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## A PRACTICE-ORIENTED MECHANISM OF AN INTEGRATED NLP CONFLICT MANAGEMENT MODEL IN CONSTRUCTION PROJECTS

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*Construction projects belong to the most complex and high-risk areas of managerial activity, where conflicts arise at almost all stages of implementation – from planning and coordination of technical solutions to execution of works and project commissioning. A high level of uncertainty, multilateral interaction among stakeholders, dependence on suppliers, and strict deadlines create conditions of constant tension and emotional strain. Traditional approaches to conflict management, based mainly on administrative or legal instruments, often prove insufficient, as they do not consider the psychological and communicative aspects of interaction. In this context, the use of neuro-linguistic programming (NLP) becomes particularly relevant, as it enables work with the behavioural, emotional, and cognitive factors of conflicts. The purpose of the study is to develop a practice-oriented mechanism of an integrated NLP conflict management model in construction projects. The methodological framework is based on systemic, communicative, and psychological approaches that combine the analysis of scientific sources, comparative analysis of traditional and modern methods, case studies, and modelling of managerial situations. The proposed model consists of three interrelated blocks: conflict prevention, conflict management, and conflict resolution. At the first level, techniques of rapport, calibration, and communication pattern analysis are applied, ensuring communication stability and early identification of risks. The second level includes reframing, behaviour modelling, and state management, which makes it possible to stop escalation and redirect interaction into a constructive channel. The third level is aimed at achieving mutually agreed solutions and restoring cooperation through the use of sensory language (VAK adaptations), the three perceptual positions, the Milton model, Interest Mapping, the win-win approach, and the Future Pacing technique. The results of the study confirm that the integration of NLP techniques into construction project management practice helps reduce the number of conflicts, shorten the time required for their resolution, increase the level of trust among participants, and ensure the stability of project implementation. The practical significance of the study lies in the development of recommendations for managers and executives of construction companies regarding the introduction of NLP methodologies into daily managerial activities. Thus, the proposed model is an innovative tool that combines psychological and communicative aspects of conflict management, promotes the development of a culture of trust and openness, and enhances the effectiveness of construction projects in modern conditions.*

**Keywords:** neuro-linguistic programming (NLP), conflict management, construction projects, communication in management, rapport, calibration, reframing, project management.

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### INTRODUCTION

**Problem statement.** Construction projects belong to the category of the most complex and high-risk types of economic activity. They are characterized by a high level of uncertainty, multi-component processes, dependence on external suppliers, strict deadlines, and significant emotional pressure on participants. Under such conditions, conflicts become an almost inevitable phenomenon, arising at various stages of project implementation – from planning and coordination of technical solutions to the execution of works and project commissioning. Traditional methods of conflict management, which are mainly based on administrative or legal instruments, often prove to be insufficiently effective, as they do not consider the behavioural, communicative, and emotional aspects of interaction.

Modern practice shows that communication barriers, lack of trust, and the inability to timely recognize non-verbal signals and emotional states of participants become the main factors in the escalation of conflicts. This leads to delays in project implementation, increased financial costs, deterioration of the company's reputation, and a decline in staff motivation. At the same time, in global management practice, neuro-linguistic programming (NLP) tools are becoming increasingly widespread, as they make it possible to work not only with facts but also with the psychological and communicative aspects of interaction.

The problem lies in the absence of a systemic model for integrating NLP techniques into conflict management processes specifically in construction projects. Existing studies examine individual techniques – rapport, reframing, calibration, or sensory language – but do not propose a holistic mechanism for their application in conditions of high stress and multilevel interaction among construction participants. Therefore, there is a need to develop a practice-oriented integrated model that would combine conflict prevention, management of conflict dynamics, and the search for mutually beneficial solutions. Such a model should become a tool for improving communication efficiency, reducing conflict intensity, and ensuring the stability of construction project implementation.

## LITERATURE REVIEW

General studies on NLP and communication: Frankovský, Birknerová, Benková, and Suhányi [1] consider NLP as a tool of managerial communication, emphasizing its role in building trust and enhancing team interaction effectiveness. Budiman et al. [7] identify key attributes of the NLP structure, focusing on practical techniques in management. Wijtenburg [8] analyses the influence of NLP language patterns on leadership and team dynamics.

Systematic reviews and criticism of NLP: Kotera, Sheffield, and Van Gordon [2] conducted a systematic review of the application of NLP in organizations, demonstrating its psychological effects. Witkowski [3] critically evaluated 35 years of NLP research, questioning its scientific validity. Zaharia, Reiner, and Schutz [4] carried out a meta-analysis of NLP psychotherapy, confirming its effectiveness in clinical settings. Zastrow, Dotson, and Koch [5] were among the first to describe NLP as a therapeutic approach in social work.

