European Proceedings of
Social and Behavioural Sciences
EpSBS

www.europeanproceedings.com
e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.02.16

ICLTIBM 2019

9th International Conference on Leadership, Technology, Innovation and Business Management: Leadership, Innovation, Media and Communication

AGILE INTERNAL AUDITING – THE CASE BACK TO NORMAL

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Abstract

In a world of disruption and fast-paced changes, today's internal auditing (IA) needs to be highly adaptive to changing risks. Agile work processes have speeded up product and software development processes and are rapidly spreading to other disciplines, very recently also to IA. This development has received little research focus so far, which leaves IA practitioners unguided in their attempts to become more adaptive. The present research project attempts to make knowledge explicit about context factors which influence how agile IA work processes are implemented and abolished. Specifically, it uses an explanatory grounded case-study approach to analyse the single case of a small IA function which has implemented Scrum for all of its IA work processes in 2015 and has returned to a regular approach in 2018. A within-case analysis identifies context variables which impact agile IA change processes decisively, namely the setup of the change process, the choice of the agile method and agile planning process, and the organization of teamwork and related communication processes. The study finds out that in an already fast-paced and innovative audit team, the implementation of Scrum is fostered by a collaborative involvement of the whole IA team and strengthens knowledge sharing and agility in return. In contrast, the implementation of a lean approach deteriorates the collaborative and communicative practices established by Scrum while the agile mindset of team members and the innovative drive of the team remain constant. These findings call for more agile IA case-studies to generate hypotheses based on cross-case analyses.

Keywords: Internal auditing, agile frameworks, scrum, case-study, end of scrum, agile certification

https://doi.org/10.15405/epsbs.2021.02.16
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Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

1. Introduction

In today's VUCA world (Bennet & Lemoine, 2014), where variability, uncertainty, complexity, and ambiguity reign, organizational risk management, control and governance processes must keep pace with our disruptive environment. Internal auditing (IA) is the independent, objective assurance and consulting activity designed to add organizational value by improving these processes (The IIA, 2017b). It must keep pace with or, better, anticipate rapid changes in order to fulfil its mission.

Research on how IA can cope with these challenges is scarce. The professional bodies of internal auditors (The IIA, 2019) and external service providers (PwC, 2019) describe what is happening at large scale in the IA profession by conducting surveys with descriptive statistics. The results indicate changes to IA processes. However, surveys with descriptive statistics are of little theoretical and practical value as far as the rich complexity of change processes is concerned and when IA professionals seek guidance on how to lead change and adapt to change in the best possible way.

This explanatory research study adds empirical evidence and case-grounded hypotheses to our common knowledge base of IA in times of disruption. Specifically, it analyses how and under which conditions an IA department has pioneered the implementation of agile frameworks for its audit work processes in 2015 and how it has returned to a more regular work approach in 2018.

2. Problem Statement

Rapid adaptation depends on conditions which can be called dynamics, fitness for change, or agility. The following literature review outlines the meaning of agility for IA and traces how the most audit relevant agile frameworks have developed and how they have impacted the work processes of IA functions. This leads towards the problem statement in the end of this section and to the research question in section 3.

2.1. Agility

While agility is often described as a personal mindset, its organizational manifestation can be defined as the organizational capability to rapidly and pro-actively adapt to a VUCA world and changing customer needs (Schmitz, 2018).

This adaptive power is very core to IA. All ten Core Principles for the Professional Practice of Internal Auditing (The IIA, 2017a), which define IA effectiveness, require agility (Wilhelm, 2019a). Agile auditing is a set of practices that helps IA functions in meeting their objectives in a more wholesome manner, it is a mindset adopted by an IA team to focus on stakeholder needs, drive timely insights, accelerate audit cycles, generate less documentation and reduce wasted effort (Foo & Bhattacharya, 2017b).

According to practitioners, agility in IA processes has explicit manifestations (Wilhelm, 2019b), which are summarized in Table 01. The table shows: agility in IA is not just a new buzzword but affects the core of IA work processes.

