SCRUM IMPLEMENTATION IN A REMOTE WORKING ENVIRONMENT: A CASE STUDY OF PROOFHQ

Magdalena Zoła*

Abstract

Background. Recently the Scrum method has been gaining increasing popularity, especially in IT projects. At the same time, many companies are turning their attention towards remote work.
Research aims. The paper analyses problems concerning the use of Scrum in conjunction with telework. It gives background on both the Scrum method and the characteristics of a remote working environment.
Method. The work presents a case study of ProofHQ, a company that runs a software development project with Scrum in a remote setup.
Key findings. The research shows that appropriate policies and procedures devised with telework in mind can enable the Scrum method to be successfully implemented in a remote working environment.

Keywords: Scrum, Remote work, Telework, Dispersed team, Case study

INTRODUCTION AND BACKGROUND

Nowadays Scrum appears to be the most often used agile approach to projects (Scrum Alliance, 2013, p. 13). Initially only used in software development, it currently seems to be expanding to other areas such as marketing or sales. The method was designed to improve speed and flexibility by abandoning the traditional division of product development into sequential phases. It emphasises the meaning of effective communication and collaboration within the team as key success factors of a project.

Recently an increasing number of companies, especially in the IT industry, are turning their attention towards remote work. While most organisations use telework only in a minor part of their operations, others treat it as their primary approach. Due to its requirements, Scrum does not seem an adequate choice for a remote working environment. Nevertheless, there are companies that try to use this method in conjunction with such a work arrangement.

This work aims to present a case study of a project operated on the basis of Scrum and rendered by a dispersed team whose members work remotely. It analyses the experience of ProofHQ company with Scrum in a remote working environment, challenges faced by the team members and the organisation, along with procedures devised and implemented in order

* Magdalena Zoła, John Paul II Catholic University of Lublin.

to address them. The choice of ProofHQ as the object of the research was inspired by the statement of its CEO on remote work (Stillman, 2013). Moreover, the company agreed to make some of its internal information available to the author.

The Scrum Method

The origins of the Scrum method might be traced back to a work published in 1986 by two Japanese researchers Takeuchi and Nonaka entitled *The New New Product Development Game*. It compares the traditional approach to product development, in which the project progresses through sequential phases, to a holistic one, which is characterised by significant overlapping of these phases. Takeuchi and Nonaka (1986) enumerate six key factors of the new approach, i.e. built-in instability, self-organising project teams, overlapping development phases, "multilearning", subtle control, and organisational transfer of learning. The combination of them positively influences speed and flexibility, and thus improves the competitiveness of the organisation. It is noteworthy that this article was the first to make reference to rugby football and to use the word scrum (which denotes the manner of restarting the game after a minor infraction) in the context of product development.

The next step in the development of Scrum was the publication of the book W*icked Problems, Righteous Solutions* (DeGrace & Stahl, 1990). The authors indicate deficiencies in the waterfall model of software development, such as incomplete requirements at the beginning of the project, frequent changes in them during the software construction process, and unpredictability of implementation strategies. The all-at-once model was proposed as a solution to these problems.

The Scrum method was formally proposed by Ken Schwaber and Jeff Sutherland. The latter admits that its essentials were directly influenced by the concept of Takeuchi and Nonaka (1986) as well as by the team-based all-at-once model (Sutherland, 2004, pp. 1–2). Additionally, other ideas that comprised the final version of the method are mentioned. These include object-oriented programming, empirical process control, iterative and incremental approach to production, analysing processes and the performance of software production, and complex adaptive systems (Rubin, 2013, p. 3).

Scrum was first put into practice in 1993 by J. Sutherland, who used it in software development process in Easel Corporation. Then, in 1995, Schwaber (1997) presented the method to wider audience at the OOPSLA Conference (Object-Oriented Programming, Systems, Languages & Applications). In the next years the authors published, together or separately, multiple works devoted to Scrum, most noteworthy: *Agile Software Development with Scrum* (Schwaber & Beedle, 2001), *Agile Project Management with Scrum* (Schwaber, 2004), and *The Scrum Guide* (Schwaber & Suther-

land, 2013), which has since been translated into over 30 languages and is publically available at Scrum.org, a website founded and maintained by Schwaber since 2009.

