Article

The Impact of Organisational Climate on Employee Engagement and Performances in a Multinational Oil and Gas Exploration and Production Company in Thailand

Pakawas Mangkang[1,a] **and Parames Chutima**[1,2,3,b,*]

1 Regional Centre for Manufacturing Systems Engineering, Chulalongkorn University, Thailand
2 Industrial Engineering, Faculty of Engineering, Chulalongkorn University, Thailand
3 The Academy of Science, The Royal Society of Thailand, Thailand
E-mail: [a]pakawas.pm@gmail.com, [b,*]cparames@chula.ac.th (Corresponding author)

Abstract. This research aims to support the company to improve employee engagement by exploring antecedent issues that have not been previously captured by the company survey. Organisation climates are chosen since they focus on intrinsic values such as purpose and work harmony, i.e. internal communication, learning and development, and perceived organisation support, to close the engagement gap and translate them into feasible actions. In addition, the study further explores the performance indicator beyond conventional measures. Conventionally, the benefit of engagement is measured through self-rating questions, e.g. organisational commitment and job satisfaction. However, it lags off the link between those measurements and tangible benefits. The internal survey data are analysed by the structural equation model (SEM) to identify the relationship between antecedents and consequences, and then linear regression is applied to correlate each factor to the observed performance. To provide a complete understanding of each relationship, interviews are conducted to find an insightful view of the model outcome. The result emphasises the strong relationship between engagement and organisational commitment, especially organisation engagement. Learning and development show contradicting results from the previous study and the outcome cannot clear the myth that higher engagement leads to better performance but it has shown a promising correlation between engagement and performance. The finding could help the management team and HR department better understate the priority for each antecedent which also links to the benefits of engagement that ultimately supports future HRM.

Keywords: Employee engagement, organisation climate, oil and gas, SEM, HRM.

1. Introduction

The employee engagement study has increased its popularity in the human resource development field recently. It aims to improve employee performances and underlie company change management directions. This study is conducted in a company that is under the organizational change process. The company is a multinational oil company based in the US. Its business unit in Thailand is an oil and gas exploration and production company which has been operating in the Gulf of Thailand for more than 50 years.

The proportion of Thai employees has been increasing in the last decade. Today, 99% of employees are Thai comprising 1400 employees and 860 contractors. In 2018, Thai national oil won the concession biding that the company currently operates. As a result, the company is obligated to hand over some current assets, including managing employees resulting in two-thirds of the employees having to leave the company. Apart from the changing process, the company is operating under several challenging conditions. First, a downturn in the oil and gas industry is hit hard by the Covid-19 pandemic. Not only does it affect the company's financial status, but also it threatens the future of the industry and directly impacts the young employees who have to leave the company to work in another sector. The second issue is related to challenging working conditions. As some people have to leave before the concession end, it creates a workforce gap for other sectors. After the concession ends, the implementation of the new organisation assigns new roles to the people. The company recognizes these situations and attempts to enhance employee engagement through many attractive support campaigns. However, the employee engagement score index surveyed by the human resource division remains unsatisfactory low.

This study aims to explore the antecedents of employee engagement by focusing on the intrinsic value in which the organizational climate is chosen to be the main theme of the antecedents. A thorough understanding of the relationship between the antecedents and employee engagement and performance is very useful for the company to generate more effective enhancing engagement programs.

The remaining sections are as follows. Section 2 discusses the related literature, followed by an explanation of the research methodology in Section 3. The results and discussion are presented in Section 4. Finally, the research conclusion is given in Section 5.

2. Literature Survey

The summary of the literature is shown in Table 1 whereby their details are as follows.

2.1. Employee Engagement

Saks's (2006) [1] two engagements models are chosen for this study based on two reasons: 1) according to company survey results and observation, which could not be explained by a single engagement, where the observed behaviour suits better with Saks's engagement model; and 2) company transformation focuses on horizontal integration; therefore, understanding the drivers of organisation engagement can support the transformation.

Saks (2006) [1] identified five antecedent groups, i.e. job characteristics, perceived organisation support (POS), perceived supervisor support, reward and recognition, procedural justice, and distributive justice. Perceived organisational support was shown to be a critical driver of engagement. In comparison, job engagement was supported by job characteristics and perceived organisation support. This corresponds with subsequence studies that perceived organisational support had influenced more organisation engagement. Further studies that applied Saks's model had expanded the employee engagement antecedent beyond the original model. Internal corporate social responsibility (CSR) and branding were favourite subjects in the service industry.

Although, no engagement study has been conducted on a similar business and many studies conducted on the service sectors, which could be completely different in day-to-day job and job engagement antecedent. Because, in engineering jobs, codes and standards were crucial and had to comply with, providing training on necessary skills or support from a supervisor could help relieve this pressure, allowing an employee to engage with their job [2]. Thus, the job antecedents may depend on the work nature. As a result, organisation engagement could be similar regardless of business because it concerned the relationship between members and the organisation. It could argue that employee background, e.g. education, personality, etc. could affect the organisation's engagement construct. A limited number of engagement studies incorporated employee factors into the model because obtaining a reliable personality was complex. Moreover, employee engagement affected HRM strategy, which was difficult to customise to fit with the individual employee. However, it did not mean neglecting the personal factor. Therefore, it had to manage at different levels, such as selecting a team leader with emotional intelligence.

