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Modelling the Effectiveness of Scrum Daily Using SEM: A Mathematical Model for Agile Teams

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Abstract: In the world of modern business, where change is the only constant, traditional methods of managing IT projects are gradually fading into oblivion. More organizations are adopting agile methodologies to flexibly manage projects, continuously deliver value to customers, maximize team efficiency and quickly respond to changing business requirements. One of the most commonly used methods is Scrum, with the key event being the Daily Scrum – a short, daily team meeting aimed at synchronizing progress and addressing any obstacles in the project. *The Scrum Guide*, the official handbook for the method, provides clear guidelines on how to organize this event. However, despite following the same principles, many teams are not satisfied with the quality of their Daily Scrum. This study aims to address this issue by building a theoretical mathematical model that considers selected aspects (Communication, Sprint Goal, Timing, Team Autonomy, and Self-Management) and conducting a Structural Equation Modelling (SEM) analysis. The findings will help identify factors worth considering to make the Daily Scrum as effective as possible.

Keywords: Scrum Team, Scrum Daily, Scrum Daily effectiveness, structural equation modelling

1. Introduction

The IT industry is one of the fastest-growing sectors. Technological advancements and increasing competition force teams to constantly adapt to changing market conditions and demands. Agile methodologies, particularly Scrum, were developed as a response, offering a flexible approach to project management that contrasts with traditional techniques. Scrum emphasises communication, close collaboration with clients and iterative delivery of business value.

A critical component of the methodology is the Daily Scrum, a concise, daily meeting intended to synchronize information, monitor progress towards the Sprint

Goal and address impediments. Despite its fundamental role within the Scrum framework, the author has observed that this practice is frequently overlooked in real-world application. Notably, many developers perceive it as redundant and ineffective, which is particularly troubling given its significance in ensuring the successful implementation of Scrum.

The study aims to identify factors affecting the quality of these meetings, understand the specific challenges faced by Agile teams and propose solutions to address them. The research problem can thus be defined as follows: How do selected aspects influence the effectiveness of Daily Scrum meetings within the Scrum methodology?

To achieve the aim, the following research questions have been posed.

- Do the identified factors affect the effectiveness of Scrum Daily?
- How do the proposed factors influence the effectiveness of Scrum Daily?
- What are the most common problems associated with Scrum Daily?
- What strategies can help improve the quality of Scrum Daily?

The study was conducted using a quantitative method. This approach aims to establish causal relationships using mathematical and statistical techniques. The methodology is characterized by a high degree of objectivity and the results of quantitative research can be generalized to a larger population.

2. Theoretical Background

Agile software development methods generally attract the interest of researchers. In-depth literature reviews have shown that many aspects have already been studied, but there has been little focus on what essentially contributes to their effectiveness.

The research that may offer valuable insights into the effectiveness of the Scrum Daily specifically, comprises publications that focus on the Scrum Team itself.

Kristinsdottir et al. (2016) examined how Product Owners (PO) communicate with developers and manage the challenges. The research highlighted communication and the indirect leadership role of POs as key challenges. Effective communication skills are crucial. POs should encourage a broad perspective within the team and inspire developers to engage deeply with the product.

Hidayati et al. (2020) identified key hard and soft skills needed in Scrum Teams. Both junior and senior developers ranked communication and interpersonal skills as the most important, highlighting the growing recognition of soft skills in the IT industry, which were undervalued under conventional project management.

In 2021 Morandini et al. evaluated how theoretical Scrum principles translate into real-world execution. The primary goal was to identify best practices in Scrum Teams and compare how they align with theory. While most respondents conducted Scrum Daily according to the recommendations, nearly half felt these meetings were ineffective. The study therefore proposed several improvements:

reviewing the Scrum Daily agenda to focus on the most important aspects, involving developers in task prioritisation and ensuring Backlog items are complete to facilitate implementation.

Moe et al. (2010) examined how Scrum impacts team dynamics. The study found that a lack of interdisciplinarity and team member specialization negatively affected communication. Issues were concealed and the lack of collaboration led to delays and significant project errors. The key takeaways are that communication is the foundation of effective collaboration and Scrum Daily plays a crucial role here. Without good communication, these meetings lose their effectiveness, potentially jeopardizing the entire project.

Ultimately, the most relevant publication is a study by Verwijs and Russo from 2021 which, in brief, mathematically models the impact of various factors on the overall effectiveness of a Scrum Team.