Scrum is a part of the agile software development stream, which embraces various approaches that have a common characteristic, i.e. they reject the standard software engineering outlook on the development process, which was based on the statement that software development is no different from any other production process (Chrapko, 2013). In 2001 the supporters of this stream signed and published the so-called *Agile Manifesto* (Beck et al., 2001). Among the signatories of this document were representatives of Extreme Programming, Crystal, Feature-Driven Development, and also Beedle, Schwaber, and Sutherland, to mention but a few.

In literature, Scrum is referred to as a project management method or methodology. For disambiguation, the following definitions are adopted in this paper (Trocki, 2014, p. 399-400):

1. A project management method is a purposefully and consciously devised, reusable set of recommendations concerning practices of solving problems in project management.
2. A project management methodology is a complete and detailed project management method, which includes recommendations concerning the entire project management process, and describes in detail the course of action leading to the fulfilment of the intended goals.

Project management practitioners indicate that Scrum lacks components related to the initial and terminal phases of the project, and thus cannot be called a project management methodology. Considering the above-mentioned definitions, for the purposes of this paper Scrum is referred to as a method, not a methodology. An additional argument for that is the fact that the recommendations given by Scrum are rather of a general nature.

The authors of Scrum appear to share this point of view, although in their early papers on Scrum they used the term methodology. In Schwaber's words, Scrum is not a methodology, it is a framework (Kniberg, 2007, p. 7). *The Scrum Guide* contains the following definition of Scrum:

> "a framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value" (Schwaber & Sutherland, 2013, p. 3).

Scrum consists of the following elements:

1. Three roles: Product Owner, Scrum Master, and Development Team, which form the Scrum Team;
2. Three artefacts: product backlog, sprint backlog, and increment;

3. Iterations, also called sprints, within which the following meetings are held: sprint planning, daily scrum, sprint review, and sprint retrospective.

The essence of the method is processing requirements contained in the product backlog into the final product. This processing is divided into fixed-period sprints (typically 2–4 weeks). A sprint begins with the sprint planning, organised in order to determine the scope of the sprint. Each day of the sprint a daily scrum is held, a meeting during which every member of the Development Team answers three basic questions: What did I do yesterday?, What will I do today?, and What impediments are in my way? The last stage of a sprint is the sprint review meeting which summarises what was done in the sprint. The team and the stakeholders decide on changes in the product backlog and what should be done next. After the sprint is completed the last meeting is held – the sprint retrospective – which is an opportunity for the team to evaluate itself and to propose improvements for the next sprint. Each of the above-mentioned meetings is strictly time-boxed.

The structure of the Scrum Team is rather simple but not typical for project teams because Scrum does not define the formal role of a manager or a leader. Instead, it introduces two roles which are, to some extent, in opposition to each other: the Scrum Master, who represents the viewpoint of the Development Team, and the Product Owner, who represents the perspective of the client. This opposition is supposed to be beneficial for both the team and the product development because the two parties have to find solutions satisfactory to both sides. Except for the above-mentioned positions, the team is not hierarchical. On the contrary, it is expected to organise and manage itself.

The success factors of Scrum include collocated development, verbal communication, focus on team building, and collaboration (Sahar, Raza, & Nasir, 2013, p. 513). They are achievable provided that the team works together in one location and communicates without restrictions. On the other hand, an increasing number of IT projects are conducted with the use of remote work. This might seem difficult to reconcile with Scrum; nevertheless, some attempts have been made with a varied degree of success.

Remote Work and Dispersed Teams

Recently the opportunities offered by telework (also referred to as remote work, flexible work arrangement, virtual work, mobile work, or e-work) appear to draw an increasing interest of both employers and employees (WorldatWork, 2013; Ipsos, 2011). The growth in the use of telework results mainly from limited availability of employees on local job markets, and, at the same time, from the possibilities offered by the technological progress. Additionally, telework allows for reducing operational costs and

for entering international markets. Employees have also begun to find remote work beneficial thanks to such factors as reducing the time and cost of commuting and often the ability to work flexible hours. Telework has gained the highest market share in the industries connected to modern technologies such as: IT, telecommunications, the media, marketing, finance, and consulting.

The term telework was coined by Jack M. Nilles in 1973. He defines telework as "any form of substitution of information technologies (such as telecommunications and/or computers) for normal work-related travel; moving the work to the workers instead of moving the workers to work" (JALA International, 2013). According to Nilles telecommuting is a subtype of telework, characterised as periodic work out of the principal office; it can be done at home, at a client's office, in a telework centre, and should take at least one day per week.

