

## A Review on Implementation of Strategic Management in Saudi Arabia Construction Companies Towards Achieving Sustainable Development Goals

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### ABSTRACT

Construction industry in Kingdom of Saudi Arabia (KSA) is going through a peek which can drive construction companies to adopt new strategies. This construction boom is a chance that cannot be missed by construction companies specially with 2030 Vision of KSA Mega projects such as Neom, and Redsea, therefore construction companies should take advantage of the opportunity leading to profitable contribution to the successful achievement of the sustainable development goals. The focus of this study is to identify the Key Performance Indicators (KPIs) for construction companies and then highlight the internal strength and weaknesses with the external opportunity and threats, towards best strategic management practice of the construction industry companies in KSA as a case study. The process will start with a literature review to identify performance factors of the construction industry in KSA, after conducting surveys results to rank the factors upon on their criticality. As result this review illustrates the research gap on construction industries on towards achieving sustainable development goals particularly in KSA's construction companies.

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Received: May 02, 2022; Accepted: May 05, 2022; Published: May 13, 2022

**Keywords:** KSA; Strategic Management; Sdgs; Construction Companies

### Introduction

Strategic management is intended to help a company effectively relate to its surroundings. Political, social, technological, and economic factors all have a role in the settings [1]. By introducing several strategic management models [1-6]. In these models, the majority of authors have focused on strategy formulation, organizational strategy implementation, and strategic control. The phase of planning strategy and environmental analysis is also significant, and most authors include it in the formulation phase [4,5].

In general, the strategic management process is divided into three parts, the first of which is the formulation phase, which is a strategy aimed at ensuring that organizations meet their goals [3]. According to strategy development entails determining which business to pursue, how to distribute resources without attracting hostile takeovers, and whether to penetrate international markets [5]. He also stated that the strategy formulation phase entails the creation of a mission statement, the identification of external opportunities and threats, the determination of internal strengths and weaknesses, the establishment of long-term objectives, the generation of alternative strategies, and the selection of the best strategy to implement. The second step is the implementation phase, in which operations are started in accordance with strategic plans [1]. This necessitates the establishment of objectives, the

development of policies, the motivation of personnel, and the allocation of resources to carry out stated strategies. According to companies are unable to reap the benefits of conducting an organizational analysis, creating organizational direction, and formulating organizational strategy without successful strategy execution [3]. Finally, the assessment and control phase necessitate gathering information on strategy performance and comparing it to established benchmarks [3].

Reviewing current plans, measuring performance, and taking corrective action are all examples of evaluation. Because today's success is no assurance of tomorrow's success, strategy assessment is required. Success always brings with it new and different issues; complacent businesses die [5].

### Types of strategy

Mainly there are four main types of strategy was implemented in the fundamental studies and was used in numerous investigations. Below are the types of strategies and its overview [7].

### Integration Strategies

Vertical integration is the term used to describe the combination of forward and backward integration. Vertical integration tactics provide a company influence over distributors and suppliers, whereas horizontal integration entails establishing ownership and/or control over competitors. Firms' vertical and horizontal actions are referred to as integration strategies in general.

### Intensive Strategies

Market penetration, market development, and product development are all referred to as intense strategies because they necessitate a lot of effort to strengthen a company's competitive position with existing items.

### Diversification Strategies

Diversification strategies are divided into two categories: linked diversification and unconnected diversification. Businesses are said to be connected if their value chains have competitively valuable cross-business strategic fits; businesses are said to be unrelated if their value chains are sufficiently diverse that there are no competitively valuable cross-business strategic fits.

### Defensive Strategies

Organizations could use defensive tactics like retrenchment, divestment, or liquidation in addition to integrative, intense, and diversification strategies.

### Strategic Management Phases

Strategic management establishes a direction for all employees of a company. It emphasizes the path to achieving corporate objectives. The following benefits of strategic management have been emphasized by [8].

- Change, new possibilities, and potential dangers are crystallized by strategic management.
- The allocation of resources to work aspects is aided by strategic management.
- Strategic management aids in decision-making in order to achieve certain strategic goals.
- Strategic management encourages a more proactive management style by defining the elements that managers must look for in order to achieve strategic goals.

The process of strategic management may be divided into three phases as shown in Figure 1.



Figure 1: Strategic Management stages

### Formulation Phase

The construction sector has a distinct set of features that necessitates a different approach than other industries. For example, because of the uniqueness of projects, most manufacturing operations are undertaken on-site, and the learning curve is hampered. As a result, strategic methods and ideas should be adaptable enough to meet the needs of this business. There is a small body of literature devoted to building strategy techniques and ideas. This might be due to the fact that construction is depicted as a low-growth, low-tech business, despite the fact that the industry has a wide range of sub-sectors and demand variations. The following tasks shown in Figure 2 are involved in the formulation phase at strategic level management.