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Table 1. Differences between regular and agile internal audit work approaches

Criteria	Regular Approach	Agile Approach
Power	Top-down from the CAE	Participation of a self-organized team
Control	Working off tasks; physical presence	Reaching stop-overs and goals
Organization	Structure: expert silos	Cross-team processes
Adaptation	Limited: planning > implementation	Continous; immedicate action
Innovation	Happens accidentally	In the DNA of the approach
Communication	Formal, documented, slower	Rather informal, direct, faster
Media	Formal reports and presentations	Visuals instead of reports
Transparency	Blackbox, from facts to findings	Model, language, insight
Customer impact	Planning and final communication	Continuous involvement

Source: Adapted from Wilhelm (2019b)

While these manifestations of agility in IA have been described by practitioners (Coleman & Kasahara, 2019; Herbert, 2019; Pundmann et al., 2018; Wilhelm, 2019a; Wilhelm, 2019b), the academic research into agile IA practices is very thin. To date, there is only one academic case-study to this topic (Foo & Bhattacharya, 2017a), which shows the need for studies like the present one.

The following sections analyse agile frameworks which are most relevant for IA work processes.

2.2. Kaizen and Kanban

The most widespread agile framework in IA work processes today is Kaizen (Japanese for: change to the better). Its basic ideas were conceived as the Plan-Do-Study-Act-Cycle by US professor Walter Andrew Shewhart, and his student and later professor William Edwards Deming (Moen & Norman, 2010). Their ideas spread rapidly in Japan, where industrial companies like Toyota agilized standardized mass production in the 1950s.

The basic idea of Kaizen is to establish and live a culture of continuous improvement, especially by reducing the three main inefficiencies of a process to make it "lean": overcharging a process or a system beyond its capacity ("muri"), inconsistency in performance ("mura"), and wastes within the process ("muda"). Kaizen is translated into different schools of thought, such as Lean & Total Quality Management, Six Sigma or ultimately also the industrial norms of the ISO 9000 family of standards.

Kaizen is very often combined with Kanban (Japanese for: visual signal), a visual pull-system for just-in-time production which was first introduced by Toyota in the 1940s. In Kanban, workflows are visualized on boards with cards in columns, where each column represents a workflow step and cards represent tasks with a focus on the flow of work. According to the "muri"-principle, the maximum number of items in each workflow step are limited, the so-called work in progress (WIP) limit (Baig, 2019).

In IA, the Kaizen ideas of continuous improvement and waste elimination are well established. The IIA's International Professional Practices Framework requires a quality assurance and improvement process (QAIP) for all IA functions (The IIA, 2017c). IA practitioners have long applied "muda" principles to their own work processes (see Table 02).

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Table 2. The Seven Categories of Waste with Examples from Internal Audit Work Processes

Waste Category	Waste in Regular Processes	Waste in Internal Audit Processes
Transport	Unnecessary movements, e.g. of raw material	Physical sign-off of reports
Inventory	Anything waiting unproductively for future processes	Archiving of raw data and work papers
Motion	Unnecessary movement of machines or operators	Business travel to field audits
Waiting	Slow pace of a step in a series of steps	Limited availability of auditee
Overproduction	Produced items in excess of customer demand	Excessive documentation
Over-processing	Providing features not demanded by the customer	Detailed report for minimalistic Board
Defects	Not acceptable to customers, requires rework	Wrong information in the audit report

Source: Adapted from Wilhelm (2019a)

The first book on lean internal auditing was published in 2014 (Paterson, 2014), while research on the application of different schools of thought of Kaizen in IA has been published already before. The role of IA in the implementation of total quality management systems, including an empirical survey on how audit work processes apply TQM principles, was a research topic already in 1998 (Wilhelm, 1998). The topic how the work processes of IA can be compatible to certification according to the family of norms ISO 9000 was explored in 2011 (Wilhelm & Wasmer, 2011).

2.3. Scrum

The most recent and most fundamental agile framework that has been applied to IA work processes is Scrum. The expression Scrum and the underlying approach was invented by the two Japanese professors Hirotaka Takeuchi and Ikujiro Nonaka when they conducted a research study of new product development processes. They found out that successful companies in their study no longer use a sequential approach but employ a holistic method with a built-in instability, self-organizing project teams, overlapping development phases, multilearning, subtle control, and organizational transfer of learning (Takeuchi & Nonaka, 1986). This approach was first applied to software development in 1990 (DeGrace & Hulet, 1990) and became very popular after 1995, when the two US software developers Jeff Sutherland and Ken Schwaber codified Scrum as agile framework for software development and marketed it all over the world (Rigby et al., 2016).