The article was prompted by the fact that, although attempts have been made to identify aspects leading to success in agile software development, there is no research that explains why some Scrum Teams are more effective than others. The authors posed two research questions:

RQ1: What are the key factors that determine high Scrum Team effectiveness and how do they relate to each other?

RQ2: Can this theoretical model be generalized to all Scrum Teams?

It is also important to note that only factors at the team level are considered. The research process employed a mixed-methods approach, combining quantitative and qualitative methods and was divided into two parts.

The first part was an exploratory case study aimed at identifying potentially significant factors. As a result, 16 key themes were identified, along with six high-level dimensions that group them. The results were used to induce testable hypotheses.

The first dimension is team effectiveness which is expressed through stakeholder satisfaction and team morale. The second dimension is responsiveness and is practically realized through the refinement and release frequency. Stakeholder concern is another concept in the model. This variable manifests in four areas: focus on value, collaboration with stakeholders, the quality of Sprint Reviews, and shared goals. The fourth dimension is team autonomy, influenced by self-management and cross-functionality. As next, there is also continuous improvement. This variable encompasses Sprint Retrospective quality, concern for quality, psychological safety, shared learning and the learning environment. The final variable is management support. In this case, only one factor was proposed, named exactly as the variable itself.

The extensive case study led the researchers to formulate the hypotheses and the following conclusions were drawn based on the findings.

Firstly, the overall effectiveness of the Scrum methodology is largely determined at the team level. The most relevant insights concern how a supportive environment

positively impacts team responsiveness and, consequently, its effectiveness. As the researchers emphasize, in the spirit of continuous skill development, teams learn how to overcome obstacles and improve collaboration. It also turns out that organizations aiming to improve Scrum Team effectiveness benefit from investing in teams' autonomy. The more independence teams experience, the more likely they are to take responsibility for improving their work as a team, which translates into increased effectiveness. Lastly, team responsiveness directly impacts its effectiveness, as understanding needs and responding appropriately is the foundation of the Agile approach and largely determines project success.

3. Research Design

3.1. Research Tool, Variables

The significant variables, whose impact on the quality of Scrum Daily meetings the author wishes to examine, are described in Tab. 1.

Table 1. Model Variables

Variable	Authors
Communication Skills	Kristinsdottir et al.; Hidayati et al.
Sprint Goal	Verwijs and Russo; Schwaber and Sutherland (Scrum founders)
Timing	Morandini et al.; Schwaber and Sutherland (Scrum founders)
Team Autonomy	Verwijs and Russo
Self-Management	Moe et al.; Schwaber and Sutherland (Scrum founders)

Source: own elaboration.

The research tool was a survey designed to evaluate the five proposed variables and utilising a 5-point Likert scale for subjective assessment. The operationalization of the variables was based on verified sources, including *Communication Skills Assessment Scale* (n.d.), relevant sections of the survey developed by Verwijs and Russo, resources from Scrum official website and Time Management Questionnaire Template (n.d.). Additionally, an open-ended question was included, addressing other challenges faced by members of Scrum Teams.

3.2. Research Sample

The inclusion criterion for the study was employment in the IT sector with the application of the Scrum methodology in the software development process, whereas the exclusion criterion was defined as the absence of professional experience with Scrum.

The research tool was subjected to a pilot test in December 2023. In this manner, an evaluation of *face validity* was conducted, which pertains to how the test is perceived by the participants and whether it is appropriate for the intended purpose. The test is generally conducted on a small scale. The study involved 21 programmers specializing in agile software development. The pilot phase was successful – no complaints were received regarding the questionnaire used for the study.

In the next phase, in February 2024, the main study was conducted. Participation in the survey was entirely voluntary and participants were assured of the anonymity and confidentiality of their data. The data collection process spanned a duration of one month.

A total of 113 individuals participated in the study. 74.5% of the respondents consisted of technical staff. Further 14.5% were Scrum Masters, 21.8% held the position of Product Owner and the remaining 9.1% were other stakeholders. Overall, the respondents exhibit significant experience with Scrum. 41.8% reported more than five years of practice, 49.1% – between two and five years of expertise, and only 9.1% of the respondents have been working in a Scrum team for less than two years.

3.3. Method

Similarly to the research conducted by Verwijs and Russo, causal relationships pertaining to the effectiveness of Scrum Daily were analysed using Structural Equation Modelling (SEM) (Kaplan, 2009). This approach emerged in response to the limitations of classical multivariate analysis methods, such as the capability to model only simple relationships and the assumption that all variables must be observable and measurable without error.

