Importance of Communication in Developer Projects

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Abstract: The developer is a key player in development projects. This article extends existing knowledge about the role of the developer by examining the application of communication techniques throughout the life cycle of a development project. Specifically, nine techniques in active listening, questioning and feedback are studied to determine the proportion of communication techniques used. The objectives of the work were to understand communication in developer projects, to identify communication techniques in projects and to find out how different techniques can be used. To achieve this goal, an analytical approach was carried out. Five development projects were identified, for which the developer and the person interested in the project were interviewed. In this context, the findings point to the need for developers to direct their efforts towards more effective use of various communication techniques as part of a project management system. This contributes to the research of communication in development with regard to the importance of the developer's role in his projects.

Keywords: techniques communication, developer

Abstrakt: Developer je kľúčovým hráčom v developerských projektoch. Tento článok rozširuje existujúce poznatky o úlohe vývojára skúmaním aplikácie komunikačných techník počas životného cyklu vývojárskeho projektu. Konkrétne sa študuje deväť techník v oblasti aktívneho počúvania, kladenia otázok a spätnej komunikácie, aby sa určil podiel použitých komunikačných techník. Cieľom práce bolo porozumieť komunikácii v projektoch developera, identifikovať komunikačné techniky v projektoch a zistiť, ako je možné rôzne techniky používať. Na dosiahnutie tohto cieľa bol vykonaný analytický prístup. Identifikovalo sa päť developerských projektov, ku ktorým sa uskutočnili rozhovory developera a záujemcu o projekt. V tejto súvislosti zistenia poukazujú na potrebu developerov nasmerovať svoje úsilie k efektívnejšiemu využívaniu rôznych komunikačných techník ako súčasti systému riadenia projektov. Toto prispieva k výskumu komunikácie v developmente s ohľadom na dôležitosť role developera v jeho projektoch.

1. Introduction

The project developer has many tasks and responsibilities that he performs with his role. The dominant role is cooperation with people, from idea, concept to finished project. His role requires excellent communication skills, an understanding of construction, land use planning and financing. Of course, the project developer's job is to complete the project on time and within budget. The project developer is involved in site selection and considers many factors, which may include zoning, sustainability, access to available labor, and utility costs. A location may also be selected based on local and state tax structures, environmental conditions, and community size. The developer looks for locations that are located in the desired geographic region, considering their proximity to public transportation.

Dealing with all the complex details, dependencies, decisions and approvals that a development project involves could not be achieved without effective communication. According to

Shaw (2022), it is surprising that one in three projects suffers from a communication failure. This clearly indicates the critical need to address communication gaps in development projects.

2. Methodology

The objectives of the literature review were to understand the communication in the developer's projects, to identify the communication techniques in the projects and to see how these challenges can be tackled. To achieve these objectives, a large number of articles on communication in developer's projects have been studied. Communication has been defined and the importance using different techniques of effective communication has been explained.

The reason for analysis is to establish a basis to judge the results obtained in the empirical study based on observations during the interviews. The worksheets were created for the observations. Incorrect communication is the biggest culprit in the failure of a development project. If changes and updates are not communicated correctly and in a timely manner, there is confusion among stakeholders, project team members, and clients. This confusion further leads to errors, missed steps in the process, conflicts and more. All these scenarios will ultimately lead to delays or budget overruns (Aghania et al, 2019). Safapour (2019) claims that miscommunication is precisely about:

- Insufficient involvement of stakeholders. Much of the project's success depends on a practical and extensive exchange of information between stakeholders. In fact, one in three projects failed due to poor stakeholder engagement. If project managers do not communicate effectively with stakeholders, there can be a significant difference in project expectations, which will ultimately affect the bottom line.
- Confusion among team members. Poor communication leads to expectation issues with stakeholders and causes confusion and misunderstandings among team members about what is expected of them. Failure to clearly state their responsibilities and task expectations leads to shoddy work and mistakes. Fixing such mistakes again leads to time delays and budget overruns. That's why you need to transfer your internal and external communication to one platform. A productive communication tool will prevent confusion and conflict from getting bogged down in your project. It will help you keep your key players aligned with the project goals and what is expected of them. Effective communication makes it easy to maintain transparency in all parts of project management. The best decisions are made and trust is built in the entire team, which is reflected in the effective implementation of the project.
- Managing clients and keeping them informed is again very important. Without effective communication to help them understand the progress of the project, there can be a lot of confusion and dissatisfaction.

