaction as a result of PSM (Vandenabeele, 2009), others suggest mediating elements like mission valence (Wright and Pandey, 2008). Variations in findings highlight the necessity for more tailored studies. The importance of job satisfaction and PSM in improving public service sector performance is highlighted, aligning with the ongoing discussion on their interrelation. This review sets the stage for exploring this connection within the distinctive context of the Maltese public service.



2.4 Leadership in the Public Service Context

This section delves into the multifaceted concept of leadership, emphasizing its role in the interaction between leaders and followers. Explored through psychological and sociological studies, leadership in organisational and administrative contexts considers environmental factors' impact on leadership behaviour.



2.5 Transformational Leadership in the Public Service

Transformational leadership, as defined by Burns (1978) and Bass (1985), addresses followers' needs across Maslow's hierarchy, beyond mere charisma (Hughes et al., 2019). It promotes principled judgment, urging followers to pursue collective goals (Burns, 1978). Bass and Riggio (2006) emphasize its role in driving organizational change and fostering commitment through vision and motivation. Despite its recognized efficacy, inconsistencies persist in its effects on PSM and job satisfaction (OECD, 2001). Observational studies, like Bellé (2014), associate transformational leadership with increased motivation and satisfaction among government employees. However, understanding its specific impact on PSM and job satisfaction remains a literature gap.

2.5.1 Transformational Leadership and PSM

Trust in leaders is vital in small states like Malta, where human resources are key (Bezzina et al., 2021). Effective human resource planning ensures goal achievement, emphasizing leaders' role in engagement (Vigoda-Gadot et al., 2013). Transformational leadership is positively linked to PSM (Paarlberg and Lavigna, 2010; Wright et al., 2012), despite potential bureaucratic barriers (Moynihan and Pandey, 2007; Paarlberg and Lavigna, 2010). Three leadership-PSM relationships exist: leadership impacting PSM, PSM influencing leadership, and PSM mediating/moderating leadership effects (Hameduddin and Engbers, 2022).

2.5.2 Transformational Leadership and Job Satisfaction

Transformational leadership boosts job satisfaction by nurturing intrinsic factors (Alkalha et al., 2012; Mändla, 2020), particularly evident among Estonian public employees (Mändla, 2020). Attributes like "instilling pride" and "generating enthusiasm for vision" significantly contribute to job satisfaction (Mändla, 2020). This relationship is consistently supported across studies, highlighting the importance of job satisfaction in organizational effectiveness (Dumdum et al., 2013; Jackson et al., 2014). However, factors such as supervisor's gender and individual work attitudes may moderate this relationship (Abelha et al., 2018) with data collected through electronic questionnaires, answered by 166 individuals from different types of organizations, areas of professional training, and gender, subsequently applying sequential regression analyses. Findings: The results indicate that the relationship between transformational leadership and job satisfaction is moderated by the followers' gender, being stronger for female followers. The relationship is not affected by the followers' area of professional training, nor by type of organization (public/private, while in India, longer service tenure and job type influence public employees' job satisfaction (Natarajan and Nagar, 2011).



2.6 Digital Leadership

“Digital isn’t just an evolution, it’s a revolution” (Okada et al., 2021). The internet and social media have reshaped relationships and work environments, creating global leadership gaps demanding unique skills and mindsets (George, 2018; Roe, 2018). Digital leadership is vital in the era of digital disruption, requiring adaptability to new challenges (Crummener and Kemmer, 2015). Leaders must possess characteristics like digital literacy, vision, adaptability, and self-awareness (Sullivan, 2017). While successful digital transformation is linked to training and motivation (Kalashnikov et al., 2019), the literature on its effectiveness in PSM and job satisfaction is limited.

2.6.1 Digital Leadership and PSM

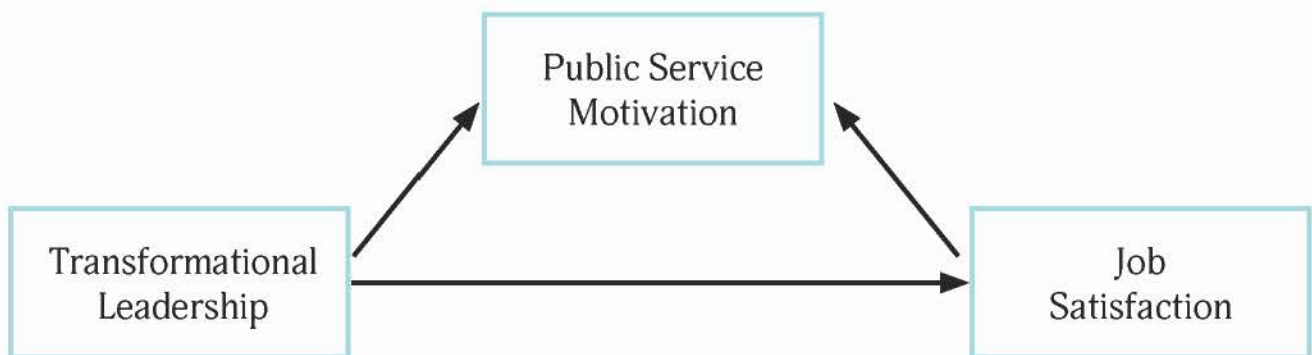
This study explores the uncharted territory of the link between digital leadership and PSM, offering a novel contribution to the existing literature.

2.6.2 Digital Literacy and Job Satisfaction

Digital leadership, grounded in digital literacy, aims to enhance employee performance (Dhingra, 2019). Limited literature examines its impact on job satisfaction, with some studies indicating positive effects (Topcuoglu et al., 2023). Digital leaders can be defined as leaders who are talented in terms of information technologies, visionary, can think innovatively, increase the corporation’s performance and create the transformation required by the business. The literature emphasizes that digital leadership practices and digital transformation efforts can fail due to fear of being unemployed, the tendency to maintain the usual, and showing resistance to transformation. However, it is realized that these approaches are generally based on foresight and are not supported by real practices. In this regard, the mediating effect of job security satisfaction of employees on the impact of digital leadership upon job satisfaction and life satisfaction is tried to be explained with application findings by utilizing from Resource Based View (RBV, while others, particularly in government settings, suggest constraints due to rigid structures (Jinarat, 2022). This raises the question: How does digital leadership affect the job satisfaction of Maltese public officers?

Given existing research affirming positive relationships between Transformational Leadership, Digital Leadership, PSM, and Job Satisfaction in the Maltese Public Service, along with the potential mediating role of PSM in the leadership styles and job satisfaction relationship, this study is based on two conceptual frameworks.

The first conceptual Model (Model A) examines the interaction between transformational leadership, PSM, and job satisfaction (see Figure 1).



