

Integration of Agile Technologies in Internal Audit

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Annotation. The study is devoted to the processes of integration of Agile technologies in internal audits. It was determined that Agile is a method and a way of thinking simultaneously, which ensures timeliness of receiving information, quick response to risks, and acceleration of audit cycles, thanks to which the effect of value creation is achieved for both top management and stakeholders. The analysis of statistical studies of the implementation of Agile technologies allowed the authors to conclude that the Agile approach is increasingly used in enterprises to achieve planned results, and to single out key changes in the concepts of internal audit, which became possible thanks to the implementation of the Agile approach. It is noted that there is no single path for transitioning to the use of Agile methodology for all organisations. In addition, such a transition can cause difficulties associated with rethinking the audit process. That is why the authors attempted to unify the work cycles of the internal Agile audit.

Keywords: internal audit, Agile, Agile audit, Agile methodology, unified work cycle of Agile audit.

JEL Code: M40, M42.

Introduction

Relevance of the topic. The dynamic development of technologies, globalisation and barrier-free markets set new requirements for the management of companies in terms of ensuring the efficiency of production processes, sustainability of innovative development, but also internal control mechanisms. The role of internal audit is increasingly critical to the overall success of an organisation. There are new risks that need to be identified and, accordingly, the organisation must be able to respond to them promptly. At this time, internal users of management information expect risk-weighted analytical conclusions and constructive recommendations in building the organisation's potential from internal audit services. However, internal audit structures are able to solve such tasks only if they demonstrate flexibility, adaptability, and the ability to refocus and ensure repositioning.

The topic of integrating Agile technologies of internal audit in business operations arouses active interest among researchers, entrepreneurs, and large corporations, however, is this methodology appropriate for implementation to keep pace with the dynamic business landscape, or is it just a newfangled trend? It should be clearly noted that there is no single path for transitioning to the use of Agile methodology for all organisations. Each organisation will have its own experience, but its success will depend on the willingness to move forward, develop new perspectives, and try new technologies.

Problem investigation level. The authors analysed the available research on the effectiveness of integrating Agile technologies into internal audits. This made it possible to single out the key changes in the concepts of internal audit that became possible thanks to the implementation of the Agile approach. In addition, the application of Agile technologies does not involve the construction of a clear organizational cycle of internal audit, which can cause difficulties associated with rethinking the audit process. That is why it is advisable to make an attempt to unify the work cycles of the internal Agile audit.

Scientific problem. Sometimes it can seem that internal audit is a constant that cannot be changed. How can internal audit be changed through the implementation of Agile methodology?

Research object. Agile methodology as a tool for changes in approaches to the organisation of internal audit.

Research aim. Study of theoretical and practical aspects of implementation of the Agile approach in internal audit and development of proposals to optimize its further implementation in organisations.

Research objectives:

- 1) to analyse the results of the implementation of the Agile approach in business processes and in internal audit;
- 2) show key changes in the concepts of internal audit under the influence of the Agile approach;
- 3) make an attempt to unify the work cycles of the internal Agile audit.

Research methods. The following research methods were used to achieve the set goal and solve the given tasks: comparison, generalisation and systematisation - in the study of scientific literature, survey results; grouping – to highlight key changes in internal audit concepts that have become possible thanks to the implementation of the Agile approach; system approach - to develop a scheme of a unified work cycle of an internal Agile audit.

1. Theoretical background and literature review

For the first time, the requirements of flexibility and adaptability to internal audit were discussed in the late 1990s. It all started with an audit of agile processes in the field of IT technologies and later transformed into the application of Agile principles when planning and conducting audits in other industries. Agile is a collective name for work methods based on the principles of the Agile Manifesto developed in 2001 (Agile Alliance, n.d.) The emphasis of these methods is focused on group solutions, teamwork and constant search and improvement of own processes, tools and work methods. Agile is a set of principles that allow moving forward without clearly defining requirements (Wysocki, 2011; Beerbaum & Piechocki, 2016; Wright, 2023; Digital.ai, 2024). The consulting and audit firm KPMG defines the Agile approach to internal audit as a mindset and method used by the internal audit function to focus on the needs of stakeholders, accelerate audit cycles, ensure timely evaluation and reduce resource costs (KPMG, 2019).