NLP and organizational success: Shradha Bohra and Shukla [6] demonstrated the positive impact of NLP on organizational success, particularly on motivation and productivity. Sharma and Gupta [9] proved the effectiveness of NLP as a tool for conflict resolution in organizations. Al-Mutairi, Khan, and Rahman [10] emphasized the role of NLP techniques in improving communication and reducing workplace conflict. Fernández, Lee [13] explored NLP strategies in multicultural teams, showing their ability to prevent conflicts.

NLP in education and healthcare: Kovačević and Petrović [11] applied NLP patterns to mediate interpersonal conflicts in educational settings. Liu and Zhang [12] described a case of NLP application in medical teams for conflict management.

NLP in construction and architectural projects: Makatora, Kubanov, and Mykhalko [14] systematized practical aspects of implementing NLP in construction companies, demonstrating its significance for communication between managers and contractors. Mykhalko, Kubanov, and Makatora [15] examined NLP as a tool of professional communication for project managers in architecture and construction. Makatora A., Makatora D., and Kubanov R. [16] investigated the application of NLP rapport in publishing and printing companies, which demonstrates the universality of the methodology.

## MAIN PART

Methodological basis of the study. The methodological framework of the study is based on a combination of systemic, communicative, and psychological approaches to conflict management in construction projects. The systemic approach makes it possible to consider conflict as a multilevel process that arises from the interaction of project participants and affects overall project performance. The communicative approach focuses on the role of language patterns, non-verbal signals, and interaction strategies that determine the quality of professional communication. The psychological approach ensures consideration of emotional states, cognitive attitudes, and behavioural reactions of participants, which is critically important in the stress-prone environment of the construction industry.

The study employs methods of analysis and synthesis of scientific sources, which made it possible to systematize contemporary approaches to the application of NLP in management and conflict studies. Comparative analysis was used to identify the strengths and weaknesses of traditional and innovative conflict management methods. The case study method was applied, based on practical examples from construction companies where NLP techniques are used to stabilize communication and resolve disputes.

Modelling was also employed, which enabled the development of an integrated three-level NLP model of conflict management (prevention, management, resolution).

Thus, the methodological basis combines theoretical and applied tools, allowing not only for the description of the phenomenon of conflict in construction projects, but also for proposing an effective mechanism for its prevention and resolution based on NLP techniques.

The purpose of the study is to develop and substantiate a practice-oriented mechanism of an integrated neuro-linguistic programming (NLP) conflict management model in construction projects. Such a model should ensure a systemic approach to the prevention, management, and resolution of conflict situations that arise during the implementation of complex engineering and construction tasks.

The study is aimed at:

- identifying key NLP techniques that are most effective for the professional communication of project managers;
- developing a three-level model (prevention – management – resolution) that considers emotional, cognitive, and communicative aspects of interaction;
- testing NLP tools in the context of the construction industry, where conflicts are highly intensive and affect deadlines, budgets, and quality of work;
- formulating practical recommendations for managers and executives of construction companies on integrating NLP methodologies into daily managerial practice.

Achieving these objectives will make it possible to create an effective toolkit for reducing conflict intensity, increasing the level of trust among project participants, and ensuring the stability of project implementation.

Presentation of the main research material. Conflict management in construction projects is a critically important element of effective management, as the construction industry is characterized by a high level of uncertainty, dependence on external suppliers, complex coordination among participants, and significant emotional pressure. Under such conditions, traditional approaches to conflict studies require supplementation with tools that allow working not only with facts, but also with behavioural, emotional, and communicative aspects of interaction. One of the most effective tools of this type is neuro-linguistic programming (NLP).

Based on the analysis of NLP techniques, a unified integrated model of conflict management can be formed, consisting of three interrelated blocks: conflict prevention, conflict management, and conflict resolution.

Each block includes specific NLP techniques that operate at different levels – emotional, cognitive, and communicative.

1. Conflict prevention block: formation of a stable communication foundation. The first level of the model is aimed at preventing the emergence of conflicts by creating a favourable communicative environment. This block includes the following techniques:

- Rapport – ensures psychological synchronization between interaction participants. In construction projects, rapport enables the manager to quickly reduce tension, build trust, and create an atmosphere of cooperation even under stressful conditions.
- Calibration – allows for the identification of early signs of conflict through observation of non-verbal signals. This is particularly important on construction sites, where emotions are often expressed non-verbally.
- Communication pattern analysis – aimed at identifying linguistic triggers, generalizations, and distortions that may provoke conflict. This technique helps the manager neutralize potentially conflict-generating statements before they escalate into open confrontation.

Outcome of the block: a stable communication foundation is formed, which reduces the likelihood of conflicts and creates prerequisites for constructive interaction.