In recent times the word telework evolved from a conversational expression to a legal term. An employment can be referred to as telework when the following two conditions are satisfied: the employee works regularly out of the office and the results of this work are delivered with the use of electronic means of communication (cf. Polish Labour Code, Art. 67). There are two aspects regarding the legal understanding of the term telework: the form of employment (employment contract) and undefined amount of time devoted to remote work.

In the light of the growing popularity of self-employment and civil law contracts, the following definition of telework is adopted in this paper: telework is any form of work performed away from the employer's or contractor's business premises provided that the results of this work are delivered with the use of electronic means of communication, and it constitutes no less than 20% of the overall working time, regardless of the form of employment.

Telework presents advantages and drawbacks to both employees and organisations. Moreover, the demands of a remote work arrangement often seem mutually exclusive. Table 1 summarises the most commonly mentioned benefits and costs of telework.

Due to the increasing globalisation of business around the world, many organisations decide to take advantage of the opportunities offered by using distributed teams (many teams working in different locations) and dispersed teams (team members within a team are dispersed to different locations) in their operations. The differentiation presented here is extracted from K. Schwaber's foreword to the book *A Practical Guide to Distributed Scrum* (Woodward, Surdek, & Ganis, 2010). By using this type of arrangement companies are able to optimise their costs, expand access to new markets, and sustain adequate workforces. Among other reasons for introducing this scheme are scarcity of skills and flexibility of forming

teams rapidly. Additional factors enhancing the popularity of this model in the IT industry are: outsourcing, subcontracting, and partnerships, which have become mainstream in software development.

Table 1. Benefits and Costs of Telework

Benefits	Costs
for teleworker	
Improved work/life balance	Difficult to differentiate work and home boundaries
Flexibility of workday	May result in extra hours worked
Minimal management direction	Performance feedback reduced
Autonomy	Less office interaction with peers and managers, teaming is a challenge
for organisation	
Reduction in office space	Infrastructure expense related to home office, travel costs associated with team meetings
Staff recruitment and retention	Difficult to control, supervise, appraise, team building is a challenge
Diversity management	Selection process for teleworkers can come under challenge
Improved employee morale	Loss of employee morale as organisational isolation occurs

Source: adapted from Potts (2006, pp. 30–31).

These trends also apply to projects operating on the basis of Scrum. A recent survey shows that the team is distributed across different sites and/or geographic areas in 24% of Scrum projects (Scrum Alliance, 2013, p. 24). This fact is even more surprising because Scrum requires intensive collaboration among team members and assumes that the team is collocated. Therefore, using this method with a distributed or dispersed team poses multiple challenges for the organisation and the team itself. Researches in the subject enumerate challenging factors due to project global distribution such as shown in Table 2.

Table 2. Challenging Factors Caused by Global Distribution

Challenging factors	Frequency (number of studies)
Synchronous communication	9
Collaboration difficulties	6
Communication bandwidth	6
Tool support	6
Large team	5
Office space	2
Multiple sites	1

Source: Adapted from Hossain, Babar, and Paik (2009, p. 179).

The problems posed by the distribution of the Scrum team are fairly well known and described (Woodward et al., 2010; Kaberwal, 2013), as

well as the means of handling them, and recommendations concerning distributed team management. Some of these difficulties are common to both distributed and dispersed teams, but others are specific to only one of these categories. It can be observed that dispersion-specific problems are relatively less examined and covered in literature. The teams that are not only dispersed but their members work remotely form a rather distinctive category, which deserves to be thoroughly surveyed and described.

METHOD

This paper presents a case study of a project conducted by a dispersed team of teleworkers. The project concerns the development of an IT system and is run on the basis of Scrum. The experience of ProofHQ company with this method in conjunction with remote work is considered, problems encountered by the organisation and its employees are presented, and solutions developed to address them are analysed.

The study presented in this paper is a single-case study (Yin, 2014, pp. 51–52), and it is not intended to serve a theory-forming purpose. Nor is it supposed to test a theory by falsifiability. By depicting a contemporary phenomenon in its actual context, the study aims to find the answers to the following questions: in what ways are particular practices implemented in the given circumstances, and what is the rationale behind the choices made by the company.

The following sources of information were used: internal documents of the company, press releases (published interviews), interviews conducted by the author (partly through electronic means of communication), and observation. The aim of the interviews was to collect information on procedures and practices connected with the use of Scrum as well as learning how the teams operate in the remote working environment. Therefore, the employees interviewed were those responsible for managing and coordinating the work of the Scrum teams, including two Scrum Masters and software engineering director.

