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CHARACTERIZATION OF PROJECT SUCCESS IN SMALL AND MEDIUM-SIZED ENTERPRISES (SME)

Abstract: *In 2017, around 99.5% of all companies in Germany belonged to the small and medium-sized enterprise category. They generated a turnover of 2.33 trillion euros, corresponding to 35.0% of the total turnover in Germany.*

SMEs are dependent on gaining a competitive advantage through a wide range of unique selling points and specializations in order to stand out from the competition and ensure their long-term existence in the market. The vast majority of products and innovations are planned, developed, and implemented within a project framework.

This paper deals with the questions of which success criteria are particularly important for SMEs, which conditions must be fulfilled, and which monitoring and control measures are necessary to ensure that the project remains on the road to success and has a particularly high probability of being completed successfully.

Extensive literature research was conducted in the course of the investigations. Sources by both project management specialists in the working environment and academic publications from project management associations and interest groups were examined.

Keywords: *Project Management; Project Success; Project Performance; SME*

Article info:
Received 04.11.2019
Accepted 23.03.2020

UDC – 005.8
DOI – 10.24874/IJQR14.03-14



1. Introduction

1.1. Project management and its importance

The planned, controlled, and structured approach to processing activities was not invented in recent decades but goes back hundreds of years. As documented records show, large-scale structures, such as the Great Wall of China or the pyramids of Gizeh, would possibly never have been realized without the application of systematic work processes (Project Management Institute, 2017, p. 1).

At the beginning of the 20th century, project management was introduced into strategic warfare, in which it was no longer used to promote civilian construction projects but to secure strategic advantage (Ohlhausen, 27.04.2011).

With the end of the world wars and the beginning of peacetime, it was necessary to create new regulations in order to unify and coordinate processes. In the context of globalization, more and more companies around the world accepted and adopted the regulations because they recognized the opportunity to sell compatible products worldwide. Project management standards

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can currently be found in five specific regulations, which together contain 27 independent standards (Klotz & Marx, 2018).

1.2. Solid project management approaches

The German Institute for Standardization (DIN), headquartered in Berlin, develops its own standards for Germany in accordance with existing guidelines and regulations. (Deutsches Institut für Normung e.V., 2019). The International Organization for Standardization (ISO) develops and issues regulations and guidelines at the international level (International Standard Organization, 2019 cited from Klotz and Marx). DIN / ISO standards are German standards that have been adopted from the international ISO standards (Klotz & Marx, 2018). The American National Standards Institute (ANSI) is responsible for the preparation, dissemination, and application of standards and regulations in the United States. In this role, it also recognizes the PMBOK® Guide issued by PMI and determines the validity of their standards (American National Standard Institute (ANSI), 2019 cited from Klotz and Marx). Until now, classical procedures, tools, and techniques have been derived from these in order to successfully implement projects with predefined time, cost and personnel frames (Project Management Institute, 2017).

New project management approaches have been developed over the years, with support from existing rules and regulations. The main reason for this has been the ever-increasing digitalization, which has made short iteration phases necessary due to the rapid change.

Twelve principles were adopted from a Manifesto (Beck et al., 2019) which was developed in 2001 by a total of 17 specialists and pioneers of agile project management; together these form the basis for agile methods.

Combining classical and agile methods has recently led to hybrid forms that combine the advantages of both approaches (Habermann, 2013) and are mainly used in projects that do

not necessarily originate in the digital environment.

Although the goal of successfully completing a project situation is always the same, there are considerable differences in the methods and techniques used in the classical and agile approaches. A recent investigation of both approaches has shown that agile methods are still largely unknown to the majority of people and that they are very insecure when using agile techniques (Schadler, 2018, pp. 64-65).

1.3. Small and medium-sized enterprises (SMU)

All three types of enterprise, micro, small, and medium-sized, make an exceptional contribution to the generation of Germany's gross domestic product (Wallau & Haunschild, 2007).

In 2017, about 3.47 million enterprises were classified as SMEs. This corresponded to about 99.5% of all the companies that generated sales from goods and services and/or provided jobs for which social insurance contributions were paid (57.9%) (figure 1).

