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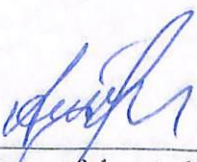


THESIS WORK

Theme: «Implementation of Agile concept in corporations»

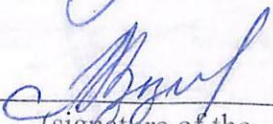
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1. ABSTRACT

The rapid pace of change and the growing complexity of the modern business environment have required the adoption of more flexible and adaptive approaches to project management and organizational processes. The Agile concept, which originated in the software development process, has attracted considerable attention as a methodology that promotes iterative and collaborative work, allowing organizations to respond effectively to changing requirements and market dynamics. In Kazakhstan, as in other countries, the traditional method was used. There are simple design models, but over time the pace of transition to more flexible methodologies increases. The purpose of this article is to study the foreign experience of implementing Agile in corporations in order to increase their flexibility, efficiency and adaptability. This article describes the problems faced by companies in their practice and in the transition to flexible human resource management.

The research methodology includes a systematic analysis of the existing literature, comparative analysis and surveys. The collected data will be analyzed using statistical methods and expert assessments. The expected scientific and practical results of this study will contribute to a more effective implementation of Agile in corporations, which will lead to increased flexibility, adaptability and competitiveness. The theoretical significance of this study is to expand existing knowledge about the implementation of Agile in a corporate environment. The practical significance of this work is to provide recommendations and guidelines that can be used by corporate managers and leaders in planning and implementing Agile.

Key words: Agile, success of project, business, companies, flexible management

LIST OF TABLES

Table 1. Types and features of Agile methodologies

Table 2. Based on the source 11th annual report of State of Agile, Version One, 2018

LIST OF FIGURES

Figure 1. Agile method for KZ companies

CONTENTS

ACKNOWLEDGMENTS.....	ii
ABSTRACT	iii
INTRODUCTION	vi
LITERATURE REVIEW.....	ix
DATA ANALYSIS.....	xxi
FINDINGS	xxix
CONCLUSION.....	xxxii
REFERENCES	xxxiii
APPENDICES	xxxv

2. INTRODUCTION

Today, network flexible programs in the field of IT are developing rapidly in the country. For this reason, large-scale projects have been implemented over time. One of the most important issues in project creation is project process management. Each stage, from the planning of the project to the desired result, has its own difficulties and problems.

What difficulties do corporate executives face when implementing a flexible management methodology? If we compare the application of advanced design in other countries, the design in our country is left behind. It is evidenced by the fact that some projects are not implemented due to various reasons, and others are not in demand. As an example, it was noticed that the government project "electronic book" could not be in demand even though it was developed with a lot of budget. Let's consider the design issue in detail. Exploration the successful implementation of Agile in large corporations and identifying ways to avoid unsuccessful attempts.

If the established project is large-scale, it should be done with the participation of several people, that is, a team will be formed to create the project. Here the relevance of the problem appears, and it is taken into account that team work is much more complex than the work of an individual. There are various problems such as disagreements, synchronization of work, sometimes insufficient time, insufficient knowledge of a team member or manager, the product not being as expected by the customer, and so on.

Waterfall management methodology is used today in large-scale project design. Let's dwell on this, giving a personal definition, the way of creating a project according to the waterfall management methodology will be as follows:

- A claim is made
- The demand is analyzed

- Project architecture is created
- The code is written
- The test is conducted
- The project was completed and handed over to the customer

One of the disadvantages of the waterfall methodology is the slow implementation of the process and its gradual implementation. For example, if we look in comparison, before the analysis is done and the project architecture is done, a competing project that is being developed according to AGILE may be connected two to three months earlier. Later, techniques were developed to improve the waterfall method by running two or more processes independently of each other, but these did not solve the main problems. At the beginning of the 21st century, a different direction for conducting the project was proposed in Western countries. Code-And Fix (we write first, then check and fix again) and the next stage methodology after waterfall methods. In 2001, a methodology manifesto was published in the state of Utah in the USA.

According to its principles, Agile falls between the two aforementioned methodologies. It can be changed quickly like the Code-And-Fix methodology, but it must follow the same framework and it is tightly structured like the waterfall method.

An important difference between the traditional method and Agile: in Agile, the initial plan is not particularly important, the important thing is to fulfill the customer's idea and business requirements. This is in stark contrast to traditional software development methods with three major constraints (budget, time, scope of requirements). The time required for one project in different projects in Agile is different (from 1 to 6 weeks). For example, two projects may be the same, but they may be completed by two different deadlines. But the shorter the period, the better it is. In addition, the life cycle of the project is based on feedback from the customer. The main goals of the project is to analyze the results to get feedback and to improve the work process. Feedback is more important here than others, because any new

information related to internal or external factors is important. Direct communication is effective. This word indicates the advantages of communication, not direct correspondence. Agile also advises the project team to focus on a high degree of self-organization. The team must resolve any problem by consensus without the guidance of the project manager. It should be noted that there is no project manager position in flexible projects. Agile - the project should run smoothly, overtime is prohibited. The entire project must be completed flawlessly and on time.

Taking into account all this, it is recommended not to complicate the system construction in solving difficult problems, because creating a high-level system construction (architecture) is one of the most important problems in software development.

Talking about the project, evaluation should be done not only when it is completely ready, but for each working part of it, that is, even if the project is not completely completed, the evaluation is done for the completed parts. This in turn leads to some difficulties. Usually, many problems are encountered only in the last stage of programming, of the project. However, it does not affect work in the inter periods, making the project viable.

The importance of system construction and design is determined by the fact that during flexible programming, changes are made to the software even in the final stages of the project. If the code structure is clear, it reduces the time it takes to make changes. To implement this principle, the code is refactored.

3. LITERATURE REVIEW

3.1 What is agile and its development principles.

In the modern business world, the Agile concept is becoming increasingly popular and relevant for corporations. It offers a flexible and iterative solution for project development and management, facilitating rapid adaptation to changing market requirements. This literature review will examine the use of Agile in a corporate environment, the challenges and risks associated with the implementation of Agile, as well as methods for measuring the effectiveness of Agile projects.

Agile (English "living", moving") is a group of flexible programming methods. Agile software development, or Agile for short, is a general term for a range of practices and approaches based on the essentials of Development Manifesto..

