IRBAS www.irbas.academyirmbr.com October 2021
International Review of Basic and Applied Sciences Vol. 9 Issue.4

A Framework for the Selection of Requirement Prioritization Techniques in Agile: A SWOT Analysis Approach

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Abstract

Agile is helping organizations around the world in producing high quality software and there is a significant increase in Agile adoption to gain the benefits. Moreover in Agile, changes in the priority list are a continuous process and the ignorance of important requirements during prioritization will leads towards several issues like unsatisfied customers and low quality of product. Therefore, given the importance of this area, this research paper provides a framework to examine the strategies of selecting Requirement Prioritization (RP) techniques in Agile using Strengths-Weaknesses-Opportunities-Threats (SWOT) Analysis Approach. This research provides the guidelines that can help practitioner to select the suitable prioritization technique by considering the S-O (Strengths- Opportunities) and W-T (Weaknesses-Threats) category of SWOT matrix. However, this type of analysis can be used as a useful tool for highlighting and addressing the problem issues in Agile processes, since the results can be used as improvement strategies in the selection of RP technique in Agile Software Development. The framework will be beneficial for software practitioners to make a right decision about the selection of RP techniques in Agile will increase the chances of project success.

Keywords: *Agile Software Development, Requirements Prioritization, Requirement Change Management, SWOT Analysis Approach.*

Introduction

Several studies have been conducted to investigate the current practice of Agile methodology and depicted that Agile is helping organizations around the world in producing high quality software (Shafinah, Fauziah,

& Deraman, 2014; Wagner, Fernández, Felderer, & Kalinowski, 2017). Furthermore, there is a significant increase in Agile adoption to gain the benefits (Forte & Kloppenborg, 2018; Paganini, 2015; West & Grant, 2010). Moreover, Agile methodology is a new approach and growing very fast in developing countries like Pakistan in comparison with global software Industry (Akhtar, Ahsan, & Sadiq, 2010; Sultana, Motla, Asghar, Jamal, & Azad, 2014). In addition, software projects have many candidate requirements to implement within the constrains such as cost and time. As stated by Berander and Andrews (2005) *"Prioritization is the process to identify the most valuable requirements from the set of requirement by distinguishing the critical to trivial"*.

Moreover, there is a direct effect due to change of requirements on the process of prioritization and after the change, all the requirements need to be re-prioritize (Racheva, Daneva, & Buglione, 2008). The process of Requirement Prioritization (RP) is not similar as of traditional software development approaches (Cao & Ramesh, 2008). In ASD, requirements are re-prioritized after every change. The literature presents many prioritization techniques, yet majority of the RP techniques suffers from critical issues such as uncertainty, complexity, time consumption and scalability (Achimugu, Selamat, Ibrahim, & Mahrin, 2014). Furthermore, the decision of prioritization also depends on other key factors such as importance, complexity, requirement dependencies, penalty, volatility, business value, strategic importance and customer importance in addition to risk, cost and time (Hoff, Fruhling, & Ward, 2008). So far to the best of our knowledge, there is no guideline to help the practitioner in selecting the suitable prioritization technique. Therefore, given the importance of requirement prioritization in requirement change, there is need of a guideline to choose improved technique(s) for prioritization using diverse factors rather to emphasize on single dimension of business value.

Thus, the prime goal of this paper is to provide a framework to choose RP technique after the change of requirement in ASD. Rest of the paper organisation is as follows: Literature review is presented in next section and provides an overview of the RP techniques in combination with its strengths and weaknesses. Research design is presented afterward whereas next section represents a framework based on SWOT analysis. Subsequently, discussion is provided that is followed by conclusion.