2. Results

The role of internal audit is difficult to overestimate, because it covers not individual processes, but the full range of business operations, thanks to which the effect of creating value for both senior

management and stakeholders is achieved. Internal audit and the internal auditor are considered one of the four pillars of effective and ethical corporate governance.

The integration of Agile technologies into auditing opens up a number of transformative opportunities. According to available research, the Agile approach is increasingly used in enterprises to achieve planned results. For example, according to the results of a survey from leading technology company Digital.ai (2024), which helps Global 5000 enterprises achieve their digital transformation goals, almost 70% of respondents said that their IT departments and software development and delivery teams use Agile; nearly 50% of engineering, product, and R&D teams use Agile, and approximately 28% of business operations and 20% of marketing teams have adopted Agile principles. Employees of small companies are more likely than employees of medium and large companies (33% vs. 16% and 20%) to indicate support for the implementation of flexible principles and practices. A third of surveyed business leaders and managers actively lead and participate in agile transformations throughout the company. 20% of Agile transformations are led by a Chief Information Officer (CIO) or Chief Technology Officer (CTO). About 44% of respondents said enterprise flexibility is working very well or fairly well for their organisations. Overall, small companies were the most optimistic, with 52% of small businesses versus 43% of large companies saying that Agile works very well or somewhat well. Survey participants who are satisfied with Agile point to specific benefits from its implementation. Almost 60% said that internal collaboration between departments had improved, and 57% saw the alignment of Agile principles with business needs.

Such impressive statistics allow the authors to single out key changes in the concepts of internal audit that have become possible thanks to the implementation of the Agile approach (see Table 1).

Table 1. **Key changes in internal audit concepts under the influence of the Agile approach**

Traditional audit	Agile approach
Establishing guidelines for internal audit audit objectives	
audit objectives	value expectations
Involvement of resources for internal audit	
approved the head and composition of the audit group, limitations in labour resources	collective work, lack of restrictions in the recruitment of labor resources
Usefulness of internal audit	
during its conduct, rather, certain problems are considered, based on the identified key risks and management needs	no restrictions in connecting to problem solving, focus on identifying the organization's opportunities
The sequence of internal audit operations	
linear cycle	work cycle
Internal audit planning	
drawing up a step-by-step plan for conducting an internal audit and performing audit studies	unplanned, quick actions (sprints)
Organization of communications during internal audit	
communication upon completion of analytical work and reporting	frequent communication, daily meetings
Monitoring of internal audit results	
as necessary or in accordance with the organization's internal audit methodology	daily and incrementally with key stakeholders
Reporting on the results of achieving the goal of the internal audit	
a single report issued after an internal audit is completed, often requiring a time-consuming review process	small summaries built throughout the internal audit process, with an emphasis on value and visualization
Documentation of internal audit results	
a significant amount of documentation	streamlined short document flow

Source: created by the authors

As it was mentioned, although the use of Agile technologies does not involve the construction of a clear organisational cycle, the authors nevertheless made an attempt to unify the work cycles of internal Agile audit. This is shown in Figure 1.

An agile approach helps to prioritise internal audits based on existing or expected risks and the organisation's readiness to conduct an internal audit. It is very important that the entire team, including the manager and the business owner, participates in the planning of the Agile audit. This allows you to develop the most effective audit plan (audit book) for the whole year, where you can quickly make adjustments. The basis of Agile audit implementation is the organisation of work in groups in two-week periods (sprints). If the audit group did not cope with the tasks, then they are returned to the backlog (a list of tasks depending on priority, which must be completed at a specific stage). The backlog requires regular updating, as new competitors may appear in the process, market requirements, prices, or other factors may change. As for creating an Agile report, it should focus on providing analytical information in the form of sprint reviews, and retrospectives with a lot of visual elements.