They generated revenues of 2.33 trillion Euro, which corresponds to 35.0% of the total turnover in Germany.

SMEs thus contributed 57.8% of the total net value added for all companies in 2017 (Institut für Mittelstandsforschung, 2019).



Figure 1. SMEs' share in 2017

Source: IfM Bonn

According to the definition of the Institut für Mittelstandsforschung Bonn, companies are classed as small and medium-sized enterprises if they have a maximum of 499 employees, and their annual turnover does not exceed 50 million Euro (Institut für Mittelstandsforschung, 2016).

Although the European Commission (Recommendation 2003/361) (Kommission der europäischen Gemeinschaft, 06 May 2003) has a similar definition, it is not considered in this paper. The main reason for this is that this paper and its results are aimed at small and medium-sized enterprises in Germany.

2. Material and Methods

2.1. Data collection

This paper examines the current state of research, reported in project management publications. Two different groups served as sources for the collection of contemporary knowledge: The first group comprised national and international publications by project management associations and interest groups. In this group, the aim of the analysis was to highlight and summarize verified findings that have already made a significant contribution to improving project success in companies in the past. The main focus was on strategic and economic aspects. The second group from which knowledge was gathered and summarized covers project managers and people who have acquired knowledge through practical project work, which has been published in books for practitioners. Internal company documents were also reviewed in the context of the analysis of practical evaluations. Narrative interviews were also conducted with the participants, in order to ask questions about individual points and, if necessary, to examine specific topics in greater depth. The aim of the primary data collection from companies was, on the one hand, to discuss possible new approaches in the field of practical project implementation and, on the other hand, to determine whether

the approaches described in the literature were still being used by companies today and contributing to the successful completion of projects.

Investigating both interest groups ensures that the research can maintain a balance between theory and practice and serve as a far-reaching summary, as a basis for further research. Since this paper claims to provide new impulses for small and medium-sized enterprises, it mainly used information sources from or for SMEs.

2.2. Data analysis

The inductive research process proposed by Mile et al. was used to gather and summarize existing knowledge, using quantitative methods (Miles et al., 2014). By compiling the results, it was possible to identify various relationships and dependencies which were then further analyzed and explained under ethical standards (Zyphur & Pierides, 2017). Finally, the primary success factors were divided into those for economic and strategic success so that a further content analysis could be performed (Lang, 2019), independent of possible synergy effects. This paper aimed to show the most crucial success factors, as well as providing new impulses to significantly increase the chances of successful, positive, project implementations in SMEs.

3. Characterization of project success

A recent study by the Association for Project Management (APM) found that 90% of respondents considered their project to be "reasonably successful," although only 22% of the projects completely met the agreed goals. In terms of costs and budget, only 87.5% of projects achieved their targets while slightly fewer, 83.6%, fulfilled the time requirements. According to the study, 6% of all projects failed and were utterly unsuccessful (Association for Project Management, 2015). Successful project

management requires that certain pitfalls are avoided (Andersen et al., 1995, pp. 31-50).

Therefore, at a time when competitive conditions in the business world are constantly growing, successful project management is seen as a competitive core competence (Horn-Vahlefeld, 2012).

In theory, a project is generally considered to be successful if the incomes and revenues generated at its end exceed the costs and expenses incurred during the project period (Klakegg et al., 2010, p. 11).

In contrast to the previous definition, which emphasizes the economic aspects, there are other definitions in the literature that measure project success by the degree to which project management fulfills its obligations. A project is considered to have been successful if the correct method (classic, agile, or hybrid) was used, the project manager's leadership style was in line with the company's internal guidelines, and all the employees involved worked in compliance with the appropriate codes of conduct and moral standards (Patzak & Rattay, 2018, p. 35). In general, projects can be positively influenced by a good leadership style and a company structure that is focused on project implementation (Simard et al., 2018).

Every manager should be aware that motivated and committed employees are the core of a successful project team and that a project's success is decisively related to the employees' competence (Welch & Welch, 2005, p. 93). Therefore, during the process of recruiting and selecting the project team members, particular importance should be attached to ensuring that in addition to sound project experience, all the employees have the necessary soft skills to fit into the group, according to their areas of responsibility (Banfield & Kay, 2012, pp. 95-98).

