Projectification and its impact on societal development in Germany¹, ²

Reinhard Wagner

ABSTRACT

The number and importance of projects is growing in Germany. A study by the German Project Management Association (GPM) published in 2015 shows a growth in the share of project work to approx. 40% in 2019. The share differs significantly from sector to sector, e.g. project work is more important in industry than in the public sector. Examples such as the still unfinished major airport in Berlin shows the potential professional project management still has in the public sector in Germany. In 2015, the large number of refugees has posed major challenges for German politics, society and above all for local communities. Both examples illustrate the role projects and project management play for societal development.

This article sheds some light in the recent developments of projectification and its impact on societal development. It is based on the research question »Does projectification have impact on societal development?« and clarifies relevant terms in regard to the projectification. The insights provided are based on literature research and a qualitative case study of developments in Germany. The increase in project work is calling for a large number of institutions, e.g. project management associations such as the GPM, whose activities help society to adapt to and deal with the new demands. The few studies on the impact of projectification at the macro level suggest that there can be both, positive and negative effects. However, further research is needed to assess the full impact. However, more research is needed to assess the full impact. An international research programme initiated by the Alma Mater Europaea is aimed at achieving this.

Key words: Projectification, Projectified Society, Project Society, Societal Development

Introduction

Projects have existed since the beginning of mankind. Unfortunately, we lack documents from the early days that would explain the purpose of the projects, the process and aspects of what we now

¹ Second Editions are previously published papers that have continued relevance in today’s project management world, or which were originally published in conference proceedings or in a language other than English. Original publication acknowledged; authors retain copyright. This paper was originally published in Proceedings of the 8th Scientific Conference “All about People: Relevance of Science and Education”. Maribor, Alma Mater Europaea, pp. 83-92. It is republished here with the author’s permission.

call project management. Since the end of the 17th century, however, there have been publications that not only emphasize the great importance of projects for society, but also provide descriptions of the way in which projects are carried out. Daniel Defoe describes the 17th century in the introduction of »An Essay upon Projects« as the »Projecting Age« (Defoe 1697) and sets projects in the context of societal developments: »Projects of the nature I treat about are doubtless in general of public advantage, as they tend to improvement of trade, and employment of the poor, and the circulation and increase of the public stock of the kingdom«.

In Germany it took more than half a century longer for someone to come to grips with the term »project«. In 1761 the German Philosopher Johann Heinrich Gottlob von Justi describes his understanding of projects as follows: »In my opinion, a project is a detailed draft of a certain undertaking, whereby our own or other people’s temporal bliss is to be promoted; at which end all the means and measures to be taken, together with the difficulties and obstacles to be feared and the way to remove them, are clearly presented in such a draft.« (Krajewski 2004) He even claimed that all people are project makers.

The world of work has changed dramatically through the various stages of industrialisation. Projects play an essential role in the efficient implementation of technical innovations and organizational changes. The paradigm of "efficiency" determines the application of management methods and tools. "Modern" project management originated in the 1950s in the context of Aerospace and Defense projects. The approach was based on "Operations Research", a mathematical approach to problem solving which, with the first computers, facilitated planning of large projects and conquered the world of projects relatively quickly. In recent years, development has not stopped at project management. Project management is developing dramatically and, in addition to industrial applications, is increasingly finding its way into public service and other areas of our society.

**Projectification**

If one traces the developments of project work since the early beginnings, then one clearly recognizes a pattern which starts with the »management of projects«, i.e. the implementation of individual projects, leads via »management by projects«, i.e. entrepreneurial action by projects, to »project-oriented organizations«, which provide the predominant part of their delivery in form of projects (Lang/Wagner 2019).

In 1995 Christophe Midler coined the term »Projectification«, based on an analysis of organizational changes at the car manufacturer Renault. Since the 1960s the number of projects at Renault has increased significantly. Projects were aimed at steadily expanding the product portfolio in order to gain new market shares and to continuously broaden the technological base. The increase in project work naturally raised the question as to how roles would be distributed between the projects (temporary organization) and the previously dominant specialist departments (permanent organization). Midler writes: »The firm effected a transition from the classical
functional organization in the 1960s to project coordination in the 1970s, and since 1989 to autonomous and powerful project teams. Search advanced project management has profound and destabilizing effects on the other permanent logics of the firm (task definitions, hierarchic regulations, carrier management, functions and supplier relations). The process of projectification is still under way, to adapt these permanent processes to the new context«. (Midler 1995)

Projectification describes, on the one hand, the significant increase in projects that penetrate wide areas of an organisation and, on the other hand, the resulting change that has an impact on the entire organisation.