The term agility was coined in 1991 by an industry group. Due to the rapid increase in the rate of development in the business world, it has become difficult to ensure the comfortable development of traditional production oriented organizations. These large organizations could not take advantage of the existing opportunities because the simple planning system did not meet the requirement presented to them and this explained the need to adapt to new ways of planning. Maybe it lead to the destruction of the single management organization in the long term? An agile company was a rational project that immediately accepted and optimally adapted to change. Agility defines processes, operations and reconfigurability. It has been observed that it can create an environment of continuous change that effectively resolves business relationships and thrives. Corporations are used to implementing this idea.

You have to be careful not to implement the type of production strategies. These new production methods must be well-thought-out long-term strategic plans. Agile manufacturing is a top-down enterprise-wide effort, and supports the go-to-market nature of competitiveness.

Agile manufacturing does not bring much effort and many changes to the production floor. Indeed, the requirements, for example in some countries, are far reaching for the successful implementation of agile manufacturing. In many countries, government regulations and infrastructure will need to change in order to thrive. Companies are their collective minds must discover through a paradigm shift in the way their products are designed, manufactured and marketed.

Cooperation between companies should be improved to maintain speed. Companies must work together to achieve the common goal of improving production, and employees must be willing to extend their services. Companies work rationally to achieve greater creativity and flexibility.

For example, if flexible manufacturing is not openly adopted in the US, aims and optimism about future gains are likely consequences. The slow adoption of this by the US and Europe has led to a paradigm shift in manufacturing, from mass production to lean/jit manufacturing, and a huge loss of profits and market share. These industries are just looking for efficiency and looking at how to adopt lean production to compete globally.

The US admits it has a credit problem, manufacturing segment and undertook research into US manufacturing. Both public and private institutions like Boston's emerged as having strengths and weaknesses.

The Commission on Industrial Productivity (Nagel and Dove, 1991) tried to address this problem. Each of these organizations suggested that the US should accept the fact. He realized that if he is globally competitive, he should follow different directions in production.

Industry and academic experts gathered at Lehigh University in 1991 to discuss this topic, and agile manufacturing was the single best focus.

The Agile Manifesto consists of four values with alternatives:

- People and interactions are more important than processes and tools

- A working product is more important than comprehensive documentation
- Collaboration with clients is more important than contract negotiations
- Being prepared for changes is more important than the initial plan

In this way, the manifest tells programmers that some values are more important than others.

That is, it shows how to make choices based on these values when faced with difficult choices in programming.

It's every company's dream to get projects done in a short amount of time by dividing up the tasks with an undeniably capable team. But apart from achieving this, there are many other benefits of project management such as:

Improve results. By getting all team members involved and contributing, you'll achieve better results because everyone is "on the same page" to get the job done. More satisfied customers. Customer care is required. And if you ask for something, try to do it with high quality. But if you give it to him quickly and with good care, he will be much happier.

Motivating workers. Because each of them feels important and a part of that team and company. They are something that builds loyalty to a place that makes you feel like one more.

Reduce costs. Not only will you avoid hiring more people, but you'll also reduce the chance of failures and mistakes because everyone knows what to do.

3.2 Types of Agile methods and usefulness in Kazakhstan.

Scrum -is a methodology that appeared relatively recently and immediately gained great respect, because it allowed managers to properly coordinate time and staff resources, as well as time intervals that led to a high indicator of efficiency and development. True, it is not easy to organize this methodology, so it is better to get acquainted with the first information in it now. It should be noted right away that all our information is only theoretical, and perfect mastery of Scrum is possible only in

practical application. It's methodology used by the world's leading companies that develop digital products and distribute them mainly over the Internet. These companies include large developers of game projects, various software developers, and even at Apple, where every employee's opinion is valued in gold. As for production and heavy industry, this technology has not taken root there, because there are very large resources, many personnel and the influence of external factors.

Scrum (methodology) is a universal project management system that allows you to get the desired result with minimal expenditure of resources. This technology is used when creating an information management system or when creating software, and this methodology is also used when creating large game projects for regular online users. It should be noted that this method cannot be used both in theory and in practice for production and hierarchical management systems. The problem is that if you analyze the technologies that are part of Scrum, you will notice that in most cases the staff is aligned, there are constant discussions about projects and further actions. The main concept is the design of this technology. This methodology is intended for further support and continuous product development.

Scrum is a methodology that allows for the proper formation of resources and increasing the potential of the team. Thanks to it, managers can keep control of the situation, find new ideas as soon as possible, which are then implemented and presented to users. Thanks to this system, it is convenient to collect ideas from all your subordinates and create a whole idea from them. In addition, this method allows you to constantly collect information about the work done, choose motivation methods and identify weak links that drag the company or team down. In addition, this methodology is convenient in that it allows you to correctly allocate resources without specific rules and guidelines, that is, to act depending on the situation. The main difference is the correct allocation of time, each step, almost any statement and meeting of the staff - in everything, a certain time is allocated to it. Thanks to these technologies, a concept such as time logistics, based on the proper allocation of

resources, appeared.

The Agile Scrum methodology is one of the key technology areas we'll cover. If the usual Scrum presents companies as a hierarchy and sometimes creates conditions for equal rights, the new addition to it avoids all possible divisions, because its basis is unity. Simply put, teams in these situations are on their own without the upper body of power and supervision. Agile Scrum is a self-directed team where everyone is equal and there are no bosses, where all ideas are evaluated and discussed, where everything is decided by collaborative voting. Do you think there are no such companies? You'd be wrong because there are so many examples, especially in Japan. This technique is used by some parts of Google. It should also be noted that in the case of using Agile Scrum, an atmosphere of complete trust and understanding is created, in which case you can see who is really obsessed with the idea of success and who is just on the list.

Kanban is a Japanese work organization system named after the production concept used at Toyota in the late 1940s (similar concepts are "neat production", "just in time").

In industry, kanban (Japanese for "signboard" or "advertising board") is based on sticky notes that accompany each product. There can only be a certain number of stickers of one model at a time, and they must fit a certain part of the car. The advantages of such a system are time saving, clarity of production process for all employees, simple and fast process of troubleshooting. This concept is used not only in the automotive industry, but also in various companies, including software firms. James Benson and Tonyanna DeMaria Barry describe a methodology of the same name in their book *Personal Kanban*. It's based on two principles: visualizing your work and limiting the overall backlog. To implement this technique, you need to take a whiteboard and draw three columns on it: "Tasks", "In Progress" and "Done". Individual tasks should be sorted according to their urgency or type of work (for example, personal or business) on different colored or underlined papers. Attach all

the cards to the "Tasks" column, then move at least three tasks (no more than three) from the first column to the center of the "In Progress" column Kanban. These are the works that should be paid attention to in this time frame. After the task is implemented, you need to move it to the "Completed" column and select a new task to move it to the "In Progress" column.