2. Conflict management block: stabilization of the situation and change in interaction dynamics. The second level of the model is activated when the conflict has already manifested itself. The objective is to stop escalation and shift interaction into a controlled format. This block includes:

- Reframing – makes it possible to change the interpretation of the situation, reduce emotional intensity, and identify new meaning frameworks. In construction projects, this helps transform accusations into constructive proposals.
- Behaviour modelling – the manager reproduces effective communicative patterns (either personal or adopted), which helps stabilize the interlocutor's behaviour. This is particularly useful when interacting with aggressive or stressed contractors.
- State management – includes techniques such as anchoring, dissociation, pauses, and breathing practices. In construction projects, where stress is a constant factor, this group of techniques enables the manager to quickly reduce emotional tension and return participants to rational thinking.

Outcome of the block: the conflict ceases to escalate, the parties move from emotions to facts, and the possibility of constructive dialogue emerges.

3. Conflict resolution block: search for solutions and restoration of cooperation. The third level of the model is aimed at achieving a mutually beneficial solution and restoring productive interaction. It includes:

- Sensory language (VAK adaptation) – enhances mutual understanding in negotiations and helps avoid communicative gaps between technical specialists, clients, and contractors.
- Three perceptual positions – enable the parties to view the situation from different perspectives, which is essential in mediation and compromise-seeking.
- The Milton model – reduces resistance and creates an atmosphere of cooperation through soft formulations and a sense of choice.
- Interest Mapping – shifts the parties from positions (“I want”) to interests (“it is important to me”), which makes it possible to find solutions acceptable to all.
- The win-win technique – aimed at developing solutions that satisfy both parties.
- Future Pacing – helps the parties form a shared vision of the future in which the conflict has already been resolved.

Outcome of the block: the conflict is resolved through a constructive solution, cooperation is restored, and the project continues without delays.

The general structure of the integrated NLP conflict management model in construction projects [1-16] is presented in Table 1.

Table 1  
**Integrated NLP conflict management model in construction projects**

Model level	Purpose	Key NLP techniques	Expected outcome
<b>I. Conflict prevention</b>	To avoid the emergence of conflict and reduce the risk of tension	<ul style="list-style-type: none"> <li>• Rapport</li> <li>• Calibration</li> <li>• Communication Pattern Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Stable communication</li> <li>• Building trust</li> <li>• Early identification of risks and tension</li> </ul>
<b>II. Conflict management</b>	To stop escalation and stabilize the situation	<ul style="list-style-type: none"> <li>• Reframing</li> <li>• Behaviour modelling</li> <li>• State Management</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction of emotional intensity</li> <li>• Shift from emotions to facts</li> <li>• Creation of conditions for constructive dialogue</li> </ul>
<b>III. Conflict resolution</b>	To find a mutually beneficial solution and restore cooperation	<ul style="list-style-type: none"> <li>• Sensory language (VAK)</li> <li>• Three perceptual positions</li> <li>• Milton model</li> <li>• Interest Mapping</li> <li>• Win-win approach</li> <li>• Future Pacing</li> </ul>	<ul style="list-style-type: none"> <li>• Agreed solution</li> <li>• Restoration of cooperation</li> <li>• Strengthening of partnership and trust</li> </ul>

Let us consider each block in more detail. The first block is conflict prevention [1; 2; 15; 16]. Techniques: 1) Rapport – a key tool for reducing tension. In the construction sector, where interaction often takes place under conditions of stress and strict deadlines, rapport makes it possible to quickly stabilize the situation. 2) Calibration – early identification of conflict. A manager who is able to “read” non-verbal signals can prevent a conflict before it becomes explicit. 3) Communication pattern analysis – work with content and linguistic triggers. This makes it possible to neutralize aggressive formulations and shift the conversation into a constructive direction (Table 2).

Table 2  
**NLP techniques for conflict prevention in the construction sector**

NLP technique	Brief description	Methodology of application	Case from construction management practice
<b>Rapport</b>	Creation of psychological synchronization, trust, and mutual openness between interlocutors. Helps reduce tension and prevent conflict escalation.	<ul style="list-style-type: none"> <li>• Matching speech tempo, posture, and intonation.</li> <li>• Using similar words and formulations.</li> <li>• Demonstrating attentiveness through non-verbal signals (nodding, eye contact).</li> </ul>	<p>Situation: the site supervisor emotionally accuses the manager of delays in material delivery.</p> <p>Manager's actions: the manager adjusts to the supervisor's speech tempo, repeats key phrases of the supervisor (“I see that you are worried about deadlines...”), and demonstrates attentiveness.</p> <p>Result: the supervisor calms down and moves to constructive discussion.</p>