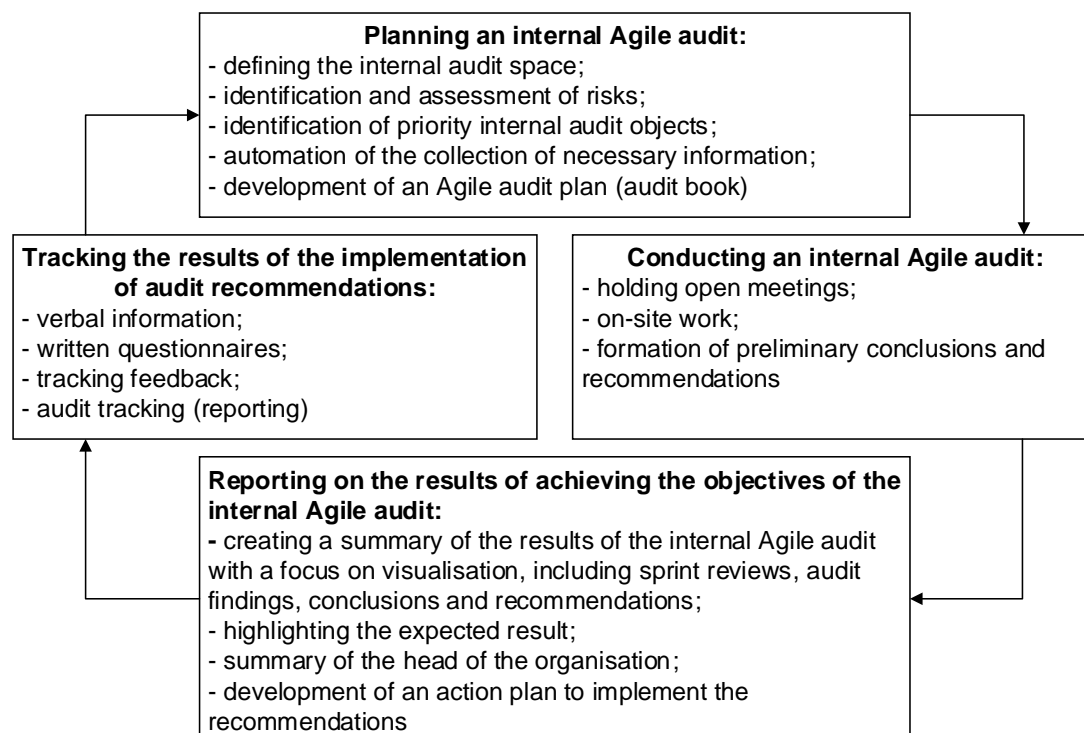


Fig. 1. **Project of a unified organisational cycle of internal Agile audit**
Source: created by the authors

When implementing the unified agile audit work cycle proposed by the authors, it should be taken into account that one of its stages must be completed before the start of the next, and together they must ensure the absence of duplication of actions. A rigid plan is replaced by a flexible one, documentation is reduced to the minimum necessary level, part of the documentation is created at the levels of production operations. It is the flexibility that allows you to create valuable expectations.

Conclusions

1. The business landscape is becoming increasingly complex and interconnected, as a result of which the use of flexible approaches in the practice of internal audit is a trend that has reached most countries of the world. While the traditional approach to internal audit is effective, the Agile approach has proven

to be able to work faster and at a higher quality level. Agile audit allows you to focus on the needs of stakeholders, provide a deeper understanding of problems, establish communications, accelerate the internal audit cycle and improve its quality, and reduce the irrational use of resources.

2. Existing research on the practice of implementing Agile technologies allowed the authors to conclude that the Agile approach is increasingly used in enterprises to achieve planned results and increase corporate flexibility.

3. The content of the research allowed the authors to highlight the key changes in the concepts of internal audit that became possible thanks to the implementation of the Agile approach.

4. Each organisation has an individual trajectory of the internal audit cycle and a list of departments and processes in which the implementation of the Agile approach is possible. The work presents the author's vision of a unified organisational cycle of internal Agile audit, although the use of Agile technologies does not involve the construction of clear work cycles.

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