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## Enhancing Workforce Retention through Time and Material (T&M) Projects: Insights from a Healthcare Start-up Case Study

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### Abstract

*Employee retention is a significant challenge for organizations across all sectors, directly influencing productivity, profitability, and long-term sustainability. This case study examines effective techniques in a mid-sized technology start-up company facing elevated staff turnover. The research employs Rational Choice Theory to illustrate how firms can make strategic decisions to tackle workforce difficulties. Identified key impediments encompass restricted professional development chances, inadequate work-life balance, and insufficient employee acknowledgment. The research emphasizes the implementation of Time and Material (T&M) initiatives as a logical approach to enhance retention. In contrast to Fixed Price (FP) projects, the Time and Materials (T&M) model provides employees with improved career advancement opportunities and equitable remuneration commensurate with their contributions. This strategic transition demonstrates the organization's intentional strategy to harmonize operational flexibility with employee satisfaction, so enhancing results for both staff and the enterprise. The organization attained notable enhancements in employee satisfaction and retention through targeted interventions, which included prioritizing T&M projects, enhancing remuneration packages, implementing career development programs, providing flexible work arrangements, and cultivating a culture of recognition. Utilizing Rational Choice Theory, the firm illustrated how synchronizing retention strategies with organizational and employee requirements may cultivate a committed and engaged staff. This case offers significant insights into the design and execution of retention strategy informed by rational decision-making. It provides pragmatic ideas for leaders aiming to tackle workforce difficulties while guaranteeing sustained organizational development.*

*Keywords: Workforce retention, Time and material projects(T&M), Career growth, Rational choice theory*

### 1. Introduction

Employee retention has emerged as a fundamental element of organizational success in the current competitive corporate environment. Elevated turnover rates not only disrupt operations but also result in heightened recruitment expenses and the erosion of institutional knowledge.

Organizations, especially in the technology sector, encounter distinct obstacles in maintaining proficient personnel due to fluctuating market demands and changing career

objectives. Time and Material (T&M) projects have arisen as a viable answer to these difficulties, providing staff with opportunity for varied experiences, enhanced remuneration, and expedited career advancement relative to FP

This case study analyses how a mid-sized technology firm utilized T&M initiatives to tackle personnel retention challenges. The company effectively decreased turnover rates and enhanced employee satisfaction by

concentrating on programs that link employee development with organizational goals. This introduction establishes the framework for examining the techniques employed, the problems faced, and the results attained using this methodology.

### **Context and Organisational overview**

HPS - Healthcare Solutions Provider, a mid-sized technology business, has been instrumental in providing innovative IT services for over four years. The company specializes in software development, system integration, and IT consulting, catering to a varied clientele that includes both start-ups and established enterprises. The company employs over 50 individuals, dividing its operations between internal development initiatives and client-oriented Time and Material (T&M) contracts.

Notwithstanding its reputation for technological proficiency, the organisation has encountered ongoing difficulties in keeping talented personnel. In the last two years, the turnover rate has increased in the range of 8-10%, with exit interviews often indicating limited career progression, stagnant salary, and repetitive jobs as primary reasons for employee departures. In comparison - LinkedIn turnover analysis indicates that the technology sector has the highest turnover rate at 13.2%. Indeed, even global technology behemoths frequently contend with diminished employee retention. The majority have a median employee duration of merely one or two years.

The attrition rate at HPS has resulted in increased recruitment expenses, diminished productivity, and the forfeiture of essential knowledge.

In light of these problems, the business recognized T&M projects as a crucial opportunity to improve employee retention. The T&M projects provide personnel with exposure to various technologies and clients, as well as opportunities for accelerated career

advancement and improved remuneration, rendering them a compelling option to in-house (Fixed price projects) positions.