The first component in the research is the identification of the most important groups of people with whom the developer exchanges information. Information needs vary depending on the nature of the project. In order to better capture the exact needs of different types of projects, this research project developed a set of typical contexts or types of developer's projects that could have an impact on information needs. The nature of the project, its scope, and stakeholders influence the types of information exchanged and the relative importance of each communication technique. The proposed contexts are to some extent a taxonomy of projects based on the three skills, Figure 1. Communication must be based on 3 developed skills: listening, asking, feedback.
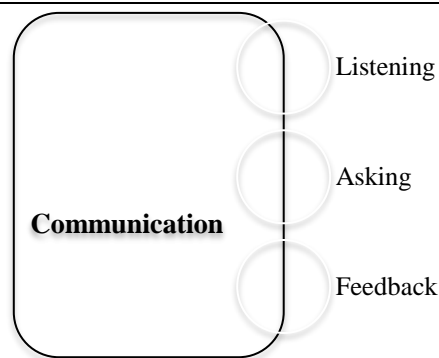
Figure 1. The three communication skills of the developer

Listening is a conscious activity that requires attention. Instead of waiting to talk, you need to listen carefully to fully understand the other person. According to Mosaicproject (2020), remember that there is no point in asking a question if you have no intention of listening carefully to the answer! Active listening is a structured way of listening and responding to others. Active listening is a structured way of listening and responding to others. Active listening takes time and focus; effectively, it opens up a whole new level of communication and relationship building.

A question has the ability to spread beyond where it started into larger networks of conversations within a development project. Powerful questions that travel well are often the key to sweeping change. But it is not easy; whereas asking and answering questions is part of everyday conversation for all of us, and we might think that asking questions is a natural skill that we all possess; it is not as simple as we assume (Mosaicproject, 2020). Questions must be designed to help the other person reach conclusions or to provide information and insights useful for discussion. There are a variety of question types that can be used for different purposes. Some questions provide structure, others direct flow, and some help us achieve closure.

Feedback is an essential part of communication. As defined by the Merriam-Webster dictionary (2022), feedback is the evaluation of an action, event, or process and the act of passing that evaluation back to the original source. The whole point of feedback is primarily to confirm that something is already the best it could be, or if not, to suggest ways to improve it. In any case, there is feedback that provides a positive effect. Without feedback, communication is just information. With developed communication skills, using the right technique will increase the impact and effectiveness of conversations with interested parties many times over. According to Bauer and Figl (2008), nine common communication techniques are the most common. Some techniques (Figure 2) are used very often, other techniques need to be known, realized and, above all, correctly applied. There is an overlap with some techniques, e.g., by asking questions in the techniques of clarification and balancing.
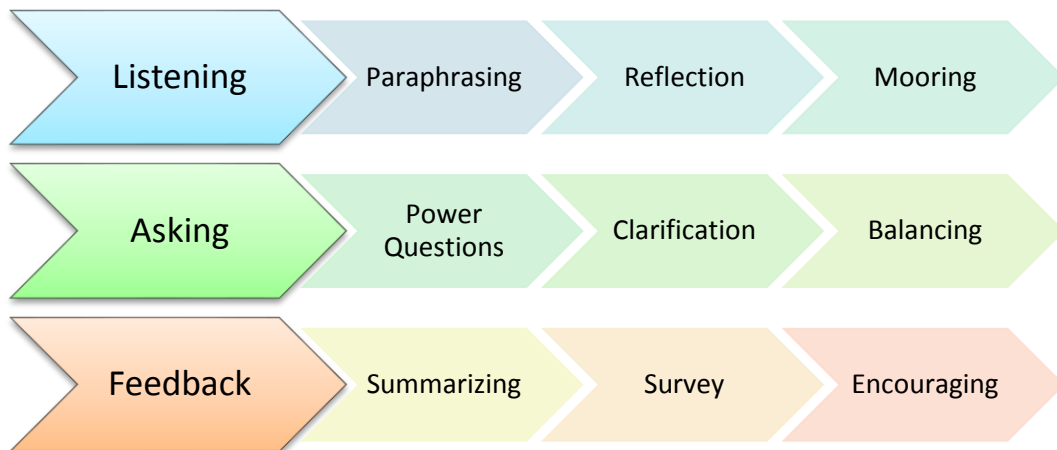
Figure 2. Nine communication techniques

Communication techniques can be adopted and applied in every development project during the entire life cycle of the project, in communication with the client, interested parties and of course also with the members of the project. Table 1 describes the techniques with an example and explanation of their use.

Table 1. Techniques and their purpose and use

Technique	Purpose	To achieve it	Examples
Paraphrasing	• Convey interest • Encourage the speaker to keep talking	• Restate the information just received with your own words.	"So, you showed up at the meeting on time."
Reflection	• Show that you understand • Help the speaker evaluate their own feeling	• Reflect the speaker's basic feelings and emotions in words.	"And this made you really angry."
Mooring	• Irrelevant information, simply let it go out • The basic anchoring tool is consent	• Acknowledge, nod or express interest.	"I agree with this apartment size in your proposal."
Power Questions	• Get more information	• Ask questions.	"And after that, Alex did not react?"
Clarifying	• Clarify what is said • Help the speaker see	• Ask questions for vague statements. • Restate wrong	"You said that you reacted immediately. Was this still on the same day?"