Calibration	Observation of non-verbal signals (gestures, facial expressions, voice changes) to identify hidden tension or the early stage of conflict.	<ul style="list-style-type: none"> <li>Fixation of changes in the interlocutor's behaviour.</li> <li>Tracking micro-signals: shoulder tension, change in voice tempo, avoidance of eye contact.</li> <li>Adjustment of one's own behaviour according to the interlocutor's state.</li> </ul>	<p>Situation: during a meeting, a contractor avoids eye contact, clenches fists, and speaks in short phrases.</p> <p>Manager's actions: notices these signals, asks clarifying questions ("It seems something is worrying you..."), and shifts the conversation to a safer format.</p> <p>Result: the contractor admits having payment difficulties, and the conflict is prevented.</p>
Communication pattern analysis	Identification of recurring linguistic and behavioural patterns that may lead to conflict: generalizations, accusations, abrupt formulations, "black-and-white" thinking.	<ul style="list-style-type: none"> <li>Identification of trigger phrases ("you always...", "you never...").</li> <li>Clarification of meaning through meta-questions.</li> <li>Reformulation of aggressive statements into neutral ones.</li> </ul>	<p>Situation: a client says: "You never meet deadlines."</p> <p>Manager's actions: analyses the pattern of generalization and clarifies: "Let us specify which stages caused delays."</p> <p>Result: the client shifts from emotions to specifics, and the conflict is defused.</p>

The second block of the model is conflict management [6; 7; 14]. Techniques: 1) Reframing – helps transform a negative interpretation into a neutral or constructive one. In construction, this is particularly useful when clients or contractors react emotionally to delays or errors. 2) Behaviour modelling – enables the manager to quickly adapt to a difficult situation by using proven communicative patterns. 3) State management – critically important in a field where stress, deadlines, and responsibility often provoke conflicts. Further details are presented in Table 3.

**NLP techniques for conflict management in the construction sector**

NLP technique	Brief description	Methodology of application	Case from construction management practice
Reframing	Changing the frame of perception of a situation, which helps reduce emotional intensity and find new interpretations of the conflict. Helps shift attention from the problem to the solution.	<ul style="list-style-type: none"> <li>Identification of a negative interpretation.</li> <li>Search for an alternative explanation or a positive aspect.</li> <li>Reformulation of the statement into a constructive version.</li> </ul>	<p>Situation: a client says: "You missed the deadlines, this is unprofessional."</p> <p>Manager's actions: "The delay is indeed an issue, but it allowed us to avoid an installation error that could have cost you much more."</p> <p>Result: the client moves from accusations to discussing solutions.</p>
Behaviour Modelling	Use of successful behavioural strategies (one's own or borrowed) to manage conflict. Makes it possible to reproduce effective communication patterns.	<ul style="list-style-type: none"> <li>Defining the desired outcome.</li> <li>Analysis of the behaviour of successful negotiators or colleagues.</li> <li>Reproducing their verbal, non-verbal, and behavioural strategies.</li> </ul>	<p>Situation: a contractor reacts aggressively to comments about the quality of work.</p> <p>Manager's actions: models the communication style of a calm senior colleague – slow pace, clear formulations, pauses before responses.</p> <p>Result: the contractor lowers their tone and agrees to correct the work performed.</p>
State Management	Techniques for stabilizing one's own and others' emotional states: anchoring, dissociation, breathing techniques. Helps prevent conflict escalation.	<ul style="list-style-type: none"> <li>Identification of the emotional state (calibration).</li> <li>Application of stabilization techniques: anchor, pause, shift of attention focus.</li> <li>Helping the interlocutor move into a resourceful state.</li> </ul>	<p>Situation: a design engineer is under stress due to an error in drawings and reacts sharply.</p> <p>Manager's actions: applies a "pause" technique, speaks in a calm tone, suggests a short break, and reminds the engineer of previous successful solutions (anchor).</p> <p>Result: the engineer calms down and agrees to jointly correct the mistake.</p>

The third block of the model is conflict resolution [9–13]. Techniques: 1) Negotiation – techniques of sensory language and the Milton model help reduce resistance and enhance mutual understanding. 2) Mediation – the three perceptual positions and reformulation in a "win-win" format make it possible to find shared solutions. 3) Interest identification – Interest Mapping and Future Pacing help shift from positions to the real needs of the parties. Further details are presented in Table 4.

The presented three-level NLP conflict management model reflects the logic of real interaction processes in construction projects, where conflicts arise at different stages and have different natures – from

emotional reactions to strategic disagreements among participants. The model integrates techniques aimed at conflict prevention, management, and resolution, which enables the manager to act systematically and consistently.

Conflict prevention: formation of a safe communicative environment. The first level of the model is aimed at creating conditions under which a conflict either does not arise or manifests itself in a mild form. Techniques of rapport, calibration, and communication pattern analysis allow the manager to establish trusting contact with contractors, clients, and the project team; timely notice signs of tension; and neutralize linguistic triggers that may provoke conflict. In construction projects, where interaction often takes place under conditions of stress, strict deadlines, and high responsibility, this level is critically important. It ensures communication stability and reduces the number of situations that may escalate into conflict.