Previous studies have demonstrated that, on average, offshore vendors attain greater earnings from time and materials (T&M) contracts compared to fixed price (FP) contracts (Gopal, 2008). T&M projects are characterised by the client managing the projects and governance, the vendor will only provide the skilled human resources. Whereas the Fixed price projects are managed by the vendor end to end and ensure the projects are delivered timely. Vendors frequently allocate more skilled workers to FP contracts due to the elevated risk associated with these projects (Arora, 1999). The skilled workers in FP projects often continue in the same projects for few years depending on the contract duration. This extended duration is viewed as a non-gainer from employees perspective. If we closely examine this from employer's perspective, employer gains by continuing the same employees over a period of time, as they would have gained expertise on the systems and applications. Year on year the contract extends and a better profitability achieved.

There is an intricate relation between "hope and job performance". Individuals with high hope exhibit superior goal-oriented tactics and demonstrate greater motivation to attain their objectives compared to those with low hope (Peterson, 2008). As evident from the current case under discussion, the employees did have high hopes and they expressed to work on other projects with a different skill/technology.

### **2. Theoretical Lens**

We analysed the scenario from the employer's perspective. The organisation had to make a choice from the available options on FP, T&M and research and development (R&D) projects to deploy the resources. The

R&D projects were excluded from this decision as it required different profile of developers. Based on the discussions and available information, we could relate the decision making process to "Rational choice theory" (RCT) (Levin, 2004). Originally proposed by Adam Smith in economics and later developed by "Jeremy Bentham and John Stuart mill" in the 18<sup>th</sup> and 19<sup>th</sup> century. The formalization and application as a systematic framework for the modern world are credited to Gary Becker – a noble price winning economist and James S. Coleman, a sociologist. Rational Choice Theory often commences with an examination of the decision-making behavior of one or more individual agents, commonly either consumers or organizations in fundamental economics. The rational choice theorist often presumes that the individual decision-making unit is "typical" or "representative" of a larger cohort, such as consumers or sellers in a particular market.

After establishing the behavior, study often progresses to investigate how individual de-

isions interact to provide consequences (Green, 2002). The decision also involved the technology choice for the employees. The closest framework we could relate to is the Technology, Organization and Environment framework (TOE) (Tornatzky, 1990). Though the organization under consideration did not directly use the TOE framework for adoption, but during discussions TOE also was brought in to decide which technologies are predominant for resource placements on T&M projects. Arriving at a decision on probable deployment of skilled employees to T&M projects was made based on the RCT.

The choice to implement the Time and Materials (T&M) model instead of the Fixed Price (FP) model in workforce retention can be properly examined through the lens of Rational Choice Theory. This economic and social theory asserts that individuals and organizations make decisions through a calculated cost-benefit analysis to optimize utility and mitigate risks.

### 3. Dependant and independent variables

Identified independent variables are listed in the table 3.1

Variable	Description	Type	Possible Metrics/Indicators
Salary and Benefits (S)	Financial and non-financial compensation provided by the organization.	Quantitative	Average salary, bonuses, benefits (e.g., health insurance).
Work-Life Balance (W)	Flexibility and ability to manage professional and personal lives effectively.	Quantitative	Flexible hours, remote work availability, overtime hours.
Career Development (C)	Opportunities for professional growth through training, promotions, or T&M contracts.	Quantitative	Training hours, promotion rates, budget allocated for growth.
Recognition and Rewards (Rc)	Acknowledgment of employee contributions (e.g., bonuses, awards).	Quantitative	Number of recognition events, monetary rewards, peer reviews.
Organizational Culture (Oc)	Quality of work environment, including leadership, teamwork, and shared values.	Qualitative	Employee feedback scores, participation in team activities.
Contract Type (T)	Nature of employee contracts	Categorical	Percentage of employees

	(e.g., Fixed Price vs. Time and Material).		in T&M vs. FP contracts.
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Table 3.1 – Independent variables

With the above independent variables we can model the Retention function (dependent variable) as

$$R = F(S, W, C, R, O, T)$$

$$R = \alpha S + \beta W + \gamma C + \delta R + \epsilon O + \zeta T + \epsilon$$

$\alpha, \beta, \gamma, \delta, \epsilon, \zeta$  are the coefficients which represents relative importance of each factor  
 $\epsilon$  is the error term.