Technique	Purpose	To achieve it	Examples
	other points of view	interpretations to force further explanation.	
Balancing	• Get more information • Help the speaker evaluate their own feelings	• Ask questions.	"Did you perceive the inconvenience to be worse than not being taken seriously?"
Summarizing	• Review progress • Pull together important ideas • Establish a basis for further discussion	• Restate major ideas expressed, including feelings.	"These seem to be the key ideas you've expressed:"
Survey	• It serves to supplement the statements made in the interview • Stick to the main topics presented by the broadcaster	• This way you will get the additional information that you were missing for the overall picture and understanding of the administration from the broadcaster.	"Name several similar projects"
Encouraging	• Convey interest • Encourage the speaker to keep talking	• Disagree • Use varying intonations. • Offer ideas and suggestions.	"Yes, I agree, it's a great idea. I will support it."

3. Results

In order to understand the impact of communication in development projects, the research was based on nine characteristics of communication techniques. Selected procedure:

1. Information needs: identification of the types of communication techniques that are communicated in development projects (within the project life cycle). The requirements stated in the development projects were determined through literature review, personal experience and professional contribution.

2. Contexts: the grouping of development projects into coherent situations through the identification of conditions that could have an impact on information needs and the relative abundance of the selected technique.

3. Communication techniques that are used less to communicate information needs in the given context.

As part of developed communication skills, we focused on 9 techniques:

1. Listening through paraphrasing.
2. Listening focused on feelings with the technique of reflection.
3. Listening using anchoring.
4. Asking powerful questions of the developer with the interested party/team member/client.
5. Asking questions by clarifying.
6. Asking questions to obtain more information using the balancing technique.
7. Feedback by summarizing what the developer and stakeholder/team member/client shared.
8. Feedback for obtaining additional information in the form of a survey.
9. Feedback given to encourage communicators.

Increased understanding in development projects is influenced by the communication techniques used. Within the causal relationship, we will use the variable that causes the given effect, the so-called independent variable. Conversely, a variable that changes as a result of an independent variable is a dependent variable. The dependent variable was given such a label because its quality, value, etc. depends on another variable (independent variable). In an experiment, the researcher manipulates the independent variable and finds out what effect it has on the dependent variable.

During three meetings/situations in 5 development projects, observations were made in different phases of the project:

◎ VALERIAN residential project (developer from Bencont Development, a.s.)
◎ Modern multifunctional complex EDENPARK (developer from the company Merius, a.s.)
◎ Berendsen production hall (developer from Prospect Group, s.r.o.)
◎ Residential project RONAVA (developer from Euro MAX Slovakia, a.s.)
◎ Family houses Nové Čunovo, (developer from the company VAZEC, s.r.o.)

Table 2 Levels of communication techniques in development projects

Techniques	Level	Develop. project 1	Develop. project 2	Develop. project 3	Develop. project 4	Develop. project 5
Paraphrasing	Weak	53%	45,0%	50%	49%	52%
	Average	45%	52%	47%	49%	47%
	Good	2%	3%	3%	2%	1%
Reflection	Weak	66%	59%	67%	60%	64%
	Average	32%	38%	32%	38%	32%
	Good	2%	3%	1%	2%	2%
Mooring	Weak	54%	58%	57%	56%	58%
	Average	44%	40%	42%	42%	41%
	Good	2%	2%	1%	2%	1%
Power Questions	Weak	75%	68%	62%	69%	72%
	Average	33%	31%	36%	30%	25%
	Good	2%	1%	2%	1%	3%

Clarifying	Weak	59%	50,0%	58%	58%	56%
	Average	40%	48%	41%	40%	42%
	Good	1%	2,2%	1%	2%	2%
Balancing	Weak	67%	58%	65%	64%	60%
	Average	30%	49%	33%	35%	38%
	Good	3%	3%	2%	3%	2%
Summarizing	Weak	73%	67%	69%	70%	67%
	Average	23%	30%	28%	28%	30%
	Good	4%	3%	3%	2%	3%
Survey	Weak	50,0%	58%	55%	57%	54%
	Average	48%	39%	44%	42%	45%
	Good	2%	3%	1%	1%	1%
Encouraging	Weak	66%	65%	67%	65%	64%
	Average	32%	33%	31%	33%	34%
	Good	2%	2%	2%	2%	2%

4. Discussion

The aim of the research was to understand communication in developer projects, to identify communication techniques in projects and to find out how different techniques can be used. To achieve these goals, a number of articles on communication in development projects were studied. Communication was defined and the importance of using different techniques of effective communication was explained. The reason for the analysis is to create a basis for assessing the results obtained in the empirical study based on the observations during the interviews. Worksheets were created for the observations.