Rolf Lundin, a prominent representative of the Scandinavian School of Project Studies (Sahlin-Andersson/Söderholm 2002) has described the development of projectification from the level of individual organisations to the level of society since the 1990s. In the preface to the seminal publication »Managing and Working in Project Society« he writes: »Project thinking is spreading to most parts of society, including industrial enterprises, governmental organizations, educational institutions, and volunteer groups. Not only do people relate to projects and to project organizing in their working lives, but they even speak and think of their daily activities in project terms.« (Lundin et al 2015) However, Lundin regrets that there is relatively little data on project work at the societal level, its significance for economic as well as social development, and that furthermore there is a lack of theoretical underpinning for this development (Lundin/Söderholm 2002).

In a study on macroeconomic measurement of project activity in Germany, the GPM has published figures. They confirm what many had already suspected but never concretely formulated: More than one third of the gross domestic product in Germany in 2013 was generated by projects. This is based on the proportion of working time spent in projects. At that time, this corresponded to a share of the gross value added of 877 billion euros. The study also shows that this share will rise to over 40% by 2019. (GPM 2015) and concludes: »Projects play an important role in value creation not only in traditionally project-oriented industries, but also in supposedly »non-project« economic sectors such as the public sector. Companies with a high proportion of project activity have a significantly higher innovation success across sectors than companies with a low proportion. In an innovation-based economy, projects should therefore also be given more attention from the point of view of competitiveness and job security«. International comparative studies show similar developments in other countries (Schoper et al 2018).

Although the share of project work in the (Western) countries studied is comparable overall, the figures differ in terms of sectoral comparability. In Germany, for example, the share of project work in the agricultural sector (agriculture, forestry and fishing) is with approximately 4% relatively low, whereas in Norway due to the fishing industry the share of project work amounts to almost 30%. Studies into the situation of Croatia, as a developing country, show that the number of projects there has also risen sharply, but the nature and complexity of the projects is different from larger and more developed countries. The fact that Croatia is a relatively new country in the European Union (EU) and that it has been projectified through corresponding projects is certainly also important: »High projectification in a smaller country could be explained
by needs for grow, change and development which is typical for country of any profile. It is also
sure that globalisation, and latest EU membership also pushed projectification in many smaller
countries due to EU project co-funding programs.« (Radujkovic/Misic 2017). The influence of the
EU on the individual countries is certainly of particular interest from the perspective of
projectification. A study in Poland on the influence of the implementation of EU policies through
projects and programmes shows that this directly causes changes in organisational structures (e.g.
public labour market organisations) at both national and local level (Jalocha 2012).

The impact of projectification on societal development

When we think about the impact that projects have on the societal level, the first thing we have to
do is examine the characteristics of projects. Projects are temporary, that is, they are projects that
are limited in time, have a specific outcome, and are limited in duration and cost. Projects are
mainly used where something new is involved, the development of new products and services,
their introduction or organisational changes. The organizational form used for projects is therefore
different from the »Business as Usual (BaU)« organization, which is characterized by routine
processes.

Projects are typically superimposed on the BaU organization and in a certain way represent a
»disturbance« of operational processes. The more the number and importance of projects
increases, the more urgent the pressure for change on the conventional organization becomes. If
one understands society as a complex, social system, with a multitude of individuals, institutions
and other influencing factors, then the question arises how the increasing projectification will
impact the development of a society. Rolf Lundin mentions several views on projectification in
society (Lundin 2016) that are interrelated and appear in various forms:

- Activities organized in another way will be somehow called and realized as projects;
- Projects are stipulated as a »new work form« and mechanism for change (see the EU
-funded projects and programs), forcing the participants to adopt project management
regulations, frameworks and practices;
- The context, projects are performed in may be adapted to the needs of projects, including
but not limited to Governance, organisational structures and culture;
- Projects may be stipulated as mechanisms for learning from previous projects, using a
standard methodology or copying previous behaviours and procedures;
- Delivering projects may be intended to implement strategic goals, piloting new ways of
working, developing new strategies and shaping the future for the society through
innovation and joint learning, and
- Projects may be simply used for dealing with controversial issues that the permanent
organization does not want to deal with.
In order to understand the effects of projectification, it is important to know which stakeholders or institutions are affected and involved by projectification and how the process of projectification contributes to the development of society. Institutional theory offers insights in the way, social activities are structured by formal as well as informal arrangements, e.g. through labour laws and unions in temporary organisations. According to Richard Scott the term »institutions« comprise of regulative, normative, and cultural-cognitive elements that - together with associated activities and resources - provide stability and meaning to social life (Scott 2014). Institutions can be seen as »actors«, interacting in a network of others and influencing the development of society (Michael 2017). During the projectification of society a multitude of institutions may be involved, e.g. governmental bodies, educational institutions and networks of people (e.g. »Fridays for Future«) or organisations (e.g. PM Professional Associations).