The vision or strategic intent (or aspired state) of an organization is a set by its executive management. The top level management picks which direction they want to focus the entity's efforts and decides on the organization's future condition while creating the vision [9]. Executive and middle management are in charge of creating mission statements. The organization's uniqueness and purpose are clearly defined in the mission statement. The entity's values are determined at the top level by management. The mission statements made by top and middle management of a business may be used to identify and establish the organization's values. In basic terms, the organization's culture may be deduced from it [8]. The SWOT analysis is carried out by the entity's top and middle management. The words 'strengths, weaknesses, opportunities, and threats' make up the acronym 'SWOT.' This framework outlines components inside companies that may be used to improve a company's performance in its business network. SWOT analysis of the organization's internal and external environments should be conducted. The internal competencies of the organization, as well as the strategic fit with the firm's external business environment, play a big role in its success [8]. The internal analysis of the company focuses on the organization's strengths and weaknesses, whereas the external analysis focuses on the organization's opportunities and threats [10]. Formulation of strategic goals is done by top level management and involves middle and operational levels. Middle level management focuses on medium-term objectives whilst operational level management has been described as focusing on short-term goals, rather than long-term plans or timetables [8].



Figure 2: Tasks of strategic level management

The gap analysis is done by top and middle level management of an organization. It looks at the actual operational outcomes measured against projected figures set out by strategic goals. This is where there is a variation between the projected and actual figures which can also be called a gap. It is not a replacement for the Strategic Gap but can be used to increase stakeholder expectations without planning for potential changes in the business or consumer environment. A generic strategy directs a company in the direction of gaining a competitive edge over its rivals. These strategies are seen as key concepts around which the company would make future decisions and, in essence, choose its corporate strategies.

### Implementation Phase

Believes that strategic management is only achievable in select firms that are large enough to finance costly study, have defined goals, and function in a stable environment [11]. This argument is contested in the sense that creative techniques that may be applied to address the obstacles connected with tactics in dynamic contexts such as construction are constantly on the table. There is a need for such innovation, as dynamic interactions among concerns like project delivery techniques and human factors negate a small

list of general solutions that could be more realistic for other sectors. Every member inside a company must plan and execute the implementation phase. Employees gain a sense of belonging as well as improved motivation as a result of all this. “Strategic management is not limited to a small group at the top of a company. Adapting well to a changing reality is the greatest way to ensure survival [8]. Despite the attainment of the short- and long-term strategies, the organization must put the plans into action as soon and effectively as feasible. If the company succeeds at this, it will have a higher chance of staying ahead of the pack and being competitive [12]. Despite the fact that many have laid out strategic management approaches and strategies, it is not a precise science that involves both quantitative and qualitative analyses of the corporate environment to be successful [10].

For the effective implementation of a new strategy inside an organization, the three levels of management have different responsibilities to perform:

- The executive management level needs to make the required changes for the new strategy to be effective. Changes in the organizational structure, leadership style, systems, staff, and organizational culture are examples of these changes.
- Tactical management which comprises senior and middle management ensures that strategic goals must be accomplished at the tactical and operational levels of management.
- Operational management must guarantee that tactical strategies are translated into action plans, which are then properly implemented.

**Assessment or Evaluation Phase**

Finally, the assessment and control phase necessitate gathering information on strategy performance and comparing it to established benchmarks [3]. Reviewing current plans, measuring performance, and taking corrective action are all examples of evaluation. Because today’s success is no assurance of tomorrow’s success, strategy assessment is required. Success always brings with it new and different issues; complacent businesses die [5]. Describes Evaluation phase is described as the phase where problems within the existing strategy are identified. The evaluation phase is also useful for evaluating industry changes and when existing strategies should be updated to reflect new market conditions [13].

**Key Performance Indicators (KPIs)**

Key Performance Indicators (KPIs) can be used to track costs, evaluate client happiness, identify strengths and weaknesses, Compare and contrast project performance. Examine certain aspects of a project, such as sustainability, safety, and waste management. It is important that Key performance Indicators (KPIs) are clearly defined, and regular provision of the information required to assess them is a requirement of the contract. KPIs are also a means to help with the rapid comprehension of the current financial position of the company. Only genuinely important performance indicators should be monitored so that it does not become a time-consuming paper exercise. KPIs can also be used more broadly as part of a bench-marking exercise to assess the performance of one project relative to another, or businesses compared to others within the industry. The proper organization of top issues and the selection of appropriate technological assistance are required for successful implementation of construction KPIs. Other crucial requirements include:

1. Standardizing reporting and measurement
2. Gaining support by involving key players
3. Incentivizing participation
4. Measuring progress

5. Evaluating the impact and making adaptations

**Objectives and Key Results (OKRs)**

OKR stands for “objectives and key results.” It’s a goal-setting strategy that will motivate your team to achieve your most important objectives while also allowing you to track your progress. The origins of OKRs can be traced back to consultant and author Peter Drucker’s “Management by Objectives” system. Andrew Grove, the former CEO of Intel, then took the system and simplified it to answer two key questions:

1. Where do I want to go?
2. How will I pace myself to get there?

Objectives and key results are the two fundamental components of OKRs. The goal you’re aiming towards is known as the objective. Rather than chores or granular outcomes, objectives should be high-level, qualitative statements that are aspirational. OKRs may not be measured in itself. That’s what your key results are for: measurable outcomes that show you’ve met your goal.

There are numerous other reasons to employ OKRs, such as the following:

- Greater alignment: Everyone is on the same page when it comes to goals and signs of success.
- Improved flexibility: The shorter target cycles of OKRs allow for more flexibility room because they are set quarterly.
- Enhanced accountability: Everyone understands how success will be assessed and who is in charge of achieving it.
- Increased attention: Because OKRs are thoughtful and well-defined, they help people focus on the most important goals.

Individuals can use the following strategies to enhance buy-in and commitment to those objectives:

- Involve your team in the process: If the preceding stages didn’t make it clear, creating OKRs should be a collaborative effort between you and your team. These objectives should not be imposed from on high.
- Assign owners: Everyone should know who is responsible for what by assigning an owner to each key outcome. It improves responsibility while simultaneously adding clarity.
- Don’t skip your check-in sessions: Things get hectic, and you’d rather spend your time working toward your objectives than checking in on them. Resist the urge to give in! Those check-in sessions are crucial for proactively avoiding problems and keeping track of your progress.
- Be patient: It’s possible that your OKRs won’t be great the first time around. The good thing is that you’ll set them every three months, so you’ll be able to fine-tune the process before long.

**Table 1: Comparison between KPI and OKR**

Key performance indicator (KPI)	Objectives and Key Results (OKRs)
Business Metrics That Reflect Performance	Goal-Setting Method That Improves Performance and Drives Changes
For Performance and Management and Measurement	For alignments, engagements, and Focus
Leadership Led – Top – Down	Bottom-up and Top-Down -50/50
Not changeable on a regular basis	Frequently set, adaptive, tracked, opand re-evaluated
The level of performance you want to achieve	A specifics area of improvements to focus on



Monitors the steady state and provides benchmarks	Informs everyone on what's important to achieve company goals
Numbers that track the operation of your business	Action-orientated goals and measures
Based on past results or future goals	Mission-based, aspirational, and directional
Monitors the "steady-state" and benchmarks	Audacious and bold, tied to mission
Action is prompted when numbers are off track	Action is taken as issues arise
Measure on an ongoing basis	Time-bound, often quarterly
May be the same from quarter to quarter, year to year	Changes from quarter to quarter, year to year

### Strategic Management

This section will highlight and define the strategic management process and its importance to the general management process.

### General Investigations

There are numerous definitions of strategy offered by various authors, and there is no single, universally accepted definition of strategy, according to an American business historian, gave the first definition of strategy, which he defined as the determination of an enterprise's essential long-term goals and objectives, as well as the adoption of courses of action and the allocation of resources required to achieve those goals [14,15]. Defined strategy in terms of diversification, foreign activity, and acquisition policy in the context of construction [16]. Defines strategy as a plan – a future direction, a guide, or a path of action – as well as a pattern, or a consistent pattern of activity across time [17]. Strategic management can be defined as a set of managerial decisions and actions that affect a corporation's long-term performance. It entails strategy development, implementation, and monitoring and assessment [6]. It's also known as the art and science of conceiving, implementing, and evaluating cross-functional decisions that help a company achieve its goals [5].

Strategic management has progressed to become a more sophisticated and potentially effective tool [18]. To ensure the success of the strategic management process, qualified employees are required [4]. An organization's top management is responsible for ensuring firm success and overcoming any competition that arises. People at all levels, not just top management, need to be involved in strategic management, according to this includes scanning the environment for critical information, suggesting changes to strategies and programs to take advantage of environment shifts, and working with others to continuously improve work methods, procedures, and evaluation technique [6].