Literature Review

The activity of inter-iteration prioritization or continuous RP is an essential approach of Agile. Continuous reprioritization leads the project towards instability if practiced without caution (Racheva et al., 2008). Practitioners however facing difficulties in selecting requirements for implementation at the inter-iteration period (Racheva et al., 2008). Furthermore, from the literature reviewed, it has been analysed that researchers identified the existing prioritization technique suffer from number of limitations (Achimugu et al., 2014; Petersen & Wohlin, 2009; Racheva, Daneva, Herrmann, & Wieringa, 2010). Such as Analytical Hierarchy Process (AHP), kano model, Planning Game (PG), pairwise comparisons, and Value-Oriented Prioritization (VOP) have scalability problems hence only suitable for small number of requirements (Duan, Laurent, Cleland-Huang, & Kwiatkowski, 2009; Rida, Nazir, Tabassum, & Asim, 2017; Thakurta, 2013). In addition, most of the prioritization techniques are slow and time consuming and in term of complexity AHP is deemed to be the extremely challenging approach followed by cost value ranking, pair wise analysis, QFD and VOP (Achimugu et al., 2014; Ali, Hafeez, Hussain, Yang, & Jamal, 2021; Kuengjai & Ramingwong, 2021).

Strategic Analysis Techniques

Strategic analysis is an organization's approach to define its directions, strategies and yielding decisions for resources allocations to pursue its strategies (Austin, 2002). Examples of strategic analysis include: PEST analysis (Political, Economic, Socio-Cultural, Technological), SOAR analysis (Strength, Opportunities, Aspiration, Result), and SWOT (Strength, Weaknesses, Opportunities, Threats) analysis (Downey, 2007). The principal aim of using analysis techniques is to assist organizations to develop a complete awareness

regarding the factors which are involved in business decision making process. Firstly, the PEST analysis is a valuable tool to understand the economic, technological, political and socio-cultural environment within which the organisation operates. In this approach, an external macro-environment is examined in which the organisation exists. Secondly, SOAR analysis framework is used to peek into strategic planning by analysing strengths to yield a perspective of future from present. There are four main components of SOAR analysis as follows: 1) Strengths, 2) Opportunities, 3) Aspirations, and 4) Results. Furthermore, SWOT is an analytical tool that support the systematic thinking and help in the analysis of the factors related to a technology, new product, management or planning (Alshomrani & Qamar, 2012). The external factors are unmanageable that allows or hinders the organization from accomplishing their objective. However, the internal factors are manageable and support organizations to accomplish their objective respectively. The organization can identify its core capabilities by distinguishing the factors in these four fields for planning, building strategies and decision-making (Phadermrod, Crowder, & Wills, 2019).

SWOT Analysis

SWOT is an analytical tool that support the systematic thinking and help in the analysis of the factors related to a technology, new product, management or planning (Alshomrani & Qamar, 2012). Moreover, "SWOT analysis is a process that involves four areas of 'strengths', 'weaknesses', 'opportunities', 'threats'. Where strengths and weaknesses are internal factors and attributes of the organization while the opportunities and threats are external factors and attributes of the environment" (Gurel, 2017). The external factors are unmanageable that allows or hinders the organization from accomplishing their objective. However, the internal factors are manageable and support organizations to accomplish their objective respectively. The organization can identify its core capabilities by distinguishing the factors in these four fields for planning, building strategies and decision-making (Phadermrod et al., 2019). Additionally, SWOT is used as an alternative strategy to make a decision in a particular context. By using SWOT analysis organizations can develop strategies based on their strengths, diminish weaknesses, maximise benefit using opportunities and counteract threats (Shariatmadari, Sarfaraz, Hedayat, & Vadoudi, 2013).

In the context of software development, Shahir, Daneshpajouh, and Ramsin (2008) emphasised the effectiveness of SWOT analysis as a process improvement tool, explicitly aiming prevailing Agile methodologies. The highlighted the issues in Agile process by providing the review of the strengths and weaknesses of Agile processes so the results can be used as improvement strategies. Furthermore, Kumar and Sharma (2015) applied SWOT analysis for assessing the internal limitations and capabilities from the external environment's threats and opportunities, in the context of RE for Web Apps. They provided a core solution to the problem of RE for Web Apps by providing an improved perspective for techniques and tools required to produce a more efficient and cohesive application.