They may prescribe the »rule of the game«, or help to assist developing the norms, rules and regulations, they may provide legitimacy, exercise governance or support learning processes. However, involvement of institutions in projectification of society isn’t unidirectional. Projectification of society will also influence institutions and may cause them to change. If we further broaden our horizon of the impact institutions might have on the projectification of society, then a number of other contextual factors will institute a considerable influence, such as the historical development path, cultural values, beliefs and traditions (Mutch 2019). Thus, the study of institutional theory brings interesting perspectives to the consideration of the projectification of society in so far as the role of certain institutions and their influence on the projectification can be explored in conjunction with the procedural aspects of the interactions.

One institution is certainly of particular interest in the context of projectification, namely the professional project management associations. These formulate appropriate standards and actively participate in the development of norms and regulations that must be observed during project implementation. They offer standards and services in the field of training and further education in project management and act as networkers to bring experts together and facilitate the exchange of experience. Professional project management associations are advisors to governments at all levels of the social structure and, if required, also take on tasks such as auditing projects or certifying project personnel. In England, the Association of Project Management (APM) was a few years ago awarded "Chartered Profession" status by Her Majesty the Queen. This has given a great deal of attention to the profession of project managers, which is still little established in other countries. What impact this has on the success rate of projects and the development of society, however, still needs to be investigated.

**Projectification in Germany and the impact on societal development**

Project work plays a major role in Germany, especially in the business world, projects are indispensable nowadays. In a much acclaimed scenario analysis in 2007, Deutsche Bank Research highlighted the importance of projects for social and economic development in Germany. The
study entitled »Germany 2020 - New challenges for a land on expedition« (DB Research 2007) predicts the following: »The »project economy« will generate 15% of value added in Germany in 2020 (in 2007 it was 2%). »Project economy« stands for mostly temporary, extraordinarily cooperative and often global value-added processes. It is based on the breeding ground of traditional economic activity and mature information technologies. German small and medium-sized enterprises (SME) in particular benefit from it. Division of labour in the form of projects is not sought on the basis of efficiency gains, but because it allows better response to complex, changing conditions. The SME structure of the German economy seems to be particularly suitable for this form of division of labour. Globally active corporations are expanding their capacities and know-how to include specialized suppliers in order to supply customers worldwide with high-quality products in a short time and at reasonable cost.

The cooperation takes place in projects, i.e. across a large number of legally independent companies. If no consortium is formed for the project, then a central coordinator is needed for the cooperation. The project manager often has this role. In the strongly networked automotive industry, one of the key industries in Germany, project management is becoming network or supply chain management (Hab/Wagner 2016). Clusters focused on specific economic sectors form the breeding ground for cooperation and innovative product solutions. In addition to universities, start-up companies and established suppliers, corporate groups are also represented in clusters. These groups play a key role as promoters of scaling innovation and with their broad market access. State funding, e.g. in the form of financing, tax breaks or stable framework conditions, helps the cooperation to survive in international competition.

A study by the Institute for Employment and Employability (IBE) from 2010 shows that the increasing importance of project work has a major impact on corporations. The study summarizes the findings as follows: »Corporate project management has long been part of everyday life in most companies. Three-quarters of the decision-makers surveyed stated that project management structures are already being used in their company. The mean value shows that around 37 percent of all work processes in corporations are now organized in a project-oriented manner.« (IBE 2010) Projects are used primarily where the development and introduction of new products and services, the introduction of new IT systems or generally the change of existing company structures or cultures are concerned. In administration and production-related areas, on the other hand, relatively little work is still done in project form, where the focus is more on routine and stable processes. The increase in number and importance is changing companies and shifting the focus of operational attention from permanent to temporary organisation (Lang/Wagner 2019).

