

# Can team building be a game changer for Start-ups?

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**Abstract.** The paper examines the possibility of using team building in order to address one of the main issues that lead to Start-up failure – lack of team cohesion and shared vision regarding goals. Team building refers to a set of activities that are supposed to help build and/or consolidate a team and facilitate the team’s ability to work together towards achieving clear, well defined goals. The research of the paper was conducted by first examining the existing literature in the field of team building and Start-ups in order to understand if the topic has been previously covered and if so, take note of the results. Secondly, it is based on the experience of the authors with implementing team building practices in the case of three Start-up businesses and continuing with applications in an educational context. The results suggest the existence of a link between the usage of team building activities and team cohesion, which in the case of Start-up businesses could prove to be the difference between their success or failure.

## 1 Introduction

Start-up businesses have been recognized throughout time as an important source of job creation and for helping create an environment of innovation and forward-thinking solutions. Start-up businesses are characterized by working on ambitious projects with scarce resources and within short time frames in order to not only satisfy a customer need, but also identify the need and convince the customer that the product can solve a problem that the latter is often times unaware it has.

A large number of Start-up businesses are born each year, but research has shown that a small number of these newly founded businesses will survive after a five-year period [1]. Among top reasons behind Start-up failure are lack of team synergy and building a product that the customer doesn’t need. It is known that team synergy can lead to an increase in productivity in any type of business, but it seems that in the case of Start-up businesses this aspect gains even more importance as this can make the difference between Start-up success and failure.

Currently, team building activities are used when trying to improve team efficiency or cohesion, with successful implementations being noted in the following fields: sports, software development, business, health care, education and construction. This therefore led the researches to the inevitable question: Could team building be effective in the case of

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startup businesses? Available literature suggested a positive link between team building activities and team cohesion for the case of a R&D startup. This was however the only documented case of team building activities used in a startup business that the researchers managed to find [2]. This therefore highlighted a research gap that the current paper aims to address.

## 2 Literature review

Ever since their birth, Start-up businesses have managed to evade a well-established definition to characterize them. Some certainties regarding the delimitation of a Start-up business is that these types of business are driven by innovation [2] [3] [4], are often faced with a shortage of resources, lack formal structures and efficient decision-making processes [5]. A generally accepted definition for Start-ups is the one coined by Ries, according to whom, Start-ups develop new products and /or services under conditions of extreme uncertainty [6].

Another important aspect of a Start-up business is that the motivation and vision of the entrepreneurial team lies is at the core of their operations, thus making emotional connection an essential aspect of a Start-up's success [2]. Lack of team synergy and building a product that customers don't need have been identified as top reasons for failing startups [7]. Regarding the role that Start-up businesses occupy in Romania, it has been noted that similar to the European market, Romania has a strong and positive attitude towards entrepreneurship and the importance of small businesses [8].

For more than twenty years, team building has been used for improving interpersonal relations and social interaction [9], while the concept emerged in the late 1920s [10]. It was in the last decade however, that an emphasis in teamwork in organizations and team effectiveness has begun manifesting [11][12].

Team building refers to the collection of activities and/or exercises that a team partakes in [13], in order to develop a sense of togetherness and increase team performance [14][15] by opening up and understanding the needs and motivations of other team members, and learning how to work with them in order to overcome obstacles [16]. An important aspect when looking to implement team building within a team is being aware of the environment in which the team operates and understanding the requirements of the team [17].

Originating implemented predominantly in the case of athletic teams [13], team building practices have made their way throughout the years across a variety of occupational fields such as: software development [18] [19] [11], business [20], health care [21] [22], R&D Start-ups [5], education [10] [23] [24] and construction [25].

Although generally considered to be a yielder of good results [18] [14] [16] [10] [11] [23] [26] [24] [12] [25] team building does have some pitfalls, but as observed from previous practice most of these "wounds" are self-inflicted by the managerial team [27] as shown in Figure 1 [28].