Generally, SEM excels in modelling complex relationships among multiple variables. Covariance-Based SEM and Partial Least Squares SEM are most widely used applications of this method. To elaborate, CB-SEM is specifically used for hypothesis testing and evaluating theories. This approach employs a correlation matrix between dependent and independent variables to assess the degree to which the model aligns with empirical data. For the study of Scrum Daily effectiveness, where a potential theoretical model has already been developed, covariance-based SEM is applicable.

3.4. Model

The model comprises a structural model, which defines the causal relationships between exogenous and endogenous variables and a measurement model, which specifies the relationships between observable variables and theoretical constructs, where each observable variable is associated with at least one latent variable.

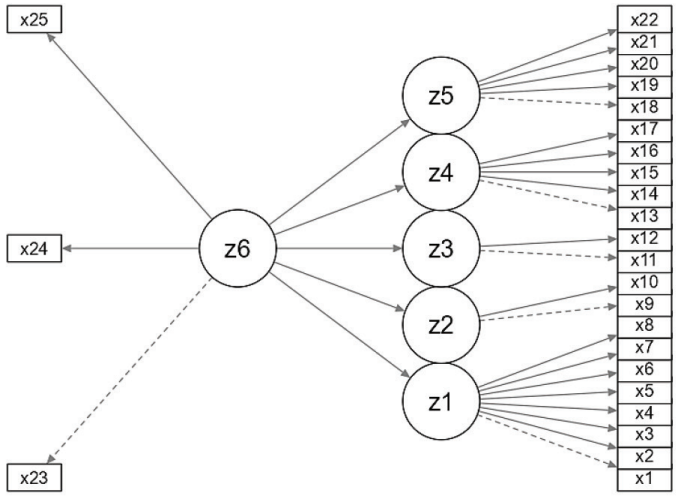

Fig. 1. Data model

Source: own elaboration.

z1-z6 are the designations of the variables representing theoretical constructs, respectively: Communication Skills, Sprint Goal, Timing, Team Autonomy, Self--Management and Scrum Daily Effectiveness.

x1-x25 correspond to indicator variables, measured using questionnaire items.

Table 2. Indicator variables

Variable	Significance
1	2
x1	the degree of openness and honesty when sharing information
x2	the degree of understanding that the message sent may differ from received
x3	the degree of effort to be precise in conveying messages
x4	the frequency of using specialized language with individuals who may not understand it
x5	the degree of avoiding the use of slang and idioms with individuals who might be offended by them
x6	the degree of effort taken in considering how to convey a message so that it is best understood
x7	the frequency of forming opinions based on what one hears rather than personal beliefs
x8	the frequency of making efforts to listen to ideas with which one disagrees
x9	the degree of clarity of sprint goals within the team
x10	the degree of clarity in formulating the sprint goal during sprint planning
x11	the degree of regularity of the Scrum Daily

Table 2, cont.

1	2
x12	the degree of adherence to the timebox of the Scrum Daily
x13	the degree of the team's responsibility for planning its capacity
x14	the degree of the team's involvement in decision-making considering working method
x15	the degree of assigning responsibility to individual team members for specific specializations
x16	the degree of collaboration among team members regardless of their specialization
x17	the degree of keeping each other informed about what one is working on
x18	the frequency of scheduling before starting work
x19	the degree of awareness of the time and effort required to complete tasks
x20	the frequency of setting priorities
x21	the frequency of completing the most important/challenging tasks first
x22	the frequency of completing tasks at the last minute/missing deadlines
x23	the degree to which respondents have all the information to continue working towards the sprint goal after Scrum Daily
x24	the degree to which respondents address their impediments during Scrum Daily
x25	the overall degree of recognition of the effectiveness of Scrum Daily

Source: own elaboration.

4. Results and Interpretation

To conduct the analysis, the free, open-source software Jamovi was used. This tool offers a range of advanced statistical functions including SEM.

4.1. Fit Indices

Particular attention should be paid to the CFI and TLI. These are comparative Fit indices that compare our specified model to a null model. The values range from 0 to 1, with higher values being desirable. Various authors, including Xia and Yang (2019), suggest a good model fit with values around 0.9 and an excellent fit above the threshold of 0.95 for both indices. Although the obtained values are below these thresholds, it is important to note that there is no definitive cutoff value that unequivocally determines the quality of model fit. In the context of an amateur study, conducted on a relatively small scale and examining rather elusive relationships, CFI and TLI values of 0.874 and 0.860 respectively can be considered decent and allow for reliable conclusions from the SEM analysis.