Comparing job engagement and organisation engagement could conclude that antecedence groups that underline job and organisation engagement were different. Although, some factors contribute to both types, such as perceived organisation support [1, 3-6] and training and development [7, 8] but in different degree of significance. Besides, support for organisation engagement also involved emotional and relationships [9, 10].

Table 1. Summarised job and organisation engagement studies.

Study	Participants	Job engagement antecedents	Organisation engagement antecedents
Tahlil Azim (2016) [11]	Students in public school	CSR ++	CSR+
Esen (2012) [12]	Public hospital	Not included in the study	Corporate reputation
Abdelmotaleb (2020) [13]	Bank sector	Not included in the study	Social responsibility
Albdour and Altarawneh (2012) [7]	Bank sector	Internal CSR Health and safety ++ Human right +	Internal CSR Health and safety ++ Training and education ++
Andrew and Sofian (2012) [14]	Group of HR across Malaysia business	Employee development++ Co-employee support+	Co-employee support++
Lee et al. (2014) [8]	Hotel business	Internal branding	Internal branding
Mahon et al. (2014) [9]	Public Company	Not included in the study	Share positive mood Share personal vision Perceived organisation support
Men et al. (2020) [10]	An online survey was distributed through the Dynata platform with a random participant.	Not included in the study	Positive emotional culture (Leader Motivating language, symmetrical internal communication)
Nawrin (2016) [15]	Manufacturing sector	Psychological ++ Empowerment ++	Psychological++ Empowerment++

Study	Participants	Job engagement antecedents	Organisation engagement antecedents
Ruck et al. (2017) [16]	Public sector and UK government department	Not included in the study	Senior management receptiveness Upward communication
Shah and Beh (2016) [17]	Middle management in the hotel business	Not included in the study	Workload Job security Opportunity Salary Performance and feedback Interesting work
Byrne and MacDonagh (2017) [3]	Teacher union	POS++	POS++ Employee voice
Malinen and Harju (2017) [4]	Non-profit organisation	POS+	POS++
Rasheed and Khan (2013) [5]	Bank sector	Perceived supervisor support Procedural justice Perceived organisation support+ Distributive justice	Procedural justice Perceived organisation support++ Perceived supervisor support Distributive justice

Note: 1 (++) indicated higher impact or significance in the statistical test.

2.2. Organizational Climate

Organisation climate is part of the psychology field, and the study dates back to 1950. Osgood et al. (1957) [18] defined psychology as the individual description of an environmental object concerning themselves. Shaver (1987) [19] emphasised that the process of interpreting environmental objects involved the experience. James and James (1989) [20] highlighted the psychological construct, e.g. loyalty, equity, stress, ambiguity and challenge, which supported the complexity of the interpretation process that was not simple, like evaluating its goodness or badness. In the working environment, the perception of the work environment affected personal value, which suggested that the work environment's valuation was the representation of psychological climate. A positive psychological climate was an environment where individuals perceived the benefit to themselves. Locke (1976) [21] proposed four underlying support factors, namely role stress, leadership, job challenge and cooperation. Later, Parker et al. (2003) [22] combined the psychology climate research after Locke's model to analyse the underlying factors. The result supported Locke's (1976) [21] model and highlights the 5th factor which Locke took out from the final model (i.e. organisation), as demonstrated in Fig. 1.
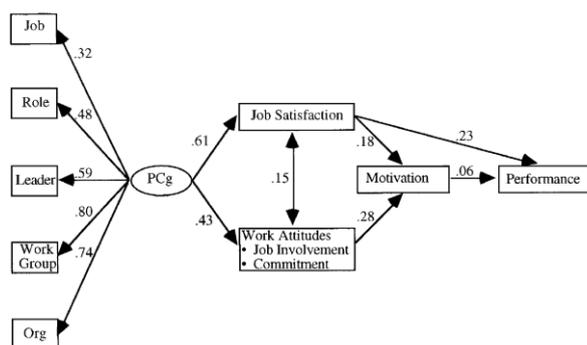

Fig. 1. Locke's (1976) [21] psychology climate.

The organisational climate was the aggregation of individual psychological climate (i.e. perception of work environment). In the organisation, people worked together, creating interactions in the group. The interpretation of the environment (i.e. psychological climate) drove the individual behaviour and ultimately affects others in the same environment. Thus, organisation climate emerged from a shared individual psychological climate. This concept supports by Burke et al.'s (1992) [23] research on a two-factor order model. The study was conducted in a retail business. The concept of psychological climate was an individual interpretation of environment-related to themselves. The study's result demonstrated that people did not reflect only on themselves. However, they were concerned about the benefit to another stakeholder in the environment (i.e. a customer in the study). Moreover, measuring the organisation's climate was difficult because the definition

was shared an aggregation of individual perceptions required an in-depth study of the group of people which cannot satisfy only by survey questions.

Many researchers found a positive correlation between psychological climate and performance, similar to engagement. Moreover, psychological climate enhanced similar consequences such as job satisfaction and organisational commitment. Therefore, it could be summarised that psychological climate concerned the emotional and cognitive parts, specifically in the work environment of the engagement model and organisation climate could underline the organisation's engagement.