Reason to use SWOT Analysis

SWOT is used as an alternative strategy to make a decision in a particular context. By using SWOT analysis organizations can develop strategies based on their strengths, diminish weaknesses, maximise benefit using opportunities and counteract threats (Shariatmadari et al., 2013). In the context of software development, Shahir, Daneshpajouh, and Ramsin (2008) highlight the effectiveness of SWOT analysis as a process improvement tool, specifically aiming existing Agile methodologies. They highlighted the issues in Agile process by providing the review of the strengths and weaknesses of Agile processes so the results can be used as improvement strategies. Furthermore, Kumar and Sharma (2015), apply SWOT analysis for evaluating the opportunities and threats and internal potential and limitations from the external environment in the context of RE for Web Apps. They provided a basic solution of RE problem for Web Apps giving an enhanced perception to develop a more efficient and cohesive application.

SWOT Matrix

For the concrete strategic actions, after accessing the company's current internal and external situation, the SWOT matrix has been used. By combining the external environment's threats and opportunities with the internal organization's weaknesses and strengths. Only four basic approaches are viable for management as follows: S-O, W-O, S-T and W-T (Weihrich, 2017). The S-O strategy can boost both opportunities and strengths, while S-T strategy maximizes the strengths of a company while minimizing the threats. However, in W-O strategy, the company has more vulnerabilities (weaknesses), but its environment provides loads of opportunities to settle them. Finally, the aim of the W-T strategy is to minimize both threats and weaknesses.

The SWOT matrix is depicted in Figure 1.

Figure 1. SWOT Matrix Adapted by Weihrich (2017)

Research Design

The research design of this paper is based on the comprehensive literature review that is followed by empirical evaluation and on the basis of these two a framework for the selection of PR technique has proposed after the requirement change in ASD. Moreover, Achimugu et al. (2014) isolated 49 RP techniques by conduction an SLR yet there is a dire need of thorough empirical research for organizations to perceive and support the critical practice of RP in Agile. Rather than aiming the development of new prioritization technique, this research takes a different approach and provides the guidelines that can help practitioner to select the suitable prioritization technique and explores the relationship of RP techniques with other factors such as stakeholders, project constraints and requirement nature. Table 1 has been derived from the comprehensive Literature review (Saher, Baharom, & Romli, 2018).

Table-1: Strength and weaknesses of Requirement Prioritization Techniques in Agile adapted (Saher et al., 2018)

Requirement Prioritization Techniques	Strength	Weakness
Analytic hierarchy process (AHP)	The main strength of AHP is to provide reliable result and resolve conflicting objectives (Achimugu et al., 2014).	AHP is challenging for larger project and hence not scalable (Karlsson & Ryan, 1997) as well as for higher count of requirements, it becomes time consuming (Duan et al., 2009).
Binary Search Tree (BST)	The strength of BST is the fast execution even if it may be scaled up to thousands of requirements (Kaur & Bawa, 2013).	BST comparison is ordinal in nature, because it can identify more favourable requirements but up to what extent they are favourable cannot be identified (Kaur & Bawa, 2013).
Cost-value ranking	The strength of Cost-value ranking is the consideration of both value and cost for the implementation of requirements (Karlsson & Ryan, 1997).	As the requirements count increases, the computational complexity also increases especially when managing their interdependencies (Thakurta, 2013) as well as its time consuming and not scalable (Karlsson & Ryan, 1997).
Cumulative Voting	Strength of Cumulative Voting is it Simplicity and ease of use (Hatton, 2008).	Non-scalable and does not evaluate relative priority difference among large number of requirements (Berander & Andrews, 2005).
Kano Model	Kano strength is its fast execution in term of prioritizing requirement with customer preferences and customer "Trustworthiness" (Fehlmann, 2008).	New product features cannot be suggested as it can only be utilised for analysing the effects (Achimugu et al., 2014); (Racheva et al., 2010); (Rida et al., 2017);
MoSCoW	The main strength of MoSCoW is that it can be utilized equally for large and small requirement count, because it can be easily scalable. Moreover, it is consistent, less difficult and less effort is required to prioritize requirement (Hatton, 2008).	As there is a lack of grading in categories therefore it is hard to identify which *SHOULD* or *COULD* requirements are more significant than others. It is suitable only where customer count is less for product (Zacarias, 2016).
Pair wise analysis	The strength of Pair wise analysis is its nature if informality with the judgments on participants' experiences (Thakurta, 2013).	The main weakness is the unreliability of results. Moreover it is very complicated and with the limitation of scalability (Thakurta, 2013).
Planning Game	The strength of Planning game is its ease of use and fast execution (Ahl, 2005).	Not suitable for large requirement count (Duan et al., 2009).
Quality Functional Deployment (QFD)	QFD strength is preference of customer needs in the form of "voice of the customer" (Achimugu et al., 2014);	QFD weakness is its inconsistencies and scalability, thus suitable for small systems (Raharjo, Xie, & Brombacher, 2006).
Value-oriented prioritization (VOP)	VOP strength is the consideration of Organization business value (Thakurta, 2013).	Un-scalable and doesn't consider requirement dependencies (Thakurta, 2013).