Malselection	Selection of team members based on personality and not the skills needed
Impatience	Not allocating enough time for the team to develop
Deception	Using the team for pseudo teamwork purposes (specifically, using team building programs to mask difficulty or conflict between team members)
Aimlessness	Failure to establish performance goals for the team
Powerlessness	Failure to empower the team members, build confidence and ensure mutual accountability
Inhibited communication systems	Failure to establish open communication
Competitive mania	Creating an overemphasis on competitiveness that thwarts teamwork

**Fig. 1.** Seven deadly sins of team building [28]

As for the ways that team building is implemented and used in today's organizations, it has been noted that there are a variety of tools available, including outdoor experiential activities and indoor group process discussions [16].

### 3 Research methodology

#### 3.1 Research background

The research for the paper has been conducted inside a company that was funding and managing I.T. Start-ups. At the time of the research, the company was developing three I.T. Start-ups. The development teams of the three Start-ups were small (1-5 members) and some of the company employees were part of more than one Start-ups' development team.

The problems that led to the decision of using team building practices and tools were related to the teams' inability of meeting deadlines and achieving established goals, manifested together with a very visible lack of communication among team members and in some cases, even team sabotage.

These issues have been discovered and confirmed upon individual discussions carried by the project manager with each member of the development team. It is important to note that the project manager was introduced after the development teams have already been established and after the previous project manager decided to leave the company.

Individual talks (in the form of semi structured interviews) with the team members have revealed the following:

- No importance had been given to team communication and development. The previous project manager created a team and expected it to function optimally with minimal interactions. It was believed that each team member could handle their part of the project and that communication was a time waster;
- Passive encouragement of negative team competition. Although the previous project manager didn't specifically expect or encouraged team members to point out flaws and/or belittle their colleagues, this behavior was not addressed and stopped either. It was also a common practice for the project manager to belittle team members and to focus on identifying the culprits rather than the issues and possible solutions;

- The opinions of the development team were never taken into account as the previous project manager believed that they knew better due to their experience with both leading teams and working in I.T. companies;
- Team members being micromanaged, and most of them were under constant pressure;
- It was common practice for team members to find functional workarounds to fix bugs, ignoring the solutions given by the project manager.

By the time the new project manager was introduced, the development team were already reluctant to the idea of management and what it implied, and therefore, not only that communication within the team continued to falter but the communication with the project manager was more difficult than necessary.

Since the company was splitting the funds between three Start-ups, the lack of resources – specific to Start-ups – was present and affecting the tools available at the project manager’s disposal for consolidating the development team, and thus the decision of trying to organize internal team building activities (ran by the project manager in order to save funds) was made. The project manager was somewhat familiar with team building since they partook previously in such activities and noted the beneficial effect it had on the team that they were a part of at the time. More so, the project manager began studying team building and its applications and designed a personalized plan based on the issues that the development teams were facing.

## **3.2 Methodology**

### **3.2.1 Data collection**

For the literature review part of the paper, the existing literature in the field of Start-ups, team building and team building in the case of Start-ups has been reviewed and analysed in two steps. For this, the authors ran a search on Google Scholar, Research Gate and WoS for papers containing the following keywords: “Start-up”, “team building”, “teambuilding”, “Start-up team building”, “Start-up teambuilding”, “team building effectiveness”, “Start-up success”, “Start-up failure”. The search was also constricted by the time when the papers were published, a filter being set for displaying only papers written in between 2011-2021. After reading the set of papers that the search returned, a selection of these papers based on how relevant they were was conducted.

The second step, the recommended literature from the analysed papers has been consulted, choosing only the papers that were relevant to the topic at hand. Like so, a total of 40 relevant papers were examined for the literature review part of this paper.

As for the practical aspect of the study, the data was collected primarily from daily observations made by the project manager as well as from semi structured interviews that the project manager ran periodically with each member of the development team, and meeting notes. Other data that has been taken into account has consisted in metrics that the project manager used to monitor team cohesion such as: number of tasks completed over a period of time, number of times that team was able to meet deadlines, and how long did it take for one team member to reach out and ask for help when stuck.

All of these observations have been collected over the course of one year, the study being a longitudinal one. During this time, the researcher had enough time to observe not only how the teams behaved before, during and after team building activities but also what happened when the team structure changed due to members leaving or new members joining the team.