Based on the scientific literature, I posit that:

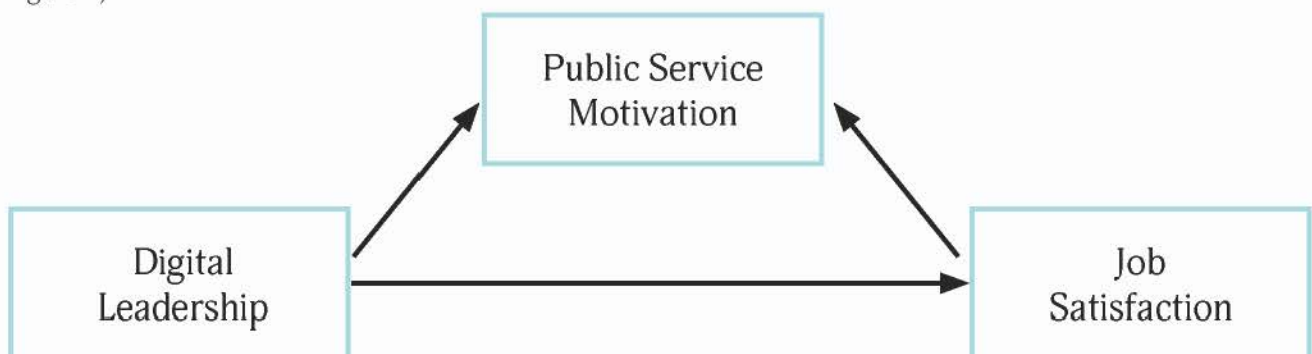
H1: Transformational leadership produces a positive direct effect on PSM.

H2: Transformational leadership produces a positive direct effect on job satisfaction.

H3: PSM produces a positive direct effect on job satisfaction.

H4: PSM mediates the relationship between transformational leadership and job satisfaction.

The second conceptual model (B) examines the interaction between digital leadership, PSM, and job satisfaction (see Figure 2).



Although there is lack of information on the effect of digital leadership on PSM and job satisfaction in the public service, studies show that digital literacy produces positive relationships with motivation and engagement (Kjirovska-Simjanoska, 2022), and organisational outcomes such as performance (Abas et al., 2019; Zubair, 2021).



Therefore, I posit that:

H5: Digital leadership produces a positive direct effect on PSM.

H6: Digital leadership produces a positive direct effect on job satisfaction.

H7: PSM produces a positive direct effect on job satisfaction.

H8: PSM motivation mediates the relationship between digital leadership and job satisfaction.

3. Method

3.1 Sampling

This cross-sectional study targeted the entire public service, with salary scales ranging from Scale 1 to Scale 18. Employees on salary scales 1 and 2, though fewer, all have direct leaders, facilitating their responses to leadership items in the questionnaire. The study was motivated by recent technological advancements in the Maltese public service. A positivist approach was adopted for data collection, aiming for objectivity and structured data (Saunders et al., 2019).

Permission to collect primary data was obtained from the Research and Personnel Systems Directorate at the Office of the Prime Minister. Participants were invited via email to complete the online questionnaire. A minimum of 150 participants is required for path analysis (Muthén and Muthén, 2002). A total of 235 complete responses were collected. The majority were female (58.7%) and the median age was 44 years, with ages ranging from 22 to 66.

3.2 Research Instrument

The online survey comprised of two segments. The first segment asked for demographic information pertaining to the respondents. In the second segment, the participants were provided with items pertaining to the four established constructs.

Transformational leadership consists of three items taken from Mändla (2020). An example item is “My immediate superior articulates and generates enthusiasm for our institution’s vision and mission and objectives”. Cronbach alpha was 0.93.

Digital Leadership is a global construct that assessed attitudes, competences, and behaviours in the context of using digital tools. It consists of six items taken from Zeike et al. (2019). An example item is “I can make others enthusiastic about the digital transformation”. Cronbach alpha was 0.83.

PSM comprises four dimensions: attraction to public service, commitment to public values, compassion, and self-sacrifice. It contains 16 items taken from Kim et al. (2013). An example item is “I believe in putting civic duty before self”. The Cronbach alpha for the global construct was 0.88.

Job satisfaction comprises three items taken from Eisenberger et al. (1997). An example item is “All in all, I am satisfied with my current job”. Cronbach alpha was 0.77.

All items utilised a five-point scale ranging from 1=strongly disagree to 5=strongly agree.

3.3 Data Analysis Procedure

In preliminary analysis, the participant ratings pertaining to each construct were averaged to generate composite scores. Then, I obtained descriptive statistics of the construct measures and the correlations between the construct measures. Finally, I used Hayes Process Macro in SPSS (Model 4) to examine direct and indirect effects (5000 samples with 95% bootstrap confidence intervals). For model A, I specified that X = transformational leadership, M = PSM and Y = job satisfaction. For model B, I specified that X = digital leadership, M = PSM and Y = job satisfaction.



4. Results

4.1 Preliminary Analysis

A summary of descriptive statistics and correlations between the composite variables is provided in Table 1

Construct	Mean (SD)	TL	DL	PSM	JS
Transformational Leadership (TL)	3.57 (1.02)	1.00	0.29 ^b	0.22 ^b	0.51 ^b
Digital Leadership (DL)	3.15 (0.69)		1.00	0.17 ^a	0.23 ^b
Public Service Motivation (PSM)	4.29 (0.39)			1.00	0.31 ^b
Job Satisfaction (JS)	3.62 (0.92)				1.00

^a $p < 0.05$, ^b $p < 0.01$

Table 1. Descriptive statistics and correlations

Table 1 shows that the respondents reported a relatively higher mean score for PSM ($M = 4.29$) than for transformational leadership ($M = 3.57$), digital leadership ($M = 3.15$) and job satisfaction ($M = 3.62$). The correlations between the variables were all positive and statistically significant and in the expected theoretical direction.

The various distributions are illustrated by the box plots in Figure 3.