In macroeconomic terms, the manufacturing industry in Germany, such as the automotive industry or mechanical and plant engineering, plays a prominent role in the country's performance. Project work also gained a foothold in Germany in the 1960s, particularly in the context of the aerospace industry (e.g. Dornier), the automotive industry (e.g. Bosch) or in international plant construction (e.g. Uhde), and gradually spread to other economic sectors. It is therefore not surprising that,
according to the GPM study on projectification in Germany, almost 50% of working time in the manufacturing industry is spent on project work (GPM 2015). Only in the construction industry (80%) and in business service providers (60%) the values are higher. In contrast, the area of »Public Service, Education and Health« is rather lagging behind with just over 20% of project work. The sector »Agriculture, Forestry, Fisheries« is even further behind with only 4% of working time in projects.

On the initiative of some large industrial companies, standards for project management were developed as early as the 1960s (Waschek 2014). This work was later continued within the German Institute for Standardization (DIN). Currently, there are two series of standards for the management of projects, the DIN 69901 series of standards for the management of individual projects in five parts and the DIN 69909 series of standards for the management of multiple projects in four parts.

DIN also participates in the development of international (ISO) standards on project management, translates them into German and makes them available to users in the country. There are further standards for project management in specific sectors, e.g. for the construction sector or the development of complex systems on behalf of public authorities. Experts from Germany were also significantly involved in the foundation of IPMA in the mid-1960s and also kicked off GPM at the end of 1970s. GPM aims to actively promote project management in Germany. Important activities are, for example, the networking and exchange of experts from all areas of society, the qualification and certification of project personnel and the support of all persons in the application of the available project management know-how. Through the umbrella organisation of IPMA, GPM also makes the internationally available know-how available for Germany and helps interested German companies to prepare for cooperation with international project partners.

A large number of specialized project management service providers help managers and employees concerned to better meet the increasing challenges of project work through consulting, training and coaching. Such services have recorded above-average growth rates in recent years and now account for a turnover of more than 4 billion euros (BDU 2018). Software firms have also specialised in project management and offer companies tailor-made systems for project handling and the cooperation of distributed supply chains, the planning and control of internal processes in project form, and increasingly also solutions for artificial intelligence in project management (Tiba 2020).

In contrast to Great Britain, however, in Germany there is neither a occupational profile for project managers nor an institution at government level that would take care of the systematic development of project management. Some authorities, cities or even municipalities have set up staff units, a PMO or a specialist department for project management, but different to the economy, project management is only weakly developed in the public sector. It is not by chance that the GPM study on Projectification in Germany shows one of the lowest success rates in this
area. Only 65% of the projects achieve the agreed results within the framework of deadlines and costs according to a self-assessment. In terms of stakeholder satisfaction the situation is even worse (GPM 2015). Three major projects prompted the German government in 2013 to convene a Reform Commission to draw up proposals for improving project management. Among the projects considered were Berlin's major airport, the Elbe Philharmonic Hall in Hamburg (»Elbphilharmonie«) and the relocation of Stuttgart's main railway station underground. A brief summary of the main findings is given here: »The complexity of large projects rather requires a competent and efficient builder-owner, intensive planning using digital possibilities, an honest and well-founded handling of time, costs and risks, clear incentives for all parties involved to achieve the same goals and open communication with the citizens. From demand planning to use, a partnership-based cooperation between the building owners, planners, contractors, consultants and users is necessary. In order to make major projects more successful in the future, the Reform Commission therefore calls for a fundamental cultural change in the planning and implementation of major projects.« (BMVI 2015)

On the basis of the recommendations of the Reform Commission, a »Action Plan for Major Projects«, a »Manual for Civil Participation« and a comprehensive »Guide for Major Projects« were developed. All of this is intended to help ensure that major projects in the public domain are planned, organised and implemented in a way that is exemplary and sets an international benchmark. In addition, specific models for the handling of complex projects have been developed in recent years, for example in the form of »Engineering-Procurement-Construction (EPC)« (Ritsche et al 2019) and secured by financing elements of the Kreditanstalt für Wiederaufbau (KfW). KfW offers tailor-made financing solutions for large-scale projects in Germany and for expansions, exports and new projects abroad.

Other fields of application show that project management in Germany can be successful not only in an industrial context. For example, in urban development in Berlin (Wagner 2018) or in overcoming the refugee crisis in 2015, volunteer project managers were able to successfully organize civic involvement in the service of arriving refugees, to professionally support the planning of cities and communities through a »master plan« or to provide concrete help on site using smart IT solutions. GPM regularly awards prizes for outstanding achievements in project management, including, for example, project management for the 2006 Football World Cup or the establishment of the Tsunami Early Warning System in South-East Asia.