Scrum is, in short, a set of rules which organizes work processes in loops of improving trials and errors (so-called Sprints), running in largely self-organized teams with daily transparent progress updates (Daily Scrum). It allows to deal with complex, adaptive problems and fosters continuous learning and naturally adjusting to changing conditions (Wilhelm, 2019a). Scrum incorporates aspects of Kaizen because its rules demand a regular inspection of the work done (Sprint Review) and a regular brainstorming on what went well and what needs to be improved (Sprint Retrospective). It implies aspects of Kanban as it works with a task board, on which the overall list of tasks to-do (Product Backlog), the list of tasks to-do during the next sprint (Sprint Backlog), as well as tasks in progress (Doing) and finished tasks (Done) are visually tracked. In contrast to Kanban, Scrum has specific roles, namely a keeper of the rules (Scrum Master), a person who is responsible for the emerging product, prioritizes the Product Backlog and links to the customer (Product Owner), as well as a self-organized project team

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which does the work (Scrum Team). Scrum does not know an explicit limit for work-in-progress as Kanban does but has its Scrum Team, jointly with the Product Owner, estimate its capacity and the amount of work to be done in the next sprint. Scrum has more elaborate rules, which is why Kanban is easier and faster to implement and can be applied more widely. Scrum has more disruptive power and can unleash more agile potential (Wilhelm, 2019b).

The first research endeavour to mention Scrum in relation to auditing was published in 2014 (Wright, 2014). The book is written as an overview for auditors and agile teams over agile governance and audit. It bridges the knowledge gap between agile software development teams and auditors (internal and external) because back then auditors and agile teams knew little about each other's work practices, goals and concerns. While its foreword mentions a number of (external?) audit teams looking at agile techniques and tools to plan and undertake their own audit work, the book focuses on the governance and audit of agile software development processes and does not deal with how agile frameworks can be applied to IA work processes.

The first documented application of Scrum in IA work processes happened at the IA department of the Swiss Accident Insurance Trust Suva in March 2015, the start of a full-fledged implementation of Scrum to all IA work processes (Wilhelm, 2017a, 2017b). Since then, the number of IA functions that "went agile" has proliferated. Practitioners have recently picked up the topic, with the first practical guide on how to do lean and agile auditing published this year (Coleman & Kasahara, 2019). Also, external service providers (Pundmann et al., 2018) and software companies (Herbert, 2019) have started to position themselves in anticipation of the rapidly growing market of agile IA transformations.

Standard academic books of IA are already mentioning the term "agile", which appears nine times in the IIA Research Foundation's standard book Sawyer's Internal Auditing (Clayton, 2019). However, the advice there is that internal auditors should follow their agile organizations and build up knowledge of agile frameworks in order to be able to audit them. The books do not yet mention or advise on the implementation of agile IA work processes. The first research study on Scrum in IA is a case-study on the IA function of DBS Bank in Singapore (Foo & Bhattacharya, 2017a). In the case-study, DBS IA implements Scrum in pilot audit projects. A Sprint Team comprised the usual Scrum roles Scrum Master and Product Owner and only one auditor plus members from all stakeholder teams, namely also process improvement executives, user representatives, and project managers from line management (Foo & Bhattacharya, 2017a).

According to that case-study, DBS IA has adopted their agile approach to avoid the disruptive effects of a full-scale agile adoption. Speaking in the classification of agile IA approaches summarized in Table 03, the DBS case-study exemplifies an IA Project Scrum, where the agile approach is limited to single audit projects and is not comprising all IA activities.

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Table 3. Classification of agile internal audit approaches

Scrum Artefact	Scrumpliance	IA Project Scrum	IA Function Scrum
Sprint	All compliance tests	Limited scope: project/area	Covers all IA activities
Epic	Compliance area	N/A	IA project, administrative task
User Story	"As a compliance auditor…"	Audit "who what why", value	Project bit: explore, test, align
Task granularity	Control tests, follow-ups	Must fit into sprint	Mini tasks > 30 minutes
Product Backlog	Compliance areas, tasks	Audit areas; all user stories	(Multi) annual audit plan
Increment	Control status	Sprint audit report (point of view, PoV)	Transparency
Findings & Follow Up	Entered as new tasks	In the audit report (point of view, PoV)	Follow up epic, findings database
Definition of Done	Control tested / remedied	Specific 'done' in a sprint	Epic question; specific 'done'
Bug	Control design error	N/A	Tracking of impediments
Release Plan	Test schedule for areas	N/A	Quarterly audit schedule
Compatibility	SOX (with access control)	QAIP	QAIP; ISO 9001
Specifics	Best fit: compliance audits	Definition of Ready, canvas	Best fit: non repetitive audits