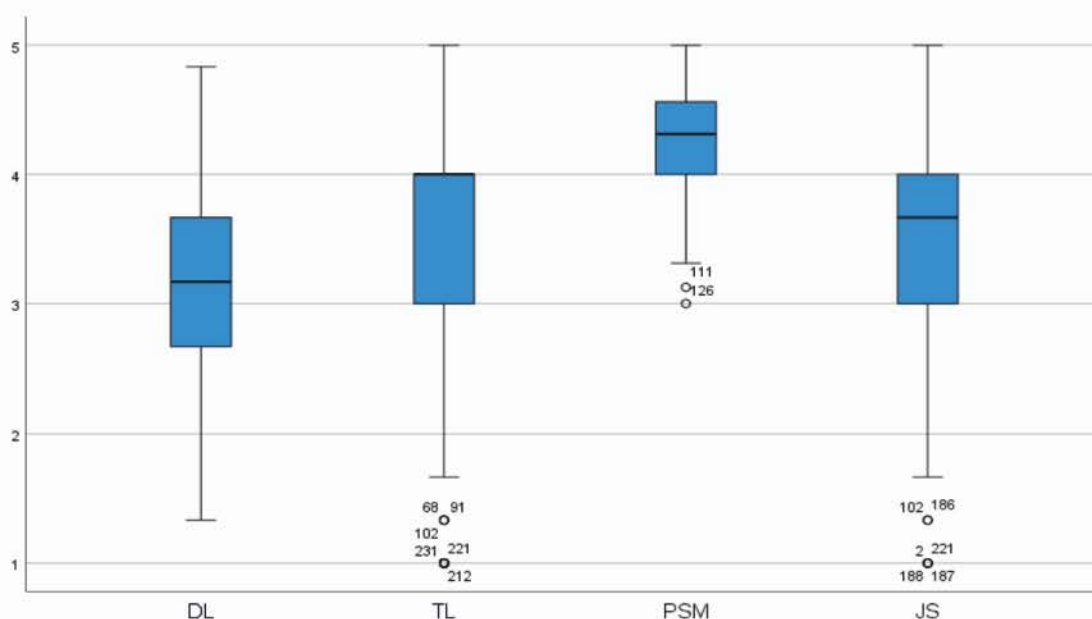


Figure 3: Box Plots

Figure 3 shows that each scale produced a wide range of scores, except for PSM, where the scores tended to be more clustered. Some respondents provided scores that were classified as outliers, but these were retained since they did not represent procedural or typographical errors.

4.2 Examination of direct and indirect effects

Model A: The model summary in the Hayes Process Procedure for SPSS revealed that the overall model was statistically significant ($F(1,233) = 12.15, p < 0.01$). The coefficients table revealed that transformational leadership produced a significant direct effect (positive) on PSM ($\beta = 0.22, t = 3.49, p < 0.01$) and job satisfaction ($\beta = 0.46, t = 8.21, p < 0.01$) while PSM produced a significant direct effect (positive) on job satisfaction ($\beta = 0.21, t = 3.72, p < 0.01$). Furthermore, PSM mediated the relationship between transformational leadership and job satisfaction (standardised Effect = 0.05, Bootstrap $SE = 0.02$, Bootstrap 95% $CI = (0.01, 0.09)$). According to Hayes (2022), this mediation is partial (since both total and direct effects are significant) and complimentary (the sign of the direct and indirect effect is the same). Hence, Hypotheses 1 to 4 have all been supported.

Model B: The model summary in the Hayes Process Procedure for SPSS revealed that the overall model was statistically significant ($F(1,233) = 6.51, p = 0.01$). The coefficients table revealed that digital leadership had a significant direct effect (positive) on PSM ($\beta = 0.16, t = 2.55, p = 0.01$) and Job Satisfaction ($\beta = 0.18, t = 2.90, p < 0.01$) while PSM produced a significant direct effect (positive) on job satisfaction ($\beta = 0.28, t = 4.55, p < 0.01$). Furthermore, PSM mediated the relationship between digital leadership and job satisfaction (standardised indirect effect = 0.05, Bootstrap $SE = 0.02$, Bootstrap 95% $CI = (0.01, 0.08)$). Similar to the result for Model A, this mediation is partial and complimentary (Hayes, 2022). Hence Hypotheses 5 to 8 have all been supported.

Discussion and Conclusion

The role of transformational leadership in the motivation and satisfaction of Maltese public service employees has proven to be crucial. In fact, this empirical study supported previous studies that reported that: transformational

leadership produces positive direct effects on PSM (e.g., Paarlberg & Lavigna, 2010; Wright et al., 2012) and job satisfaction (e.g. Alkalha et al., 2012; Mändla, 2020); that PSM produces a direct effect on job satisfaction (Vandenabeele,

2009); and that PSM mediates the relationship between transformational leadership and job satisfaction (e.g. Wright and Pandey, 2008). This is the first study, at least to the knowledge of the researcher, that examined the effect of digital leadership



on PSM and job satisfaction, although the findings were in line with expectations derived from studies conducted on digital literacy in other organisations (e.g. Abas et al., 2019; Kjirovska-Simjanoska, 2022).

From the findings of this study, at least two important implications emerge. Firstly, the direct effects of transformational leadership and digital leadership on PSM and job satisfaction highlight the importance of promoting and sustaining transformational and digital leadership skills through training and support. Employees are lifelong learners and such initiatives require ongoing commitment. Secondly, the study provides empirical evidence of the direct and indirect effects of PSM which incorporated the attraction to the public service, commitment to public values, compassion, and self-sacrifice. This highlights the importance of the administrators and managers within the Maltese Public Service to manage and encourage PSM among its'

employees, to ensure that the Public Service is responsive to the public and is meeting its objectives.

In essence, this paper interconnects the digital transformation with public service motivation, the general public satisfaction and the leadership of the public service. Effective leadership in digital transformation brought about a managerial *modus operandi* that shifted the poles for both public service employees and the general public. In fact, surveys show that Maltese citizens are the most active in Europe in terms of online services usage, specifically web applications and apps. This brought about a silent revolution in the manner that services are being offered to the citizens. At the same time, public service employees can handle their workload and the kind of work that they do in a more agile and effective manner, that is tied to the public service strategic goals. According to the Digital Economy and Society Index (DESI) of the year 2022, Malta

ranks sixth out of 27 member states (European Commission, 2022).

Before concluding, it is worth highlighting the study's main limitations. Firstly, this study adopted a cross-sectional design and hence one cannot establish cause and effect relationships. Secondly, the study utilised Hayes' Process Macro in SPSS rather than a structural equation model. This meant digital leadership and transformational leadership as independent variables could not be integrated into a single model. Additionally, the process macro estimates the parameters of each equation independently rather than the entire system of equations simultaneously through iteration (Hayes et al., 2017). Thirdly, this study is based on employees working in the Maltese public service and hence one needs to be careful when generalising the findings to other contextual settings and countries. These limitations lend themselves as avenues for further research.



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EXPLORING INDUSTRY 4.0 TECHNOLOGIES & SKILLS IN MALTESE MANUFACTURING

Stefania Buhagiar



Introduction

The concept of Industry 4.0 has ushered in a new era of technological advancement, transforming the industrial context and revolutionizing the way we live, work, and interact.

The concept of Industry 4.0 has ushered in a new era of technological advancement, transforming the industrial context and revolutionizing the way we live, work, and interact. The integration of cutting-edge technologies such as artificial intelligence, automation, robotics, and the Internet of Things, has brought about unprecedented opportunities and challenges for industries worldwide. As organizations strive to remain competitive in this dynamic environment, the roles of skills such as digital literacy, problem solving, critical thinking, adaptability, and collaboration have emerged as a crucial factor in harnessing the full potential of Industry 4.0 (Heidemann Lassen & Waehrens, 2021).

The aim of the study is to explore the intricate relationship between I4.0 and skills and sheds light on the transformative potential of the digital revolution and the impact it has on the workforce pertaining to the Maltese manufacturing industry.

The study comprehensively investigates the impact of I4.0 technologies on the skill requirements within the Maltese manufacturing industry and identifies skill gaps that have emerged as a result. This article focuses on the conclusions derived from both the literature review and the research carried out (questionnaires & interviews) and proposes effective strategies, recommendations and avenues for further research to bridge these gaps.

