



APPROACHES TO INNOVATION AND ORGANISATIONAL CHANGE

Management, Innovation and Sustainability



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Executive Summary

This report analyses the innovation and organisational change with InSite Technical services, a contracting firm operating in the design industry for engineering and energy sites.

The organisational change focused on within the report is the diversification of client portfolio, from traditional oil and gas projects to sustainable and innovative energy related solutions. The change is analysed with the use of established theories and models in organisational change and employee psychology. Theories considered include Lewin's Forcefield Analysis, Kotter's 8-step change model, and Herzenberg's two-factor motivation theory.

The organisational change was initially proposed in response to several extrinsic factors effecting the organisation, including oil market volatility, environmental considerations, and the decline in profitability of oil and gas projects. These were considered as driving forces for change. The restraining forces to the change included lack of experience and ignorance to the newer industries, gaps in employee skillsets, and the overall cost of adopting the change throughout the entire organisation.

The senior management team adopted a controlled and gradual approach to the change, using key theories and change models to ensure a sustainable approach to the management of the change. InSite used Lewin's forcefield model to increase the driving forces and limited the restraining forces by focusing on the procurement of hybrid projects within newer industries, increasing training and skillset development funding, and adopting a controlled approach to approaching new clients. Kotter's model created the urgency required to inspire the change, and to then anchor the change within the organisation's activities. Herzenberg's theory was used to maintain employee motivation and ambition to limit disruption and lack of engagement from employees.

Overall, the report demonstrates the key theories that InSite adopted and considered for the managing of the change. Whilst earlier identification of extrinsic factors and restricting forces would have enhanced the effectiveness of the change, key change theories were considered throughout the report, along with motivational models relating to the change to create an effective change process.

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Introduction

The implementation of any change within an organisation must consider the most effective and sustainable method of change management. Engineering organisations are subject to continuous cultural, technological, and strategic change throughout company lifecycles, to create sustainable business models.

Ensuring that change is effective in improving company performance is vital, therefore, the use of established theories in this field ensures that the change process is adopted appropriately and limits the risk of company collapse.

As technology and further innovation continues to improve industry, organisations that shy away from change are most often ineffective in remaining dominant in their chosen market. Being able to critically analyse the effectiveness of change and how to adopt it correctly remains often difficult, with no one theory that fits all. The use of several findings in employee psychology and behaviours allows employers and directors to maintain motivated employees who adapt successfully to change.

InSite Technical Services is a design and consultancy firm that previously operated solely in the oil and gas industry. years since its start has fuelled growth in its industry, with continuous change continuing to improve company efficiency and effectiveness in its role as an engineering design firm.

Main Findings

The change analysed is the diversification of client portfolio and work that InSite Technical Services have undergone over the last 3 years.

The change aimed to provide the organisation with a diverse variety of revenue streams, to support financial stability and sustainability. The company employed a controlled approach to this change to limit company interruption and risk.

Lewin's Forcefield Analysis Model

Lewin's Forcefield model analyses the two sets of forces and what they represent to the equilibrium of the organisation. The model allows for solutions to be created for improving driving forces and limiting restraining forces. (*Lewin, 1951, pp.3–32*).

Driving Forces

Market Changes and Volatility

The clients in the oil refining industry work to the budgets set by profits of refining and worldwide oil pricing. In the past, when refineries have cut work in a short space of time, InSite had to release contractors and find additional project work. The change in global energy trends were shown in latest reports, further proving a clear reduction in growth within the oil industry over the last 5 years. (*International Energy Agency, 2025*).

Environmental Impact

Oil refining is one of the biggest contributors to global climate change and carbon production. Many of the typical oil refining clients are diversifying into renewable solutions and no longer building purely oil units. InSite have seen their biggest clients diversify their refineries and energy terminals, therefore, InSite would have to do the same to align their skillset with the requirements of its clients.

Opportunity for new revenue streams

New renewable and hydrogen projects are amongst the most profitable and high cost in the world. Being a part of the newest innovations in renewable energy sectors encourages higher spending and more projects being available for skilled design firms. Projects such as Hinckley Point C have allowed InSite to be involved in such projects.

The three driving forces outlined were clearly communicated by InSite as the main reasoning behind their target to diversify their client portfolio. The changing landscape of energy production was identified early, giving the organisation the best time to prepare and adjust to the market demand efficiently. The approach of communicating this change effectively can be suited to both model x and y employees. (*Herzberg, 1968, pp.53–62*).

Restraining Forces

Ignorance to newer industries and roles

Senior members of management within the organisation have key relationships with local and national Oil and Gas refineries, relying on previous relationships with managers and contacts from those refineries. Starting professional relationships takes longer and requires a new set of interpersonal skills.