„Nothing matters more in winning than getting the right people on the field.“

(Banfield & Kay, 2012, p. 95 cited from Welch and Welch, 2005)

Outside the organization, close ties to stakeholders and organizations, which should be involved in the project as early as possible, are necessary to achieve the required goals (Reichert, 2009, pp. 89-91). New research supports this thesis. They see the need to present the project objectives to stakeholders in such a way that they are "specific," "attainable," and "comprehensive" (Zwikael et al., 2018).

Key success factors in project management include PM tools, PM practices, and PM support. Another factor is the team members' individual performance, which becomes most effective when the project members form a team in which each individual's work merges into collaborative teamwork (Jitpaiboon et al., 2019, pp. 283-284). The unreserved, complete integration of all project participants, as well as the team's firm cohesion, are regarded as fundamental prerequisites for successful project implementation (Demirkesen & Ozorhon, 2017). The managers must create the basis for an honest exchange, focused on the common goal orientation (Chen & Lin, 2018).

The project management theory, yin-yang, describes a similar approach: It states that subjective satisfaction (Yin) and objective success (Yang) are basically present in every project and continuously influence each other (Usher & Whitty, 2017).

In addition to fulfilling the three main criteria of the iron triangle (quality, costs, and time), the project manager's main tasks include controlling administrative sub-areas, such as personnel, as well as risk and contract management. As they are able to exert influence on all project-relevant areas, the project manager can be regarded as the person primarily responsible for determining its outcome (Radujkovic & Sjekavica, 2017 cited by Project Management Institute *PMBOK Guide* 5th Edition). If the aim is to determine the project success of non-profit departments, this can be done by utilizing internal division key figures (Kim et al., 2018). The key figures from the areas of

"client and society KPIs," "staff and volunteer KPIs" and "funder, partner and organizational KPIs" have proven to be particularly suitable indicators (Anderson & Lannon, 2018).

A closer look at project execution reveals that each project has uncertainty factors (Marcelino-Sádaba et al., 2014) that, depending on their impact and probability of occurrence, can have a significant impact on project performance (Lin et al., 2019).

The Global Risk Alliance has published a *Risk Management Guide* specifically for small companies (up to a maximum of 20 employees, according to its own definition), which summarizes the most critical risk influences in 14 categories (Global Risk Alliance, 2005, p. 15). In the context of project realization, special attention should at least be paid to the following categories, as the effects of risk occurrence could have a massive negative direct impact on the project's success:

Financial risks include all financial matters such as budget requirements, salary payments, and tax liabilities that could lead to a project imbalance.

Organizational risks include uncertainties regarding internal structural and organizational requirements. The category also includes risks involving personnel who are necessary for maintaining effective operations.

Strategic risks include all uncertainties directly related to the planning, maintenance, and growth of a company or division.

Reputation risks comprise all negative influences that could lead to the loss of the company's good name, whether due to material defects, defects in service, or misconduct by the company or its employees.

Risks in the *project management* category relate to possible changes in deadlines and costs, quality problems, customer decisions, and unforeseeable events in business development.

Stakeholder management is associated with risks arising from the establishment and maintenance of internal and external interest groups.

Technology Risks are all uncertainties resulting in high costs due to technological change, for example, through implementations, frequent maintenance, or necessary upgrade cycles (Global Risk Alliance, 2005, p. 16).

There is no universal procedure for determining a company's success. Instead, the company decides which key figures it includes in the analysis or defines as the essential decision features.

In principle, however, the procedure should be chosen in such a way that the strategic or economic success can be determined, and a comparison with other projects or companies is possible.

If one tries, for example, to compare the 2009 figures for the gross value per employee in the capital-intensive energy sector (€ 552,584), with those from the hospitality sector (€ 31,673), it can be seen that it is 17 times higher and a comparison is not possible (Söllner, 2011, p. 1090)

In 2010, Steuer & Lange conducted an online survey among eleven start-up companies to determine which criteria they considered to be particularly important in terms of entrepreneurial success (figure 2).

