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APPLYING AGILE PRINCIPLES TO ROI METHODOLOGY DESIGN

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Abstract

In the modern landscape of project management and development, the Agile methodology has emerged as a transformative approach, particularly in fostering adaptability, customer-centricity, and continuous improvement. This summary explores the integration of Agile principles into the design of an ROI (Return on Investment) methodology, emphasizing how Agile's iterative, customer-focused approach enhances value delivery and sustainability.

Keywords: self-organization, simplicity, improvement, workable product, unnecessary, signals, rhythm

1 Introduction

Enterprises using the principles belong to the class of self-organizing organizations [1]. If self-organization is taken to an extreme with no guidance or overarching structure, teams may focus on different goals or interpretations of the requirements, leading to inconsistency. Proper communication and alignment are needed to ensure that self-organized teams are still working towards common objectives. This is where the research problem comes from: “It is impossible to keep the final product in working order without means of eliminating unnecessary work”. The ability to cut out the unnecessary allows us to formulate the subject of research, reduced to teamwork.

The purpose of the study is to develop a procedure for improving ROI technology in the context of the advanced implementation of effective proposals. In accordance with the stated goal, the following tasks were solved:

- Conduct an analysis of the application of Agile principles.
- Assess the possibility of using Agile principles in ROI technology.
- Apply Agile principles in the methodology for measuring the effectiveness of an organization
- Develop instructions to ensure the use of principles in the tasks of long-term management of change in activities.

Solving the problems will allow the developer, first of all, to be ready for changes in technology. Thus, he will be able to achieve the quality and reliability of the software product being created.

2 Overview of Agile Methodology

Agile methodology focus is on delivering maximum value to customers by prioritizing their needs, fostering adaptability to change, promoting continuous improvement, optimizing resource utilization, and expediting time-to-market [2, 3]. Agile was conceived in the 1990s as a response to the rigid Waterfall model, which struggled to adapt to change and failed to accommodate evolving customer needs. The Agile Manifesto, formulated in 2001, prioritizes flexibility, collaboration, and iterative progress over stringent processes and documentation. It has since evolved to influence various domains, from software development to broader organizational practices.

The core values of Agile include:

1. Individuals and interactions over processes and tools.
2. Responding to change over following a fixed plan.
3. Customer collaboration over contract negotiation.
4. Working software over comprehensive documentation.

These values promote an environment where teams are empowered to respond swiftly to changes, prioritize customer feedback, and maintain a focus on delivering functional, usable products.

Agile Principles.

3 Linking Agile Principles to ROI Methodology

The integration of Agile principles into ROI methodology design directly impacts the effectiveness of value generation, resource optimization, and customer satisfaction. Here's how the 12 Agile principles align with the key elements of a structured Methodology System focused on ROI:

1. Technical Excellence: Agile's emphasis on continuous improvement and high-quality design (Principle 9) directly enhances the technical aspects of ROI. High-quality outputs lead to higher customer satisfaction and, consequently, improved ROI.

2. Workable Product: Agile's principle of delivering frequent, small releases (Principle 3) supports ROI by ensuring that the product is continuously refined based on real-world feedback. A workable product allows for ongoing testing and iteration, aligning with ROI goals.

3. Flexibility: Agile's commitment to embracing change (Principle 2) allows the methodology to remain adaptable to shifting market conditions,

customer needs, and project requirements -ultimately ensuring that ROI objectives are met, even in volatile environments.

4. Continuous Improvement: Agile promotes regular reflection and adjustment (Principle 12), fostering a culture of ongoing optimization that drives both team productivity and ROI.

5. Customer Satisfaction: Frequent deliveries (Principles 1 and 3) ensure that customer needs are consistently met, enhancing customer satisfaction and, by extension, ROI.

6. Sustainability: By focusing on a sustainable pace (Principle 8) and ensuring the long-term well-being of the team, Agile ensures that development processes remain efficient, avoiding burnout and sustaining ROI over the long term.

4 Benefits

By applying Agile principles to ROI methodology design, organizations can expect the following benefits:

- Enhanced Value Delivery: Agile's iterative approach ensures that products are continuously refined based on customer feedback, leading to greater value delivered at each stage.
- Optimized Resource Utilization: Agile methodologies focus on minimizing waste and unnecessary work, optimizing resources, and ensuring that efforts contribute directly to ROI.
- Faster Time-to-Market: By prioritizing small, frequent releases, Agile enables faster time-to-market, facilitating quicker realization of ROI.
- Risk Mitigation: Frequent reviews and adjustments help identify potential risks early, allowing for more proactive management and alignment with ROI goals.
- Sustainable Development: By ensuring a manageable workload and fostering continuous improvement, Agile supports long-term success and organizational sustainability.

The value of Agile principles lies in continuous interaction. This is where the essence of agility comes in.

5 Conclusions

In conclusion, integrating Agile principles with an ROI methodology promotes a more responsive, customer-focused, and efficient approach to project management. Agile's emphasis on frequent delivery, collaboration, and flexibility enhances ROI by ensuring that value is continuously delivered, resources are optimized, and risks are minimized. As organizations strive for sustainable success, Agile provides the tools to navigate the complexities of modern development while maintaining a clear focus on achieving high returns on investment.

This synergy between Agile and ROI methodology not only accelerates value creation but also ensures that development processes remain aligned with long-term business goals. For developers who strive to adhere to Agile principles, the ROI methodology signals a violation of the emergence property, since they stop in professional growth, continuing to diagnose the system with outdated tools.

References

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