Table 4

**NLP techniques for conflict resolution in the construction sector (negotiation, mediation, interest identification)**

NLP technique	Brief description	Methodology of application	Case from construction management practice
Sensory language (VAK adaptation)	Adaptation of speech to the interlocutor's dominant perception type (visual, auditory, kinaesthetic). Enhances mutual understanding and reduces communication gaps in negotiations.	<ul style="list-style-type: none"> <li>Identification of the client's perception type through linguistic markers.</li> <li>Use of corresponding words ("see," "hear," "feel").</li> <li>Adjustment of communication tempo and style.</li> </ul>	<p>Situation: the client does not understand technical explanations.</p> <p>Manager's actions: switches to visual metaphors ("let's look at the plan...").</p> <p>Result: the client quickly understands the essence; the conflict disappears.</p>
Three perceptual positions	Transition between three roles: 1) one's own position, 2) the other party's position, 3) the position of a neutral observer. Helps find compromise and reduce emotional intensity.	<ul style="list-style-type: none"> <li>Description of the situation from one's own position.</li> <li>Transition to the other party's position.</li> <li>Analysis of the situation from the "third position."</li> </ul>	<p>Situation: conflict between a designer and a client regarding the choice of materials.</p> <p>Manager's actions: suggests that both describe the situation from three positions.</p> <p>Result: the parties see shared interests – budget and durability.</p>
Milton model (soft influence)	Use of vague, soft formulations to reduce resistance and create an atmosphere of cooperation. Effective in mediation.	<ul style="list-style-type: none"> <li>Use of soft constructions ("possibly," "let's consider an option...").</li> <li>Avoidance of categorical statements.</li> <li>Creation of a sense of choice.</li> </ul>	<p>Situation: a contractor categorically refuses to redo the work.</p> <p>Manager's actions: "Perhaps we could find a solution that would be convenient for both you and us."</p> <p>Result: the contractor agrees to discuss options.</p>
Interest mapping	A technique for identifying the deeper interests of the parties rather than their stated positions. Makes it possible to find solutions that satisfy both sides.	<ul style="list-style-type: none"> <li>Identification of the parties' positions.</li> <li>Search for interests behind the positions ("why is this important?").</li> <li>Formulation of solutions that consider the interests of both parties.</li> </ul>	<p>Situation: the client insists on replacing a contractor.</p> <p>Manager's actions: clarifies that the real interest is meeting deadlines.</p> <p>Result: replacement is unnecessary – an additional crew is introduced.</p>
Reformulation in a "win-win" format	A technique that transforms conflict from confrontation into a search for a mutually beneficial solution.	<ul style="list-style-type: none"> <li>Identification of the needs of both parties.</li> <li>Formulation of solutions that satisfy both sides.</li> <li>Emphasis on shared goals.</li> </ul>	<p>Situation: conflict between two contractors over access to equipment.</p> <p>Manager's actions: "How can we organize the schedule so that both teams benefit?"</p> <p>Result: a joint schedule is created; the conflict is resolved.</p>
Future pacing	Transferring the parties into a future where the conflict has already been resolved. Helps reduce emotional pressure and form a shared vision.	<ul style="list-style-type: none"> <li>Questions about the desired outcome.</li> <li>Visualization of a conflict-free future.</li> <li>Returning to the present with new solutions.</li> </ul>	<p>Situation: the client and architect cannot agree on planning.</p> <p>Manager's actions: "Imagine that we have already completed the project. What result do you see?"</p>

		Result: the parties form a shared vision and reach a compromise.
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Conflict management: stabilization and change in interaction dynamics. The second level is activated when a conflict has already manifested itself. Techniques of reframing, behaviour modelling, and state management enable the manager to reduce emotional intensity; change negative interpretations of the situation; stabilize participants' behaviour; and shift interaction from an emotional to a rational plane. This level is particularly important in situations where a conflict threatens deadlines, work quality, or trust among project participants. Through NLP techniques, the manager gains the ability to stop escalation and create conditions for constructive dialogue.

Conflict resolution: search for solutions and restoration of cooperation. The third level of the model is aimed at achieving a mutually beneficial solution and restoring productive interaction. Techniques of sensory language, the three perceptual positions, the Milton model, interest mapping, the win-win approach, and future pacing make it possible to enhance mutual understanding between the parties; identify underlying interests behind stated positions; formulate solutions that satisfy both sides; and restore trust and partnership relations. In construction projects, where interaction among clients, contractors, and technical specialists is long-term, this level ensures sustainable cooperation and minimizes the risk of recurring conflicts.

The integrated NLP model functions as a sequential system in which each level reinforces the next: prevention creates a foundation of trust and stability; management enables effective response when conflict arises; and resolution ensures long-term outcomes and restoration of partnership. Thus, the model covers the entire conflict management cycle – from early identification to full resolution – and can be used as a practical tool for construction project managers.

To ensure the effectiveness of the model, a checklist "NLP conflict management for a construction project manager" has been developed:

### *I. Conflict prevention*

#### 1. Rapport:

- Have I adapted to the interlocutor's pace and style of speech?
- Do I use similar formulations to create a sense of "we are on the same team"?
- Do I demonstrate an open posture, eye contact, and attentiveness?
- Does the interlocutor feel that they are heard and understood?