Notwithstanding the fact that the study was only conducted with eleven entrepreneurs and is therefore not highly representative, the survey identifies indicators of business success that are also likely to be decisive for other SMEs.

The results show that, in addition to criteria evaluating more or less personal feelings, the market position, turnover, and profit were regarded as fixed indicators that were suitable for reporting entrepreneurial success (Steuer & Lange, 2010, pp. 17-21).

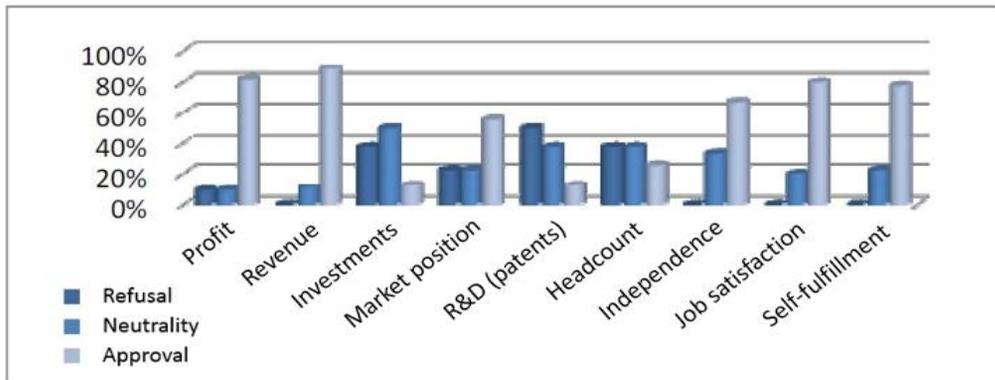


Figure 2. “Success” factors of start-ups (translated from German)

Source: Steuer & Lange

Recent research on business success has shown that the innovative power of SMEs is increasingly being linked to business success. However, this also identified a dilemma: Although small and medium-sized enterprises are convinced of the importance of innovation process, their financial and human resources are usually so limited that no controlled, systematic innovation process can be maintained (Rüggeberg, 2009, p. 17).

Continuous further development and use of innovative approaches are necessary for them to be successful in the market (Smerlinski et al., 2009, pp. 8-13).

3.1. Strategic success

As previously mentioned, the definition of entrepreneurial success depends on the company’s perspective.

However, an evaluation on the basis of various key figures is possible (Todorovic et al., 2015).

The situation is different for strategic success, which normally cannot be measured directly and is, therefore, usually judged by subjective perception. The corporate vision often contributes to the achievement of strategic competitive advantages through forward-looking decisions, innovations, and long-term partnerships (Hinterhuber, 2011, p. 83).

Successful project management offers small and medium-sized companies the opportunity

to benefit strategically. Once the company has managed to convince a new customer of its own performance by means of professional project management, the client will contact it again in future tenders, whereby long-term business relationships can be developed from which both parties can profit. It became clear during the 2008 economic crisis, that those small and medium-sized enterprises which had already built up a vast network of partner companies, could use the synergy effects for the company’s continued existence, thanks to the close relationships (Wollenweber, 2012, p. 64). New research shows that networking helps to save costs and time in a project (Sanchez et al., 2017). In addition, the formation of networks can contribute to the cost-effective internationalization of SMEs and significantly advance innovation creation through effective knowledge transfer (Terstriep, 2009, p. 8). Geyer and Amrisha even see a need for SMEs to exploit their growth potential and open up to foreign markets, as a result of the increasingly globalized economy and changes in the economic framework conditions (Geyer & Amrisha, 2012, pp. 8-9).

3.2. Economic success

If a project is to be subjected to a profitability analysis, the same methods can be applied as when analyzing the entire company. First, it is crucial that all the project tasks have been

completed and that all income and expenses have been booked. If these requirements have been met, a simple mathematical operation can be performed by deducting the expenditure from the actual receipts. A positive result indicates the project's positive profitability, which thus contributes to the increase in the enterprise value (Thommen & Achleitner, 2012, p. 116).