The study makes use of triangulation of the sources of information. The research was conducted during the period from February to April 2014, but it also refers to former history of the company, information about which was acquired through the interviews, as well as informal observation of the company's operations since 2011. Due to low prevalence of remote work in Scrum teams, especially in Poland, a single-case study approach was chosen as the research strategy in this paper.

Short History of ProofHQ Including Evolution of Scrum in the Company

ProofHQ (Approvr Ltd) is an IT company offering an online system for managing content review and approval process. It was founded in 2007 by Mat Atkinson, CEO, who currently manages the company along with Anthony Welgemoed, CTO. The company is independent. It has been funded by the management team and has no external investors.

The ProofHQ system is a SaaS (Software as a Service) application designed to simplify workflow and to expedite the delivery of marketing projects. It is used by brands and agencies in numerous countries. The customers include, inter alia, Tesco, BlackBerry, AT&T, Nestle, CBS, and WWF.

The concept behind ProofHQ was developed at the end of 2006, and in the years 2007–2008 extensive research and development was conducted. The first beta version of the product was released in mid-2008 followed by the full launch towards the end of 2008. In the early phases of the development of the product, when the team was small, no particular project management method or methodology was formally adopted. Since January 2010, after A. Welgemoed joined the company, Scrum has become its dominant product development approach (the company also episodically used Kanban, another agile method for software development).

In the early stages there was only one Scrum team, which then split into two teams divided on the basis of technological aspect. The teams started to grow rapidly; in 2011 alone the number of their members almost doubled. In 2012 the company launched two sub-projects aimed at introducing major new features. The teams created in order to run these sub-projects were formed using some of the members of the existing Scrum teams. In August 2013 when the features were ready and integrated into the main stream of development, the two-team structure was restored. The only difference was a higher number of team members because of the recruitment which was conducted in the meantime.

Due to the increasing number of employees and a further expansion of the company, a need emerged to rearrange the team structure. At the end of 2013 a decision was made to divide the product development unit into three Scrum teams. This time the division was not based on technological factors, but rather on the areas of the application, which made the teams multidisciplinary. The restructuring in question also involved other changes in the approach to Scrum. Firstly, it was decided to formalise the Scrum process and to unify it across the teams. Secondly, in order to better address the growing complexity of the project, the main tool used by the company to manage the product development was changed. Thirdly, professional courses in Scrum were organised for Scrum Masters, Product Owners, and senior team members.

RESULTS

Scrum Adapted to Remote Working Environment in ProofHQ

In January 2014 ProofHQ adopted a document describing the details of the Scrum process in the technological team. A need to formalise the process resulted from several factors. To begin with, the increased number of Scrum teams required some unification to be introduced in order to make it easier for new employees or these transferred to another team to get accustomed to the new environment. The most important reason, however, was the fact that the team works remotely, and, thus, the Scrum process needed to be adapted to face the challenges posed by these conditions.

ProofHQ promoted telework from the beginning. With only one exception (sales office opened in Dallas in September 2013) all the employees, including CEO and CTO, work remotely. The majority work from their homes, although some team members rent offices or desks in shared offices. The company is highly internationalised, with employees spread over multiple locations including the UK, the USA (California, Texas, Florida), Poland, and South Africa. Even though the term employee is used here, most team members are in fact employed as independent contractors.

The current number of ProofHQ employees amounts to 60 and is still growing, up by almost 20 since mid-2013. The technological team consists of 28 members split into three Scrum teams of 6, 11, and 11 members. Each Scrum team has one Scrum Master (who is also a developer) and one Product Owner. The prevailing part of the technological team is Polish, except for the Product Owners, who are South African and British.

There are several aspects connected with remote work that the Scrum process, or the development process in general, needs to address. The most noteworthy are difficulties with collaboration. It becomes rather complicated when a single task is worked on by two or more people, as they cannot simply work on one computer or a piece of paper. Moreover, synchronising the communication between the people is not as easy as it would be in an office because team members do not see each other or know if someone is busy or not. Moreover, they are not always able to obtain answers to their questions quickly. It becomes even more challenging when this communication needs to involve a larger group.