2.3. Organisation Climate and Engagement

Organisation climate and employee engagement were in different fields but shared similar consequences. Moreover, the organisation engagement theory foundation was from the social exchange theory that employees in a social group (i.e. organisation) contributed to the group for a reward which could be tangible or intangible such as relationship and reputation etc. This explanation was similar to Burke et al. (1992) [23] on a two-factor order model that explained the higher order of phycology climate. Mahon et al. (2014) [9] found that organisation climate underlined job satisfaction and employee commitment, which were employee engagement measurements. Moreover, it concerned performance as well. According to this definition, many employee engagement antecedences could consider an organisation climate, as summarised in Table 2.

Table 2. Psychology climate factors and Engagement antecedents.

PSYCHOLOGY CLIMATE FACTORS	ENGAGEMENT ANTECEDENTS
Role stress and lack of harmony	Work-life balance Training and development
Leadership facilitation and support	Supervisor support Supervisor trust and integrity
Job challenge and autonomy	Job characteristic
Work-group corroboration	Teamwork Team environment
Organisation	Organisation support Internal communication

The literature review related to job and organisation engagement is summarised in Table 2. Considering the company situation and current engagement practice, two psychological climate factors i.e. role stress and organization are selected to explore as the antecedent of employee engagement to close the company survey gap and fully understand the company engagement level. An additional criterion is that selecting antecedent could lead to feasible action items or the current employee support program. For example, salary or career opportunities are excluded from the study. Therefore, this study selects three antecedents including training and development, internal communication, and perceived organisational support.

3. Methodology

Antecedents, engagement and organisational commitment are measured by a questionnaire, which is a five-point Likert's scale. The structural equation modelling (SEM) is chosen instead of multiple regression to analyse the relationship between antecedents and performances because SEM can minimise participant scoring and question design errors. Moreover, SEM can measure the indirect effect or meditation of each variable. SEM is widely used in social science to analyse the survey questions and create the model to represent the relationship between the interested measures. In addition, personnel interviews are conducted to provide some insight for further investigation.

3.1. Participants

The participant target is the company employees, and the questionnaires are distributed to all teams in every function to create a representative engagement model and to ensure sufficient data for further performance analyses.

3.2. Antecedents

3.2.1. Training and development

Providing the necessary skill to perform the task helps the work quality and improves employee mental status. According to the job demand resource theory, the resource refers to the employee's capability. Inadequate resources led to task failure or rework. Thus, an imbalance between resources and demand induces stress on the employee. Moreover, mental skill is equally essential as job skill. Working in the organisation requires social skills such as emotional intelligence (EI) or communication to complete the task.

Albdour and Altarawneh (2012) [7] found that internal CSR supports both engagements, especially organisation engagement. Internal CSR shared the definition with CSR, but instead of looking outward to the customer or society, internal CSR treated employees as a customer, which concerned the issue that did not directly contribute to the company's benefit. The study was conducted in the Jordan

bank sector by measuring internal CSR through 5 dimensions including training and education, human rights, health and safety, work-life balance, and diversity. The result showed that all five dimensions support engagement, but health and safety and training were more significant to organisation engagement to different degrees.

Lee et al. (2014) [8] conducted a study on the hotel business in South Korea. The study focused on internal branding as an antecedence. Lee proposed three internal branding matrices that consisted of training, communication, and reward. Training had the highest impact on job engagement and the third on organisation engagement, but the 2nd impact, i.e. communication and training, showed closed correlation power to organisation engagement. The result corresponded with Andrew and Sofian (2012) [14] that training fostered job engagement more than organisation engagement.

The relationship between training and job engagement is clear. The company provided the necessary skill to perform the task would make people more engaged. Moreover, other training that may not be directly related to the work but supported future development was also given, e.g. new skills (programming), soft skills to improve corroboration, cross-functional training, etc. These skill sets may not directly affect the current work, but they could motivate employees to create new ideas. Unfortunately, the example studies did not disclose the questions in the survey. Thus, it was unable to conclude which training supported engagement. This study will focus on additional training or development programs besides the job skill to align with the current training strategy and support organisation engagement.

3.2.2. Internal communication

Internal communication is a crucial part of the company's journey and a strategic tool for management to lead the company to success and foster change management. Moreover, it could consider one of the employee's emotional constructs [10]. Internal communication can be divided into many levels, for example, the formal message from management, from supervisor to subordinate or interaction between teams. Consider the company survey results that supervisor support and work process have a high score, and communication is excluded from the survey. Thus, the effort to transform the company makes management communication must be evaluated.

Men et al. (2020) [10] emphasised the importance of internal communication through positive emotional culture as a mediator instead of engagement. Nevertheless, a consequence of positive emotional culture is organisation identification which is similar to the engagement model. Organisational identification has a similar definition to organisation engagement, i.e. "the strong attachment to with an organisation" [23]. In addition, the concept is derived from the social identity theory that identification emerges from a feeling of

belonging to the social group. In this case, the organisation is concerned about emotion and perceived value as part of the member. Thus, internal communication could consider an antecedent. Men et al. (2020) [10] also articulated that internal communication (i.e. symmetrical communication) fostered employee emotion through trust, openness, empathy and empowering employees.