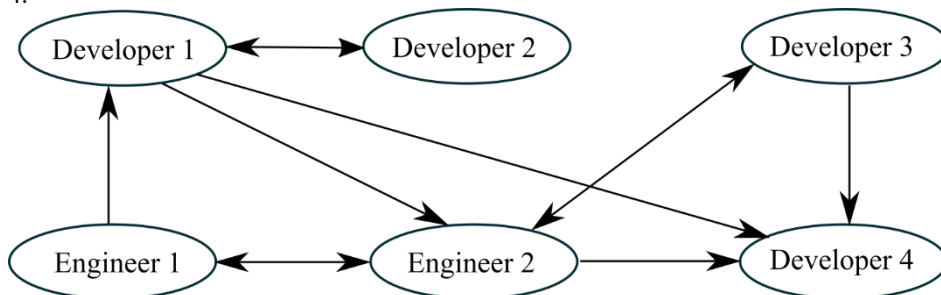
### **3.2.2 Data analysis**

In order to establish whether the perception of a dysfunctional team was a fact or it was merely the impression of the project manager or the response of the development team in regards to being presented with a new project manager, the latter decided to use sociograms in order to understand the relationships at a team level.

Sociograms are tools used to highlight and analyse social networks [29] and are very useful for charting the relationships and preferences within a group [30]. Sociograms are recommended to be used at the data analysis stage [31]. These sociograms were used before, during and after team building activities have taken place. Together with the metrics used by the project manager and the data gathered from the semi structured interviewed, they helped form the results of the study.

## 4 Results

In order to protect the identity of the team members, the names of the team members have been replaced in the sociograms presented in the paper. The sociogram presented in Figure 2 shows the existing relationships between team members at the time that the new project manager was introduced. It can be observed that prior to team building activities most members of the team formed cliques of two people, and there were two team members that according to the sociogram would be considered to be isolates – Developer 2 and Developer 4.

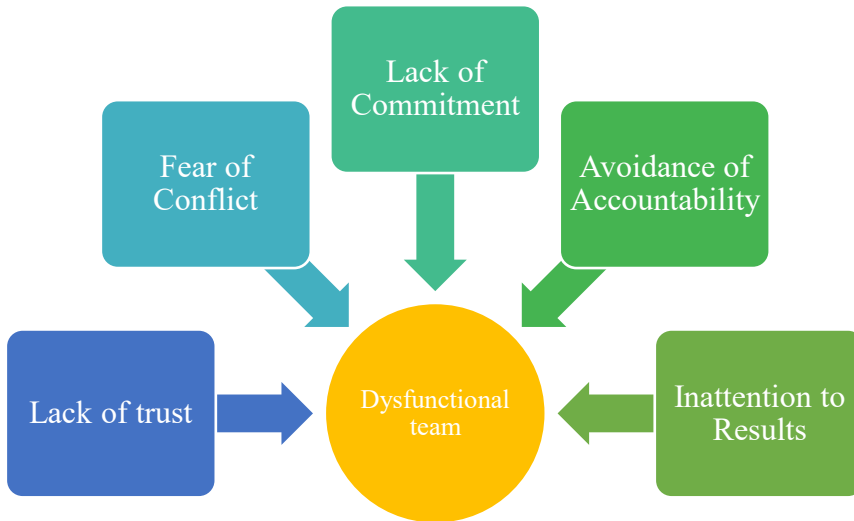


**Fig. 2.** Sociogram before team building

Additionally, the results of the semi structured interviews revealed the following common concerns among the members of the development team:

- Lack of trust regarding the members of the development team. It seemed like no one felt safe opening up and admitting when they were wrong or when they were stuck since most team members believed that their team mates would be unable and / or unwilling to help them;
- Most team members felt like they were doing more in terms of number of tasks completed, or more difficult tasks than their team mates;
- When asked what causes them to spend so little time discussing matters with team mates, most team members blamed the large amount of work that they had to complete for the lack of time dedicated to socialize with team mates;
- Most team members felt like they were not to blame for the team not meeting deadlines;
- Team members didn't have a clear overview regarding team roles and so there were plenty of times when small tasks were not completed because they were not assigned to one or more team members, even though at least one team member could have had the time and necessary means to complete the task.