According to Knight, three prerequisites must be fulfilled if a project's success is to be determined during project implementation, without which it is impossible to counter budget overruns at an early stage. First and foremost, he points out that it is not enough simply to give the project manager full responsibility for the project's outcome without ultimately giving him sovereignty overall project expenditures. This is the only way that budget overruns can be identified and counteracted as early as possible.

As a second elementary point, he states that it is only possible for the team to work out solutions and achieve potential savings if all the decision-making processes are presented transparently and all the team members are involved in the decision-making process.

Finally, thirdly, for economic success, it is essential that the decision-maker has access to project-relevant key figures, and reliably and comprehensibly compiled information, at all times (Knight et al., 2012, pp. 41-46).

The calculation of the pay-off period (PoP) can provide significant insights to clarify the question of whether it makes any economic sense to carry out a possible project (Kruschwitz & Löffler, 1999). The calculation is based on the assumption that income and expenses are constant every year, or are regarded as constant.

$$PoP = \frac{\text{project effort}}{\text{additional income}}$$

When evaluating investment projects, the profitability calculation can help in reaching the right decision about a project's implementation or rejection (Schlink, 2019, p. 26 ff.).

The expected annual profit is calculated by subtracting the sum of all expenses from the total income and dividing it by the project duration (in years). Profitability is obtained by dividing the result by the average tied-up capital.

$$\text{Rate of Return} = \frac{\text{Profit} * 100}{\text{Capital}}$$

Like the two previous calculations, the calculation of the return on investment (ROI) is easy to perform and, as has already been experimentally proven, can give important decision impulses (Kogut & Phillips, 1994).

$$ROI = \frac{\text{Average of profit} * 100}{\text{Invested capital}}$$

Both the rate of return and the return on investment calculation take the project's financial aspects into account, but only the average annual profits are included, the actual project duration is not considered. Therefore, although the calculations should provide indications for or against a project, under no circumstances should they be used in isolation, as the sole basis for decision-making (Braehmer, 2009, pp. 18-19).

4. Ensuring success through project controlling

Interestingly, although most organizations are convinced of the importance of project controlling, there is no consistent definition of the term in the literature. However, it can be concluded from the multitude of definitions that 'controlling' is generally understood to be a monitoring and coordination concept (Zirkler et al., 2019, pp. 23-24). The aim of project controlling is to use target/actual comparisons to detect deviations from the initial plan, so that problems can be identified at an early stage, and suitable countermeasures initiated as early as possible (Martens & Vanhoucke, 2017).

Since controlling is primarily responsible for monitoring all payment flows and adherence to the budget throughout the entire project life cycle, controlling also has the task of selecting projects that, although in the early project phases, offer the best prospects of success and profit for the organization while maintaining an acceptable risk situation.

Later, during the implementation phase, controlling must make all project-relevant key figures and data available in a prepared form, so that the project manager and all other decision-makers are able to steer the project in the planned direction by controlling the cash flows (Zirkler et al., 2019, pp. 29-33). The following comparison scenarios have proven to be suitable indicators for comparing the current status with the planned status:

- Target start date and actual start date
- Target finish date and actual finish date
- Target duration and actual duration
- Target effort and actual effort
- Target costs and actual costs

As soon as deviations from the plan become apparent, the entire project team has the task of investigating the causes of the discrepancy. Concerning possible future shifts, milestone trend analysis can help to identify both positive and negative trends (Tiemeyer, 2011, pp. 13-14).

Earned value analysis (EVA), initially developed in the 1960s by US forces (Linssen, 2019), is suitable for monitoring a project's progress and budget (Acebes et al., 2013) (figure 3).

Nowadays, EVA provides useful information to all levels of management (Stratton, 2006). Although earned value analysis, as used today, does not distinguish between critical and non-critical activities (Zhong & Wang, 2011), it is enormously helpful for the project team to be able to monitor investments and cash flows based on trends, during the project period (Kersten, 2004, p. 3).