Another factor that exacerbates the situation is the dispersion of team members across time zones. Even though the time differences within the technological team are minor, they can still disrupt the daily routine. A similar effect might be caused by the fact that even in one time zone not all employees work at the same hour schedule. In the case of cooperation across the Atlantic, the time difference is much more difficult to overcome (the time offset to UTC for Warsaw is +1, Dallas is –6, and Los Angeles is –8). What is more, cultural differences also play their role as well as differ-

ent public holidays in particular countries, and the language barrier. Although English is the standard language used in communication in the company, not everyone speaks it on the same level.

There are also other disruptions specific to working from home. First of all, the Internet connection, which is key to this type of work, may sometimes be faulty resulting in idle periods during working hours. Even ordinary things such as crying children, noises from a neighbour's flat or a postman ringing the doorbell might interrupt work, especially when they happen at most inappropriate moments. Moreover, remote work requires employees to be able to separate their professional and private lives, otherwise one may interfere with the other.

Finally, the aspect that suffers most in this type of work is team integration. It is relatively difficult for people who only meet over the Internet to develop friendship and team spirit. What is more, remote work seldom offers the employees opportunities to meet socially after work.

The Scrum process and the general workflow in ProofHQ is designed to address as many of the above-mentioned problems as possible. This is done by various means such as tools, policies and procedures, and planning the work with the view to its character.

Collaboration and communication within the company are continually improved in numerous ways. First of all, multiple tools are utilised such as bug tracking and project management software; screen, documents, and calendars sharing; or video conferences. One of the most important roles is played by the instant messaging application, which is extensively used for daily communication as well as giving information about the status of particular team members (busy, out of office, etc.).

Moreover, Scrum itself is designed to enforce and enhance communication by imposing a framework for it. Daily scrums provide all team members with updates on the sprint progress and help synchronise the work within the team. The synchronisation and coordination of work among teams in ProofHQ is facilitated by the scrum of scrums – a cross-team meeting attended by Scrum Masters, Product Owners and representatives of each team, which is organised bi-weekly or at the request of any of them. Most communication, however, takes place within the teams.

The initial meeting in every sprint is the sprint planning, during which the Product Owner presents to the team the user stories that are candidates for the sprint. Next, these user stories are discussed and estimated using the planning poker technique. Based on the resulting estimations, a decision is made which stories should constitute the sprint. Additionally, the conclusions from the discussion are used to update the descriptions of the stories in the management system. As a rule, the company propagates a policy of recording the results of such conversations for future refer-

ence so that all the details can be accessed even if not all the participants are available.

At the other end of the sprint, there is the sprint retrospective. In ProofHQ it is divided into two parts: the proper sprint retrospective and the sprint retrospective summary. The former is held within the Development Team, with the Scrum Master and the Product Owner being optional attendees (ProofHQ, 2014). In practice the Scrum Master participates in this meeting as a member of the Development Team. During this meeting everyone has an opportunity to raise negative and positive issues regarding processes and the environment. The Team also proposes solutions to internal and external issues. The sprint retrospective summary meeting involves a representative of the Development Team, the Product Owners, and CTO. Its aim is to escalate external problems reported by the Team during the sprint retrospective to the management and discuss the solutions. This can lead to decisions to amend the company's policies and procedures in order to address the problems and to improve the workflow.

ProofHQ has also introduced additional meetings to the Scrum process. First of them is the grooming session. Its purpose is to review the user stories considered as possible candidates for the next sprint in order to locate any missing details and potential problems as well as to determine preliminary estimates which give the Product Owner better understanding of their technical complexity. The meeting is attended by the Product Owner and one or more representatives of the Development Team, usually senior team members, and is held 2–3 days before the sprint planning.

Another meeting is called the feature freeze. It is usually scheduled about two days before the end of the sprint. During the meeting the Development Team reviews open issues (user stories and defects) and decides which of them can be closed in the current sprint and which should be dropped. The Product Owner's responsibility is to approve or to amend this decision. All the resources are subsequently relocated to the identified issues in order to complete them. After this meeting no new items should be added to the sprint, unless critical defects appear.

The last meeting that takes place in each sprint is called the release meeting. Its participants include the same group as the scrum of scrums plus representatives of system administrators. It is aimed to discuss items completed in the sprint by all teams and actions that need to be taken during the release of the sprint's work. The outcome of this session is called the release plan, which helps coordinate the process of making the new functionalities available to clients.

The Development Teams are also given an opportunity to present the effects of their work to the whole company. This session is called the sprint demo, and it is held on the penultimate day of the sprint. It takes a

form of a webinar during which new functionalities are demonstrated by team members responsible for their development. After that there is time for the audience to communicate their questions and suggestions, but any further discussion is done afterwards, in order to keep the meeting brief. If such suggestions are found valuable, they may be converted into user stories for future sprints.