The Local Context

Malta's manufacturing industry has been making strides in implementing I4.0, where manufacturers have sought to optimize production processes, increase efficiency, and enhance product quality. When compared to other European countries, Malta's manufacturing sector's adoption of I4.0 may still be in its nascent stages. However, its strategic geographical location, business-friendly environment, and concerted efforts in promoting innovation could serve as catalysts for its ongoing industrial transformati (Bezzina et al., 2012).

In contrast to what I4.0 was initially thought out to be, the technologies relevant to this era focuses on the skilled worker. The year 2025 will see a 6% increase of employment in manufacturing, which will inadvertently increase demand for a variety of workers of different skill sets (Rose et al., 2019). Today, businesses across Europe are finding it difficult to implement digital technologies within their companies, due to changing skill requirements in the workforce (Babic et al., 2022). With a substantial amount of manufacturing companies at stake, does Malta have what it takes to progress towards more digitisation with the right skills to implement and maintain it?

Skills in the Digital Era

Skills have been defined as a merger of soft and technical knowledge (Braun et al., 2022). Whilst it is often associated with the human-centric ability to apply knowledge to complete a task and solve problems, it has also been extended to a 'machine-to-human' collaboration (Froschauer et al., 2022). Machines are unable to manifest soft skills, and this is where the human-to-machine interaction comes to be, resulting in a symbiotic partnership that increases productivity in 'Factories of the Future' (Maisiri et al., 2019).

Table 1 provides the skill requirements in I4.0 according to Maisiri et al. (2019)

	Typology	Skills
Technical Skills	Technological Skills	Designing to incorporate Virtual Simulation Fault & Error Recovery Process Digitalisation
	Programming Skills	Computational skills Simulation Skills Coding computer and software programming Software Development
	Digital Skills	Data analytics/data processing IT Security Cloud computing IT knowledge and abilities AI skills
Non- Technical / Soft Skills	Thinking Skills	Creativity and Innovation Practical Ingenuity Critical and logical thinking Flexibility Complex problem solving Analytical thinking skills Collaboration (including machine to human) Interdisciplinary skills
	Personal Skills	Lifelong learning skills Leadership skills/people management Emotional intelligence Negotiation skills Entrepreneurship Adaptability
	Social Skills	Teamwork Professional ethics Self-awareness Self- organisation Intercultural skills

Table 1. Skill Requirements in I4.0.

Nevertheless, foreign literature highlights mismatch between existing skills possessed by current workforce and the specialised skills and competencies required to effectively adopt, operate, and optimise advanced technologies and automation. These shifts not only affect young graduates, but also experienced personnel working within



the industry (Guo & Kim, 2021). In view of this, training strategies to bridge these skill gaps should be adopted at educational level and beyond.

Table 2 provides a summary of contributing factors to skill gaps in manufacturing.

<i>Rapid Technological Advancements</i>	Time constraints for individuals and organizations can hinder their ability to close the skill gaps effectively and on time. (Pessot et al., 2021)
<i>Education and Training Gaps</i>	Curriculum and training programs in schools and universities often lag the latest industry requirements, leading to a disconnect between the skills taught and those in demand. (Mahmood et al., 2021)
<i>Lack of Awareness & Understanding</i>	Personnel are uncertain about how automation and digitization would affect the skills needed and lack necessary resources and expertise to reskill. HR might not be capable of implementing a new strategy aimed at tackling evolving skill gaps. (Ellingrud et al., 2020)
<i>Resistance to Change</i>	Due to fear of job displacement and unfamiliarity with new technologies or concerns about job security. Insecurity can slow down the adoption of new skills. (Pessot et al., 2021)
<i>Limited Training and Development Opportunities</i>	Organisations sometimes focus on short-term goals and do not invest in training programmes (Ellingrud et al., 2020)
<i>Demographic Shifts</i>	As experienced workers retire, there may be a loss of valuable knowledge and skills in the manufacturing workforce. (Ellingrud et al., 2020)
<i>Changing Job Roles and Responsibilities</i>	Some traditional manufacturing jobs may become automated, while new roles requiring digital skills emerge. (Alhoul & Kiss, 2022)

Table 2. Contributing factors to skill gaps in manufacturing

Method

The study adopted an interpretivism approach (Saunders et al., 2019). Researcher opted for a methodological triangulation approach utilising a quantitative questionnaire completed by C-suite level representatives of

manufacturing companies. This provided insights into their organisations' social, cultural, and economic context concerning the implementation and operation of I4.0 technologies. Additionally, qualitative interviews were conducted with academics, economists, HR personnel and organisational psychologists to gather information from a broader perspective. These findings were then correlated to generalisable insights and theories from specific observations or cases. This strategy enhanced the credibility and validity of the findings by approaching the research questions from different angles (Bans-Akutey & Tiimub, 2021).

Results & Discussion

Figure 1 exhibits the utilization of I4.0 technologies across the companies that participated in the study.