Skillset gaps

Due to InSite working within the oil and gas industry, the organisation hired employees based on previous experience in the industry. The hiring policy had to be changed to include individuals that have experience in other industries such as renewables, hydrogen, or other engineering design fields.

Cost of diversification

The existing staff required up-skilling and training in new working techniques and procedures. This costs a large amount of money and unbillable time.

Diversifying into the wrong industries and roles can impact the projects that InSite are able to procure. If standards are unable to be upheld in quality and knowledge in a particular field, reputational damage will occur. InSite managed this by creating goals for employees with necessary motivation. (*Locke and Latham, 1990*).

Managing the Change

To ensure that InSite were able to diversify its client portfolio, the driving forces were to be increased, and the restraining forces be reduced.

Strengthening Driving Forces

Build relationships in new industries

Networking events were attended following market research and client identification. The company's skillset was displayed to potential clients to display the value of the organisation.

Identifying high revenue opportunities

Refineries and energy companies that had increased their use of renewable projects were targeted by InSite as high value potential clients. Targeting larger companies within the energy sector was prioritised due to the higher spending and larger project scope available.

Demand to align with UK 2050 Net Zero Target

As an organisation within the UK's energy production sector, InSite have a duty to align their working targets and practises to align with the industry wide move away from purely fossil fuel use. Many of the employees within the organisation are conscious of their environmental impact, meaning that a large number of employees had intrinsic motivation for the change, which ensured a more successful transition of change within the organisation. (*Kreitner, 2012*).

Weakening Restraining Forces

Hybrid Projects

The company firstly prioritised the offering of hybrid projects as the first step in diversification in work type. This included more efficient refining process. This allowed for existing employees to use their skillset in slightly different roles as opposed to starting with training from the beginning. An example of this is the projects involving Used Cooking Oil (UCO) to create biodiesels. In 2022, the amount of UCO being used in projects worldwide was 3.7 billion, showing that procuring hybrid projects like this is a sustainable business method. (*Paul Winters, 2023*).

Opportunity for future growth and upskilling

Rather than change to working practises and expertise being negative, the change would allow existing employees to develop skillset and add new attributes to their personal skillset. This would allow InSite to keep employees interested in their personal progression, whilst creating a diverse group of employees that can adjust their skills to all engineering design fields. By identifying employees between X and Y groups, as expressed in McGregor's Theory, InSite would be able to identify the human nature of each employee, along with the motivation and rewards that each employee is able to perform to. (McGregor, 1957).

Controlled procurement of newer clients

Ensuring that a slow and controlled approach is followed for procuring new industry work allowed InSite to keep in control of main revenue streams whilst continuing with its mission of diversification. This ensures that upfront cash flow into the company is maintained to spend on upskilling and training for employees.

The result of adopting Lewin's forcefield analysis model allowed for clear reasoning and analysis of the intrinsic and extrinsic factors effecting the organisational change. InSite's management were successful in identifying restricting forces and neutralising them as effectively as possible. However, the management lacked more varied and effective methods of strengthening driving forces, giving the organisation exposure to further extrinsic impact effecting the change.

The basis on which the proposed change was evaluated upon would have changed throughout the use of the forcefield model, resulting in several of the driving and resisting forces becoming outdated and ineffective in proving change requirement. The driving forces were extrinsic factors, meaning that the company's resource and ability to make the effective change was not considered throughout.

Kotter's 8-Step Change Model

Kotter's eight-step model can be applied to the change as shown below. (*Kotter, 1996, pp.21–23*)

Step 1 – Create a Sense of Urgency

Existing clients showed decreasing funding into new refining projects for third party design firms, leading to less workload in the future to InSite. Planned large shutdowns at client sites also forecasted lower design requirement for the immediate future.

Large hybrid and renewable energy projects were at bidding stages, leading to an opportunity for InSite to invest time and money into bidding for work available immediately and in future scenarios.

Step 2 – Build a guiding management for change

With the existing managers and directors being from Refinery based roles, expanding the management team with newer members from other fields supported the strive for expertise in more engineering design fields. A change of management style and personnel is key to establish long term organisational change. (*Schein, 2010*).

Step 3 – Strategic Vision and Incentives

The vision was outlined by company directors with the target being 'to achieved growth in 3 new energy sectors, hybrid projects, LNG, and renewables such as offshore wind turbines. This is with the aim of procuring 10 new clients in these industries in the next 2 years. This vision was built on previous knowledge of targeted clients and engineering fields.

Step 4 – Communicate the vision

An evidence-based reasoning was provided to employees to clearly demonstrate the advantages of the change and the philosophy behind why it was being implemented. This was an opportunity for employees within the InSite delivery teams to raise concerns and ideas to the management team. This was key to ensure employees can trust the management through the change. (*Burns, 1993, pp.141–145*).