Source: Wilhelm (2019a)

2.4. Problem Statement

The application of agile frameworks, especially Scrum, in IA work processes is a relatively new phenomenon which has not yet been adequately covered by academic research. Specifically, there is up to date no research study which has analysed an IA function that lives a full-fledged agile approach, an IA Function Scrum, for all its IA work processes. This appears to be the more urgent, the more agile IA work processes get adopted throughout the world of IA, as it is currently the case.

3. Research Questions

Given the large number of IA functions in transition from traditional to agile work approaches, the specific research question for this study is:

3.1. How can the change of an IA function related to agile IA work processes be influenced?

4. Purpose of the Study

The goal of business administration as applied science is not only to generate new knowledge but also to support practitioners in the field, in this case active internal auditors and chief audit executives (CAE).

5. Research Methods

The choice of a 'how' research question indicates an explanatory research approach which tries to build theory by answering the research question.

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5.1. Ontological, epistemological, and methodological position

This research project assumes a post positivistic ontological position, in other words it takes it for granted that reality exists in a complex nature that cannot be fully understood by the limited human mind. As a consequence, the best way to understand reality is to critically examine claims about it. As epistemological position, which concerns the nature of the relationship between researchers and their knowledge about reality, this project accepts the existence of dependence between researcher and research object but upholds objectivity of the researcher as ideal that must be controlled by means of critical questioning or peer review. This is especially important as the author is also an IA practitioner with a large experience and personal convictions about the IA profession and the present case. Methodologically, the study applies modified experimental and manipulative methodologies which are supported by triangulation of perspectives and are based on empirically grounded data derived from natural, situational settings. Research projects with a post positivistic position see theory construction as scientifically equal to theory testing, consider empirically grounded contextual variables and focus also on human behaviour and its aspects, thus trying to bridge the gap between individual cases and generalizations (Guba & Lincoln, 1994).

5.2. Single case-study research design

This study chooses a single case-study research design in its attempt to answer the research question of a case with an unusual outcome, which underlines the suitability of this design (Ragin, 2000). Such a case-study research design starts with data collection, namely writing a case-study on an IA function that has pioneered the implementation of IA Function Scrum in its IA work processes. It aims at developing explanations by finding general patterns in the case observations, which are considered in their context and are obtained and described with the help of interviewed respondents who provide also clues about the meaning of behaviour.

5.3. Grounded case-study approach for within-case analysis

Within-case analysis of the data was done following the methodological procedures of the grounded case-study approach by Wilhelm (Wilhelm, 2005), adapted for the single case-study approach of this study. It starts with data collection in semi-structured, problem-centered interviews, which are methods of data collection that are suitable for case-specific complexity.

The case of an IA department going agile and returning back to regular work processes was selected because of its obvious fit to the research question. Table 04 summarizes key criteria for the initial selection.

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Table 4. Criteria of the selected case

Criteria	Case	Remark
Organization selected	Swiss financial services provider with an annual turnover of CHF 4 billion, assets of CHF 50 billion and 4000 employees	The company is kept anonymous in order to speed up the research process by avoiding lengthy corporate review and authorization processes. It will be called "FICO" in the rest of this study.
Internal Audit Function	5 internal audit team members and 1 Chief Audit Executive	All 6 members of the internal audit function were certified as Certified Scrum Masters
Agile internal audit approach	Internal Audit Function Scrum	The agile framework comprised all internal audit work processes, including audit, consulting, fraud prevention, data analytics, management and support processes
Agile Frameworks	Scrum, Lean Management	Implementation of Scrum in 2015, return to regular lean-scented work processes in 2018

Data collection is based on two interviews of 90 and 76 minutes length, covering the IA Scrum roles Scrum Master and Team Member. The interviews were recorded and transcribed, entered into a case-study database and are turned into a grounded case summary with the help of summarizing content analysis.