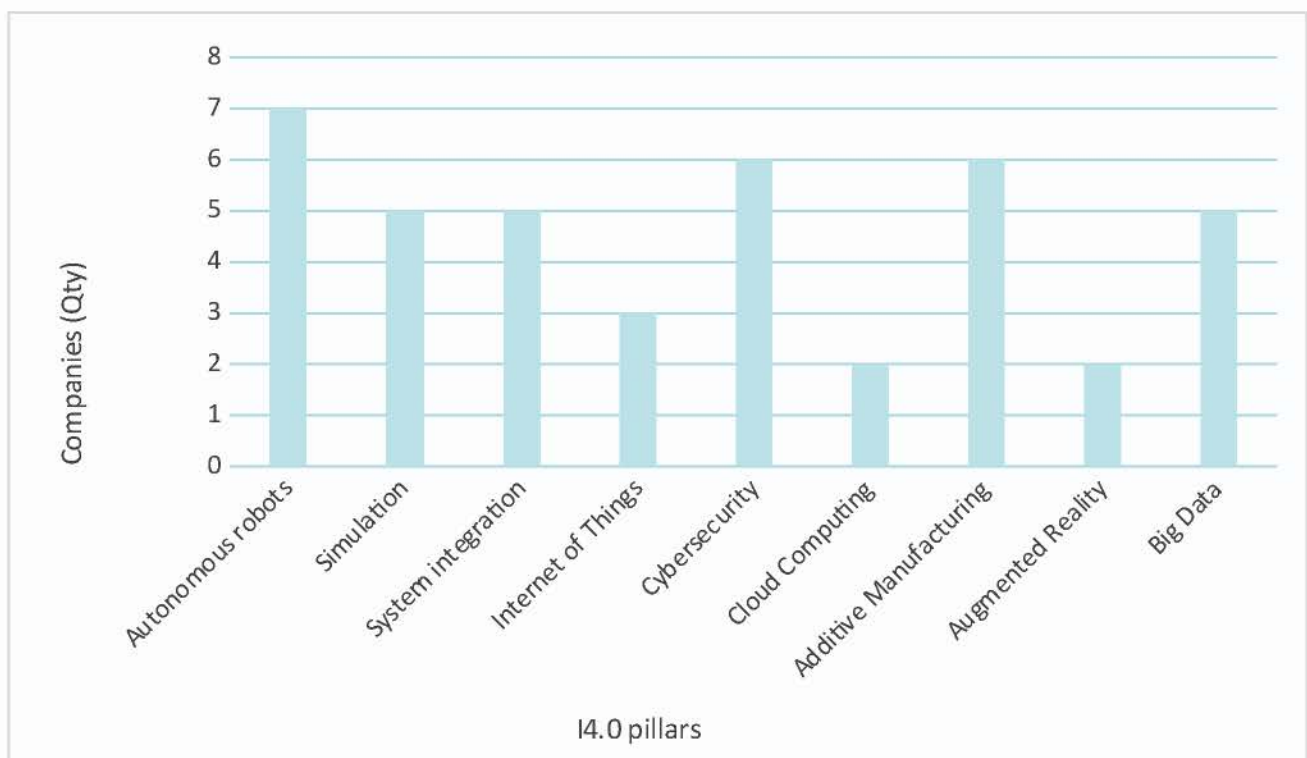


Figure 1. Bar Chart - Utilization of I4.0 technologies

Results derived from both questionnaire and interviews highlight the paramount importance of technical and soft skills for individuals working within the industry. The continuous development and adaptability of these skills are imperative to ensure the relevance and effectiveness of a dynamic sector. Reskilling and upskilling not only enhances an individual's employability factor, but also contributes to the bridging of skills gaps within the team, encouraging and resulting in a more cohesive and skilled workforce.



Questionnaire replies extracted from this study revealed that manufacturing companies in Malta are struggling with a wide range of skill gaps. Interestingly, the most prominent gaps pertain to interdisciplinary and soft skills which correlate to *emotional intelligence*.

The study identifies multiple factors that give rise to skill gaps within the industry and these effects are observed across individuals of varying age groups, as listed below. These contributing factors highlight both intrinsic and extrinsic influences and ought to be instilled in individuals from a very early age, persisting throughout their careers until retirement.

1. Skill Gaps due to Education

Academics interviewed for the scope of the study have emphasized on the significance of *attitude*. While technical skills can be taught, it is notably more challenging to cultivate emotional/transversal/soft skills in adults. This highlights the need to focus on imparting soft skills to children from a very young age. ‘Future of Education’ is a ‘challenging’ time that requires ‘change’, ‘adaptability’ and ‘flexibility’ to provide students with opportunities for growth (National skills Council, 2023). Change is inevitable as it takes educational investments a decade to yield substantial returns. Foreign studies have also dictated that 65% of skills are expected to change by the year 2030, which implies that changes ought to be made now.



The importance of *balancing prescriptive education with hands-on experience/apprenticeship* has also been noted. Whilst examinations train students in developing critical thinking, problem solving and time management skills, hands-on experience and apprenticeship reinforces students' technical abilities, boost interpersonal, communication and leadership skills. During this time, students will also develop employability skills and learn to balance life-work commitments. Working within a team will also allow students to be a part of a community (GPS Education Partners, 2023)

2. Promoting STEM*

Participants have identified 'engineering and technical roles' as exceptionally crucial. From this study one can also observe that these organizations encounter difficulties when seeking to hire proficient individuals for critical positions, often resorting to subcontracting consultants to assist in addressing skill gaps within their teams. According to academics interviewed in this research, the decline and waning interest in the STEM field can be attributed to declining birth rates, a phenomenon of 'brain drain', and the perceived inaccessibility of STEM degrees to students with diverse learning capabilities. STEM education, now also known as STEAM, is a multi-discipline approach to teaching. STEAM education combines science, technology, engineering, the arts and mathematics.

3. World Economy

The world is currently witnessing a new era of *globalisation*, where local companies are not only competing against other local businesses, but the competition for skilled labour has assumed an international dimension. In view of this phenomenon, local companies are resorting to employing skilled Third Country Nationals (TCNs) to fill in strategic roles within their businesses. This brings about diversification in the workplace and was proven to be a short-term strategy. Due to Malta's high cost of living and low wages, TCNs tend to leave after a while. This short period does not allow for appropriate skill transfer to other employees, leaving an even greater gap behind.

Apart from this aspect, the manufacturing sector needs to also compete against other sectors that are considered finer and more attractive to employees such as gaming and finance. There is a misconception surrounding the manufacturing sector, that it is no longer influential, so it tends to attract less high value-added employees than other industries. To counter this, there is a need to vigorously promote manufacturing as an industry that fosters innovation, creates tangible products, and contributes significantly to the local economy, re-establishing its importance.



Addressing Skill Gaps

1. Education 4.0

The success stories of I4.0 in Germany and Austria have highlighted the importance of aligning educational programmes with industry requirements. This alignment ensures that students acquire skills and knowledge directly applicable to real-world job demands. Consequently, this synergy stimulates economic growth, fuels innovation, and strengthens global competitiveness. These factors, in turn attract new business and investments to Malta, cultivating an environment suitable for industrial development.

2. Upskilling and Reskilling Initiatives

Participants highly agree that there are skill gaps in ‘adaptability and lifelong learning’ and that retraining and upskilling programs are crucial for individuals to adapt to skill requirements in the industry. To remain aligned with these shifts, academics and professionals actively engaged in the field, must consistently refresh their skills to stay well-attuned to the ‘accelerating change’ in technology.

Participants have also highlighted the need for adequate training programmes and resources to bridge these gaps. Most of their concern lies in the fact that the correct upskilling can only happen if the right educational and skill base is in place and if laboratories in universities and vocational institutions are equipped with high-end technological equipment. A concerted effort must be done to improve interest in the manufacturing sector and promote opportunities within the industry.

Introducing lifelong learning and the principles of apprenticeship and work-life balance into the educational journey of young individuals could facilitate their adoption of these concepts. However, implementing the same in older individuals might pose somewhat of a greater challenge. Research has shown that the most common barriers to upskill experienced individuals within a corporation are due to (i) time and budget constraints, (ii) lack of direction where to focus their skill development, (iii) lack of resources and tools, and (iv) because upskilling is not an organizational priority (Pluralsight, 2023).

To address these challenges, survey participants have suggested that individuals should undergo on-the-job upskilling experience to attain higher MQF levels which align with the credit system of educational institutions.

Furthermore, participating corporations have opted for in-house training when vocational and educational institutions could not bridge the gaps in their business. A Skill Matrix System or Five Cycle Training programme strategies could be adopted to develop the workforce during and after the transition process of digitisation.

3. Public Initiatives and Policies

Malta has formulated a Recovery and Resilience Plan (RRP) to strategically address these critical challenges. To enhance research and innovation, Malta has embraced the EU's smart specialization strategy as a fundamental component of its primary funding request. This strategy centres on investing in research infrastructure and facilitating participation in Horizon Europe. The strategy also promotes inter-agency collaboration to aid businesses and proposes offering incentives to industry stakeholders to promote innovation (European Commission, 2023)

Conclusion and Recommendations

While extensive discussions and efforts have transpired over recent years, tangible outcomes remain limited in effect. To genuinely aid the manufacturing industry, decisive and well thought out actions must be collectively and promptly undertaken for a prosperous future with no further delays.