Supported by Mahon et al. (2014) [9], the engagement model through positive emotions including shared personal vision is classified as a psychological climate factor in the work harmony group. The shared personal vision reflects the positive employee emotion toward company direction. Employees with higher vision alignment could engage more and have better contributions. Although a shared personal vision may not entirely fit in communication, effective communication can project the company's future and create inclusion that brings all employees to the same goal. Thus the measure of the perceived shared vision reflects the internal communication effectiveness.

Internal communication does not always support engagement. Andrew and Sofian (2012) [14] found no correlation between employee communication and job/organisation engagement. The difference between Men et al. (2020) [10] and Andrew and Sofian (2012) [14] is that Men et al. (2020) [10] focused on symmetrical communication, which concerns not only the message but how to communicate is essential, whereas Andrew and Sofian (2012) [14] described communication as a mediator for an employee to receive feedback for their performance. Thus, the communication measurement of Andrew and Sofian (2012) [14] is only a tiny part of symmetrical communication. This difference could explain why the result of Andrew and Sofian (2012) [14] differs from other communication research.

3.2.3. Perceived organisation support

Perceived organisation support is a well-studied antecedence, and it supports both job and organisation engagement, usually having a more substantial influence on organisation engagement. This correlation supports by the social exchange theory that companies demonstrate or behave in a way that favour or align with employee value. For example, a company promotes diversity and inclusion, which help an employee to work with colleague easier. Hence, perceived organisation support could be viewed as the interpretation of collectively company behaviour (i.e. the way that company treat or react to the employee, which can be direct or indirect) from the employee's viewpoint. Nonetheless, perceived organisation support is a broad terminology and unidimensional, and various studies measure it differently. The original scale was proposed by Eisenberger et al. (1986) [25], containing 36 items, ranging from employee well-being, recognition, fairness, empathy, and understanding of employee needs. It covered all aspects of the organisation, and some dimensions overlapped with other engagement antecedents such as reward and recognition and procedure

justice. Thus, some of the items were excluded from the employee engagement study.

This study aims to provide better employee engagement understanding by applying Saks's (2006) [1] model (i.e. work and organisation engagement) and closing the company engagement survey gap. This study focuses on organisational climate factors, namely symmetrical communication, training and development, and perceived organisation support, as antecedents to predict employee engagement. Therefore, the hypotheses are as follows:

H1: Internal communication is positively correlated to job engagement.
H2: Internal communication is positively correlated to organisation engagement.
H3: Training and development are positively correlated to job engagement.
H4: Training and development are positively correlated to organisation engagement.
H5: Perceived organisation support is positively correlated to job engagement.
H6: Perceived organisation support is positively correlated to organisation engagement.

3.3. Consequence and Organisation Performance

Enhancing the engagement program aims for total employee contribution to the organisation. The measure of engagement consequence can be assessed from many perspectives, e.g. 1) invert evaluation by reflecting on individual performance such as self-rating on level of focus on the job or willingness to spend overtime; 2) external evaluation by observing other behaviour, such as helping others in the team solve the problem; and 3) employee feeling, for instance, level of job satisfaction and intent to quit. This measure can imply better performance. For example, if everyone in the team rated high on work corroboration, the team should have higher performance. Typically, the performance measurement includes organization commitment, job satisfaction and intention to quit or stay. However, according to a preliminary discussion with HR, they do not want to include sensitive measurements in the survey; therefore, only organisation commitment is included in the survey. Arguably, the relationship between consequence and real performance does not have strong evidence to back it up; in particular, supporting financial benefit is weak [26].

Regardless of the unclear relation between consequence and performance, the consequence is a valuable indicator if appropriately selected. Like the example above, the consequence is a snapshot. The same person could rate differently depending on the situation or condition during the survey period, which is more dynamic than measuring performance. It could conclude that consequence can be a leading indicator of performance; therefore, if the company monitor the proper consequence, that correlates with the focusing performance. For example, in the case study, the company

wants to transform into a flatter organisation that aims to promote corroboration and generate a new idea that impacts business. Thus, organisation commitment is chosen as an indicator. Additional hypotheses to be tested are as follows.

H7: Job engagement is positively correlated to organisational commitment.
H8: Organization engagement is positively correlated to organisational commitment.

Lastly, this study attempts to relate engagement to the transition effort to promote horizontal integration and clarify the claim of high engagement to performance enhancement. Therefore, the study will correlate organisational engagement and commitment with the number of idea creation (i.e. performance indicators), using the company data from performance improvement programs that encourage employees to submit new ideas such as cost-saving, optimisation, lean work process, etc. Therefore, the consequence could be a predictor by having employee engagement as a mediator of observed performance (i.e. the number of submitted ideas). As a result, two more hypotheses to be tested are as follows.

H9: Job and organisation engagement are mediators of organisation commitment and performance
H10: Average team job and organisation engagement are positively correlated to performance

The total hypotheses to be tested is 10 (from H1 to H10). Their interrelations are depicted in Fig. 2.
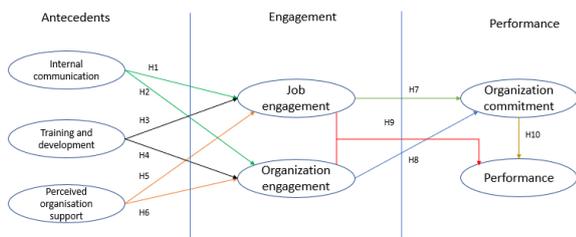

Fig. 2. Hypothesis summary.