6. Findings

In the data of the case-study of FICO's IA, the empirical data can be structured into categories which have emerged as influences on the implementation of agile work processes. They are summarized in the following sections.

6.1. Background and change process

Before going agile, FICO's IA employed a classical audit approach where an annual plan was established, decided for each year, then worked off in individual black-box audit projects. The way how agile work process were implemented played an important role. Mental speed has already been IA's key success factor and has allowed it to successfully overcome organizational hostility during the past seven years. The CAE and his team had already implemented several innovations such as dedicated consulting and data analytics teams or a database of findings and recommendations replacing traditional audit reports. After years of trying out in vain audit work process software solutions to find satisfactory IA work processes, the CAE brought forward his agile idea. His five-person team's reaction reached from change fatigue to deep interest in a new potential solution. What followed was a time of intensive reading by those interested. The CAE communicated his wish to give the idea a try and gave every member of his audit team the chance to veto against it – which nobody did. In March 2015, they decided to go agile. They organized a training workshop for agile methodologies and their implementation in IA to get the knowledge about agile work. The workshop was given by a Tunisian agile coach experienced with software development. It introduced agile frameworks and Scrum, had practical exercises to strengthen the knowledge, and placed its focus on finding a solution on how to adapt agile to IA. Having a professional coach saved a lot of time because of his idea of agile opportunities. He helped to structure the discussions and represented ideas visually. As the coach knew only agile software development, he did not speak the language of internal auditors and therefore the IA team autonomously transferred his

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ideas into the IA world. At the end of this two-day workshop, every IA team member became certified as Certified ScrumMaster. Whereas several team members were initially rather sceptical, the course sparked their enthusiasm and willingness to try living Scrum. The IA team had decided to use Scrum for all IA processes because also support processes and links to other processes like planning, education or data analytics are relevant for the core audit processes. They felt that the more pervasive Scrum was applied, the better will be the prioritization of tasks. What follows was a period until June 2016 in which the IA team used trial and error and cut its annual plan into pieces until manageable tasks were found as items on the Product Backlog.

In this initial phase, Scrum met much resistance within the IA team. People were used to know in the beginning of a year what audits they will perform. The idea to meet every day and every two weeks to plan anew how little chunks of work can be done took away planning security for the individual auditor. Astonishingly, people with a very structured accounting profile who appeared to be rather inflexible coped with the change process very well whereas other team members had severe concerns and, at one time, tried even to work out an alternative work model which followed a waterfall project method. In intensive team discussions and with the strong dedication of the CAE, the IA team tried to find "their Scrum" and the right aggregation of tasks. Very quickly, working with Scrum became the normality for FICO's IA team. The agile method lost its initial attraction and became routine. The IA team started to feel well with this new way to work. In this phase, instead of individual motivation the strong structures of Scrum carried the system forward: the sequence of institutionalized exchanges in daily and bi-weekly meetings and the included continuous improvement process. When the CAE left the company, a new CAE was appointed out of the IA team, who happened to be a proponent of the waterfall project and lean management methods. The new CAE aimed at making the Scrum work process leaner, which is why – after a transition phase of one year – he eventually changed the IA Scrum work processes back to a regular IA approach with a Kanban board in 2018.

6.2. Agile method, audit planning, and innovation

In the Scrum approach, especially the definition of work packages proofed to be difficult. A too fine-grained planning of Scrum tasks consumes a lot of preparation time and is felt by some auditors as pressure. Due to the interdependencies outside of IA's control, it often turns out to be in vain. Agile audit gets more transparent but often not much quicker when the auditee and data access do not work in an agile way.

One and a half years after FICO's IA had fully implemented Scrum, the new CAE abolished the regular team meetings, the role of a Scrum Master and self-organization of the audit team. Instead, there were biweekly regular team meetings without an agile rule setup. A conventional Kanban board as a general to-do list, a special to-do-list for the next two weeks as well as columns with "doing" and "done" were retained. The process became leaner but also less agile as fast changes were no longer done and team members did no longer bring in new requests in an agile way. During the Scrum approach, IA had still kept the traditional annual planning process where the AC decides on a yearly plan. This was a trade-off made to develop IA Scrum in an incubator mode without AC involvement. The new CAE arranged with the AC to introduce a half-yearly planning. As a consequence, the audit plan was executed closer to

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its initial risk assessment. Also, according to the regular audit approach, internal auditors were no longer multi-tasking in several audits but worked at one audit at a time. Audit planning became more rigid as the audits had to be finished punctually twice a year instead of once a year. Given the fixed end dates and less flexibility of a one-auditor-one-audit approach, agility inside individual time-boxed audit projects became more difficult because many auditees were rather inflexible and favoured a planned inflexible audit approach whereas agile auditing would have required quick access and quickly scheduled interviews during the time-boxed audits.