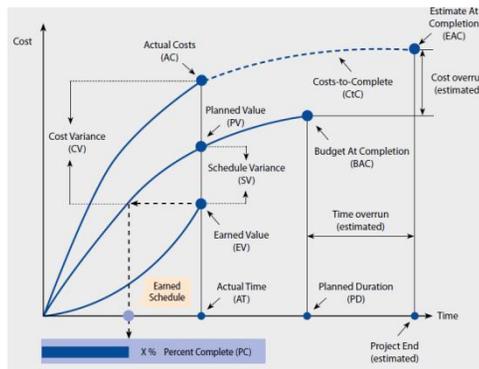


Figure 3. Overview of influencing EVA variables (Stratton, 2006)

Overview of the essential factors of earned value analysis is shown in Table 1.

EAV Parameter	Description	Formula
CV	Cost Variance	$EV - AC$
CPI	Cost Performance Index	$EV : AC$
SV	Schedule Variance	$EV - PV$
SPI	Schedule Performance Index	$EV : PV$
EAC	Estimate at Completion*	$BAC : CPI$
BAC	Budget at Completion	$VAC + EAC$
ETC	Estimate to Complete*	$(BAC : CPI) - AC$
VAC	Variance at Completion	$BAC - EAC$
% Complete	Percent Complete	$EV : BAC \cdot 100$

* assumption that variances will remain

Table 1. EVA Parameter and Formula
Source: own illustration

Direct success factors for the application of the EVA method, include internal factors (e.g., degree of trust), design-related conditions (e.g., visual and graphical reporting), and operation-related conditions (training on EVA) (Bryde et al., 2018).

The ability to combine cost and time factors with a likely prediction when determining earned value KPIs is one of the most significant benefits which can help project managers to make value-based decisions (Burke, 2004, p. 289). The decisive factor here is that the project's actual progress is determined and measured against the previous plans, based on the influencing factors time, costs and degree of completion, so that countermeasures can be taken in good time if necessary (Vanhoucke, 2014, p. 17).

The fact that consideration of the EVA indicators is not only considered to be effective by project organizations, such as PMI®, but now also by official standards bodies, is demonstrated by the recently published, ISO standard 21508:2018 (Earned Value Management in project and program Management), which supplements the existing ISO 21500: 2012 (Guidance on project management) and ISO 21503: 2017 (Project, program and portfolio management - Guidance on program management) standards.

However, in order to exploit the full scope of performance during application and implementation, all relevant standards must be known and kept up to date, as is the case with other directives. This presupposes that, depending on its complexity, sufficient personnel resources have been assigned to the project from the outset to ensure seamless control and monitoring (Bjorvatn & Wald, 2018).

5. Results

Project success is not a coincidence! It is the result of successful management, which amalgamates the team members' individual achievements to form a core competence team, which is continuously challenged and promoted. With regard to risks, the project team also has the task of uncovering, analyzing and monitoring the most likely risk scenarios, or those which are likely to have a large impact and initiating appropriate measures as quickly as possible.

By analyzing a large number of publications, it was possible to identify three main causal criteria which are of great importance for project realization in SMEs.

Strategic success: Although strategic success is difficult to quantify, it is one of three core factors that help SMEs to hold their own in the market in the long term. If companies succeed in building long-term customer relationships through successful project implementation, this can result in lasting

partnerships that can help them survive difficult economic times. If small and medium-sized companies have successfully established networks, it is possible for them to open up new markets or advance internationalization. It has also been shown that it can make sense to accept a project order with a small scope and only a short duration. If a company has previously had the opportunity to convince the client of its efficiency, it is usually possible to obtain larger, follow-up orders without much extra effort. Because of the higher project volume, these orders may have the potential for higher project profits.

Economic success: Although a project is already considered successful, from a commercial point of view, when its revenues exceed its expenses, economic project success is far more complex. A crucial prerequisite for determining a project's current and past success is that all income and expenditure must be recorded in full.

If the manager is to be able to initiate the necessary countermeasures in the event of impending financial losses, he must always be given absolute responsibility for the project, as well as decision-making sovereignty overall expenses. The entire project team also has the task of discussing possible savings potentials and providing management with a fact-based, decision template, with which the project can be brought back onto track for success. It can be determined from the earned value analyses that a project's financial success is subject to fluctuations that are inevitable in every project, depending on the current project phase. Therefore, it is essential that all actions are coordinated, so that the project can be completed with a positive earnings situation.