Test Driven Development(TDD) - is a reverse development process. In the normal development process, we first program the application code and then test it. In TDD, we start with tests and then make mistakes because we make them before development. To pass the test, the development team must develop the code and continually extend it. The process is carried out using some set of steps:

1. Run the test
2. After performing all the tests, perform a check
3. Write the necessary codes.
4. Implementation of tests
5. Refactor code.

The simple concept of test-driven development is to develop and run tests before new code is written. This avoids code duplication. This is because we only write the minimum amount of code needed to pass the test. If the subtest passes, the testing process starts on the next error message, for which we must code again. This cycle continues until the test passes without errors. Essentially, tests are nothing more than application requirements that we need to determine if they are being met. Thus, test-driven development turned out to be an iterative process belonging to the Agile group of specialists. This is why TDD is commonly used in an Agile environment. Each feature iteration begins with a series of tests written for the new part. The first stage is testing. During the iterative process, we write application code with the intent to accurately pass all iterated arrays. As soon as the application codes are ready, we will run the tests.

Dynamic Software Development Method (DSDM) - is a unique framework for

effective project design. DSDM became a general framework project in 2007.

The following steps are followed in this DSDM process:

Step 1: Feasibility study

Step 2: Iterate on the functional model

Step 3: Build and Design Iteration

Step 4: Implementation

Extreme programming(XP)- is a software development methodology that is part of what are collectively known as agile methodologies. XP is based on values, principles, and practices, and its goal is to enable small and medium-sized teams to produce high-quality software and adapt to constantly changing and evolving requirements. What distinguishes XP from other agile methodologies is that XP emphasizes the technical aspects of software development. Extreme programming reflects how engineers work, as the following engineering practices allow teams to deliver high-quality code at a steady pace.

FDD(Feature Driven Development) - is one of the agile software development processes. It uses an incremental model and a short iterative model. Light and flexible methodologies for software development. This program combines the key benefits of various agile methodologies with other industry-recognized best practices. This program is best suited for expanding larger teams and projects.

Characteristic	Developmental approach	Single iteration duration	Member size	Project size	Communication type
SCRUM	Incremental and iterative	2-4 week	5-9	All types	Informal
XP	Incremental and iterative	1-6 week	More than 20	Small	Informal
FDD	Incremental and iterative	more than 2 week	No limit – more than one team	Complex	Based on Documentation
TDD	iterative	based on product	Firstly 2 or 3 developers	Small scale	Open communication with managers

			get used to TDD. Then next members are added accordingly		and developers
DSDM	Incremental and iterative	2-3 days	independent	All types	Based on documentation
KANBAN	Incremental	Time taken From the start of work until Bugfix is live	Any team with cross-functional and skills	Small	face to face informally

Table 1. Types and features of Agile methodologies

3.3 Companies in Kazakhstan which used Agile method

Air Astana - is a Kazakh airline that has been operating air transportation for 19 years. The airline operates domestic and international flights and is a benchmark for quality, comfort and impeccable service in both economy and business class. Air Astana is the only Kazakh company that has successfully passed the international operational safety audit (IOSA) and in 2011 the airline was registered by the International Air Transport Association (IATA). In addition, Air Astana received the "Airlines of the World" award 4 times, won the titles of "Aviation Market Leader 2015" and "Regional Asian Carrier", etc.

Unified Pension Fund. 10 years ago, that is, on January 23, 2013, at the extended meeting of the government, the President made a proposal to create a Unified Pension Fund. The President explained his proposal that "such a fund managed by the national bank allows for effective and safe management of citizens' savings." Critics of this proposal, which did not receive immediate support, said that more than 20 billion people's money could be lost. Even Grigriy Marchenko, who was

Citizens who have funds in BZZK, in case they want to relocate, have the opportunity to prepare documents confirming their departure from the country and withdraw their funds. All the necessary documents for that process are available on the website of the fund.

Among readers, who can receive pension contributions and when? - may be a legitimate question. Fund specialists have already given their answers to this question. First of all, citizens who want to leave the country can use this opportunity. Also, citizens who have reached the age of fifty and have limited means can receive their funds. For this purpose, according to the legislation of the Republic of Kazakhstan, the Pension Fund shall pay pension contributions to the citizen who submitted the documents in accordance with the rules for accounting for voluntary pension contributions within the specified period. A citizen who wants to withdraw money from his savings can view the important list of necessary documents, depending on the method of presenting the necessary documents, as well as the type of payment currency, application forms, forms of their filling and power of attorney on the website of the National Bank of Ukraine at www.enpf.kz. In addition, when he comes to the office of the BZZK, he will need a copy of the recipient's identity document and the original for verification, as well as information about the recipient's bank account. If the depositor, who intends to withdraw funds through a representative or guardian, first brings a notarized copy of the document certifying the identity of the citizen who wants to receive funds from the fund, secondly, a notarized power of attorney or a notarized copy of it and a certificate of the legal representative and a certificate on the appointment of the legal representative, thirdly, the authorized person the legal representative must provide a copy of the identity document and the original for comparison and verification. It is also a good idea to have the recipient's bank account details. Those who want to receive a collection of fund specialists say that this case can be done by mail. However, it should not be forgotten that the amount received is taxed. According to Articles 158, 160 and 170 of the Code of the Republic of

Kazakhstan on Taxes and Other Mandatory Payments to the Budget, pension payments from the State Pension Fund are considered income subject to personal income tax from the source of payment. The recipient of pension payments is subject to personal income tax at the rate of 10 percent, taking into account the amendments and tax deductions provided for in the tax code.

Henkel CAC- this is an international company that operates worldwide and produces a wide range of products: from detergents and cosmetics to industrial and household adhesives, as well as a number of industrial technologies. In 1876, young merchant Frinz Henkel founded Henkel & Cie together with two of his friends in Aachen. For the first time, the partners introduced a universal washing powder made of silicate called Universal waschmittel to the attention of the local population. For several decades, the company's development has been slow. After that, in 1907, the company launched the Persil brand on the market. This, in turn, contributed to the faster development of Henkel. The owner of the company, while advertising his products, was the first among other German companies to provide buyers with information about the features and composition of the product. By the end of the 20th century, Henkel had become a large international company. And during the Second World War, the company actively used the labor of veteran workers. "Schwarzkopf & Henkel" company has been working together with "Altyn Alma" group of companies in our country since June 2007. Today, Altyn Alma is the distributor of Henkel throughout Uzbekistan. Since February 2008, "Altyn Alma" has been working together with "Schwarzkopf" in West Kazakhstan.