4. Results and Discussions

4.1. Results

The survey data are processed by using a structural equation model (SEM), analysing path analysis with a bootstrap confidence level to test the hypotheses 1-8. The hypothetical path analysis model is illustrated in Fig. 3. To interpret the significance of each antecedent, a confidence level of 90% with the bootstrap test is applied to demonstrate the expected value with the range of outcomes. The statistical summary is demonstrated in Table 3. The result indicates that eight paths (i.e. relationship) are statistically significant. Two hypotheses

demonstrate the contradict result against the previous studies conducted by Lee et al. (2014) [8] and Andrew and Sofian (2012) [14], namely learning and development (consisting of team and individual learning) which have a negative impact on job engagement.
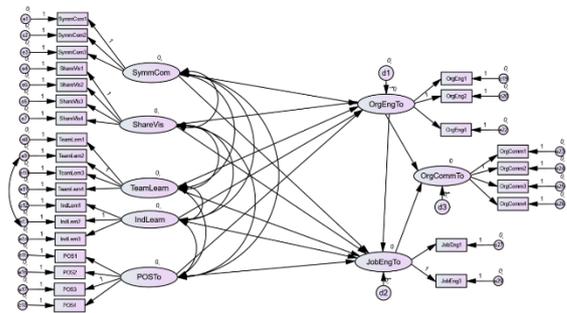

Fig. 3. SEM model.

Hypotheses 9-10 aim to explore the relationship between engagement and organisational commitment to performance. It is observed that the SEM model cannot correlate a significant relationship at an individual level. The aggregating team data is conducted by ANOVA multiple regression and still, no significant correlation is detected between organisational commitment and the number of idea submissions.

4.2. Discussion

During the SEM modelling process and analysis, two outstanding issues should be explored in addition to the result to provide a better understanding and precaution before using the result. First, the model fit quality is declining when adding complexity which generally is a common observation. However, a significant decrease could indicate heterogeneity in the sample. Additional analyses are performed and the result revealed insight into the driver behind engagement. Second, regarding the relationship between engagement and performance, no correlation can fit the data with statistically significant; nevertheless, the data trend seems to support the positive correlation. Therefore, refining the performance measurement and additional static tests could support the relationship. These two additional analyses are carried over to the discussion section.

Table 3.   Hypotheses results and statistic summary.

No.	Hypotheses	Loading Factor	Lower bound	Upper bound	SE.	P-Value	Result
1.1	Symmetrical communication will be positively correlated to job engagement.	0.253	-0.331	0.628	0.147	0.086	Support
1.2	Symmetrical communication will be positively correlated to organisation engagement.	-0.168	-0.636	0.102	0.136	0.217	Not significant
2.1	A shared vision will be positively correlated to job engagement.	0.380	0.73	2.308	0.272	0.162	Not significant
2.2	A shared vision will be positively correlated to organisation engagement.	0.953	0.502	2.028	0.225	**<0.001**	Support
3.1	Team learning will be positively correlated to job engagement.	-0.340	-0.589	0.684	0.194	**0.08**	**Not support**
3.2	Individual learning will be positively correlated to job engagement.	-0.476	-0.641	0.205	0.227	**0.036**	**Not support**
4.1	Team learning will be positively correlated to organisation engagement.	0.203	-0.381	1.059	0.177	0.251	Not significant
4.2	Individual learning will be positively correlated to organisation engagement.	0.318	-0.087	0.934	0.198	**0.100**	Support
5	Perceived organisation support will be positively correlated to job engagement.	-0.058	-0.174	0.426	0.087	0.506	Not significant
6	Perceived organisation support will be positively correlated to organisation engagement.	0.199	-0.124	0.602	0.078	**0.01**	Support
7	Job engagement will be positively correlated to organisational commitment.	0.145	-0.042	0.557	0.061	**0.018**	Support
8	Organisation engagement will be positively correlated to organisation commitment	0.567	0.414	0.922	0.116	**<0.001**	Support
9	Job and organisation engagement are mediators of organisation commitment and performance						
10	Average team job and organisation engagement will be positively correlated to performance.			Perform linear regression in AMOS, found no insignificant correlation			

4.2.1. Model fit quality

There is a significant decrease in model fit after combining antecedences and engagement in the path analysis. In general, the model fit slightly decreased due to the increasing error from the increasing model complexity. However, the significant drop in model fit (antecedences CFI = 0.918, engagement CFI = 0.978 and combined CFI = 0.88) could be caused by the hypothetical model may not capture all crucial antecedents that support engagement. In other words, it could indicate the lag of antecedences. Another explanation is that the employee in different functions could have a different relationship (i.e. factor loading) between each variable. In this study, subgroups are categorised based on work function, such as petroleum engineer, electrical engineer, geologist, finance, etc. Work function could influence the perception of external factors differently. For instance, people who work as a specialist in the industry could perceive the external factors that negatively impact the industry more than other groups because their career future relies so much on the business trend.

Other functions that less relied on the industry have a choice to move to the other growing sectors. Hence, the specialist groups are vulnerable to external factors which distract them from their work. The hypothesis is set to test the statement, i.e. "The decreasing model fit is influenced by subgroup effect therefore antecedents and external factors influence engagement differently". If there is a different relationship, the model fit indicator such as CFI and RMSEA should be improved. AMOS can perform the subgroup analysis. Unfortunately, the subgroup path analysis cannot give a result with high confidence because there is not enough data to satisfy the good model fit. Thus, the compare mean difference is performed as an alternative method.