The operationalization of these variables is beyond the discussions of this case.

#### 4. Workforce retention strategies

Workforce departures and arrivals will significantly alter the environment for healthcare businesses and their leaders in the forthcoming years (Myers, 2007). Candidates choose a business for numerous criteria, including its ranking, reputation, dedication to diversity, and workplace atmosphere. The prominence of these traits will fluctuate based on a candidate's inclination towards collaboration, other factions, and social hierarchy (Umphress, 2007). When recruitment rhetoric does not correspond with actual working conditions, employees will depart for more favourable opportunities in pursuit of a better alignment (Taber, 2003). Healthcare administrators must adopt a proactive and systematic approach to diversity management in order to recruiting and retaining the workforce. They must be cognizant of their behaviours, comprehend and value the perspectives and contributions of the workforce they aim to retain and identify elements that foster a better performance in the work environment, and convert that understanding into organizational policies and practices (Myers, 2007). In the next section we discuss the current retention strategies.

##### 4.1 Retention and Internal Engagement

**Evaluate and foster a culture** that prioritizes quality, competence, education, and the comprehensive involvement of all employees. To achieve this objective, strive to reduce rank abuses and equilibrate power by fostering inclusiveness, promoting egalitarian principles, and implementing democratic procedures (Thomas, 1996).

##### 4.2 Engage in professional advancement

Customized to address various learning methods, languages, and competency level in technology and language required. Deliberately facilitate the transfer of information from experienced individuals to novices to preserve and augment the organization's competitive advantage (Ford, 2005).

**4.3 Implement mentorship** and knowledge transfer, that recognize and appreciate both the experiential wisdom of experienced employees and the technical expertise of starter individuals (Ford, 2005). Learn from the foremost by examining the practices of firms acknowledged for exceptional performance.

To conclude on the literature review on retention, Organizations must foster a culture of mutually respect the employees, promote the inclusive engagement of all employees, regardless of their status or identity, and acknowledge excellence (Myers, 2007).

Other strategies like higher pay grade, new learning opportunities (skill enhancement), position rollup, equity offering etc have been time tested and seen as success factors for organizations to retain their employees.

##### 5.0 OBT (out of the box thinking) by HPS

HPS as an organization of innovators (tech and business), explored the new dimension of T&M contracts which were both profitable and satisfying their skilled

employees. The COO (chief operating officer), explored the new T&M opportunities and directed the HR staff for organizing required training programs to enhance the four primary skills on react.js, reactnative, node.js and QA (software application testing engineers). The training was provided by worldclass trainers in these technologies as per client requirements and interviews were successful for 20 employees. They were placed on client's T&M projects.

**6.0 The Contracts caution**

Though HPS was able to place and retain the targetted workforce, there was a high risk of these talented employees to get absorbed by the clients! The legal team was tasked with writing the terms and condition of the

contracts and after negotiation with the clients, the contracts were signed. We need to stop and think at this point - this whole case is not just training and placing bodies in T&M projects ! but a well thought strategy to retain the skilled workforce.

**7.0 Discussions**

The choice making strategy, design execution and monitoring are the key takeaways from this case study. The outcome of this decision led to retaining 20 skilled resources over 1.5 years and still continuing. The tables below provides the rationality of the decision made for the benefit of organization and employees who were keen on such opportunities.

Aspect	Explanation	Rational Outcome
Flexibility	T&M contracts allow modifications in scope, resource distribution, and schedules. This flexibility reduces employee fatigue compared to Fixed Price models.	Employees experience less pressure, leading to higher job satisfaction.
Resource Utilization	Enterprises invoice clients based on actual hours worked, ensuring equitable workload allocation and avoiding overwork from underestimated efforts in Fixed Price.	Employees perceive fairness in workload, enhancing engagement and retention.
Predictable Revenue for Development	T&M ensures steady revenue, enabling firms to invest in career development programs and upskilling.	Employees see growth prospects, improving retention.