#### 2. Calibration:

- Do I observe non-verbal signals (gestures, facial expressions, voice)?
- Do I notice behavioural changes that may indicate tension?
- Do I adjust my behaviour according to the interlocutor's state?
- Have I identified early signs of conflict?

#### 3. Analysis of communicative patterns:

- Do I notice generalizations ("you always," "you never")?
- Do I ask clarifying questions instead of reacting emotionally?
- Do I reformulate harsh statements into neutral ones?
- Have I prevented a possible misunderstanding?

### *II. Conflict management*

#### 4. Reframing:

- Have I identified the negative interpretation of the situation?
- Have I proposed an alternative, constructive perspective?
- Have I reduced emotional intensity by changing the perceptual frame?
- Have I shifted attention from the problem to the solution?

#### 5. Behaviour modelling:

- Do I use effective communicative patterns (my own or borrowed)?
- Do I control pace, intonation, and pauses?
- Do I demonstrate behaviour that stabilizes the situation?
- Does my behaviour contribute to reducing tension?

#### 6. State management:

- Have I identified the emotional state of the interlocutor?
- Have I applied calming techniques (pause, breathing, anchoring)?
- Have I helped the interlocutor move into a resourceful state?
- Do I control my own emotions?

***III. Conflict resolution***

## 7. Sensory language (VAK adaptation):

- Have I identified the interlocutor's dominant perception type (visual, auditory, kinaesthetic)?

- Have I adapted my language to their style?

- Has the number of misunderstandings decreased?

## 8. Three perceptual positions:

- Have I considered the situation from my own position?

- Have I tried to understand the position of the other party?

- Have I analysed the situation as a neutral observer?

- Has this helped to find a compromise?

## 9. Milton model (soft influence):

- Do I use soft formulations ("perhaps," "let's consider...")?

- Do I avoid categorical statements?

- Do I create a sense of choice for the interlocutor?

## 10. Interest mapping:

- Have I identified the positions of the parties?

- Have I clarified the interests behind these positions?

- Have I proposed a solution that considers the interests of both sides?

## 11. Win-win:

- Have I formulated a solution that is beneficial for everyone?

- Have I emphasized shared goals?

- Has the "us versus them" opposition been eliminated?

## 12. Future pacing:

- Have I helped the parties imagine a positive outcome?

- Have we formed a shared vision of the future?

- Have we returned to the present with a concrete action plan?

***IV. Post-conflict follow-up***

## 13. Consolidation of results:

- Have the agreements been documented in writing?

- Have responsibilities and deadlines been defined?

- Has a control mechanism been agreed upon?

## 14. Prevention of recurring conflicts:

- Have the causes of the conflict been analysed?

- Have changes been introduced to processes or communication?

- Has brief feedback been provided to the team?

Practical recommendations for the application of NLP in the construction sector.

## 1. At the organizational level:

1) Introduce NLP communication training. Managers, site supervisors, engineers, and team leaders should master basic techniques of rapport, calibration, reframing, and state management.

2) Develop communication standards. Integrate NLP elements into corporate protocols, including feedback rules, conflict response algorithms, and standards for informing clients and contractors.

3) Use NLP in negotiations with clients and contractors. Techniques of sensory language, interest mapping, and the win-win approach are particularly effective.

## 2. At the project manager level:

4) Apply calibration on a regular basis. The project manager should monitor non-verbal signals of the team and partners in order to identify tension before it escalates into conflict.

5) Use reframing in difficult situations. Replacing negative interpretations with constructive ones helps reduce emotional intensity and find solutions.

6) State management. The manager should be able to stabilize their own state, manage stress in others, and use techniques such as pausing, breathing, and anchoring.

## 3. At the team and contractor level:

7) Build rapport in daily interaction. This reduces the number of conflicts related to misunderstandings, stress, or differences in communication styles.

8) Use the three perceptual positions technique in disputes. This helps the parties view the situation from different perspectives and find a compromise.

9) Conduct short NLP-oriented briefings. For example:

- "What do we feel?"
- "What do we see as the problem?"
- "What interests lie behind our positions?"

4. At the client interaction level:

10) Use sensory language. Adapting communication to the client's perception type improves communication quality and reduces the risk of conflicts.

11) Apply the Milton model in difficult negotiations. Soft formulations reduce resistance and help find common solutions.

12) Use future pacing. This allows the client to imagine a positive outcome and reduces emotional pressure.

For maximum effect, NLP should be applied not episodically but systematically – as part of corporate culture, management style, and the communication policy of a construction company.

As part of the project design, the NLP model was implemented in the activities of three small architectural and construction companies with similar characteristics: staff size of 30–50 employees, 1–2 project managers, work with private clients and small commercial facilities, and high dependence on contractors and suppliers.