To further explore the hypothesis by applying a simpler method, one of the specialist functions is separated, called the "A" group. The chi-square test analysed the difference between groups ("A" and the rest of the subjects), which shows a statistically different mean in engagement and commitment scores. There is no difference in the antecedent score. That result could indicate that the subgroup has an influence on the engagement and commitment score (i.e. personal background or experiences), which affect the generic model fit, as shown in Table 4.

Table 4. Chi-Square test between "A" group and others.

MEASUREMENT	SIG. (2-TAILED)	MEAN DIFFERENCE
Job engagement	<0.001	-0.8994
Organisation commitment	<0.001	-0.6295
Organisation engagement	<0.001	-0.7472

In addition, to explore the finding and the claim that the specialists have more concern about the future and affect the engagement. Two employees in the "A" group are interviewed with the open question, i.e. "What do you think why engagements are significantly low in this group compared to others while the antecedence scores are on par with?". There is a common area that the two interviewees address.

In this case, the external factors are referred to as the business factor, e.g. the COVID-19 pandemic, that crippled the energy demand, and drive oil and gas prices down. Moreover, production has declined recently due to the limitation of new investment because of the transition deadline. Hence, the future of the business is clouded. Nonetheless, this happens to everyone in the company, but why does the "A" group react differently? The interviewee explains that the specialists in this field are tough to get a new job outside the energy sector, which induces more uncertainty and distracts employees from their jobs. Also, the interviewees emphasise that they do appreciate the company campaigns to boost engagement and effort to improve the business, but sometimes it is not so convincing. Hence, this could explain the difference in engagement score but on par in the antecedent score compared to others.

The model fit has decreased significantly after correlated antecedents with engagement and commitment. The additional analysis explains the model fit decline with two main findings. First, external factors influence the employees in each group differently, such as business future, career path or job security. Many interviewees address the concerns which distract employees emotionally (e.g. anxiety, frustration or looking for an opportunity in other areas) and ultimately affect engagement and commitment scores. Although the external factor is a known-negative effect, it is discussed during the questionnaire framing process. As a result, we decide to drop it out because the impact should affect everyone, and there is limited action that the company can do. However, the result demonstrates that the external factors affect people differently and are significant in some groups. Second, the heterogeneity of the participants

shows that although people have experienced a similar event but could react differently, as demonstrated by the "B" group interview. There are factors such as personality, mindset, age or educational background that influence people's interpretation and drive the reaction to the external factors. However, it does not mean the generic engagement model is not helpful in an environment with high influencing external factors. In this case, interpreting the result with caution and recognising the impact of external factors is the key.

4.2.2. Relationship between performance and engagement

It is challenging to find strong evidence to prove the hard benefit of engagement or correlation to performance at the individual or company level [26]. The study yet again fails to illustrate the vital evidence. However, extra analysis is further conducted in addition to the path analysis. The question about why path analysis fails to correlate if there is a relationship between engagement and performance is addressed. There are three suspected root causes.

First, the relationship between engagement, organisation commitment, and observed performance is non-linear, which could explain why path analysis fails to find the correlation. The path analysis correlation is based on linear regression, which could work with correlating the same scale; unlike performance measurement, the relationship could be in the other form, such as exponential or logistic regression.

Second, the number of individual idea submissions may not be a good measurement that indicates the behaviour or performance. Each idea is not equal, and there are differences in complexity, benefit and effort. For example, an employee with five submissions per year does not mean they perform only half of another employee who submits ten ideas per year.

Third, the nature of the record system is that some ideas are executed as a team. The way that ideas are recorded is project-based. Some people may be involved in many projects as team members (which still demonstrates good engagement) but submit only a few ideas. Lastly, the recording noise could disturb the correlation significantly, considering the small sample size.

Two additional analyses are performed to explore the relationship. First, instead of using the number of submissions as a direct performance indicator. The participants are divided into routine idea submissions and not routine ones. The cut-off is two submissions per year because the company has a goal to submit at least 1 per year; hence, to indicate an extra effort, two ideas are the cutoff. The data shows that 36 people out of 104 submitted two more ideas in 2021. The T-test result shows a significant difference in organisation commitment score (3.84 vs 3.61) between routine and non-routine idea submission groups as shown in Table 5. Hence, it can conclude that the organisation's commitment supports the idea creation or employee participation in the company campaign.

Table 5. Independent sample T-test results between idea submission group.