Table 3. Model fit indices

Index	Model	Scaled
Comparative Fit Index (CFI)	0.875	0.796
Tucker-Lewis Index (TLI)	0.861	0.773
Bentler-Bonett Non-normed Index (NNFI)	0.861	0.773
Relative Noncentrality Index (RNI)	0.875	0.796
Bentler-Bonett Normed Fit Index (NFI)	0.840	0.703
Bollen's Relative Fit Index (RFI)	0.822	0.670
Bollen's Incremental Fit Index (IFI)	0.875	0.799
Parsimony Normed Fit Index (PNFI)	0.756	

Source: own elaboration.

4.2. Model Estimates

In the context of the measurement model, the most significant elements are the values of the estimates and the *p*-statistics.

Table 4. Model estimates

Latent	Observed	Estimate	SE	95% confidence intervals		*β*	*z*	*p*
				Lower	Upper			
z6	x23	1.0000	0.0000	1.0000	1.000	0.6504		
	x24	1.0712	0.1019	0.8715	1.271	0.6967	10.516	< .001
	x25	0.8380	0.1161	0.6104	1.066	0.5450	7.219	< .001
	z1	0.7922	0.1141	0.5685	1.016	0.8893	6.941	< .001
	z2	1.0089	0.1022	0.8085	1.209	0.6818	9.871	< .001
	z3	0.1787	0.1413	–0.0982	0.456	0.3744	1.265	0.206
	z4	0.9041	0.1009	0.7063	1.102	1.0262	8.959	< .001
	z5	0.7316	0.0973	0.5409	0.922	0.6841	7.521	< .001

Source: own elaboration.

The estimate signifies both the strength and direction of the relationship between a pair of variables, while the sign of the estimate denotes the direction of the relationship.

The *p*-value indicates the statistical significance of the relationship, it is used to support or reject the null hypothesis (in this case, it concerns the existence of the relationship between variables). For small *p*-values (here less than or equal to 0.05), there is no basis to reject the hypothesis.

Based on the obtained results, the following conclusions can be drawn:

- Communication skills [of team members] do affect the effectiveness of Scrum Daily (z6 -> z1). For the variable pair the *p*-value suggests the statistical significance of this relationship. The estimate is equal to 0.7922, indicating a strong positive relationship – an increase in z1 is associated with an increase in z6.
- The Sprint Goal does affect the effectiveness of Scrum Daily (z6 -> z2). For the variable pair the *p*-value suggests the statistical significance of this relationship. The estimate is equal to 1.0089, indicating an extremely strong positive relationship – an increase in z2 is associated with an increase in z6.
- Timing does not affect the effectiveness of Scrum Daily (z6 -> z3). The estimate is equal to 0.1787, yet the *p*-value does not reach the level of statistical significance, indicating that there is no relationship.
- Team autonomy does affect the effectiveness of Scrum Daily (z6 -> z4). For the variable pair the *p*-value suggests the statistical significance of this relationship. The estimate is equal to 0.9041, indicating an extremely strong positive relationship between z6 and z4 – an increase in z4 is associated with an increase in z6.
- Self-management does affect the effectiveness of Scrum Daily (z6 -> z5). For the variable pair z6 and z5, the *p*-value suggests the statistical significance of this relationship. The estimate is equal to 0.7316, indicating a strong positive relationship – an increase in z5 is associated with an increase in z6.

4.3. Other Reported Issues Concerning Scrum Daily

An examination of the issues encountered by team members can yield valuable insights into the optimisation of the process. Through the analysis and categorization of responses from an open-ended question, several principal areas were identified that respondents believe diminish the efficacy of Scrum Daily meetings.

The most prevalent issue appears to be the occurrence of lengthy and often overly technical discussions. Prolonged dialogues lead to a loss of time and reduce the focus of individuals not directly engaged in the conversation. Furthermore, this overemphasis may result in a loss of business perspective and a diminished focus on value delivery.

The second concern pertains to the challenges associated with team size. Respondents believe that working within large groups can result in disorder and impede effective communication. Additionally, managing a sizable team presents significant challenges, including an effective communication style promotion.

Another noted difficulty, partially related to operating within a multicultural environment, involves language barriers. Respondents reported that varying levels of language proficiency impact the quality of communication and contribute to the extension of Scrum event durations. Moreover, inadequate language skills can lead to misunderstandings, thereby affecting overall project efficiency and customer satisfaction.