"Henkel bautechnikkazakhstan" llpturkuaz ben henkel planned to open its first factory in Almaty in May 2008. The main focus of TURKUAZ and HENKEL companies is the production of cement based on dry mixes, finishing materials of the brand "Ceresit", as well as the production of a wide range of adhesives of the brand "Thomsit" and laying compositions in Almaty.

Iplus Education Center—more than 6 years of experience in education, our

country have developed our own program for training in NIS, RFMSH and BIL (KTL), UNT, as well as in specialized lyceums No. 165, No. 39, No. 90 and No. 134. This center has a huge book fund, developed by our leaders and trainers. In particular, they are independently developed teaching aids for preparing for NIS, which help children additionally focus on the specifics of the exam. The "AIPLUS" student training program includes practical exercises similar to the tasks in the NIS entrance exams. This is how students "fill their hand" and train their skills in performing test tasks. This allows you to take the exam without stress and be confident in your knowledge.

4. DATA ANALYSIS

It is a misconception to think that Agile is only applicable to programmers. In fact, Agile methodology can be suitable for developing any product that lacks a specific action algorithm. For instance, it can be particularly beneficial for technically complex products that cannot be assembled from pre-existing parts or for products that have not been introduced to the market and where the value of the idea and market size have not yet been confirmed.

To illustrate the difference between traditional and innovative management approaches, let's examine them in the context of confectionery products. We will consider two scenarios: the first represents the classical approach adopted by enterprises, while the second demonstrates the implementation of Agile.

Scenario #1: Simple Dough In this scenario, a technologist is tasked with creating a new cake. Although market research and consumer preferences may be taken into account, significant attention is placed on the preferences of the company director. The technologist develops the cake based on these preferences and presents it to the manager. The manager then decides whether to approve it or request modifications. Once approved by the CEO, the confectioners receive instructions, and the cakes are put up for sale. This represents a typical approach in Russia, where the team focuses on completing a specific task, and the evaluation of the work is typically conducted by one person or a small group.

Scenario #2: Agile Confectionery In this scenario, the director of the company comes up with an innovative idea for a new type of cake. The entire team, including marketers, technologists, logisticians, sales department, confectioners, and even ordinary customers, collaborates on developing the product. The collective efforts result in the creation of a product that meets market demand and is loved by consumers. In this Agile approach, there is no strict hierarchy. Each participant in the process evaluates and interprets the outcome to continuously improve performance. By leveraging the flexibility of Agile project management, companies can effectively focus on specific goals, leading to the timely delivery of

highly competitive and in-demand products. Agile practices not only improve sales and save time but also enable the prompt identification and correction of mistakes, ensuring continuous improvement.

The examples presented clearly illustrate that Agile methodology extends beyond the realm of programming and can be successfully applied in various industries, including the creation of confectionery products. Agile approaches facilitate collaborative decision-making, adaptability to market needs, and ongoing improvement, all of which contribute to the development of successful and sought-after products.

Agile project management is widely adopted in IT and business contexts, including marketing, training, and enterprise management. It has been embraced by numerous government entities and businesses. In Russia, notable organizations such as "Sberbank," "Alfa-bank," the "Knopka" service for accountants, and the "Dodo Pizza" pizzeria chain employ Agile methodologies. While banks may implement Agile at the team level rather than across the entire enterprise, larger organizations like "Alfa-bank" possess the technical capabilities and personnel to implement Agile effectively. Moreover, small business teams, such as accountants and pizzerias, attribute their success to the implementation of flexible management systems.

Key benefits of Agile include the ability to quickly solve tasks, resulting in cost and time savings, the development of market-demanded products, meticulous project planning and monitoring, high-quality outcomes, and the ability to adapt to competitive conditions. However, it is crucial to acknowledge that effective implementation of Agile in a Russian company necessitates team training and adaptation. Additionally, this methodology may not be suitable for organizations with rigid administrative management structures.

Ultimately, meeting customer needs is essential for maintaining competitiveness and balancing internal hierarchies within organizations.

This is accomplished by ensuring continuous operation and promptly correcting errors. Agile methodology enables a quick response to changes in product

requirements and provides support to engaged employees. A motivated team tends to perform better than a dispirited one. Close face-to-face interaction with the client and all members of the development team throughout the project is essential. Simplicity serves as the foundation of Agile work. The marketing plan should be regularly updated, ideally every two weeks or at least every month and a half. It is important to prioritize detailed customer research, analyze results, and implement changes, rather than relying on conditions and subjective opinions. Conducting multiple short-term tests is valuable in addition to one long-term experiment. When adopting Agile, it is crucial to choose one of the following flexible method bases:

Total Strength: The customer, manager, and team must collaborate closely to avoid misunderstandings regarding the project's goal and loss of information.

Vision Control: All team members are required to use different color cards to indicate the progress of different parts of the product, including planning, development, and completion.

Adaptive Control: The leader does not assign tasks but instead monitors adherence to cooperation rules. The project is divided into stages, enabling focus on each individual cycle.

Error Correction: During each sprint, the team learns from new experiences and analyzes past shortcomings to prevent their recurrence in subsequent sprints.

Considering the aforementioned factors, Agile methodology can be successfully implemented in the following situations:

The project's goal and deadline are clearly defined.

The entire volume of work can be divided into stages.

Research has been conducted on the target audience.

Data collection has been organized, and evaluation indicators have been determined.

Implementing the Agile system in a company involves several key steps. Let's explore them:

Requirements Analysis: It is crucial to understand the target audience and their

needs. Managers should maintain constant contact with the audience to ensure relevant and measurable requirements.

Planning: Organize a meeting to define the project, establish ideas, set deadlines, allocate resources, and create a work plan by breaking it down into smaller parts.

Team Building: Select the right employees, assign tasks, and schedule meetings. Additionally, choose appropriate tools for disseminating reports and analyses.

Employee Training: Provide training on the fundamentals of Agile management to ensure that employees understand the principles and maximize efficiency.

Test Drive and Sprint Execution: Conduct a test drive to explain the roles and demonstrate the stages under the supervision of a specialist. Then, proceed with running sprints, evaluating results, making adjustments at each stage, and ultimately delivering the final product.