MEASUREMENT	SIG. (2-TAILED)	MEAN DIFFERENCE
Job engagement	0.929	-0.01282
Organisation commitment	0.107	-0.22970
Organisation engagement	0.853	0.02849

Second, to minimise the noise from the submission system, aggregating the data to the team level could be a better representation instead of correlating with individual submission. However, the study fails to identify a reliable model, lagging in statistic support to demonstrate the relationship, but still notices a positive trend between engagement and commitment, as shown in Fig. 4. This poor prediction indicates the missing factor or other relationships which are not linear among engagements, organisation commitment and observed performance (i.e. number of idea submissions).
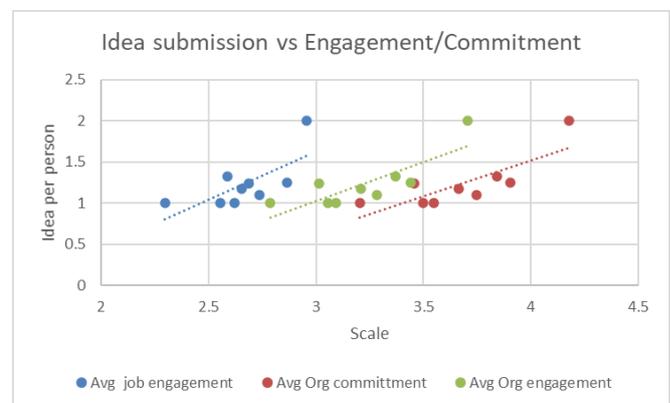

Fig. 4. Number of idea submissions vs engagement and commitment.

4.3. Suggestions to the Company

Some study findings can apply to improve the company's engagement and commitment. As described earlier, the company has been in the transition process to fit with the new environment, for instance, a smaller footprint and uncertainty on price. To stay competitive, the company does develop new strategies previously, i.e. maximising production to improve the margin and looking for other sources of revenue. The company recognises the need to change the strategy while maintaining employee engagement. Thus, the company has deployed many enhancing engagement campaigns.

The additional effort suggested by the study is internal marketing.

Internal marketing is a controversial HR tool, and many researchers said it is just a part of human resource management (HRM) strategy, and it has emerged from the marketing field. However, we believe that it can be helpful in this situation. The concept of internal marketing is to treat employees as internal customers, using the marketing lens to build employee satisfaction. Thus, after the company has attempted many times to improve engagement, the result shows that employee shared vision received the lowest score. It is crucial to engage, doing it strategically by using a marketing framework could be more effective.

The framework in Fig. 5 proposed by Qiu et al. (2022) [27] combines the previous studies on internal marketing. Figure 5 highlights the overlapping between HRM and marketing perspective. The new goal has been communicated recently but still failed to get engagement. It could be because the activities are in the transition period, and many people will have to leave the company. Therefore, it is too many things to focus on. Hence, relaunching the new communication campaign on the new goal and direction could bring all employees to the same page. A couple of activities can be added to make the campaign more effective.

Fig. 5. Internal marketing dimension.

According to preliminary finding from the study, here are the proposed plan. First, conduct intelligence generation to collect and assess employee preferences and needs. Although the interviews revealed many concerns and needs, it is still limited to a small group of people. Second, communicating the new strategic priority, instead of the big town hall, small group meetings with management could help to foster the shared vision. Collecting feedback and concern about a new direction is also crucial. Although it may not have a significant change in the direction, addressing employee concerns and discussing the direction could help employees engage and commit to the new target. The feedback could help HR and management design the job that suits the new direction and better fits employee needs. Moreover, this insight helps HR to rearrange the current campaign to focus on the critical point which also consolidates the message and optimizes resources. Lastly, relaunching the

campaign with the monitoring tool and continuing to collect feedback is very crucial. In addition, having a brand ambassador or dedicated person to promote the new direction is helpful in the early stage of the campaign.

5. Conclusion

This study emphasises the relationship between engagement and organisational commitment, especially organisation engagement. Although the outcome cannot fully clarify the myth of why higher engagement leads to better performance, the result shows a promising correlation between engagement and performance (i.e. the number of innovation idea submissions in this context). Thus, the company's endeavour to improve employee engagement should be continued.

The study results highlight two areas to improve the engagement campaign, i.e. shared vision and individual learning. Considering the company's situation and journey, improving the shared vision should be on the priority list. The study result shows that shared vision has the highest impact, as suggested by the loading factor on organisation engagement. A shared vision can improve through the company's communication channels, but the communication score indicated that the company has done very well. However, the 2nd question of shared vision, i.e. "I feel inspired by our vision and mission" brings the overall score down. That highlights a need to implement additional measures. Transformational leadership is the favourite topic for organisational change or bringing employees to a new strategy. Thus, training the leaders and strategically communication, such as internal marketing, could bring employees to align with the company vision and translate to performance.

In the second area of improvement, the individual learning score is significantly lower in the learning and development area than team learning, especially the 2nd question, i.e. "Time is made available for education and training activities", which indicates the time availability issue. Distributing workload and additional staffing seem simple but not practical in many cases. As a result, designing job characteristics to match the learning objective could be a better solution. For example, suppose an employee is interested in machine learning. In that case, the supervisor could find the project or the way to incorporate such interest into his/her current job responsibility so that he/she can practice the subject matter through on-the-job training and also reduce the implementation time constraint issue.

References

[1] A. M. Saks, "Antecedents and consequences of employee engagement," *Journal of Managerial Psychology*, vol. 21, no. 7, pp. 600-619, 2006.

[2] E. Demerouti, A. B. Bakker, J. De Jonge, P. P. Janssen, and W. B. Schaufeli, "Burnout and engagement at work as a function of demands and

control," *Scandinavian Journal of Work, Environment & Health*, vol. 27, pp. 279-286. 2001.

[3]   O. Byrne and J. Macdonagh, "What's love got to do with it? Employee engagement amongst higher education workers," *The Irish Journal of Management*, vol. 36, no. 3, pp. 189-205, 2017.