Based on the opinion of practitioners [32] [33] and experts in the field [34], the development team was dysfunctional as it manifested most of the signs of such a team as presented in Figure 3.



**Fig. 3.** Key aspects of dysfunctional teams [34]

Furthermore, upon closer examination, it became apparent that the development team was working in an environment that could have been characterised as toxic [35], therefore it was clear that some intervention strategies were necessary in order to help the development team become effective.

In that regard, team building activities have started being implemented internally by the project manager. After studying the available literature in the field [36] [37] [38] [39], and upon examining the requirements of the development team, the project manager decided that the following types of team building activities could prove to be beneficial:

- Ice breakers. Team building exercises with the role of opening up the team to the activities, increasing their interest in being involved and being open to interact and get to better understand their team mates;
- Role clarifying exercises. Team building activities that would assign various roles to team members in order to help them develop an overview of what a certain position implied, and develop a sense of understanding what each team member is responsible for and what their activities imply;
- Conflict resolution exercises. Exercises that would face the team with an issue that the latter would have to solve / overcome and which would help develop mechanisms for solving conflicts at a team level.

The team building activities have been implemented at the end of the weekly review meeting that the development team was accustomed to, and which was a meeting in which the progress of the team was reviewed and targets were readjusted. Prior to the team building activities this weekly review meeting was not seen as a positive thing by the development team, as the members perceived it as a time waster and useless activity that only meant to bring out the bad, and specifically, what the team didn't manage to achieve.

The duration of the weekly review meeting has been cut in half, and inspired by the daily Scrum meetings, the focus of the meeting has been shifted on three major aspects: what the team managed to achieve, what tasks were still required to be completed and establishing

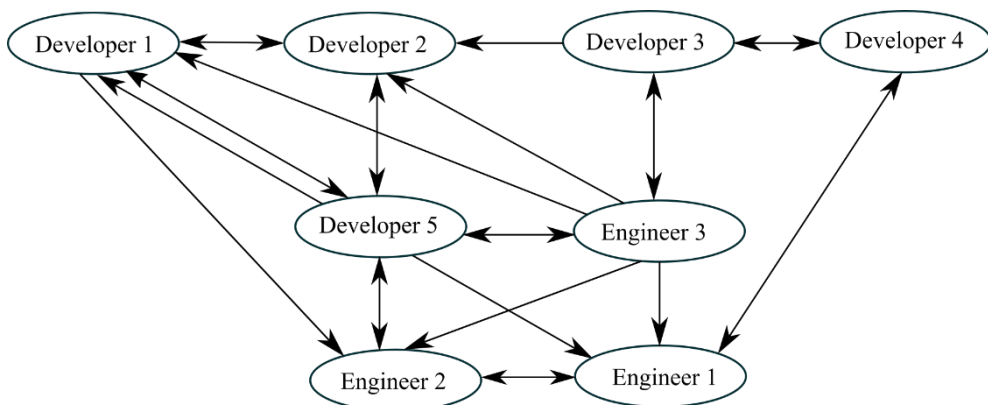
if any of the team members encounter issues or were stuck. The second half of the meeting (around an hour) was dedicated to team building activities and exercises.

A general openness towards the rest of the team was visible after a month (4 sessions) and the efforts of the team building sessions were doubled by changes in the daily habits of the development team, such as: encouraging team members to reach out to one another and ask for help, shifting the attention from pointing out problems to identifying solutions and so on, encouraging team members to work in groups.

An issue that emerged quickly however was that the results of the team building sessions tended not to last. Even though the team would get closer or work better for a couple of days, or sometimes even a week, when faced with a tight deadline or a possible problem, most of the team members would return to their previous behaviour patterns.

The solutions identified to this issue were: continuing the team building activities and finding ways to remind the team of the progress that has been achieved so far and that the environment in which they worked continued to be a safe one, even when issues emerged. One way in which this was achieved was by displaying the results obtained by the team during the team building exercises on the company's whiteboard – which was placed near the entrance so that the team would see the it daily and be reminded of their achievements.