In the past, many companies relied on traditional practices such as annual performance appraisals and goals that were reinforced yearly based on business and unit objectives. However, with the adoption of Agile methods, companies have shifted towards conducting performance evaluations on projects. This shift has been observed in various industries, including insurance (Cigna), retail (Gap), investments (Oppenheimer Funds), pharmaceuticals (Pfizer), consumer goods (P&G), and accounting (BIG4). The focus now lies on providing rapid feedback throughout the year, promoting agility, enhancing performance, and fostering learning through iterations, which are fundamental aspects of Agile development. This approach of obtaining quick feedback after each project has been found to significantly increase project efficiency and speed.

It's worth noting that Kazakhstani companies have experience in improving employee efficiency and are making progress in implementing Agile practices. However, the adoption of such assessments may face challenges, especially in companies with well-established vertical management systems where management decisions are not subject to general review unless they are controversial.

Some companies have adopted new processes based on proven models, such as Johnson & Johnson's five-talk system (goal setting, career discussion, mid-year

performance review, year-end evaluation, and compensation review) and ongoing dialogue. These companies have introduced changes through a three-month experiment, initially involving 20% of pilot managers. Overcoming the inertia of long-standing annual assessments has proven challenging. However, through intensive training and the appointment of "Change Champions" to model desired behavior, these companies have successfully increased active participation to 46% among pilot group leaders, resulting in the exchange of 3000 comments. This method has proven more effective than regular maintenance.

Encouraging feedback among teams and team members can contribute to positive outcomes. For example, dynamic biotech company Regeneron Pharmaceuticals plans to make significant changes in their evaluation process. The most successful companies in implementing Agile talent management practices invest in enhancing their managers' coaching skills. Cigna supervisors undergo coach training that is designed to fit into their busy schedules, consisting of weekly 90-minute videos. Managers also participate in training sessions such as Agile Project Management "learning sprints." Feedback is also included in Cigna's management training, where peers form study groups to exchange ideas.

By following these steps and fostering a culture of continuous feedback and learning, companies can effectively implement the Agile system and experience improved project management and employee performance.

Their subordinates are eager to share their stories with the CEOs and are not afraid of admitting their mistakes, as they understand that judgment is not hanging over their heads. Henkel Kazakhstan has implemented a training program for new professionals that utilizes short videos to introduce products and brands. This approach saves time and effort in training, and the program is regularly updated to enhance employee competency. DigitalOcean, a startup based in New York, has taken a proactive step by hiring a full-time professional coach to assist all managers in improving employee feedback and expanding internal coaching opportunities. The company believes that once individuals have experienced excellent coaching, they can become exceptional coaches themselves. It is not

necessary for everyone to become a great coach; individuals who choose programming over coaching may still progress in their technical careers within the company, but coaching skills are considered crucial for managerial roles.

Kazakh national companies, such as "Air Astana," bring in professional trainers from abroad, such as London and Moscow, to provide training to their employees on topics such as security, new methods, and business procedures. For instance, their flight crew training program includes sending recruits to Frankfurt for training, where they undergo flight safety briefings and learn procedures. P&G also emphasizes the importance of managers becoming better coaches as part of their efforts to enhance training and development programs for managers and increase their involvement within the organization. By simplifying the performance analysis process, separating evaluation from discussion, and eliminating talent calibration sessions (which often involved subjective and politicized rating models), P&G has freed up significant time to focus on employee growth. However, transitioning managers from evaluating employees to coaching them has been challenging within the traditional P&G culture. Therefore, the company has made substantial investments in training managers on various topics, including prioritizing and setting employee goals, providing feedback on contributions, and aligning employee career aspirations with business needs and training and development plans. By creating opportunities for staff and fostering effective communication between staff and managers, P&G enhances employee engagement, which, in turn, fuels innovation and drives faster progress. Although cultural changes are still being discussed, P&G has observed improvements in these areas at all levels of management, including the Almaty office.

Traditional HR practices primarily focus on people—their goals, performance, and needs. However, the shift towards Agile methods and practices requires a broader emphasis on fostering a culture of continuous feedback, coaching, and employee development.

As most companies operate on a project-by-project basis, their management systems and talent are oriented towards teams. These teams are responsible for

creating, executing, and analyzing projects based on their own goals and objectives. With the implementation of Scrum, the focus has shifted to the team level, allowing for greater adaptability to new information. In this context, organizations need to embrace multidirectional feedback, recognizing that gathering feedback from colleagues is crucial for course correction and employee development in an agile environment.

In agile teams, everyone has the opportunity to contribute feedback, and it is often an informal process where comments are directed towards the employee rather than the manager. This prevents constructive feedback and concerns from harming colleagues and extends beyond mere competition in the workplace. Diana Gerson, Head of Human Resources at IBM, highlights that the relationship between managers and employees undergoes changes in the network context (referring to the set of projects employees work on). As the flexible environment makes it nearly impossible to "monitor" performance in the traditional sense, IBM managers rely on others for assistance. They identify and address problems at an early stage, utilizing input from colleagues in daily team meetings and recording it on relevant apps.

Employees have the option to include managers and others in their feedback to colleagues. The risk of destructive behavior is minimized through the guidance provided by team leaders and subject matter experts. Agile organizations also value feedback from employees to team leaders and managers. Non-profit organizations like the MITRE Research Centers have taken steps to encourage such feedback, but they acknowledge that it requires significant effort. They have initiated confidential employee interviews and focused group discussions to create opportunities for employees to express their thoughts and concerns to their managers.

The HR department then shared this data with managers to inform their discussions with their direct reports. Initially, employees were hesitant to provide feedback, despite it being anonymous and used solely for development purposes, without expressing their opinions about management.

MITRE also discovered that the most crucial element in fostering employee loyalty is direct communication from managers about their expectations and a willingness to receive feedback. Otherwise, employees may worry that their leaders are not open and receptive to feedback. When organizations fail to respond to feedback, it diminishes engagement and erodes trust between workers and their supervisors. Recognizing this, the CEO of MITRE embraced the new performance and feedback process, and a revised feedback system will be implemented this year. As feedback flows in multiple directions within teams, many companies are leveraging technology to manage this crucial aspect. Applications enable managers, colleagues, and clients to provide instant feedback from wherever they are. It is important for managers to upload all comments later when it's time for evaluation. Some applications even allow employees and managers to track goal achievement. Additionally, certain project management platforms like Slack offer chat analysis features that aid managers in providing feedback on collaboration. Cisco utilizes proprietary technology to collect weekly "breadcrumbs" or feedback from employees about their colleagues' performances. These tools enable managers to monitor individual performance trends over time, even within teams. However, it's worth noting that these applications do not provide an exhaustive measure of productivity, and employees may prefer discussing certain issues face-to-face rather than documenting them in a downloadable file. It is acknowledged that companies recognize and reward improvements along with actual performance, but concealing problems may not always be advantageous for employees.