Table 2 shows developer communication levels on a 3-point scale according to communication techniques. Most developers were found to be weak in all techniques, between 50%-75% for Development Project 1 and between 45%-67% for Development Project 1. Development Project 3 had between 50%-69%, Development Project 4 had between 49% - 70%, and development project 5 had between 52% - 72%. However, in the case of development project 2, there was a slight improvement in communication techniques. The weakest techniques for almost all groups include the use of paraphrasing (project 2, 3, 4, 5) and summarizing (project 2,3,4). It was development project 1 that reached a maximum of 4% when using summarization. In other cases, the maximum was 3%.

After finishing the interviews and evaluating the obtained data, there was a meeting with the developers again, who admitted that they do not pay attention to communication techniques during any interviews and were pleasantly surprised with the familiarity with new techniques. The question remains how they will apply it in their roles.

Recommendations for improving communication in development projects can be divided into three areas. The first is clear expectations (a), the second area is the communication channel (b) and the third is synchronization (c).

a) setting clear expectations is based on the goals of the development project. In this area, it is important to establish the following approaches:

◎ Setting the task dependency so that the person performing the next task is notified as soon as the previous task is completed. The team is related to determining the structure of the project, including its milestones. Make sure your team and stakeholders have access to your plan so they can track progress every step of the way. Make sure you invite them to the project with the necessary permission.

◎ As a developer, it is essential to monitor the progress of the task. Proper internal communication allows team members to keep you updated on progress and notify you of any delays, problems, or assistance needed. Instead of calling or emailing your team members every time to give them feedback or guidance on a specific task. This will save you time and keep the entire task conversation in one place, making it easier for everyone involved. Discussion of project outputs and their review in the team is crucial for building a solid project.

b) structuring of the client's communication channel. In fact, jobs often depend on client approval and input. If such things are not communicated in advance, it will have to be repeated, which will ultimately delay the project. In this area, it is important to establish the following approaches:

◎ Securing trusted sources and setting up the right communication channel will ensure critical information flows throughout the project and things get done smoothly and on time.

◎ Adding clients to development projects as guest users so they can receive all updates and also express their opinions.

◎ Sharing project dashboards that are always continuously updated with real-time project progress.

◎ video calls/video conferences can be used for regular meetings where work is discussed, potential risks are identified and eliminated within the development project and better decisions are made.

c) keeping the development project in synchronization. Lack of transparency and wrong choice of communication techniques will lead to miscommunication, arguments, conflicts and ego clashes. In this area, it is important to establish the following approaches:

◎ Ensuring that everyone is informed of important project updates in a timely and consistent manner.

◎ When sharing the same task between procurement team projects, both teams are notified of any updates to the task, such as custom field changes.

Research shows that it is important to understand that the developer is in a communication process that ensures the transmission of information and the channels through which it is transmitted, and takes into account the ability and need of the recipient to understand the administration. Interviewing team members should ensure that the report is sent through a trusted source who has the knowledge to communicate the report to stakeholders. Clients should then receive detailed information about follow-up actions and provide them with a personal contact during which information will be provided in more detail and the recipient can discuss their concerns and fully understand the administration. According to Anderson (2015), communication in a development project is mostly perceived as correct and timely delivery of relevant information about the project. The view of communication in this way misses the constitutive nature of communication. Communication is more than the exchange of messages; is the way a developer generates the grounds for a project.

5. Conclusions

Effective communication is defined as the ability to successfully convey information, knowledge, and ideas in a way that is received, understood, and acted upon as originally intended. When communicating in the construction sector, effective communication is essential to ensure the successful and safe functioning of the organization and the completion of projects.

Communication takes many forms, including verbal (in person and at a distance, such as over the phone), non-verbal (conveying and understanding non-verbal cues such as body language), written and visual (such as graphs and visual signage). All these forms of communication are necessary and it is important to understand their importance and know how to use them effectively. The goal of the work was to address developers in five projects, to arrange meetings based on the identification of communication techniques and to conduct research observations.

Development projects follow a chain of communication from one person to another, from one party to another. For example, there is a very long chain of processes and tasks that must be clear and precise between the architect providing the drawings to the contractor and the type of approval required for the selection and application of the final paint on the building. to make these types of decisions fast and accurate. Different people in different roles perform these types of processes, which is why good communication is important.

Communication leads to feedback. Feedback loops allow the developer to track performance and understand where there is success and where there are problems and concerns. Being able to communicate the strengths and weaknesses of a project is one of the best ways to learn. This way you can improve your strategies and tactics for future projects.

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