Wiegers' matrix approach	The strength of Matrix prioritization is based on several criteria (penalty, cost, risk and benefit) and its scalability (Achimugu et al., 2014).	Stakeholders can easily manipulate it to achieve their goals (Duan et al., 2009).

Requirement Prioritization technique with its Evaluation Criteria

As stated in the empirical study conducted by Saher, Baharom, & Romli (2020), the most suitable RP criteria for the chosen prioritization technique is illustrated in Figure 2.

From Figure 2, it has been revealed the RP technique importance according to the prioritization evaluation criteria. For instance, Cost value ranking the most appropriate criteria to choose this technique is Business value and customer preference while the reliability of result and the complexity is the major threat, as this technique is not very easy to use.

Figure 2: Requirement Prioritization Techniques with Evaluation Criteria

Proposed framework to select Prioritization Technique

The proposed framework provide guidelines to prioritize requirements with considering all the relevant factors that have an effect on priorities with different stakeholder views together (Lehtola, Kauppinen, & Kujala, 2004). By the insight of the prior literature of requirement prioritization techniques and comparison on different factor of prioritization, this research focuses on providing the guideline to select suitable RP technique. In this study, SWOT analysis is used as an analytical tool that support in the diagnosis of the factors related to the decision making in re-prioritization following the requirement change process. For this purpose, SWOT matrix for requirement prioritization technique has been prepared. Moreover, SWOT analysis, strengths and weaknesses are internal factors and attributes of the organization while the opportunities and threats are external factors (Gurel, 2017). The internal factor of strength and weaknesses are identified by theoretical study as mentioned in literature review. Whereas, the opportunities and threats are extracted from exploratory study and mentioned in study by Saher, Baharom, & Romli (2020).

This section presents the strategies for refining the processes by placing these factors in a SWOT matrix. The result is explained in Table 2. By combining the external environment's threats and opportunities with the internal organization's weaknesses and strengths, the four viable approaches for management are as follows: S-O, W-O, S-T, W-T strategies. By considering the strengths, weaknesses, opportunities, and threats identified, two strategies are within the scope of this research that is S-O (Strength, Opportunities) and W-T (Weaknesses, Threats) (Shahir et al., 2008; Shariatmadari et al., 2013). The S-O strategy is considered as the selection criteria and all the recommended improvement strategies are in the W-O category. The rest of the two strategies are out of the scope of this research.

Table 2: Strategies to select prioritization technique using SWOT Matrix

SWOT Matrix Cost-value ranking		
	Strength	**Weaknesses**
	S1: Capability to combine the judgments of both value and cost of requirements. S2: Cost Value ranking determines top requirements by graph plots to visualize the requirements value against its implementation cost.	W1: Time consuming and un-scalable W2: Requirements computational complexity increases in managing interdependencies as the number of requirements increases
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Cost Value is the best approach while taking both benefit and dependency as a fundamental factor. O2: Need to increase the business value and market share.	Consideration of both cost and value (S1, O1,O2)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Reliability of the result. T2: Complexity	Out-of-scope	Useable for small number of requirement (W1, W2, T2)

