

# Education of Translation Project Management Awareness through the Lens of CATWOE

Jiameng Sun \*

College of Foreign Language Studies, Chengdu University of Information Technology Chengdu,  
 610000 China

\*Corresponding Author

**Abstract.** This thesis investigates the integration of CATWOE analysis, a component of Soft Systems Methodology (SSM), into the education of translation project management. The goal is to enhance awareness and decision-making skills among students or future project managers in the translation industry. By applying CATWOE, educators can provide a structured framework for understanding complex project environments, identifying key stakeholders, and improving strategic thinking. This study employs a case study approach, examining a leadership development program and analysing perspectives from employees, learning and development departments, and board directors. The findings indicate that the knowledge of CATWOE is highly likely to enhance the comprehension of multifaceted project management scenarios. The research contributes to translation studies by proposing a structured method for incorporating CATWOE into educational curricula, aiming to bridge the gap between theoretical knowledge and practical application. It not only prepares future project managers for the dynamic challenges of global communication but also fosters a more holistic understanding of the translation industry's demands. Ultimately, this thesis advocates for the adoption of CATWOE as a transformative tool in translation project management education, promoting a nuanced understanding of stakeholder needs, environmental constraints, and the broader impact of translation projects.

**Keywords:** CATWOE; Translation project management; Translation industry; educational curricula.

## 1. Introduction

### 1.1. Background

The translation industry is experiencing rapid growth due to globalization and the digitalization of content. As businesses expand globally, the demand for multilingual communication increases, necessitating efficient translation project management. Traditionally, translation project management focused on linguistic accuracy and basic coordination. However, the modern landscape requires a broader skill set, including cross-cultural communication, technological proficiency, and strategic leadership [1]. This evolution has highlighted a gap in traditional educational approaches, which often emphasise technical skills over the complex realities of managing translation projects. Translation projects are inherently complex, involving multiple languages, diverse stakeholders, and tight deadlines, which requires project managers being able to balance quality, time, and cost while ensuring client satisfaction and team collaboration [2]. These challenges underscore the need for comprehensive education that prepares managers for the multifaceted nature of their roles. The integration of Soft Systems Methodology, particularly CATWOE analysis, offers a promising approach to address these educational gaps.

### 1.2. Research objectives

This thesis aims to explore the application of CATWOE analysis in translation project management education. The research objectives are multifaceted: firstly, to investigate how CATWOE can be effectively integrated into educational programs for translation project managers; secondly, to analyse the effectiveness of CATWOE in enhancing understanding of complex project management scenarios; thirdly, to evaluate CATWOE's impact on decision-making processes in translation project



management. By achieving these objectives, it seeks to propose a comprehensive framework for incorporating CATWOE into translation project management curricula, thereby potentially improving the quality and effectiveness of project management education in the translation industry.

### 1.3. Significance

It contributes to translation education and project management by introducing CATWOE as a novel approach to developing project management awareness. It bridges the gap between theoretical knowledge and practical skills, preparing students for real-world challenges in the translation industry. By fostering a holistic understanding of project environments, CATWOE can lead to more effective management strategies and improved project outcomes.