5. FINDINGS

The radical shift to teams has also affected decision-making rights: organizations are putting them first and allowing employees to work independently. But it's a big change in behavior and people need support to make it happen. Now let's go back to the Bank of Montreal example. When BMO introduced an agile team to develop new customer services, Sr. management was unwilling to relinquish control, and those below them are not accustomed to accept it. Thus, the Bank introduced agility coaching in business teams. He started with them. Everyone, including top managers, is brought together through «retrospectives» – regular reflection and feedback sessions held after each iteration, a flexible version of feedback on actions; their goal is to improve processes. Like retrospectives.

By quickly identifying specific successes, failures and root causes, BMO's senior management immediately recognized their value, which helped them to succeed. Consult the general dexterity and free their hands in decision making (Nathan, 2003: 3).

This method also applies to Kazakhstani companies, i.e. hire a professional coach and learn to identify gaps in retrospective conversation in order to respond more flexibly and quickly in the store. After each iteration, regular discussions between teams and supervisors take a maximum of 10-15 minutes to review and to improve processes.

Organization s in RK	Project	Team Size	Success in using Agile (in percent)	Success in using Waterfall (in percent)	Foreign companies already used such practices
Air Astana	Digital	200	88	35	Johnson

	solutions				&Johnson
Henkel CAC	New Talent and Performance management	2000	79	50	BMO, GE
«Accumulative pension Fund «GNPF.»	Digital system operation	25	65	56	Mitre, Cisco
Iplus education center	Finding new branches	20	87	60	BIG4, P&G, Cigna, Pfizer, etc

Table 2. Based on the source 11th annual report of State of Agile, VersionOne, 2018

Finally, as the supervisor's role shifts from managing an individual to the more complex task of maintaining a productive and healthy team dynamic, people often need help with this as well. Cisco Special Intelligence provides this support. The goal is to identify the most active teams in the company, analyze how they work, help other teams and learn how to be more like them. It uses the Team Space enterprise platform, which tracks data about team projects, needs and achievements to measure and improve the performance of teams across departments and across the company. This aspect of teamwork is equally important when planning teams and improving company performance. One group's success and open methods of success allow other groups to accept their means and victory as a challenge.

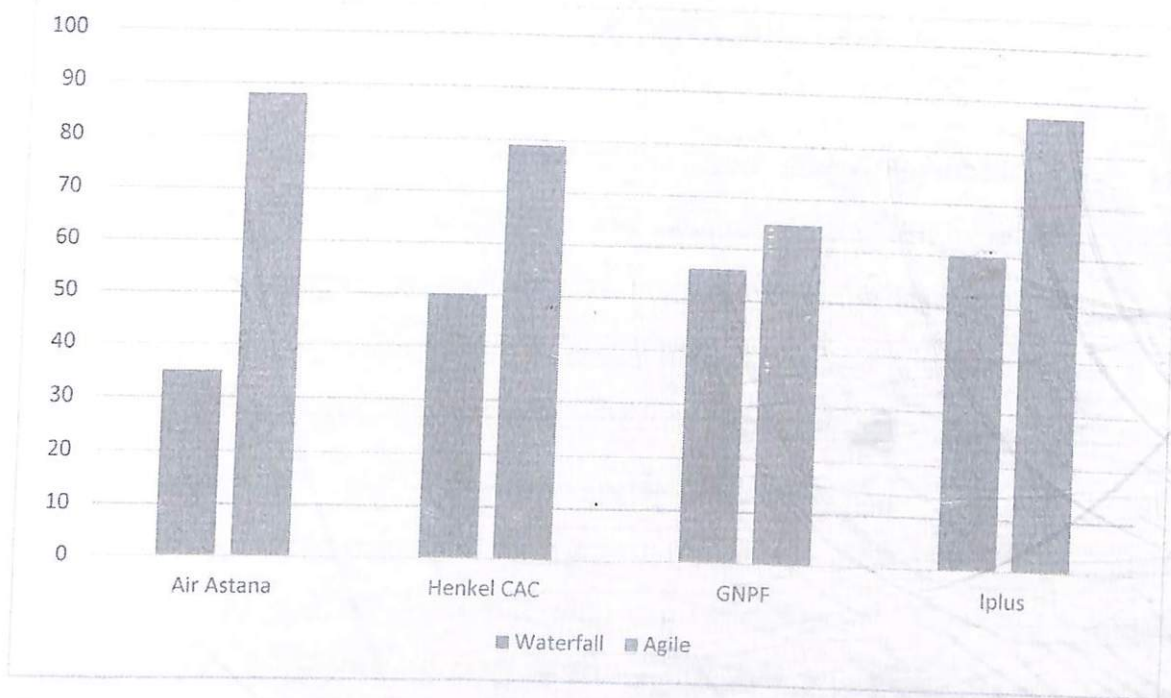


Figure 1. Agile method for KZ companies

In addition to such common problems as the lack of involvement of the team or managers and the failure of project deadlines, there are other problems. For example:

- Burnout team;
- Reduced team performance;
- Customer expectations are not met, etc.

For the implementation of the method, 4 main, leading companies were chosen. According to the data, it can be clearly seen that the iterative method is more optimal. As seen in the table, the main difficulties are the corporate culture, which diverges from the principles of Agile component 53% of the survey, in second place with 29% – lack of knowledge and skills in the use of Agile methods. In order to eliminate the weak points of human capital management in Kazakhstan, it is necessary to gradually introduce a flexible methodology.

6. CONCLUSION

In short, making an agile can be compared to buying simple clothes. If you buy clothes online, that is, if you pay and wait, the result may not be as expected. And the clothes chosen by going to the shops and tried on will definitely please you. In the same way, if the customer of the software also participates in its creation, it will undoubtedly be a competitive product. Modern knowledge does not stand still and is constantly evolving, especially with the advent of total capitalism. First came conventional management, and then it began to develop rapidly, introducing all new technologies and developments. Today, you can use many different methodologies that allow you to effectively manage people and entire companies, processes and small departments, each technology has its own characteristics and special features. It is recommended to start using the Agile management method with a pilot project or with the departments responsible for digitalization, which allows them to change and to allow and to adapt them to rapidly developing technologies.