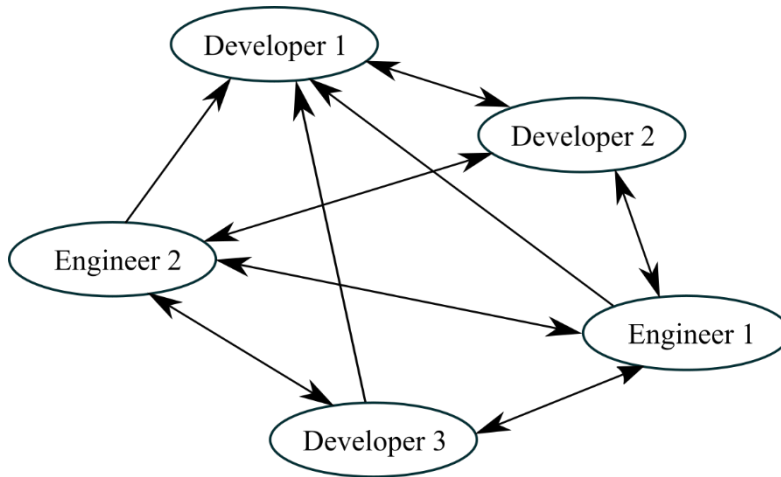
Something interesting happened when six months into using team building activities daily, the team composition changed slightly, in the sense that a developer left the team while two new ones joined, and a third engineer joined the team. The sociogram in Figure 4 shows how team relationships adjusted as a result of both team building activities and modifications in the team composition.



**Fig. 4.** Sociogram after 6 months of team building activities

Even though the new members of the team tended to form cliques, they managed to adapt to the team faster and the results of team building activities lasted much longer in their case. A new major disruption encountered in the development team four months later when some of the members of the development team were redirected to work for another Start-up belonging to the same company, with two new employees. The sociogram presented in Figure 5 shows how the team adjusted to the new work structure.

As it can be observed, the two new employees (Developer 1 and Developer 3) had selected a smaller number of team mates for their options while the older employees that have been taking part in team building activities for over 10 months, have had an easier time selecting three contacts.



**Fig. 5.** Sociogram for new development team

Besides the results highlighted by the changes in the sociograms, an improvement in team effectiveness was visible with the team meeting the deadline most of the times, completing an increasing number of tasks and responding better to emerging issues. The team building activities were paused after ten months in order to assess their efficiency when interrupted and it was not surprising to see that even after two months with no team building activity, the team continued to work just as efficiently as it did before the team building activities were stopped.

## 5 Discussions

Team building has been used for over twenty years by practitioners in order to increase team cohesion, team efficiency and satisfaction, with studies analyzing the effectiveness of team building activities in teams across a wide range of occupational fields and varying from small teams of 1-5 team members to teams of 100 + members.

A lack of research regarding the implementation of team building activities in the case of Start-ups has been identified which in turn, led the researchers to try and cover the topic in the course of the present paper. Therefore, in the paper, the efficiency of team building activities in the case of a Start-up's small development team has been analyzed.

The development team of the analyzed Start-up has also manifested an open attitude and has registered positive results when quality management practices were implemented in the Start-up's development process in a previous study [40].

The current research suggested that the team building activities have had a positive influence on the team efficiency and cohesion, and furthermore, sociograms used to describe the relationships within the team support this claim. This then leads the researchers to conclude that team building can be extremely effective within Start-up development teams, due to the volatile nature of Start-ups and given how efficient team work has been highlighted as being a top reason behind Start-up success. More so, the research helped strengthen the claim of other papers regarding the efficiency of team building activities in the case of small teams.

Furthermore, the results of the study suggest that team building activities can be interrupted once the team has reached a point of maximum efficiency and minor interventions when team changes take place can help stabilize the team and transition into an efficient environment.



However, the authors suggest that more research is needed in the field of team building applied in the context of Start-up businesses as there continues to be a small number of research articles in the field. It is therefore the suggestion of the authors that further developments regarding this topic be focused on implementing team building activities within Start-ups teams, and covering a wide range of team sizes and types of Start-ups.

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