Regardless of the audit approach, where an audit is broken down into tasks there is the risk to intellectualize the audit work – it is already difficult to formulate a good task but it takes an enormous planning effort and has doubtful chances for success to plan the ideal backlog first and then implement it as it is.

FICO's IA team had always spent a lot of time for innovation. The introduction of Scrum has supported this innovative spirit because in an IA Function Scrum innovation was treated as a normal task and there was no difference between innovative tasks and regular work tasks. Both types of tasks were included in the normal work process, which was very helpful. The team managed to develop an agile mindset which led to more discussions and innovation debates compared to before the introduction of Scrum. This mindset stayed also after the restitution of a regular work process and was nourished by a constant inner urge to be agile and to stay innovative, no matter if agile was lived or not in the work process.

6.3. Organization of teamwork

In the Scrum and the conventional Kanban approach, the decision what the end result must be is taken top-down. The CAE is the place, irrespective of the approach, where the full responsibility remains.

Before FICO's IA changed to Scrum, the individual auditors had limited contact with each other. Once the annual audit plan was decided, the projects were distributed by the CAE and if no urgent question or resistance came up, the auditor could execute the whole allocated audit project without any contact to the team or the CAE. This was satisfying for individual experts and granted them a lot of freedom. Teamwork, transparency and sharing knowledge were limited.

When FICO's IA changed to Scrum, a self-organized team gained the freedom of implementation and could freely decide who does what task and how. The individual auditors had their specializations which played a large role on the choice of tasks each one made. Each auditor worked together with other auditors and according to the circumstances there were mixed and changing teams within a single audit. Auditors were multi-tasking in several audits and tasks of other IA processes such as education, management or quality improvement. Most audit projects were completely unique green field approaches, derived solely out of the IA team's risk assessment. Every second week, the IA team critically discussed its active projects and decided if action should be taken and if the initial goals were still justified.

When FICO's IA changed back to a conventional Kanban work process, the auditors could pronounce their work preferences in a meeting but the CAE decided over the distribution of labour. With a lean approach in mind, the new CAE strived for a strong standardization of the audit process. Templates with process and content checklists were introduced that had to be closely followed in each audit, with

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any deviation to be explained in detail. One team member was appointed as quality controller to make sure the templates were filled in and the individual steps were all kept in every audit project. It stayed in the discretion of the individual auditor to add additional content, however due to the time-boxed setup working off the checklists had the priority. Fulfilling the audit plan became the priority whereas reaching unique value added used to be the priority before. The Scrum Master's usual role is to take away impediments so that the development team can concentrate on their work. Most impediments in IA stem from sources external to the IA function, which is why the possibilities of a Scrum Master as regular IA team member are limited. If the team members are not content with the work approach, the Scrum Master frequently receives negative feedback and is in a double role in between the CAE and the team. After the FICO's IA changed back to a conventional Kanban work process, the Scrum Master role was abolished.

6.4. Communication and customer focus

For FICO's IA team, the customer focus remained constant irrespective of the work approach because it is linked to the proactiveness of every individual auditor. The relation to auditees was coined by interviews and feedback questions, no matter if the audit approach was agile or not. With Scrum, the communication became more structured and daily communication routines were formalized. The team members knew that they will see each other in and around the next daily Scrum meeting so they tended to use the formal time to exchange instead of spontaneous office visits. Inside the audit team, discussions were very intensive, before, during and after Scrum. The intensive exchanges in formal Scrum meetings made especially sense when every team member felt as real part of the project. In the IA Function Scrum, the team often talked every day about very different topics. In such a situation, the limited mutual influence of team members on each other turns the exchange less vital. In contrast, in an environment where one task influences the other and where there is real collaboration, feedback from colleagues is more interesting and the formal meetings allow to share topical knowledge and not only to gain insight into the work of the team in terms of organizational information about where a colleague is and what he does. Before Scrum, FICO's IA had already replaced their formal IA report with a database of findings and recommendation and kept formal presentations to a minimum, therefore Scrum did not have a large impact on reporting. However, the IA team had decided to balance the speed of quick reports with the need to wait until interrelated findings can be linked, which may appear during different phases of the audit. In addition, having too frequent reports carries the risk of confusion and a loss of time due to avoidable discussions with auditees.