A series of recommendations have been formulated based on the findings derived from this research. These are intended to serve as a roadmap for policymakers, highlighting the areas that require attention and support to promote a sustainable and thriving manufacturing industry equipped with a well-skilled workforce in the future.

- 1 The National Employment Policy issued by the Government of Malta provides a well detailed overview of our future economy across diverse sectors till the year 2030. However, to support the needs outlined in the study for the coming years and beyond 2030, the country needs to equip workers with the right skills and support them along their upskilling transformation. It is also equally important to enable employers to harness resilience of business against external obstacles for greater economic growth and support work institutions.
- 2 The educational curricula in schools need to be revised such that skills gaps encountered across all sectors, most especially in manufacturing, are addressed. Curricula covering formative years should balance prescriptive education with soft skills. On the other hand, curricula covering secondary and tertiary levels should promote apprenticeship and on-site workshops to induce employability skills and life-long learning mindsets in students. At this level of education, academia should be designed to align with industry needs.
- 3 Academics should be provided with annual short-term training courses or the opportunity for sabbatical leave every seven to ten years to update their expertise in alignment with contemporary advancements.
- 4 The Ministry of Education should assess the optimal blend of soft and technical skills necessary to make an individual a viable and well-suited candidate for employment within the industry.

Articles by Students

- 5 Promote STEM careers by introducing scientific concepts at an early age through interactive activities and experiments to encourage curiosity and exploration. Develop an engaging curriculum that focuses on problem solving, critical thinking and hands-on learning can attract students to move towards STEM.
- 6 Promote continuous professional development among the workforce by incentivising the attainment of both local and internationally recognized certifications.
- 7 Malta can also implement an Industrial Growth Initiative similar to a strategy utilised in Russia which outlines prospective new jobs across sectors to guide students in selecting the right career path. With this strategy in place and good working conditions, Malta will be able to retain high value employees and limit 'brain drain' from the country.
- 8 Examine the demographics of the unemployed population and develop strategies to enhance their skills and competencies to reintegrate them into the labour force. Adopting strategies similar to those employed by certain G20 nations can efficiently allocate resources by targeting individuals capable of contributing to the workforce, aligning with industry requirements, and channelling investments into more tangible initiatives.
- 9 Due to the implementation of remote work programmes during the Covid-19 pandemic and the digitalization of work processes, companies have become more open to adopt flexible work arrangements as a means of attracting young talent. This practice should be retained as it has proved to be successful.
- 10 Policy makers should establish incentives aimed at enabling manufacturing firms to maintain their Research and Innovation departments in Malta. There is already a trend of these departments shutting down and relocating to other countries to reduce operational costs. This will diminish Industry's significance, potentially resulting in reduced growth and the possible closure or relocation of certain companies. High labour and operational costs are the main contributing factors to this loss. Attracting foreign companies to set up their Research and Development /Innovation Department in Malta by providing them with specific support measures and incentivised is also of paramount importance.
- 11 Strategies need to be established to retain TCNs and other foreign workers for a longer period. It is imperative that various stakeholders, including government bodies and private institutions collaborate to put together policies aimed at meeting this requirement.

Avenues for Further Research

Despite its limited time constraints and small sample size, this study yielded intriguing findings. It suggests that there is substantial room for further analysis regarding the impact of I4.0 on the future of manufacturing in Malta.

A longitudinal study could be undertaken to monitor changes in skill gaps and industry demands over an extended period. This approach offers a dynamic comprehension of how these factors adapt in response to technological advancement and economic shifts.

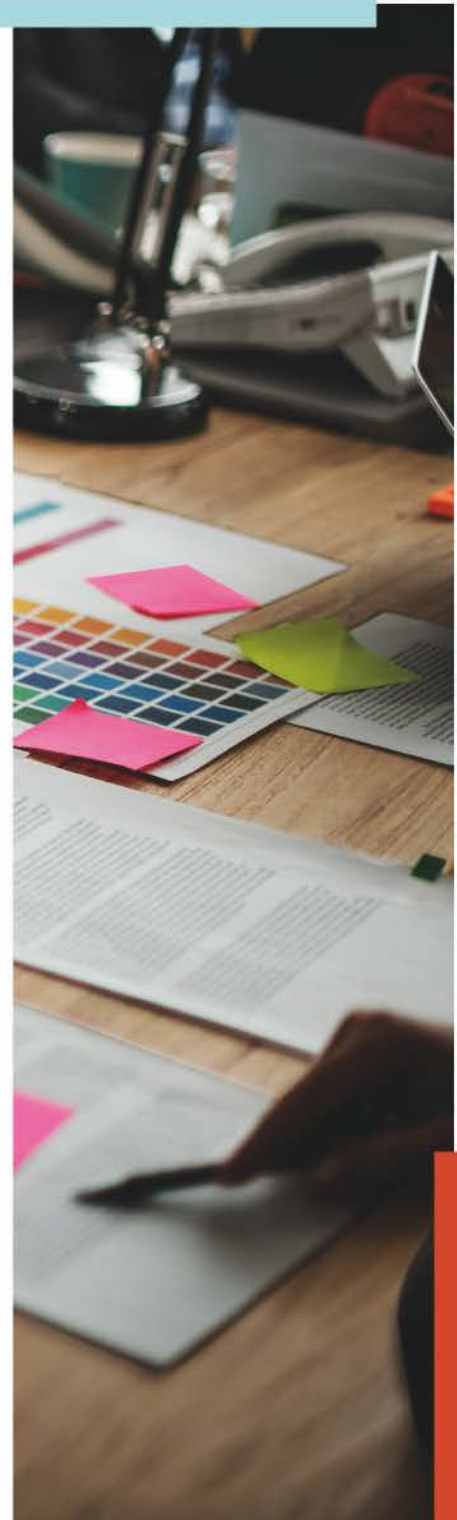
The research could also be extended to compare skill gaps and needs in the manufacturing sector with those in other industries such as the gaming or the financial services sectors. This comparative analysis can offer valuable insights into the unique challenges and opportunities in manufacturing.

Focused investigations into specific strategies and initiatives implemented by manufacturing companies to tackle skill gaps could be conducted to evaluate their efficiency and discover best practices.

One can also assess the impact of educational programs designed to bridge skill gaps. The researcher can investigate the alignment between the skills taught in these programs and the skills demanded by the industry.

Comparing Malta's manufacturing industry with that of another country could provide a global benchmark for performance, skill requirements and initiatives. Such a comparative approach could provide valuable insights for policy development.

Finally, research could delve into the effectiveness of knowledge transfer programmes for imported workers and their role in mitigating skill gaps. Exploring the feasibility of extending the duration of their stay could be an additional area of inquiry.