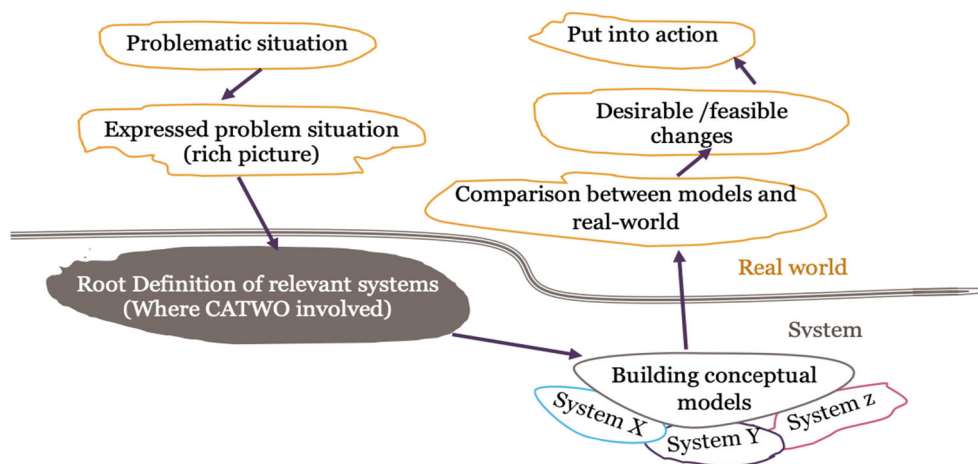


Figure 1. CATWO, part of SSM, adapted from SSM (Checkland, 2013)

## 2. Literature review

### 2.1. CATWO

Being widely discussed and adopted in many areas, Soft System Methodology [3] has been considered an idea approach to tackle complex and problematic situations [4][5]. Different from the hard systems thinking that ignores worldviews, it integrates the complexity of human-centred real world while exploring the rooted reasons through certain worldviews [6]. CATWOE provides a structured approach to understanding complex situations. It stands for Customers, Actors, Transformation process, Worldview, Owners, and Environmental constraints. It encourages consideration of multiple perspectives, making it a versatile tool for problem-solving. Despite criticisms of its simplicity, CATWOE remains widely used in various fields, including project management.

Among the 7 steps of SSM (see Figure 1), CATWOE has been considered a useful tool during the stage of deriving root definitions for the purpose of defining problems with meaningful input and output transformations [7]. The precondition is to have clear input-output diagrams from different worldviews that might be endowed with different sources of bias [8]. As the most significant distinction from non-SSM analysis, three root-definition systems for the delivery of leadership development program have been selected and derived as an illustration of diverse purposes [9] all for the common goal of reaching a consistently positive attitude. Though researchers have applied CATWOE to curriculum development in business education, but its application to translation studies remains unexplored.

## **2.2. Translation education**

SSM and CATWOE have been applied in educational contexts to address complex, people-oriented problems. Studies demonstrate their effectiveness in curriculum development and program analysis. However, their application in translation project management education is limited, presenting an opportunity for this study to contribute significantly to the field. The application of SSM has already found its theoretical support from previous studies, where researchers revealed how SSM is a sustainable way to help all the stakeholders of a system work together to take action that aims at improving their system, including discovering how to take action to improve learning by trying a new way of learning English as a foreign language [10], stakeholders ascribed their value-based objectives to the transformations through a multi-methodological framework of SSM [11], and stakeholder roles were clarified by implementing sustainable development goals using the CATWOE analysis tool in higher education institutions [12].

## **2.3. Translation project management**

Translation project management has evolved significantly, driven by technological advancements and globalization. It involves planning, organizing, and controlling multilingual projects, balancing the project management triangle of quality, time, and cost. The coordination of distributed teams, quality assurance, and technological integration are key challenges. Recent literature that orienting on the employability on the completion of higher education not only emphasises the importance of professional knowledge in a certain field, but also the need for soft skills [13], such as leadership and cultural intelligence, ethical thoughts, alongside technical skills [14], which is true to translation majors. Combining the systems, translation education could be improved through the lens of CATWOE.

## **3. Application of CATWoe in Translation education**

### **3.1. Methodology**

This study employed a qualitative case study approach, focusing on a leadership development program in a local translation agency. A single-case embedded design was chosen, focusing on a leadership development program at a large language service provider (LSP) that specialises in technical translations. It involves 3 phases: 1) the review of existing training materials, project management guidelines, and course syllabi from the LSP's internal training program. 2) semi-structured interviews with 15 participants (10 trainees, 3 trainers, 2 senior managers), collecting feedback and self-assessment reports, and the analysis of literature on translation project management education. 3) Thematic analysis was used to identify key themes and patterns in the collected data related to CATWOE components, including notes transcription of interviews, initial coding using Nvivo software, and thematic framework development [15].