[4]   S. Malinen and L. Harju, "Volunteer engagement: Exploring the distinction between job and organizational engagement," *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, vol. 28, no. 1, pp. 69-89, 2017.

[5]   A. Rasheed, S. Khan, and M. Ramzan, "Antecedents and consequences of employee engagement: The case of Pakistan," *Journal of Business Studies Quarterly*, vol. 4, no. 4, p. 183, 2013.

[6]   A. M. Saks, J. A. Gruman, and Q. Zhang, "Organization engagement: A review and comparison to job engagement," *Journal of Organizational Effectiveness: People and Performance*, vol. 9, no. 1, pp. 20-49, 2022.

[7]   A. A. Albdour and I. I. Altarawneh, "Corporate social responsibility and employee engagement in Jordan," *International Journal of Business and Management*, vol. 7, no. 16, p. 89, 2012.

[8]   Y. K. Lee, S. Kim, and S. Y. Kim, "The impact of internal branding on employee engagement and outcome variables in the hotel industry," *Asia Pacific Journal of Tourism Research*, vol. 19, no. 12, pp. 1359-1380, 2014.

[9]   E. G. Mahon, S. N. Taylor, and R. E. Boyatzis, "Antecedents of organizational engagement: Exploring vision, mood and perceived organizational support with emotional intelligence as a moderator," *Frontiers in Psychology*, vol. 5, p. 1322, 2014.

[10] L. R. Men, C. A. Yue, and M. A. Ferguson, "Examining the effects of internal communication and emotional culture on employees' organizational identification," *International Journal of Business Communication*, vol. 58, no. 2, pp. 169-195, 2020.

[11] M. Tahlil Azim, "Responsabilidade social corporativa e comportamento do funcionário: Papel mediador do compromisso organizacional," *Revista Brasileira de Gestao de Negocios*, vol. 18, pp. 207-225, 2016.

[12] E. Esen, "The role of trust on the relationship between organizational engagement and corporate reputation," *Journal of Management & Economics*, vol. 19, no. 1, pp. 47-58, 2012.

[13] M. Abdelmotaleb, "The moderating and mediating role of public service motivation between organization's social responsibility and employee engagement: evidence from Egyptian public hospitals," *International Review of Public Administration*, vol. 25, no. 3, pp. 207-223, 2020.

[14] O. C. Andrew and S. Sofian, "Individual factors and work outcomes of employee engagement," *Procedia—Social and Behavioral Sciences*, vol. 40, pp. 498-508, 2012.

[15] R. Nawrin, "Impact of psychological empowerment on employees' work and organization engagement: A study in the manufacturing sectors, Bangladesh," *Mediterranean Journal of Social Sciences*, vol. 7, no. 5, pp. 389-389, 2016.

[16] K. Ruck, M. Welch, and B. Menara, "Employee voice: An antecedent to organisational engagement?," *Public Relations Review*, vol. 43, no. 5, pp. 904-914, 2017.

[17] S. H. A. Shah and L. S. Beh, "The impact of motivation enhancing practices and mediating role of talent engagement on turnover intentions: Evidence from Malaysia," *International Review of Management and Marketing*, vol. 6, no. 4, pp. 823-835, 2016.

[18] C. E. Osgood, G. J. Suci, and P. H. Tannenbaum, *The Measurement of Meaning*. University of Illinois Press, 1957.

[19] K. G. Shaver, *Principles of Social Psychology*, 3rd ed. Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc., 1987.

[20] L. A. James and L. R. James, "Integrating work environment perceptions: Explorations into the measurement of meaning," *Journal of Applied Psychology*, vol. 74, no. 5, p. 739, 1989.

[21] E. Locke, "The nature and causes of job satisfaction," in *The Handbook of Industrial and Organizational Psychology*. Rand McNally College, 1976, vol. 1, pp. 1297-1343.

[22] C. Parker, B. Baltes, S. Young, J. Huff, R. Altmann, H. Lacost, and J. Roberts, "Relationships between psychological climate perceptions and work outcomes: A meta-analytic review," *Journal of Organizational Behavior*, vol. 24, no. 4, pp. 389-416, 2003.

[23] M. J. Burke, C. C. Borucki, and A. E. Hurley, "Reconceptualizing psychological climate in a retail service environment: A multiple-stakeholder perspective," *Journal of Applied Psychology*, vol. 77, no. 5, p. 717, 1992.

[24] H. E. Tajfel, *Differentiation between Social Groups: Studies in the Social Psychology of Intergroup Relations*. Academic Press, 1978.

[25] R. Eisenberger, R. Huntington, S. Hutchison, and D. Sowa, "Perceived organizational support," *Journal of Applied Psychology*, vol. 71, no. 3, p. 500, 1986.

[26] R. B. Briner, "The future of engagement thought piece collection. What is employee engagement and does it matter? An evidence-based approach: Engage for Success Thought Leadership Paper. 2014.

[27] J. Qiu, A. Boukis, and C. Storey, "Internal marketing: A systematic review," *Journal of Marketing Theory & Practice*, vol. 30, pp. 53-67, 2022.

Pakawas Mangkang, photograph and biography not available at the time of publication.

Parames Chutima, photograph and biography not available at the time of publication.