7. Conclusion

This case-study is the first research project to examine the introduction of an IA Function Scrum in an IA function. In addition, it is the first case-study about an IA function which has returned back to a regular work approach after having implemented an agile framework. The data is highly contextual and specific to the individual case of an IA team that used to be already fast-paced and innovative before implementing agile frameworks. It indicates how sets of context variables influenced the agile change of

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FICO's IA function. Thanks to the rich contextual descriptions, a comparison of context variables will allow to infer general conclusions for IA change processes in other environments.

The within-case analysis has identified the setup of the change process, the choice of the agile method and agile planning process, and the organization of teamwork and related communication processes as relevant influencers of agile change. It shows that the collaborative involvement of the whole IA team has facilitated the implementation of Scrum. The implementation process was supported by the motivating dedication of the CAE as well as by an agile workshop led by an external coach and the included certification of the whole IA team. After the initial enthusiasm became less, the new work processes were backed by the strong routines of the Scrum approach. FICO's IA team has repeatedly adapted these routines to their specific needs and has thereby applied the principle of trial and error to the implementation process. Scrum has increased the transparency over IA work processes and it has strengthened knowledge sharing and agility in the IA team. It turned out challenging in terms of finding the right task size and striking a balance between fast reporting and considering interdependencies of findings. The strong structure of Scrum has created its own inefficiencies, thereby paving the way to its abolition in favour of a leaner approach. FICO's leaner approach was successfully rolled out in a strictly top-down manner and has replaced Scrum. It has deteriorated the collaborative and communicative practices established by Scrum. However, it has consistently preserved the agile mindset of team members and the team's innovative drive.

The most decisive factor for the implementation of Scrum and for its replacement by a leaner approach were individual preferences of the CAEs and their ability to overcome resistance in the team. The collaborative implementation of Scrum was well aligned to its collaborative nature and allowed to spark enthusiasm and commitment in the IA team. Over time, this drive ceded to a more bureaucratic application of the strong structural processes of Scrum. Agile work processes tended to become tedious and time consuming routines. The top-down implementation of a leaner approach counteracted a collaborative spirit and did not cause open resistance but tended to create emotional withdrawal and a work-to-rule spirit. After the restitution of less-agile work processes, a strengthened agile mindset and innovative drive remained unchanged. This shows that agility is more than a question of designing work processes but affects organizations primarily as a mindset shared by individuals and teams. FICO's agile audit case calls for more research into how different agile audit work processes succeed in different organizational settings. Specifically, it will be interesting to see how IA can keep up the momentum of agile work processes without getting stuck in agile structures and bureaucracy. Based on a variety of empirically grounded cases, multi-case analysis will allow a cross-case analysis emancipated from individual preferences. This will ultimately lead to the discovery of options for practitioners who plan to change their IA teams towards more agile work processes.

References

Baig, M. S. (2019, November 28). *A (Very) Short History of Kanban.* https://www.researchgate.net/publication/332571187_kanban

Bennet, N., & Lemoine, G. J. (2014). What VUCA Really Means for You. *Harvard Business Review*, 92. https://hbr.org/2014/01/what-vuca-really-means-for-you

Clayton, D. (2019). *Sawyer's Internal Auditing: Enhancing and Protecting Organizational value.* Altamonte Springs: Internal Audit Foundation.

Coleman, P., & Kasahara, S. (2019). *Active Auditing – A Practical Guide to Lean & Agile Auditing.* Amazon Kindle: Coleman.

DeGrace, P., & Hulet, S. L. (1990). *Wicked Problems, Righteous Solutions: A Catalogue of Modern Engineering Paradigms.* Upper Saddle River: Prentice Hall International.

Foo, S. L., & Bhattacharya, L. (2017a). *Agile Auditing at DBS: Embracing the Future. Case-Study.* Boston: Harvard Business Press.