Step 5- Empower Broad-based action

The management team revised its Key Performance Indicators (KPI's) to align with the change, such as revenue targets for renewable projects. This included designating a higher percentage of resource to procurement of select industry work away from typical refinery work.

New training and mentoring procedures were set up to improve the versatility of the delivery teams, encouraging employees to apply previous experience and knowledge to new projects.

Step 6 – Generate short term wins

During company updates and meetings, an increased emphasis was given to the procurement of new clients in diverse industries. By celebrating the initial acquisition of clients and projects, momentum would support the team in increased client sales.

Employees who were able to work effectively in diversified roles in hybrid projects were given additional responsibility to develop other members of the delivery teams, creating an incentive for higher responsibility and increased compensation. (*Vroom, 1964*).

Step 7 – Sustain acceleration

Following smaller hybrid projects and case studies for newer clients, larger FEED and detailed design projects were targeted. With experience gained at early stages of diversification to newer clients, this was to be implemented in larger profit-making projects. Changes to hiring and training procedures to align with the change to more variety in industry work also sustained the acceleration.

Step 8 – Anchor the change in the Culture

The company has continued its targeted change, by rebranding the company website and company aims and strategy. This involved redefining the label of InSite from 'Oil Refinery Design' to "Oil, Gas, & Energy Site Design'.

Designated teams and resource were created for the newer clients and work, to effectively supply the newer expertise.

InSite were able to adopt the change model above to create an urgency required to start the change, however, ensuring that acceleration could be continued proved difficult. This threatened to stop the change being anchored into the company procedures. By using employee psychology and effective management techniques, InSite aligning the change needs with the team and individual needs proved an effective solution to this. (*Adair, 1973*).

The theory stresses the important of urgency to force the change to happen, which may have pushed InSite to enforce the company wide change without the required resource and system in place to the adopt the change the successfully. The change may have been rushed, causing anxiety and confusion to employees.

Herzberg's Two-Factor Motivation Theory

This motivation theory can be tailored to the change management as part of the diversification of client portfolio.

InSite managed Intrinsic factors throughout the organisation through formal feedback and communication with members of each team. The change in client diversification was suggested as a new method for employees to develop skills and achievement in new engineering fields. By ensuring that the newer client work would be innovative and interesting, the organisation was able to inspire and motivate the workforce to develop new skills and improve to achieve more within their respective fields and contribute to the company's long-term success. (*Herzberg, 1959*).

The hygiene factors involved in this organisational change proved unique to InSite at the beginning of the change, therefore, a deeper understanding and acknowledgement was required by the directors to ensure that the change would not negatively impact employee motivation. Had the change resulted in significant revenue losses, employee salaries and overall job security would be at risk. To ensure that the change was necessary and that it could be completed without the risk of significant company risk was incredibly important.

By identifying and addressing intrinsic and extrinsic motivators and factors, InSite were able to reduce uncertainty and reduce adjustment times throughout the organisation. The change process continued to fuel engagement for employees, which was crucial in such a high-level change in company strategy. The innovative work available through diverse projects motivated the employees, whilst ensuring that several oil and gas projects were still a part of the company projects provided stability for the organisation.

Whilst Herzberg's two factor motivation theory was effective in its use, other theories such as Fayol's Principles of Management and Adair's action centred management would also have provided InSite with effective solutions to employee motivation.

Conclusion

The management of change from InSite in its aim to diversify its client base has shown considerations to several models of organisational change and employee management in its approach.

Lewin's forcefield analysis showed the key forces effecting the change for InSite. Whilst forces were identified from the organisation's management, the ability to counter the forces was often apparent during the change. The driving factors were not specific enough to the organisation, with no consideration of the existing company structure and procedures in place.

By creating urgency and accelerating the change, the organisation was adapted quickly. Key considerations were rushed in this situation, such as the requirement to ensure stability throughout the change. Existing projects with high revenue were deemed as 'less important' during the transition period, leading to exposure on oil and gas projects.

Overall, the change has been ultimately effective in its implementation. Over the last 3 years, the company has had a steady increase of 30% revenue to £23 million in 2024. Along with the number of overall clients growing, the company is now a more sustainable organisation, with innovative engineering projects in diverse fields taking place.

Key considerations and targets can be taken away from the management of change process, including the management's adherence to extrinsic factors being considered alongside company structure. Whilst the theories and change models used in the report support change management, they are not suited for gradual, large-scale change, as driving and restraining factors, along with change acceleration, will alter as the change is taking place. A dynamic and effective management team must ensure that risks to company exposure and altering the change in process is often required to complete an effective organisational change.

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