The objective of the implementation was to improve the quality of communication between managers, clients, and contractors, as well as to reduce the number of conflicts that negatively affect deadlines, budgets, and company reputation. To assess effectiveness, clear performance criteria were defined, reflecting both quantitative and qualitative changes in company operations after applying the NLP model.

The implementation was carried out in several stages:

Stage 1 – diagnosis of communication problems. Typical problems were identified: emotional conflicts between managers and contractors, misunderstandings with clients caused by different communication styles, the lack of structured negotiation techniques, and a low level of early conflict detection.

Stage 2 – training managers in NLP techniques. Managers completed training in rapport, calibration, reframing, state management, win-win techniques, and interest mapping.

Stage 3 – implementation of the NLP conflict management checklist. The checklist became a daily tool for managers: during meetings, in negotiations, in work with clients, and in the resolution of internal conflicts.

Stage 4 – monitoring of results. Over a period of 3–6 months, the following indicators were assessed: the number of complaints, the number of repeat clients, the level of client satisfaction, and the dynamics of orders.

The criteria for evaluating the effectiveness of implementing the NLP model:

1. Reduction in the number of complaints from clients and contractors. One of the key indicators of effectiveness is a decrease in the number of formal and informal complaints related to communication misunderstandings, delays, uncoordinated changes, and emotional conflicts among project participants. Within the framework of the modelling, it was established that after the introduction of NLP techniques (rapport, calibration, pattern analysis), managers began to identify signs of tension earlier and neutralize them before escalation. This made it possible to reduce the number of conflict situations by 25–40%.

2. Increase in the number of repeat clients. The construction sector largely depends on repeat orders and recommendations. After the implementation of the NLP model, improvements were recorded in the quality of interaction between managers and clients, increased trust, and a reduction in misunderstandings during project implementation. This contributed to an increase in the share of repeat clients by 10–15%, which is a significant indicator for small companies.

3. Increase in the level of client satisfaction with communication with the manager. Client satisfaction was assessed according to the following parameters: the manager's response speed, clarity of explanations, emotional stability in difficult situations, and the ability to propose solutions rather than engage in conflict. Through the use of reframing techniques, sensory language, the three perceptual positions, and the soft formulations of the Milton model, the level of client satisfaction increased on average by 20–25%, which confirms the effectiveness of the NLP approach in the field of service interaction.

4. Growth in the number of orders by 20–30%. Improved communication and reduced conflict intensity had a direct impact on the speed of client decision-making, trust in the manager and the company, and clients' willingness to recommend the company to others. As a result of implementing the NLP model, an increase in the number of new orders by 20–30% was recorded, which is a critically important indicator for small architectural and construction companies. For clarity, the results are presented in Figure 1.

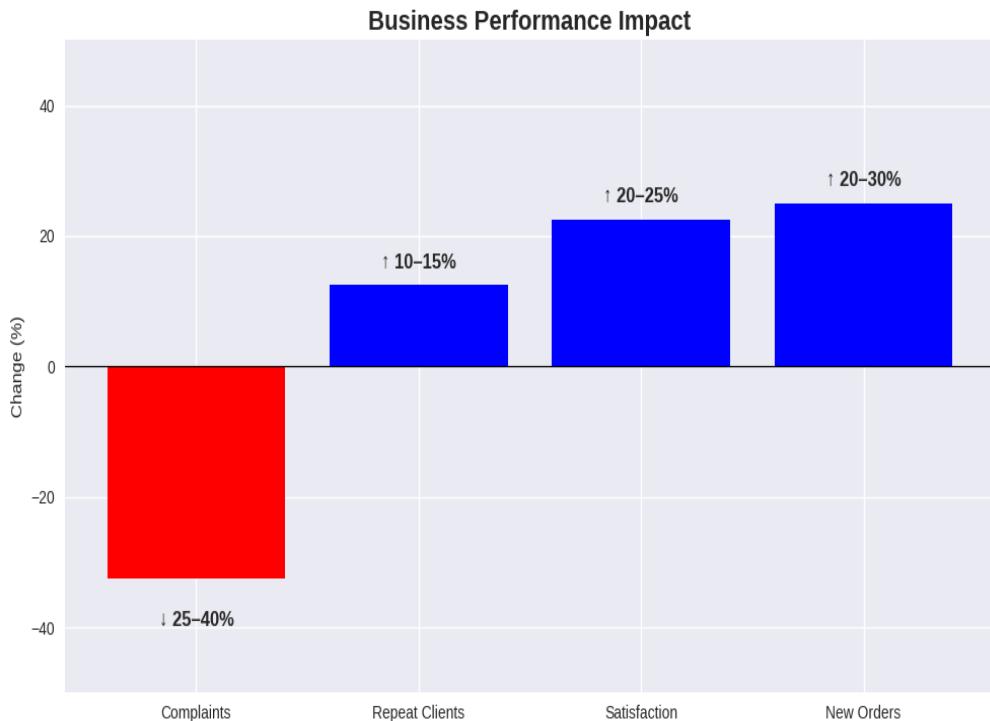


Fig. 1. Baseline results of business performance indicators of architectural and construction companies