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Factors leading to insurance reform derived from examining the insurance principle of utmost good faith

Dr Andre Farrugia

Introduction

The principle of utmost good faith applies an “all or nothing” basis, which means that if an insurance policy is valid, insurers will fully respond to a claim. However, if the contract is in some way defective, even partially, then no cover would apply at all.

Utmost good faith is a fundamental principle of insurance law that requires both the insurer and the insured to act honestly and with full disclosure in all their dealings with each other. This principle has been an essential part of the insurance industry for many years and is considered a cornerstone of the insurance contract (Merkin, 2018). The principle of utmost good faith encourages honesty and transparency between the parties. The insurer is required to fully disclose the terms of the policy, including any exclusions or limitations, while the insured must provide accurate and complete information about the risk being insured (Turner, 2019). This ensures that both parties are aware of the risks involved and that the terms of the

policy accurately reflect those risks. Also, it has been designed to reduce the risk of fraud by requiring both parties to act honestly and with full disclosure. This, not only benefits the insurer by reducing the risk of fraudulent claims, but also benefits the insured by ensuring that they are protected by a valid insurance policy (Guillen, 2004). The application of this principle in practice is not without difficulties, as the principle places a significant burden of disclosure on the insured who is expected to provide accurate and complete information about the risk being insured, positively. This can be particularly challenging for individuals or small businesses that may not have the expertise or resources to accurately assess and disclose all the relevant information which could lead to disputes between the insurer and the insured. If the insured fails to disclose all the relevant information, the insurer may consider the policy as void and refuse to pay a claim (Clarke, 2017).

The UK has a long history of upholding the principle of utmost good faith in insurance contracts. However, in the mid-20th century,

concerns were raised about the fairness of the principle and the lack of transparency around its application in practice. As a result, reforms were introduced to regulate and modernize the principle of utmost good faith in the UK insurance industry. Relevant to this study are the changes in the recent enactment of the UK Consumer Insurance (Disclosure and Representations) Act 2012 and the Insurance Act 2015 after a century applying the principle of utmost good faith as laid by the earlier Marine Insurance Act 1906 (Merkin & Lowry, 2008).

The established insurance principle of utmost good faith, has been controversial in bringing equity and fairness to the parties under an insurance contract, especially where breaches are made innocently or where breaches are unrelated to the cause of the loss. Despite the principle's onerous requirements and seemingly unfair application, not all countries have felt the need to change the practice of utmost good faith. The motivation of the research is therefore to study the factors which lead a jurisdiction, to reform the old-standing principle with a test case on Malta.

Method

To achieve the research aim, the researcher conducted a systematic review to determine propositions from literature using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology to filter the results (Pahlevan et al., 2019). Specifically, such secondary sources were obtained from law reports and journals, scholarly papers, articles, industry and company information, and historical literature. The study conducted by the researcher employed the thematic analysis approach to identify five main propositions from the literature review. These propositions were used to derive 22 statements (see Table 1), which were structured into a questionnaire that was divided into two sections.



Articles by Students

Item 1 – The political climate and influence by governments is a strong factor in bringing about reform in insurance
Item 2 – Insurance policymakers push for insurance reforms especially to improve practices like the duty of disclosure
Item 3 – Through their decisions, the judiciary and the LRC influence the need to change insurance practice
Item 4 – The type of legal system has a bearing on the application of utmost good faith
Item 5 – Lack of satisfaction of judiciary decisions and delays in settling insurance matters call for insurance reforms by the litigants
Item 6 – Industry market players press for reforms to bring equity and fairness in insurance practice
Item 7 – The regulator has a stronghold in insurance practice introducing fairness and transparency which might lead to reform
Item 8 – When placing the responsibility of utmost good faith on the consumer, the insurers are not achieving contract equity thus increasing litigation
Item 9 – The media plays an influential role in bringing changes in insurance practice as it voices concerns
Item 10 – Consumers today have more rights and thus litigate more, increasing the need to change insurance practices like utmost good faith
Item 11 – Insurers would consider altering the practice of utmost good faith if court cases increase
Item 12 – Different practices of utmost good faith in different countries restricts cross border insurance
Item 13 – international competition and dependency on certain countries like the UK will force the dependent domicile to follow reforms
Item 14 – EU harmonisation exerts pressure to initiate reform in insurance
Item 15 – Reinsurers influence the insurance market and also any changes in the practice of utmost good faith
Item 16 – The need for modernisation in the insurance industry will initiate the need to reform in insurance
Item 17 – In view of technology and social media collecting information changed and correspondingly so the principle of utmost good faith
Item 18 – Electronic processes and tech systems such as Insurtech have rendered utmost good faith obsolete
Item 19 – In a soft market, insurers tend to accommodate and compromise and this are more likely to reform the principle of utmost good faith
Item 20 – Fragmentation of market players brings disparity in the application of utmost good faith necessitating reform
Item 21 – Competition might entice insurers to cut corners and adopt a soft approach on the application of utmost good faith
Item 22 – Changing demographics and socio-cultural trends are triggering the need to modernise the practice of utmost good faith

Table 1: List of questionnaire statements

The first section of the questionnaire aimed to collect respondents' demographics while the second section tested the 22 statements using a five-point Likert scale. The Likert scale ranged from 1=total disagreement to 5=complete agreement. The questionnaire allowed for further comments through a comment box to ensure that respondents could clarify their responses or add additional information (Creswell, 2013). The survey was self-administered using social media platforms, primarily LinkedIn and email contacts, which included the distribution of circa 5000 email contacts.

The data collected from the survey questionnaire was analysed using IBM SPSS Version 20 (IBM Corporation, 2011). The statistical analysis methods applied in the study also included Exploratory Factor Analysis (via principal components extraction with Kaiser normalization and Equamax rotation) to explore the underlying factor structure and extract factor variables (Watkins, 2018).



Following exploratory factor analysis, the researcher constructed interview questions on the basis of the emerging items and later conducted interviews (Merriam, 1998) to determine whether the insurance industry in Malta was prepared (or otherwise) to undergo similar reforms as those in the UK. Interviews were mostly carried out through virtual platforms such as Zoom or verbally over the phone, while a few interviews were conducted face-to-face. The interviewees ($n = 32$) were selected using purposive sampling (Creswell, 2013) based on their experience, expertise, knowledge, position, role in the industry, qualifications, repute, practice, and contribution to the industry.

Findings

Respondents

The initial questionnaire survey was conducted with over 2300 potential respondents, and a total of 1794 valid responses (78%) were received, meeting the required confidence levels for the analysis to proceed (Cochran, 2007). Additionally, 47 respondents (2.6%) provided open-ended comments, with 90% of these comments coming from respondents who participated face-to-face or via phone, online surveys

and social media. These comments were analysed and grouped and the emergent results produced the variables influencing reform in the practice of utmost good faith in insurance (Naderifar et al., 2017). The single largest groups were male (67.1%), aged 55-64 (35.6%), in possession of A Bachelor's (Level 6) degree (40.0%) and occupied a managerial/professional position (49.8%).