Project Controlling: Although the literature has not uniformly defined project controlling yet, its importance for being able to carry out successful project implementations is generally recognized by companies. When choosing possible projects, controlling can help to select those which promise the highest chances of success, while taking the risk

situation into account. Later, during the project, controlling helps by providing the decision-makers with important impulses based on target/actual comparisons, so that they can complete the project according to the plans. The possibilities offered by practical project controlling should also be used in advance to simulate various decision options and highlight the best option for the project, having taken the apparent effects into account.

6. Discussions

The results show that decisive influencing factors are subject to the fact that decisions are made by people who rely on their experience as project experts. However, this also has the consequence that it is difficult to identify relevant influencing factors within the strategic success framework that are directly related to the identified success criteria. Often keeping the project on the road to success depends on the decision maker's actions to influence it correctly. Conversely, the extent to which a statement made to one of the stakeholders has influenced the project positively or negatively, for example, is difficult to determine in figures.

On the other hand, it is very possible to calculate the project's probable framework conditions in advance, with the help of relevant economic formulas. For example, by applying mathematical formulas to calculate the pay-off period or the return on investment, the probable financial project framework conditions can be determined together with the possible profit to be derived from them.

The earned value analysis makes it possible, within the project controlling framework, to depict the general project performance, the progress, and the current cost situation, compared to the planning, based on key figures. If all the relevant key figures have been entered correctly, it is possible to counteract negative trends or support positive trends more strongly by means of future forecasts. However, this also means that

personnel resources must be allocated for data maintenance and the project-relevant monitoring of standards and guidelines. The cost of these resources usually has a negative impact on the project's success, as they are pure costs, i.e. without quantifiable added project value.

As a result, there is no single, generally valid, success factor. Instead, the success factor for projects is a collection of many intuitive, well-thought-out, or tactical measures that combine to make a project successful and thus ensure the long-term success of small and medium-sized enterprises. In addition to the concrete success factors discussed, a company can significantly influence the chances of a positive project outcome by managing current and future risk situations adequately. This includes engaging in all activities that identify and assess risks, discussing and implementing appropriate countermeasures, and monitoring their effectiveness on an ongoing basis (Falkner & Hiebl, 2015).

Further Research: These findings have been carefully compiled from various sources in the literature. However, the theoretical approaches have not been confirmed by practical experiments, and their effectiveness for small and medium-sized enterprises has not been proven. Subsequent research should examine failed or particularly successful projects, on the basis of analyses or mathematical calculations, and thus validate the findings. In addition, the extent to which the success factors identified for SMEs also apply to large enterprises could also be investigated, as well as the extent to which the findings could also be used to increase success in those enterprises.

Limitations: Although all the findings are based on careful research, it is possible that not all the success factors which have a significant influence on SMEs' project success have been identified. It is, therefore, possible that other success factors exist that have not been taken into account in this paper, although they positively influence

project work in small and medium-sized enterprises. It can also be assumed that each company has developed its own processes in order to meet its own needs and requirements. Thus it could be that the success factors mentioned in this paper are jointly responsible for increasing the probability of successful project completion in one company but cannot be directly associated with that of another. Therefore, in each individual case, whether the success factors mentioned fit the corporate structure and the extent to which the success factors discussed are suitable for optimizing the project landscape, must first be checked.

7. Conclusion

The main objective of this study was to identify the essential success criteria for small and medium-sized enterprises, in order to significantly increase the probability of successful project implementations. Our

analysis has shown that project success is not a random event, but the result of many economic, strategic decisions that are based on consistent teamwork. SMEs' consistently high market share, in relation to the total for all companies in Germany, which has been high for years, clearly shows that small and medium-sized companies are able to meet the ever-changing requirements. Although, over the course of time, the project management methods are continually being supplemented by new processes, or existing procedures are being adapted, it can be seen that the success factors which are necessary for creating a project with a successful ending have retained their validity over a more extended period of time.

Funding: The author(s) have not received any financial support. The decision to collect, analyze and interpret the data, as well as the decision to publish the results, was the sole responsibility of the author(s).

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