All of the above-mentioned meetings are most often scheduled at a fixed time in each sprint. This helps team members organise their work so that they can take part in relevant meetings. Most of the sessions are timed during common working hours of all their participants. However, there is one exception: since the sprint demo is organised for the whole company, i.e. on both sides of the Atlantic, it needs to be scheduled at a time which is, if not convenient, than at least acceptable for everyone. This requires concessions from the Polish employees, who have to finish their work later than normally, and those from western America, who need to start earlier.

It is worth mentioning that, although the official language in ProofHQ is English, some meetings are conducted in native languages of the people who take part in them. Specifically the sprint retrospective is usually in Polish, as well as a large part of technical discussions. Especially in the latter case, it makes it easier and more natural for the participants to express their ideas. Another noteworthy practice is recording some of the sessions, particularly in the case when one or more person who was expected to take part cannot appear. This policy also applies to meetings of high relevance in order to make them available for future reference.

ProofHQ supports the idea of separating the professional and private lives of its employees. One of the factors that make this easier is the fact that the team members work during fixed hours, unlike in many telework companies, which measure their employees labour by the number of tasks done rather than the time spent. There is also a procedure introduced in order to limit the need to engage employees in work outside of their working hours: each day a few team members are "on duty", and only they should be contacted in case of emergency issues. On the other hand, the company allows its employees to work in moderately flexible hours, so it does not object to them taking a break during the day, as long as it does not collide with scheduled activities.

Although the integration is difficult in such a dispersed team, the company makes an effort to facilitate it. On a regular basis, generally twice a year, a "meetup" is organised for the whole company, i.e. a face-to-face meeting for both work and entertainment. At this event the employees from different countries and divisions can meet and get to know each other. More often meetings in smaller groups take place. "Mini meetups" are formal, work-oriented events organised in order to discuss technological aspects of planned features, as well as proposed improvements to the

development process. The list of their participants is dependent on the nature of problems concerned. Lastly, the employees from various cities or areas meet informally from time to time, including occasional travels to other locations.

CONCLUSIONS

It might seem that Scrum, which is a method highly dependent on collaboration, does not work properly with a dispersed team. Moreover, some practitioners claim that a remote setup is especially detrimental to start-up companies. Others, like Yahoo! CEO Marissa Mayer, discourage this kind of work arrangement in general. They argue that speed and quality are often sacrificed when people work from home and that being one company starts with physically being together.

However, sceptics of telework seem to be in the minority. The example of ProofHQ, which has been a remote company from the beginning, proves that it is possible to establish and develop a successful enterprise based on this type of work arrangement. Consistency and appropriate approach to management are key factors in running such a company.

In order for Scrum to work in a remote setup some effort is required on the part of both the management and the employees. Appropriate policies and procedures devised with telework in mind, such as the ones described in this paper, are essential factors in adjusting Scrum for dispersed teams. Apparently, the conception of self-organising teams, which is one of the keystones of the method, in conjunction with the experience of the team members, can allow for a successful implementation of Scrum in a remote working environment.

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IMPLEMENTACJA METODY SCRUM W ZDALNYM ŚRODOWISKU PRACY: STUDIUM PRZYPADKU PROOFHQ

Abstrakt

Tło badań. W ostatnich latach metoda Scrum staje się coraz bardziej popularna, szczególnie w projektach IT. Jednocześnie w wielu firmach daje się zauważyć rosnące zainteresowanie pracą zdalną.
Cele badań. Artykuł rozważa zagadnienia związane z użyciem metody Scrum w połączeniu z telepracą. Przedstawiony jest kontekst dotyczący zarówno metody Scrum, jak również specyfiki pracy zdalnej.
Metodyka. W pracy zaprezentowane jest studium przypadku ProofHQ, firmy, która prowadzi w oparciu o tę metodę projekt IT realizowany w zdalnym środowisku pracy.
Kluczowe wnioski. Przeprowadzone badanie pokazuje, że metoda Scrum może być z powodzeniem zaimplementowana w zdalnym środowisku pracy dzięki odpowiednim zasadom i procedurom zaprojektowanym pod kątem telepracy.

Słowa kluczowe: Scrum, praca zdalna, telepraca, zespół rozproszony, studium przypadku