The time of rapid development of technologies forces us to act as flexibly as possible to successfully manage projects and organizations. Using Agile methodology in a public system should start with project planning. Project budget planning in Kazakhstan takes an average of 2 years and to complete 3-4 years. In the way of planning and budgeting, technologies and development methods. As a result, before the last stage of the project, in our case, there are changes in the service, technological and legislative plan.

On average, it takes 4-5 years to make one product provided as an electronic service. Moreover, during this time, the service may only be a prototype. The problem is the lack of a project approach to project planning and budgeting, the lack of many coordinating organizations, and the requirement for technical and economic analysis of all projects.

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8. APPENDIX

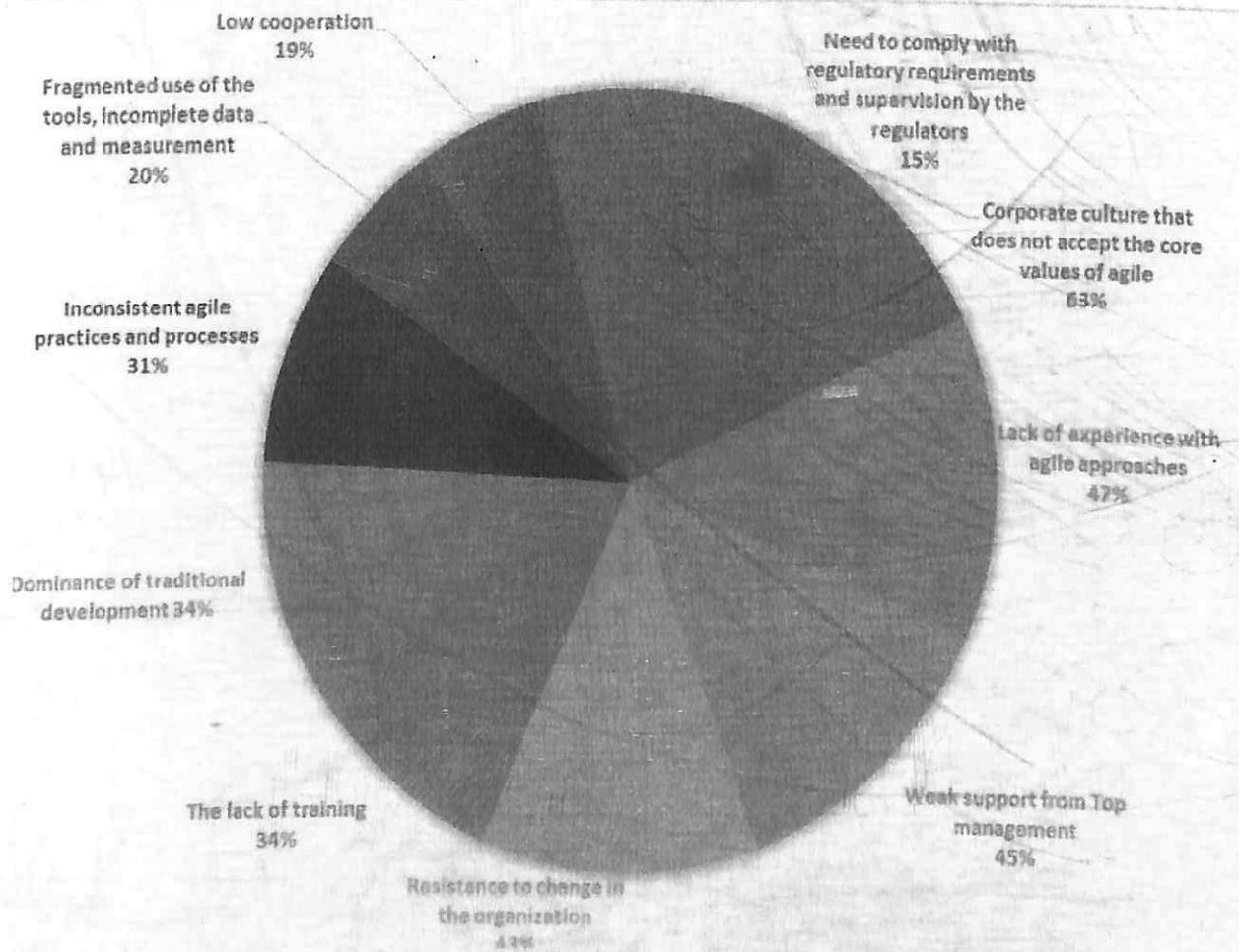


Figure 1 – Challenges in implementing and scaling Agile in Kazakhstan companies.
Based on 2018 Agile Alliance