In particular, the following outcomes were recorded: a reduction in the number of complaints by 25–40%, an increase in the number of repeat clients by 10–15%, an increase in the level of satisfaction by 20–25%, and a rise in the number of new orders by 20–30%. Overall results of the implementation. The use of the integrated NLP model and the checklist made it possible to reduce the level of conflict in communication, improve the professional competence of managers, strengthen client trust, enhance the effectiveness of interaction with contractors, and increase the number of orders and repeat requests. Thus, the NLP model proved its effectiveness as a tool for conflict management and for the development of a communication culture in construction companies.

## CONCLUSIONS

Thus, several conclusions can be drawn:

1. NLP is an effective tool for conflict management in construction projects, as it makes it possible to work not only with facts but also with emotions, behaviour, and communicative patterns of interaction participants.

2. The three-level NLP conflict management model (prevention → management → resolution) provides a systemic approach to working with conflicts, which is especially important in complex, multilateral construction projects.

3. Conflict prevention techniques (rapport, calibration, pattern analysis) form a stable communicative environment, reduce the risk of misunderstandings, and allow conflicts to be identified at early stages.

4. Conflict management techniques (reframing, behaviour modelling, state management) help stabilize the situation, reduce emotional pressure, and shift interaction into a constructive direction.

5. Conflict resolution techniques (sensory language, three perceptual positions, the Milton model, interest mapping, win-win, future pacing) contribute to achieving mutually beneficial solutions, restoring cooperation, and strengthening partnerships among project participants.

6. NLP enables construction project managers to improve communication quality, reduce the number of conflicts, minimize time and financial losses, and enhance overall project management effectiveness.

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## ПРАКТИКО-ЗОРІЄНТОВАНИЙ МЕХАНІЗМ ІНТЕГРОВАНОЇ NLP-МОДЕЛІ УПРАВЛІННЯ КОНФЛІКТАМИ В БУДІВЕЛЬНИХ ПРОЕКТАХ

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Будівельні проекти належать до найбільш складних і ризикованих сфер управлінської діяльності, де конфлікти виникають практично на всіх етапах реалізації – від планування та узгодження технічних рішень до виконання робіт і здачі об'єкта. Високий рівень невизначеності, благостороннія взаємодія учасників, залежність від постачальників та жорсткі строки створюють умови для постійної напруги та емоційного навантаження. Традиційні методи конфліктології, що спираються на адміністративні чи юридичні інструменти, часто виявляються недостатніми, оскільки не враховують психологічні та комунікативні аспекти взаємодії. У цьому контексті актуальним стає використання нейролінгвістичного програмування (NLP), яке дозволяє працювати з поведінковими, емоційними та когнітивними чинниками конфліктів. Метою дослідження є розробка практико-зорієнтованого механізму інтегрованої NLP-моделі управління конфліктами в будівельних проєктах. Методологічна основа ґрунтується на системному, комунікативному та психологічному підходах, що поєднують аналіз наукових джерел, порівняльний аналіз традиційних і сучасних методів, кейс-стаді та моделювання управлінських ситуацій. Запропонована модель складається з трьох взаємопов'язаних блоків: попередження конфліктів, управління конфліктами та вирішення конфліктів. На першому рівні застосовуються техніки рапорту, калібрування та аналізу комунікативних патернів, що забезпечують стабільність комунікації та раннє виявлення ризиків. Другий рівень включає рефреймінг, моделювання поведінки та роботу з емоційними станами, що дозволяє зупинити ескалацію та перевести взаємодію у конструктивне руслу. Третій рівень спрямований на досягнення узгоджених рішень і відновлення співпраці завдяки використанню сенсорної мови

(VAK-адаптації), трьох позицій сприйняття, Milton-моделі, Interest Mapping, *win-win* підходу та техніки Future Pacing. Результати дослідження підтверджують, що інтеграція NLP-технік у практику менеджменту будівельних проектів дозволяє знизити кількість конфліктів, скоротити час їх вирішення, підвищити рівень довіри між учасниками та забезпечити стабільність реалізації проектів. Практичне значення роботи полягає у формуванні рекомендацій для менеджерів і керівників будівельних компаній щодо впровадження NLP-методик у щоденну управлінську діяльність. Таким чином, запропонована модель є інноваційним інструментом, що поєднує психологочні та комунікативні аспекти управління конфліктами, сприяє розвитку культури довіри й відкритості та підвищує ефективність будівельних проектів у сучасних умовах.

**Ключові слова:** нейролінгвістичне програмування (NLP), управління конфліктами, будівельні проекти, комунікація в менеджменті, рапорт, калібрування, рефреймінг, проектний менеджмент.