Value Oriented Programming		
	Strength	**Weaknesses**
Value Oriented Programming	S1: Organization business value is the important factor in VOP prioritization technique.	W1: Ignores the dependencies among requirements. W2: Suitable for smaller project
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Stakeholder ratings by linking them to identified business values. O2: Customer preferences.	Customer preferences to achieve business value (S1, O1,O2)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Complexity T2: Reliability of the result. T3: Consistency	Out-of-scope	Useable for small projects and number of requirement (W2, T1)
Cumulative Voting		
	Strength	**Weaknesses**
	S1: Simplicity of the approach	W1: Just suitable for small projects with less requirements. W2: Assessment of the relative priority variance among the requirement is not possible.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Ease of use O2: Customers preferences. O3: Business Value. O4: Cost/Benefit/Penalty.	Encourages customer preferences, easy to use and the consideration of business value (S1, O1, O2, O3)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Time consumed. T2: Consistency in result. T3: Reliability of result.	Out-of-scope	Suitable where the evaluation of the relative priority variance among the requirements are not the concern and useable for small number of requirement (W1, W2, T1)
MoSCoW		
	Strength	**Weaknesses**
	S1: It is less difficult, consistent, less effort required and handle large number of alternative.	W1: As there is a lack of grading in categories therefore it is hard to identify

	S2: Suitable for both large and small project and easily scalable..	which *SHOULD* or *COULD* requirements are more significant than others. It is suitable only where customer count is less for product.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Ease of use O2: Customers and stakeholders preferences.	Suitable for both large and small projects. (S1, S2, O1)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Time consumed. T2: Consistency in result. T3: Reliability of the result.	Out-of-scope	Better suited to product with less customers so the consistency and the reliability of result can be maintained. (W1, T2, T3)
	Planning Game	
	Strength	**Weaknesses**
	S1: Fast and Easy to complete the prioritization process. S2: PG is a better alteration of numerical computation.	W1: Problematic with large number of requirements.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Ease of use O2: Business Value.	Consideration of business value and easy to use (S2, O1,O2)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Technical Risk. T2: Reliability of result.	Out-of-scope	Useable for small number of requirement to manage reliability of result (W1, T2)
	Analytic Hierarchy Process (AHP)	
	Strength	**Weaknesses**
	S1: Resolve conflicting objectives. S2: Result of AHP is reliable and consistent.	W1: Time consuming at higher number of requirements. W2: Not scalable so problematic for larger project.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Reliability of the result. O2: Consistency.	Suitable where the consistency and reliability of result is the main consideration (S2, O1,O2)	Out-of-scope

Threats	S-T Strategies	W-T Strategies
T1: Complex in execution. T2: Time consumed.	Out-of-scope	Not preferable for larger project, time consuming for larger number of requirement (W1, W2, T1, T2)
Quality Functional Deployment (QFD)		
	Strength	**Weaknesses**
	S1: QFD is used for customer needs in the form of "voice of the customer".	W1: Suitable for small systems. W2: Scalability issue with inconsistent result.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Customers and stakeholders preferences. O2: Business Value. O3: Consistency	Customers and stakeholders preferences, Consistency in result and business value is the main concern (S1, O1,O2, O3)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Complex in execution. T2: Reliability of result. T3: Time consumed.	Out-of-scope	Not suitable for larger number of requirement (W1, T1, T3)
Binary Search Tree (BST)		
	Strength	**Weaknesses**
	S1: BST could easily scale up to thousands of requirements, and still prioritize requirements very fast.	W1: BST provides a simple ranking of requirements rather than assigning any priority. W2: BST comparison is ordinal in nature, because it can identify more favourable requirements but up to what extent they are favourable cannot be identified.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Scalability	Main concern would be scale up to thousands of requirements (S1, O1)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Complex in execution. T2: Reliability of result. T3: Time consumed.	Out-of-scope	Reliability and complexity (W2, T1, T2)
Wiegers' matrix approach		
	Strength	**Weaknesses**