Respondents also identified absenteeism of team members as further factor, particularly when the meetings are scheduled early in the day. The absence of key personnel disrupts the flow of information, especially if the absent individual is solely responsible for specific tasks.

5. Conclusions

5.1. The Model – Practical Implications

The variable most strongly associated with the subject of this study is a well--defined Sprint Goal. It is therefore essential to ensure that the goals set are both understandable and realistic. A clear Goal directs the discussion topics and serves as a reference point for evaluation. Moreover, it serves as a source of motivation for the team-shared objective drives team members to become more engaged in the project.

Similarly strong is the positive impact of high team autonomy. This result aligns with the research of Verwijs and Russo (2021). More autonomous teams can use the Daily time more productively because their ability to independently make decisions on crucial matters. Organizations should therefore support team autonomy by providing the necessary resources, tools and decision-making authority. This approach allows team members greater freedom in organizing their work, promotes creative thinking and leads to innovative ideas. Another aspect to consider here is the selection of working methods – independent experimentation with different approaches allows for finding those most suitable for team's dynamics and project needs. All of this must be underpinned by a culture of collaboration and the support in solving problems and removing obstacles.

High communication skills among team members also have a significant impact on the quality of event. For the appropriate synchronization of information, smooth communication flow and inspection of Sprint progress, it is crucial to communicate concisely, without delving into technical complexities. At the same time, an open attitude toward actively listening to what colleagues have to say is essential. The research suggests that organizations should raise awareness of the importance of soft skills and strive to understand how these skills affect the effectiveness of the entire processes. A culture of open and effective communication should be promoted within teams and investments in developing these skills should be made. Such practices help train the ability to convey information within the team and build awareness of colleagues' communication needs and styles. This will contribute to the development of effective mechanisms for exchanging ideas during the Daily, based not only on mutual support and collaboration but also on a better understanding of shared goals and tasks. Moreover, when team members feel heard and valued for their contributions to the discussion, they feel more motivated, which boosts team morale.

Finally, team self-organization is also statistically linked to the effectiveness of the Daily. In this context, the ability to self-organize contributes to maintaining control over tasks, making it easier to discuss progress and make decisions. In practice, a culture of mutual trust for employees in their pursuit of self-organization is crucial. A self-organizing team can independently make day-to--day decisions without the support from higher-level managers. Demonstrating initiative also enables rapid response to changes and proactive measures to resolve issues. Team members should be encouraged to take responsibility for organizing work in the Sprint, including organizing the Scrum Daily and other events. Collectively determining the format and flow of meetings and involving the team in preparations increases employee engagement and motivation, which translates into more effective meetings. It is also important to regularly monitor team members' progress in this regard and provide constructive feedback.

5.2. Other Issues – Practical Implications

Addressing issues related to the effectiveness of daily meetings in the Scrum methodology may require the application of various strategies. The following paragraphs outline those strategies that respond to the challenges observed by the respondents.

Limiting meeting duration and using moderation techniques – establishing and adhering to strict time limits can help prevent unnecessary prolongation of discussions. Additionally, to maintain focus, ensure everyone has a chance to express their views and better direct the discussions, it is beneficial to introduce appropriate moderation techniques. The first one is Powerful Questions. According to Scrum experts, unlocking a team's potential can be achieved by asking the right questions rather than providing ready-made answers. In Scrum Daily context, the following questions can be particularly effective:

- "What is the biggest bottleneck in our current work together? What can we do today towards removing it?"
- "What is keeping us from completing this task? Where do we need help?"
- "Instead of starting something new, where can you assist others in finishing the work already in progress?"

If the team is already working within a format that includes responding to the classic three questions ("What did I do yesterday?", "What will I do today?", "Do I have any obstacles?"), it might suffice to adjust the terminology used to better promote a focus on delivering value:

- "What did you accomplish yesterday that we can leverage?"
- "What do you plan to accomplish today that we need to utilize or coordinate?"
- "Is there anything beyond your control that might prevent you from achieving today's goal?"

To prevent overly specific discussions, the ELMO technique (Enough, Let's Move On) can be introduced, where participants signal, by raising an ELMO toy, that it is time to conclude the current topic and move on to the next. For topics that are too technical to discuss during the Daily but still important for the project, the Parking Lot technique can be used – these topics can be noted in a visible place and scheduled for a separate meeting. This approach ensures that important issues are not overlooked, while also not disrupting the current discussion.