### **3.2. CATWOE Stakeholders**

In translation project management education, customers include project managers, employers, end clients, and team members. Each group has distinct needs and expectations, from skill enhancement to efficient project delivery. The leadership development program case study identifies the primary customers as "leaders to be trained," emphasizing the importance of addressing their specific needs. Actors in this context include trainers, learning and development professionals, industry experts, technology providers, and professional associations. For example, they could be the HR department and external training coaches, playing a crucial role in shaping the educational experience. The transformation process involves converting novice project managers into skilled professionals. This includes developing technical and soft skills, strategic thinking, and industry understanding. For students learning translation, it highlights the integration of skill-learning activities and performance evaluation as key components of this process, for example in the class, out of the campus, internship platforms, etc. The worldview reflects beliefs about effective project management, emphasizing a

balance of linguistic expertise and management skills. It acknowledges the importance of cultural intelligence and adaptability in global communication, for example, to help the students to understand the critical role of leadership skills in a team. Owners are those with the power to change or stop the system. In translation project management education, owners include educational institutions, industry representatives, and translation agencies, which highlight their influence on program direction and resources sharing. Environmental constraints encompass external factors that limit system operation, such as technological advancements, market demands, and cultural differences across different generations. For example, constraints like available funding, HR support, and market competition, and industry information, all emphasizing the need for adaptive strategies and up-to-date training designs.

### **3.3. Benefits**

The application of CATWOE (Customers, Actors, Transformation process, Worldview, Owners, and Environmental constraints) analysis in translation education offers numerous benefits to various stakeholders. This comprehensive approach enhances the quality of education and better prepares students for the complexities of the translation industry. Let's explore these benefits from different perspectives.

#### **3.3.1. Education institutions**

For educational institutions, integrating CATWOE into their translation programs provides several advantages. CATWOE offers a structured framework for analysing complex translation projects, allowing institutions to design more comprehensive and industry-relevant curricula. This approach helps bridge the gap between theoretical knowledge and practical application, making programs more attractive to prospective students. Secondly, by incorporating CATWOE, institutions can better align their programs with industry needs, which could further enhance the reputation of the institution and can lead to stronger partnerships with translation agencies and corporations. In addition, the holistic nature of CATWOE encourages collaboration with other departments such as business, technology, and cultural studies, fostering a more interdisciplinary approach to translation education, something that is incremental to the education of language-related students especially in the era revolutionised by AI [16].

#### **3.3.2. Teachers/trainers**

For educators in the field of translation, CATWOE offers several benefits. First, a more structured teaching framework. CATWOE provides a clear structure for teaching complex project management concepts, making it easier for educators to convey these ideas to students. At the same time, by using CATWOE, teachers can more effectively illustrate real-world translation project scenarios, helping students understand the practical applications of their studies. This is of great significance because a lot of teachers were easily stuck with the knowledge they taught in the same class and the application of CATWOE opens a window to put themselves in a bigger picture in the real world.

#### **3.3.3. Students**

Students stand to gain significantly from the integration of CATWOE in their education. CATWOE helps students develop a systematic approach to analysing and solving complex translation project challenges. With such awareness, students learn to identify and consider the needs of various stakeholders in translation projects, preparing them for the collaborative nature of the industry, developing skills highly valued in the translation industry, enhancing their employability, which is also called. career readiness. Meanwhile, it encourages students to consider the broader context of translation projects and fosters strategic thinking, helping students understand factors beyond the textbooks, course credits, and homework, including cultural, economic, and technological changes that are shaping the world.