Table 7.0a Advantages of T&M model for workforce retention

Risk	Impact on Employees
Scope Creep	Leads to dissatisfaction as work exceeds initial expectations.
Cost Overruns	Underestimations result in cuts to employee benefits or morale-enhancing initiatives.
Inflexible Schedules	Stringent timelines cause stress and burnout.

Table 7.0 b Risks associated with FP contracts

Advantage	Impact on Workforce
Dynamic Adjustments	Reduces pressure by allowing project modifications.
Transparency	Builds trust between clients, organizations, and employees.
Equity in Workload	Synchronizes workloads with actual efforts, reducing dissatisfaction

Table 7.0c Advantages of T&M contracts

**Linking the rational choice theory to retention strategies.**

The selection of T&M demonstrates a logical strategy for reconciling business objectives.

Organizational Rationality	Employee Rationality
Optimizing project profitability while preserving talented personnel	Remaining in positions that provide flexibility, equity, and opportunities for professional advancement

Table 7.0d

Rational Choice Theory illustrates that matching business models with employee retention objectives makes the T&M approach a rational option for effectively addressing workforce retention challenges.

**8.0 Strategy Design, Execution and Monitoring**

HPS designed the steps with solid foundation for employing the T&M paradigm to tackle workforce retention issues. The following are the factors considered for strategy design

Design	Details
Objectives	Boost employee retention and happiness.
	Reduce staff stress with project flexibility.
	Pay employees according to market standards and contributions.
	Promote career and skill development.
Key Elements	Transparent Pay: Payment should match billable hours for fairness.
	Recognize employee contributions at T&M milestones.
	Career Development: Invest in training programs funded by T&M project revenues.
Stakeholder Roles	Employee Recognition: Acknowledge contributions during T&M milestones.
	Leadership: Ensure buy-in for T&M and allocate resources for retention efforts.
	- Managers: Align project scopes, workloads, and employee skill sets.
	- HR Team: Design recognition and professional development programs.

**Strategy execution**

Implementation Steps	Details
Project Realignment	Transition selected resources to T&M.
	Set clear expectations with clients regarding billing, deliverables, and timelines.

Workload Balancing	Use resource management tools to equally assign jobs to teams.
	Review workloads regularly to avoid burnout.
Compensation and Incentives	Restructure remuneration to reflect hourly billing incentives.
	Link performance bonuses to T&M project results.
Training and Upskilling	Fund staff development with T&M earnings.
	Establish regular feedback cycles to acknowledge efforts.
Recognition and Inclusion	Celebrate T&M project achievements like client feedback.
Flexible Work Policies	Add remote or hybrid work paradigms for T&M teams.

### Monitoring and Evaluation

Key Performance Indicators (KPIs)	Employee turnover rates.
	Surveys of employee happiness.
	T&M project client satisfaction scores.
	Employee utilization and revenue.
Feedback Mechanisms	Employee satisfaction with T&M initiatives should be assessed quarterly.
	Ensure client happiness by collecting feedback.
Iterative Adjustments	KPIs and feedback can improve workloads, pay models, and recognition.
	- Communicate changes to employees and clients to ensure transparency.

### 9.0 Conclusion and Future research directions

The top management team’s commitment to overall organizational performance, retaining employees with certain skills, and doing it profitably is evident from success measures, namely it retained 20 employees over 1.5 years, the T&M projects deals increased to 62% when compared to 23% earlier. The firm creates a more flexible, fair, and engaging workplace by using the T&M model in its retention strategy. Effective implementation ensures this approach's benefit higher morale, lower turnover, and more client satisfaction for ongoing organizational success.

We propose to do a mathematical formulation of this choice problem with the identified variables applicable to this case. Future researchers in this vital topic of workforce retention can explore on further risks to both employer and the employee perspective in such resource deployments. Further studies can focus on the bargaining power - who has more bargaining power whether it’s the skilled employees, the employer or the client? These research questions will contribute to the workforce retention literature and the leaders in practice to adopt the best strategies for profitable business and create win-win situation.

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