	S1: Matrix prioritization is based on several criteria (penalty, cost, risk and benefit.) as well as it is easily scalable. S2: Spreadsheet auto-calculates the priority values and very easy to conduct.	W1: It can be easily manipulated by stakeholders to accomplish their objectives.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Customers and stakeholders preferences. O2: No Technical Risk O3: Cost/Benefit/Penalty.	Scalability and customer preferences (S1, O1)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Stakeholder biasness. T2: Complex in execution. T3: Time consumed.	Out-of-scope	Stakeholder biasness (W1, T1)
Kano Model		
	Strength	**Weaknesses**
	S1: Kano is more concerned to the customer preferences for customer "Trustworthiness". S2: Kano method is the fastest way to prioritize requirements.	W1: It can only be used for analysing the effects. W2: It is not for suggesting new product features, something that is quite difficult to achieve.
Opportunities'	**S-O Strategies**	**W-O Strategies**
O1: Ease of use O2: Customers and stakeholders preferences.	Main consideration is fast way to prioritize, customer preferences and customer "Trustworthiness". (S1, S2, O1,O2)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Reliability of the result. T2: Consistency T3: Technical risk	Out-of-scope	Not suitable for new product features, and where the reliability of the result is main concern (W1, W2, T1, T2)
Pair wise analysis		
	Strength	**Weaknesses**
	S1: Criteria for comparing options can remain informal, thereby basing judgments on participants' experiences.	W1: its very complicated, tedious, and deliver unreliable results. W2: Ignores level of detail or sophistication of a multi-criteria analysis. W3: Un-scalable.

Opportunities'	S-O Strategies	W-O Strategies
O1: Customers and stakeholders preferences.	Customers and stakeholders preferences. (S1, O1)	Out-of-scope
Threats	**S-T Strategies**	**W-T Strategies**
T1: Consistency T2: Reliability of the result. T3: Time consumed	Out-of-scope	Very complicated and Not suitable for larger number of requirement (W1, W3, T1, T2)

Table 2 is derived both from theoretical study (Saher et al., 2018) and empirical study (Saher et al., 2020). As, Table 1 describe the weaknesses and strengths of selected RP approaches. Afterward, it is confirmed through the empirical study by Saher, Baharom, & Romli (2020). For instance, in case of cost value ranking, the most appropriate criteria to choose according to the S-T strategy is the cost and business value while the W-T strategy suggest that its threat of complexity can be managed by using this technique for small number of projects.

Discussion

Rather than aiming the development of new prioritization technique, as there are already plenty of RP techniques discussed by Achimugu et al. (2014), this research takes a different approach and provides the guidelines that can help practitioner to select the suitable prioritization technique by considering the S-O (Strengths- Opportunities) and W-T (Weaknesses-Threats) category of SWOT matrix. Table 2 provides a complete insight to practitioner to choose the prioritization technique and after prioritizing the list of requirements with changed requirement, the change implementation has started.

The main objective to construct the SWOT matrix is to provide a strategy to practitioner to select the suitable RP technique. The entire suggested category to select the suitable RP technique is in S-O category by considering the strength and opportunities of the RP technique, while the W-T category suggests minimizing the weaknesses to avoid threat.

Moreover, Achimugu et al. (2014) isolated 49 RP techniques by conduction an SLR yet there is a dire need of thorough empirical research for organizations to perceive and support the critical practice of RP in ASD projects. By the insight of the prior literature of requirement prioritization techniques and comparison on different factor of prioritization, this research proposes a framework which will focus on providing the guideline to select suitable RP technique, with other factors such as stakeholders, project constraints and requirement nature. The rest of the RCM activities are discussed further in the subsequent subsection.

Conclusion

In Agile, requirement prioritization is very influential and critical factor. This paper proposed a framework using SWOT matrix to choose an appropriate RP technique during the process of requirement change in Agile software development. Moreover, the weaknesses and strengths of renowned prioritization techniques for Agile are discovered through comprehensive literature review and used the empirical evidence for its confirmation. Rather than aiming the development of new prioritization technique, as there are already plenty of RP techniques discussed by Achimugu et al. (2014), this research takes a different approach and provides the guidelines that can help practitioner to select the suitable prioritization technique by considering the S-O (Strengths- Opportunities) and W-T (Weaknesses-Threats) category of SWOT

matrix. However, the framework will be beneficial for software practitioners to make a right decision about the selection of RP techniques in Agile will increase the chances of project success.

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