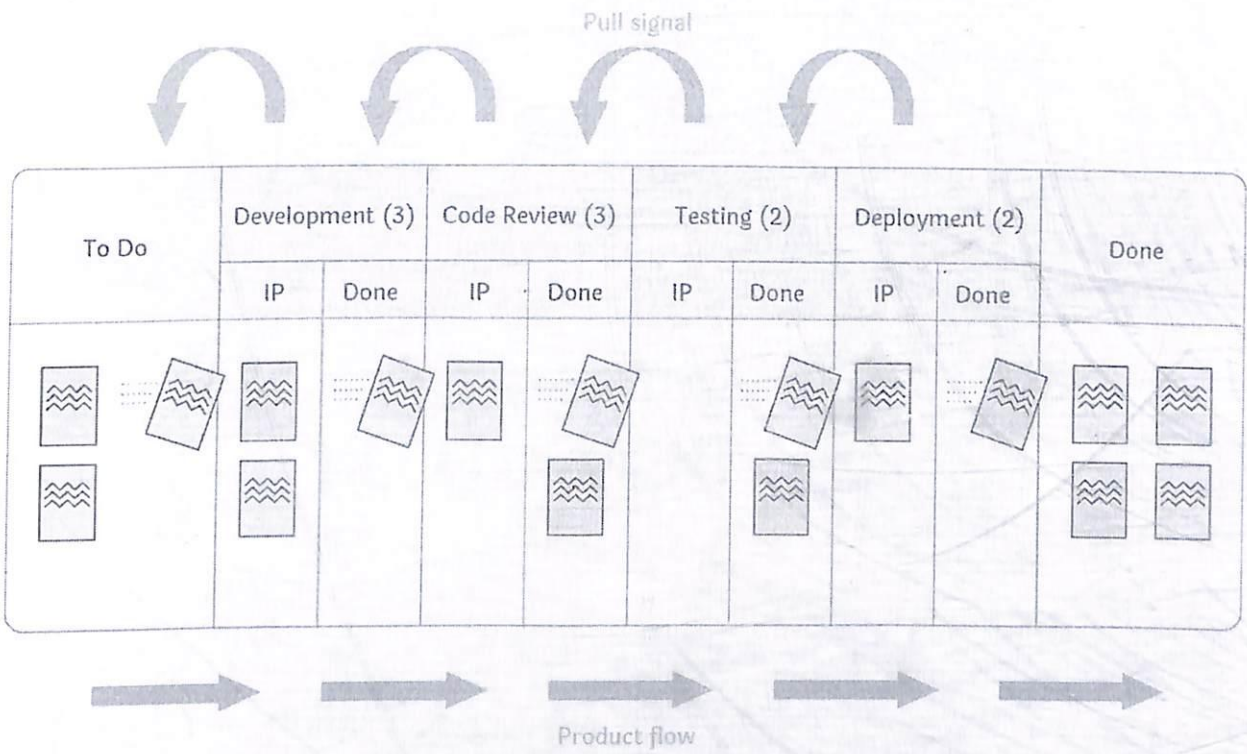


Figure 2 – KANBAN method

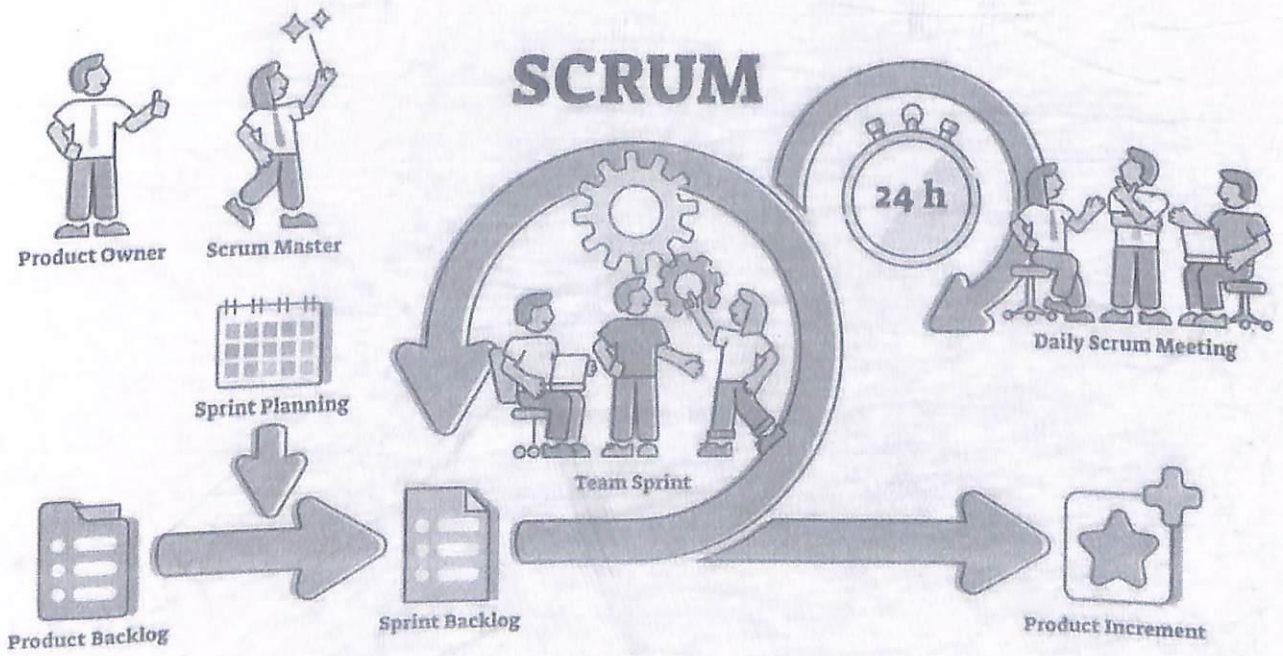


Figure 3 – SCRUM method

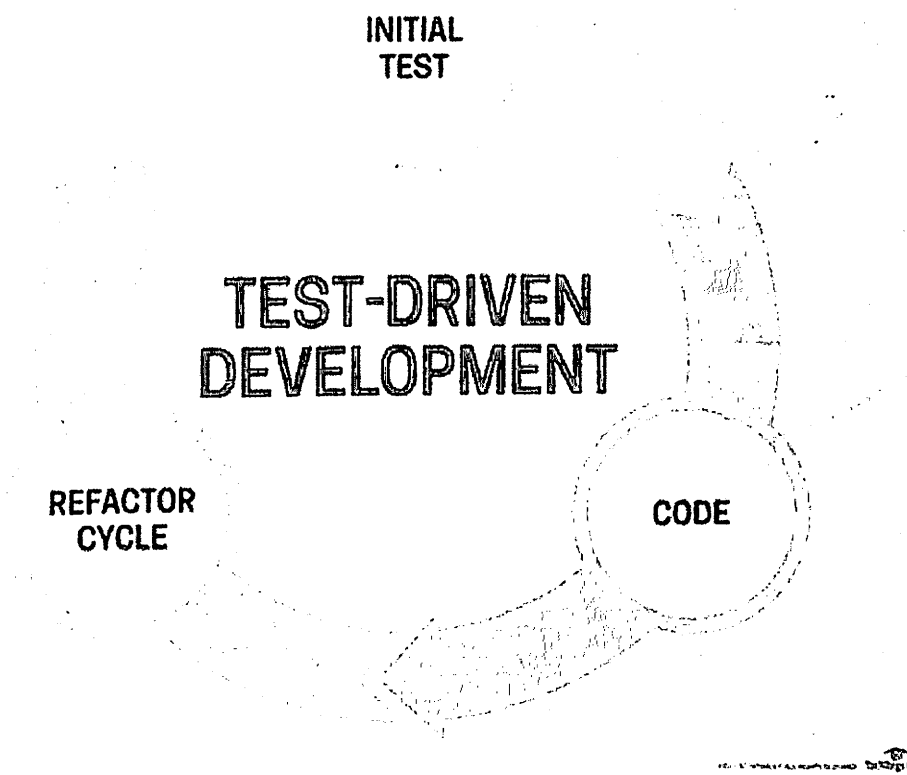


Figure 4 – Test Driven Development method