Employing scaling techniques – Scrum founders recommend that teams consist of 3 to 9 members. It is therefore unsurprising that respondents find working in larger teams detrimental to process efficiency. If this issue arises in an organization, it is worth considering at least splitting the team into smaller groups to enhance communication clarity. However, the best solution would be to move away from classic Scrum in favour of a framework that allows for scaling. Nexus or SAFe are worthy options to consider.

Supporting intercultural communication and collective learning. The issue of language barriers is fortunately recognized by employers and offering language courses has become a standard practice. Cultural differences seem to be a more challenging issue. To address this, it would be essential enable team members from diverse backgrounds to better understand both the impact of their behaviours and the working styles of their colleagues. Another step that could potentially enhance the effectiveness of such a team would be organizing communication workshops, which would help develop techniques for effectively resolving issues within a heterogeneous team.

Establishing clear rules regarding attendance at meetings. Improving participants' punctuality typically requires a combination of different strategies and appropriate oversight. The meeting time should align as much as possible with the availability and preferences of all team members and be established collectively. This aims to increase the likelihood of punctual arrival and regular attendance at the event.

Promoting awareness of Scrum principles – this is essential for ensuring that everyone involved in the agile software development process understands the rules governing it. Regular Scrum training can help solidify the knowledge of team members, which may lead to improvements in the quality of daily meetings. Importantly, managers and other stakeholders should also be equally familiar with the framework's principles to shift from micro-management practices toward strengthening team autonomy and embracing the values of Scrum. Such knowledge enables a better understanding and support of the team's workflow, which can increase mutual satisfaction with the collaboration. Each person is then clear about their responsibilities and role expectations, which helps to avoid conflicts. It is also important not to forget to organize regular retrospective meetings and promote a feedback culture – this practice supports continuous process improvement by facilitating constructive discussions on strengths and weaknesses, identifying challenges and collaboratively finding solutions.

5.3. Limitations

The findings of this research should not be regarded as a definitive guide for all teams using Scrum, despite considerable efforts to ensure their reliability. The study's limitations arise from the small sample size, which precludes the generalization of results. The fact that most respondents were from a single organization further introduces the influence of specific organizational culture on the data. Additionally, individual experiences, beliefs and preferences can lead to varied interpretations of the same phenomena by the responders. Furthermore, the research model concentrated primarily on internal team dynamics, potentially overlooking external factors, such as project-specific conditions, that could also impact the effectiveness of Scrum Daily. Consequently, this model should be considered rather as a guideline for teams working with the method and looking for the ideas to improve the process.

5.4. Future Research Directions

The future development of the study should primarily focus on refining and adapting the model. The first potential extension would involve incorporating so--called contextual aspects. These include factors at the level of organizational culture in a given workplace, team structure, and project specifics. Integrating variables that define the operational environment ensures that the obtained results can be applicable to various organizational contexts.

Another dimension would be external factors, such as technological advancements, competition, and evolving customer needs. Considering external conditions would optimize the model's ability to predict efficiency within a dynamic business environment, increasing risk and shifting market conditions.

Finally, it is crucial to consider temporal variability. A project team is not static; it evolves over time, with potential changes in its composition, size, or structure. Customer requirements may also differ overtime. The approach to conducting Daily meetings, which may be effective in one phase of the project, might no longer be suitable in another phase after a shift in project direction.

By implementing these improvements, the model will have long-term applicability throughout the entire project lifecycle.

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Efektywność *Scrum Daily* – wybrane aspekty

Streszczenie: W świecie biznesu tradycyjne metody zarządzania projektami IT stopniowo odchodzą w zapomnienie. Coraz więcej organizacji przyjmuje metodyki zwinne, a jedną z najczęściej stosowanych jest *Scrum*, w której kluczowym wydarzeniem jest *Daily Scrum* – krótkie spotkanie zespołu mające na celu synchronizację i rozwiązanie wszelkich przeszkód w projekcie. Pomimo jasnych wytycznych, wiele zespołów pozostaje niezadowolonych z jakości swoich spotkań. Celem tego badania jest rozwiązanie tego problemu przez opracowanie teoretycznego modelu matematycznego, który uwzględnia wybrane aspekty (komunikację, cel sprintu, terminowość, autonomię zespołu i samoorganizację) oraz przeprowadzenie analizy modelowania równań strukturalnych (SEM). Wyniki pomogą zidentyfikować czynniki, które warto wziąć pod uwagę, aby uczynić *Daily Scrum* jak najbardziej efektywnym.

Słowa kluczowe: zespół scrumowy, *Scrum Daily*, efektywność *Scrum Daily*, modelowanie równań strukturalnych