### 3.3.4. Industry market

The translation industry benefits from CATWOE-educated professionals. Professionals entering the industry with CATWOE knowledge are better equipped to handle complex projects and navigate stakeholder relationships. For example, translators and project managers received CATWOE-training can more effectively plan, execute, and evaluate translation projects, leading to better outcomes. On the client side, understanding the customer perspective through CATWOE helps professionals better understand and communicate with clients, and their teammates, to meet their demand and expectations more efficiently. On the other hand, the environmental constraints aspect of CATWOE makes professionals more aware of external factors affecting the industry, allowing for better adaptation to market changes. For example, the actor's component of CATWOE helps leaders better understand and manage team dynamics in translation projects.

## 4. Practical implication

As the most significant distinction from non-SSM analysis, three root-definition systems for the delivery of leadership development program have been selected and derived as an illustration of diverse purposes for the common goal of reaching a consistently positive attitude.

In the wake of this leadership program [17], their comprehensive capacities in managing their teams can be effectively enhanced, which indirectly benefits the efficiency of all the employees at large by sharing cultural values and promoting work commitment [18], and turnover rate be reduced with approachable goals, such as promotion and welfare [19].

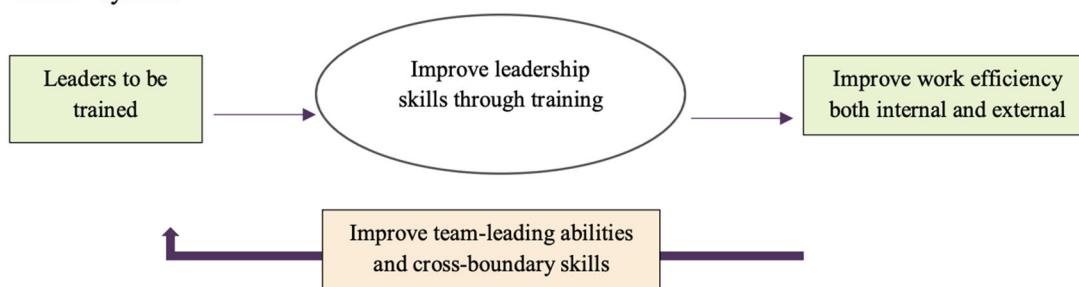


**Figure 2.** The 1st adapted system

In the context of translation project management education, the first system can be adapted as follows: After completing a comprehensive translation project management program that incorporates CATWOE analysis, students' capacities in managing translation projects can be effectively enhanced. This indirectly benefits the efficiency of all stakeholders in the translation process, including translators, editors, and clients, by promoting a shared understanding of project dynamics and cultural values. The turnover rate in translation agencies could be reduced as project managers set more approachable goals and better understand team dynamics. For example, students might learn to balance the workload among team members more effectively, set realistic deadlines, and manage client expectations, leading to improved job satisfaction and retention in the industry.

The second system is perceived from the perspective of the Learning and Development that by improving leadership skills of the leaders to be trained, including emotional intelligence and boundary spanning skills [20] [21], both the efficiency of their team and the external network relationship can be boosted for sustainable development for the good of the organisation [22].

The 2<sup>nd</sup> system:

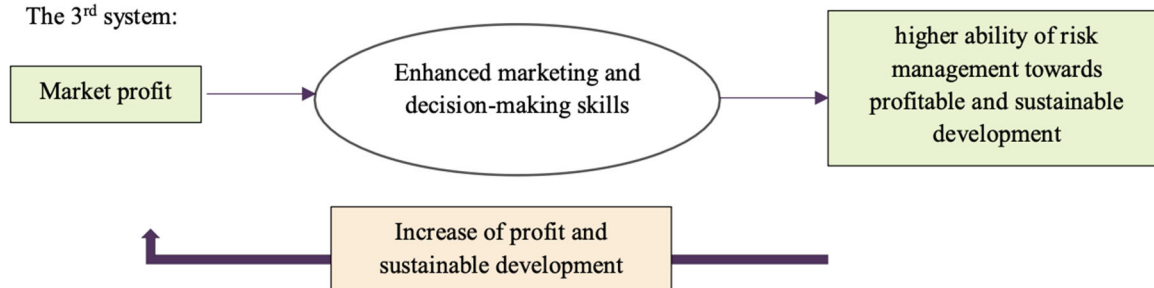


**Figure 3.** The 2nd adapted system

Adapting to translation project management education, this system can be adapted as follows: By improving the project management skills of future translation managers, such as leadership, emotional intelligence and boundary-spanning skills, both the efficiency of translation teams and external network relationships can be boosted for sustainable development in the translation industry. For instance, students learn to navigate the complexities of managing multilingual teams, coordinate with clients from diverse cultural backgrounds, and effectively liaise with technology providers. This holistic approach prepares them to handle the interconnected nature of modern translation projects, fostering better collaboration across linguistic and cultural boundaries.

The third system is perceived from the perspective of the board of directors that by enhancing decision-making and risk management ability of the executive committee, team leaders as well as all employees, the whole organisational resilience [23] can be efficiently enhanced to better anticipate and adjust to unpredictable changes and black swan event [24] for survival and further prosperity.

The 3<sup>rd</sup> system:



**Figure 4.** The 3rd adapted system

By enhancing decision-making and risk management abilities of future translation project managers, the resilience of translation agencies and language service providers can be efficiently improved. This prepares the industry to better anticipate and adjust to unpredictable changes and "black swan" events [25], ensuring survival and fostering prosperity. For example, students might learn to develop contingency plans for sudden changes in project scope, manage the risks associated with new translation technologies (ChatGPT or alike), or navigate geopolitical issues that could affect international projects. This forward-thinking approach helps create a more robust and adaptable translation industry.

Analysis of interview data revealed three key themes: 1) Improved stakeholder awareness, 2) Enhanced decision-making skills, and 3) Better understanding of environmental constraints. These themes align with the CATWOE components.

By integrating these adapted systems into the curriculum, translation project management education can better prepare students for the realities of the industry. 1) Relating to translation education, the application of CATWOE demonstrates its potential to provide a holistic view to identify key

stakeholders, clarify transformation processes, and highlight environmental constraints (theme 1). 2) It encourages consideration of multiple perspectives, leading to more informed decision-making. These insights can inform the design and delivery of translation project management education, fostering a more comprehensive understanding of the industry's complexities (theme 2). 3) This holistic approach not only prepares students for the realities of the translation industry but also elevates the quality of translation services, benefiting clients, companies, and the broader global communication landscape (theme 3). By fostering a more comprehensive understanding of translation projects and their contexts, CATWOE contributes to the professionalisation of the field and the development of more effective, efficient, and culturally sensitive translation practices.

Theoretically, this study extends CATWOE theory by demonstrating its applicability to translation project management education, particularly in enhancing students' understanding of complex stakeholder relationships in multilingual projects. From a practical lens, we recommend integrating CATWOE analysis into translation project management courses through 1) Case-based learning exercises, 2) Stakeholder mapping activities, and 3) Simulated project scenarios that emphasise environmental constraints.

## 5. Summary

This thesis demonstrates the potential of CATWOE analysis as a transformative tool in translation project management education. By providing a structured framework for understanding complex project environments, CATWOE enhances decision-making skills, improves strategic thinking, and fosters a holistic understanding of the translation industry's demands.

The integration of CATWOE into educational curricula can bridge the gap between theoretical knowledge and practical application, preparing future project managers for the dynamic challenges of global communication. While challenges remain in integrating CATWOE into existing curricula, its potential benefits make it a valuable addition to translation project management education. This thesis advocates for the adoption of CATWOE as a core component of translation project management education, promoting a comprehensive understanding of project dynamics and stakeholder needs. Future research should explore empirical implementations of CATWOE in translation studies curricula and its long-term impact on project management outcomes in the translation industry.

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