That projectification has an impact on both economic and social development is nothing new. However, there are still very few studies that prove the nature of the influence and the actual effect. Henning and Wald have studied the impact of projectification on economic development in Germany by extending standard input-output modeling and analyzing the static and dynamic effects of projectification. The results indicate that projectification can have positive macroeconomic implications for innovativeness, employment and income that differ across economic sectors. However, projectification may also result in negative impacts. »For agriculture,
increasing projectification reduces innovativeness, which leads to less employment and a decrease in income. Therefore, increasing use of projects as a temporary form of organizing cannot be recommended without reproach, and a ‘wiser’ form of projectification, i.e. an optimal mix of project and non-project work, must be found.« (Henning/Wald 2019)

The increasing number and importance of project work in Germany (and many other countries as well) means that people and a large number of institutions have to deal with the new requirements and find new solutions. Through research in the field of project management by GPM and many researchers and research institutions, the understanding of project work and the corresponding need for action is increasing. These needs for action mean changes for people, organisations and institutions in Germany. The former can be prepared for these challenges by specialized service providers in the form of qualification and certification. For example, GPM in Germany qualifies and certifies more than 5000 people in its competence model every year. This helps on the one hand to complete projects more successfully and on the other hand to prepare people for the future.

Organisations and institutions are also facing change. Increasing projectification is challenging traditional approaches, organizational structures and processes, and culture. Specialized service providers help these organizations to successfully manage this change on the basis of proven standards and norms and to prepare themselves for project work in a future-proof manner. Projects are also used at the macro level of society in Germany to address challenges such as the refugee crisis. This requires cooperation at all levels, i.e. as became clear in 2015, from civic involvement to voluntary work by associations and the professional work of state institutions.

As shown above, projectification can also lead to more innovation, employment and growth. However, the exact impact of project work on economic and social development requires significantly more research work in order to understand the demands on all participants and to translate them into concrete measures. This also includes the analysis of the negative side effects of projectification. What are the consequences of project work on the working time of employees? What does temporary employment in projects mean for the so far rather permanent employment in companies? How are people involved in the decision to select and prioritize projects at the societal level? What scope of action do project participants have and are they able to deal with it in a meaningful way? Many open questions that arise in the context of projectification. This offers the opportunity to find answers collectively within the framework of research initiatives such as the international research programme »Capabilities for delivering projects in the context of societal development (CaProSoc)« initiated by the Alma Mater Europaea (Wagner 2020).

**Conclusion**

Project work and project management have gained significantly in importance for our society in recent years. Not only in the economy, but also in the public service and in many other areas of our society, projects have become part of everyday life. These changes, also known as
"projectification", have a significant impact on everyone involved, from the micro to the macro level of society. Although number and importance of projects in the context of society continues to increase, there is still relatively little research on the impact of this development on the society and its development. Indeed, the spread of the project-based form of work not only leads to changes in forms of organisation, but also to changes at the societal level, including the institutions concerned. This article deals with the developments in Germany as an example. The findings are therefore not directly transferable to other countries or as general developments. Since there are relatively few studies on project work at the societal level, the findings presented here are certainly not complete and require further, in-depth research. This is precisely the aim of further studies by the author and an international research programme initiated by the Alma Mater Europaea.

Literature

- Ritsche, Frank-Peter, Reinhard Wagner, Peter Schlemmer, Mark Steinkamp and Bernhard Valnion. 2019. Innovation Project EPC 4.0 – Unleashing the hidden potential – Final Report. Düsseldorf: ProjectTeam and Partners
- Tiba.2020. Shaping the Future. Available at: https://www.tiba.de/aktuelles/downloadarea/
About the Author

Reinhard Wagner
Germany

Reinhard Wagner has been active for more than 35 years in the field of project-related leadership, in such diverse sectors as Automotive, Engineering, and Consultancy, as well as various not-for-profit organizations. As Managing Director of Tiba Managementberatung GmbH, a leading PM Consultancy in Munich/Germany, he supports executives of industrial clients in transforming their companies towards a project-oriented, adaptive and sustainably successful organization. Reinhard Wagner has published 36 books as well as several hundred articles and blogposts in the field of project, program and project portfolio management. In more than 20 years of voluntary engagement he served the German Project Management Association (GPM) as well as the International Project Management Association (IPMA) in a range of leadership roles and was granted for his international commitment with the Honorary Fellowship of several IPMA Member Associations. Reinhard is Senior Lecturer at the Alma Mater Europaea and is currently finishing his doctoral thesis on the topic of Project Society. He can be contacted via reinhard.wagner@almamater.si