Foo, S. L., & Bhattacharya, L. (2017b). *Agile Auditing at DBS: Embracing the Future. Case-Study Teaching Note.* Boston: Harvard Business Press.

Guba, E., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 105-117.

Herbert, G. (2019, May 31). Dynamic Auditing. Presentation at the SOPAC 2019. http://iia.org.au/sf_docs/default-source/sopac-2019/delegate-copy-presentation-session-8d-dynamic-auditing-keeping-pace-in-the-now-environment.pdf?sfvrsn=2

Moen, R., & Norman, C. (2010). Circling Back – Clearing up myths about the Deming cycle and seeing how it keeps evolving. *Quality Progress*, 22-28.

Paterson, J. C. (2014). *Lean Auditing: Driving Added Value and Efficiency in Internal Audit.* Wiley.

Pundmann, S., Adams, S., & Narayanan, R. (2018, February 2). *How Agile Internal Audit Can Add Value.* https://deloitte.wsj.com/cfo/2018/02/02/how-agile-internal-audit-can-add-value/

PwC. (2019, November 6). *2019 Global State of the Internal Audit Profession Study.* https://www.iianz.org.nz/Site/news/all-news/2019-state-of-internal-audit-profession.aspx

Ragin, C. (2000). *Fuzzy-Set Social Science.* University Press.

Rigby, D., Sutherland, J., & Takeuchi, H. (2016, April 20). The Secret History of Agile Innovation. *Harvard Business Review*. https://s3.amazonaws.com/media.loft.io/attachments/The_Secret_History_of_Agile_Innovation.pdf

Schmitz, A. (2018, November 15). Agiles Arbeiten – Worüber reden wir hier überhaupt? Präsentation an der BGM-Fachtagung der ZWW, Universität Bielefeld. [Agile work – what are we talking about? Presentation at the ZWW conference, University of Bielefeld]. https://www.bgm-bielefeld.de/downloads/ws181115bgm31415.pdf

Takeuchi, H., & Nonaka, I. (1986). The New New Product Development Game. *Harvard Business Review*, 37-146.

The IIA. (2017a, November 5). *Core Principles for the Professional Practice of Internal Auditing.* https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Core-Principles-for-the-Professional-Practice-of-Internal-Auditing.aspx

The IIA. (2017b, November 5). *Definition of Internal Auditing.* https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Definition-of-Internal-Auditing.aspx

The IIA. (2017c, November 5). I*nternational Standards for the Professional Practice of Internal Auditing* (Standards), 7-9. Retrieved from https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Standards.aspx

The IIA. (2019, November 6). *Pulse of Internal Audit Reports. The Audit Executive Center.* https://www.theiia.org/centers/aec/Pages/pulse-of-internal-audit.aspx

Wilhelm, P. (1998). Die Rolle der Internen Revision bei der Umsetzung einer TQM-Strategie (Diplomarbeit). [The Role of Internal Auditing during the implementation of a TQM strategy]. (Master Thesis). University of St. Gallen.

Wilhelm, P. (2005). *Power in Change Management* (Doctoral dissertation). Antonym.

Wilhelm, P., & Wasmer, S. (2011). Qualitätssicherungsprozess bei der Suva – IIA-Qualitätsprogramm und ISO 9001:2008. [Quality Assurance Process at Suva – IIA-Quality Programme and ISO 9001:2008]. *Der Schweizer Treuhänder 9*, 732-737.

Wilhelm, P. (2017a, September 21). *Agile Audit Planning.* Presentation at the ECIIA Conference Basel, Switzerland.

Wilhelm, P. (2017b, November 10). *Agile Audit Planning*. Presentation at the IIA Baltic Conference 2017, Riga, Latvia.

Wilhelm, P. (2019a, July 9). *Agile Internal Audit Processes.* Presentation at the International Global Conference 2019 of The Institute of Internal Auditors, Anaheim, California.

Wilhelm, P. (2019b, September 26). Agilität und ihre Anwendung in der Internen Revision. [Agility and its Application in Internal Auditing]. Presentation at the 38th Annual Conference of the IIA Austria, Schloss Schönbrunn, Vienna.

Wright, C. (2014). *Agile Governance and Audit – An overview for auditors and agile teams.* IT Governance Publishing.