Exploratory Factor Analysis to group the emergent factor variables

Exploratory factor analysis revealed that there were four eigenvalues greater and these accounted for 73.4% of the variance. Furthermore, the Bartlett Test of sphericity rejected the null hypothesis that the correlation matrix was an identity matrix (statistic = 33776.76, $df = 231$, $p < 0.001$) while the Kaiser-Meyer-Olkin statistic ($KMO = 0.89$) indicated that there is sufficient common variance and hence factor analysis was appropriate (Hair et al., 2010).

The Pattern Matrix (see Table 1) revealed eight items loaded under Factor 1 and this was termed "Institutional stakeholders and the political-legal framework"; six items loaded under Factor 2 representing "Market, consumer influence and the socio-economic environment"; four items loaded under a Factor 3 representing the "Socio-technological environment"; and finally, four items loaded under Factor 4 representing the "Insurance practice and international business". The statements and the corresponding factor loadings are presented in Table 2.

	Component			
	1	2	3	4
Item 5	.83			
Item 3	.83			
Item10	.82			
Item 1	.78			
Item 2	.68			
Item 4	.67			
Item 9	.64			
Item 14	.52			
Item 21		.86		
Item 22		.85		
Item 7		.84		
Item 19		.79		
Item 6		.62		
Item 20 *		.55		
Item17			.81	
Item 13			.81	
Item 18			.78	
Item 16			.69	
Item 15				.73
Item 12				.65
Item 11				.61
Item 8				.45

*item responses were reverse scored; item statements are presented in Table 1

Source: (Farrugia, 2023)

Table 2. Principal Component Analysis using Equamax rotation output

Factor scores and Cronbach alpha coefficients

Table 3 provides a descriptive summary of the factor scores. The factor that produced the highest mean agreement score for affecting reform was Factor 1 (market, consumer influence and the socio-economic environment)', followed by Factor 2 (socio-technological environment), Factor 3 (insurance practice and international business) and Factor 4 (institutional stakeholders and the political-legal framework) respectively.



Factor	Name of Factor	Item	Mean	Min-Max	Cronbach Alpha
Factor 1 (F1)	Institutional stakeholders and the political-legal framework	8	2.607	2.05-3.09	0.93
Factor 2 (F2)	The market, consumer influence and the socio-economic environment	6	3.626	3.31-4.09	0.86
Factor 3 (F3)	Socio-technological environment	4	3.210	2.77-3.46	0.80
Factor 4 (F4)	Insurance practice and international business	4	2.832	2.27-4.04	0.62

Source: (Farrugia, 2023)

Table 3. Factor labels, descriptive statistics for factor scores and Cronbach alphas

The Cronbach alpha coefficient for the whole instrument measures was 0.867, with factor Cronbach's Alpha coefficients ranging from 0.62 to 0.93. According to established criteria, a Cronbach's Alpha value of 0.6-0.7 indicates an acceptable level of reliability, while values of 0.8 and above represent a very good level (Lance et al., 2006).

Exploring the factors in the Maltese insurance sector

Having established the four factors that have an influence on reform of the principle of utmost good faith, the researcher sought to explore these on a particular jurisdiction namely Malta as this was the most proximate. The factors served to build a set of related interview questions which led to the cognisance of the practice of utmost good faith and its potential reform in the insurance industry after interviewing practitioners and experts who could effectively depict the position of Malta.

The responses from the interviews presented different perspectives, especially based on whether the interviewee approached the subject from the insurer's or consumer's viewpoint. Most interviewees (26 out of 32) believed that the application of the principle of utmost good faith in Malta was fair and effective from the insurer's perspective. They emphasised that the principle provided a safeguard for insurers by identifying fraudulent policyholders and enabling them to void the insurance contract in cases of dishonesty or misrepresentation. On the other hand, some interviewees raised concerns about the fairness of the principle on the consumer's side, stating that it places a heavy obligation on the proposer and could invalidate insurance claims even if the breach of utmost good faith is committed innocently.

Regarding consumer and market pressure, the interviewees did not feel that there was enough dissatisfaction to influence reform in the application of the principle. They also believed that dissatisfaction related to breaches of utmost good faith would not have a significant impact on the indigenous socio-economic environment. However,

they acknowledged the impact of evolving socio-technological infrastructure on the application of the principle, with some mentioning how insurers have embraced technology to obtain material facts.

In terms of international business, interviewees did not perceive significant pressure on the Maltese industry to voice concerns and push for insurance reform. They also expressed scepticism about the involvement of

institutions, including the regulator, in pressing for reform, and they felt that political-legal willingness to reform utmost good faith practice was lacking.

The interviews also addressed the UK model's influence on the Maltese insurance practice, with most interviewees recognizing the historical dependence on the UK model. While some believed that changes in UK practices would impact the Maltese insurance industry,



others were sceptical about the need for major reforms in Malta and expressed the importance of remaining vigilant with developments in the UK industry.

Regarding the EU factor, interviewees unanimously agreed that being an EU member state implies the need to incorporate all EU laws, rules, regulations, and guidelines into national law. However, there were differing opinions on whether waiting for EU initiatives would remedy the poor practices in the domestic scenario.

Overall, the interviews depicted mixed views on whether the insurance industry in Malta is prepared to reform the practice of the principle of utmost good faith, with some expressing confidence in readiness for change while others were more reserved, emphasizing the need for concerted efforts among stakeholders to drive meaningful reform (Farrugia, 2023).

Conclusion

Although there have been studies on regulatory reform and the principle of utmost good faith, this research is different from others in the field, in that it seeks to fill a gap in literature, particularly in the area of insurance by exploring what leads to change in practice. Utmost good faith serves as a case study to investigate the determinants of reform and builds knowledge by understanding the roots and causes of such changes and the corresponding importance of these determinant factors.

This study serves to build upon, change, reject or confirm insurance practices, principles and policies and possibly serve as a preparatory platform to enable various insurance market players to identify and adapt to the changing environment. It will also serve as insight for regulators and stakeholders who are considering to act amidst such changes. Moreover, insurers benefit from the findings through the understanding of the social, operational and regulatory factors and their respective impact, to incorporate these trends and tendencies into insurance policies and practices to attain contract certainty. Therefore, this analysis is important for underwriters and policy writers in insurance and may also be relevant and

significant for reformists of non-reformed countries who might be considering a change in the principle of utmost good faith among others.

This research addresses a significant knowledge gap in the insurance reform literature and offers valuable insights into the factors that shape the industry's future. It provides scholars and academics with a model which can be applied to other insurance principles, other sectors and different industries in a variety of jurisdictions to test the readiness or otherwise of initiating reform based on a structured study. Therefore, the study has the potential to influence insurance principles and practice, market knowledge, and insurance laws and regulations and can be used to build a framework for making a case for insurance reform and also as a basis for future fact-finding mediums such as interviews or surveys.

Finally, the study provides a theoretical conjecture on the formulation of factors affecting utmost good faith practice in insurance, which can be further fine-tuned through future research exploring different contexts, industries, and practices.

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