### Construction Industry

Many studies on strategic management methods have been conducted in the construction industry, including studies by [19-22]. The traditional construction management philosophy places a premium on the capacity to plan and execute. According to the construction industry's management is critical in order to improve its performance and raise national Gross Domestic Product (GDP), as the construction industry contributes between 5 and 9% of GDP in developing nations [23]. According to effective management requires a strategy and the ability to implement it on a daily basis [24]. According to while project management subjects receive a lot of attention from construction experts, strategic management gets less attention [19]. Many researchers, according to have

long emphasized the importance of a strategic perspective for construction organizations [20].

Various authors, have questioned the construction industry's ability to innovate and handle change on a regular basis [25-28]. According to the construction sector is subjected to a never-ending cycle of changes in workload, job mix, and change management methods [28]. The rapid advancement of technology, communication, and the market, according to has changed the worldwide perceptions of time, distance, and spatial boundaries [19]. While some construction organizations have been successful in adapting to changing demands and opportunities by employing technological innovation and contractual development to gain a competitive advantage, others have failed by remaining static. According to the ability to discern between effective and ineffective construction businesses in terms of how far change management by any firm has improved the industry's general competence is based on the clients' ability [27,28]. Furthermore, the urge for businesses to change has shifted away from a conviction in the benefits of innovation and toward a fear of being left behind by competitors.

To be successful, construction organizations, according to organizations must augment their existing short-term techniques of enhancing organizational effectiveness with a more long-term strategic strategy [29]. discovered that a successful construction company has clear objectives that recognize the markets it wishes to address, the services it will provide, the risks it will bear, the structure it will employ, the environment it will operate in, the controls it will implement, and the returns it wishes to achieve [30].

### Construction Companies in KSA

KSA has seen tremendous building activity over the previous decade, attracting construction specialists from all over the world. Construction projects cost around \$30 billion during the second development plan (1975-1980), accounting for about 32% of overall government spending during this time. Some special features of the construction business in KSA are [31].

- Most consultants and contractors are foreign based, may not be in KSA after the 1-year maintenance period and will have no lien on the project after it is handed over.
- Joint ventures between two or more firms from different countries are preferred to one reputable firm from one nation, such as a Saudi company working for a Gulf state-based contractor
- The words "biggest," "best" and "latest" sell. Sometimes the utility or worth is compromised in favor of the "best". The emphasis in every phase of a project should be on excellence, rather than quantity or value.
- All unskilled and semiskilled labor is im-ported from Far Eastern and Middle Eastern countries. These workers live in temporary labor camps without their families. The extra costs of trips home, annual vacation, housing, transport, medical care, food, and insurance can be as much as 100 percent of base wages.
- Working hours are 10 hours each day, six days a week. Annual vacations range from 6 to 10 days. This leaves a yearly working time of around 305 days.
- There are no formal labour unions or strikes in this country.
- Inflation is quite low. In the previous four years, it has been zero or even negative on some commodities.
- It is critical for the owner to have faith in his or her business. A construction management business, a consultant, or a contractor must work hard to establish a reputation of integrity to remain.

- As much as 40 to 50 percent of materials are imported, and therefore the cost is relatively high. Poor material planning has been the cause of delay on some projects.
- Safety and environmental requirements are minimal and of a quite basic nature - with little oversight or regulation from the state level.
- Labor productivity and machine life are both harmed by the hostile environment. During construction, large temperature differences between day and night cause significant temperature strains in buildings.

### Various Issues Faced

Forecasting, monitoring, and regulating cash inflow and outflow, as well as the arranging of deficits throughout the course of a project's lifespan, are all part of cash flow management. The authors in use a questionnaire survey to identify the procedures and practices used by construction businesses in KSA's Eastern Province to estimate and manage cash flow at the project level [32]. Most contractors use cash flow forecasting to establish a cash flow baseline and choose the best financing option. They employ credit financing for materials, subcontract a large amount of projects, and pay for equipment and labour with corporate assets and credit financing. Even though social responsibility (SR) has been widely addressed as a business idea, it is still not being implemented effectively inside mega-construction projects due to a variety of obstacles. To overcome these obstacles, precise information is required; unfortunately, there is a scarcity of research on the challenges to SR implementation in mega-construction projects, particularly in poor nations like KSA. The goal of the research in is to investigate the major roadblocks to SR implementation in the context of mega-construction projects in KSA [33]. A detailed literature research and expert interviews resulted in the identification of eleven impediments. A questionnaire survey on two ongoing mega-construction projects in KSA was used to investigate these constraints in further depth.

Construction companies must maintain their success levels to survive in today's competitive business market. The construction sector is constantly changing, thanks to new technology breakthroughs. To stay competitive in this era, many businesses have integrated technological applications and devised strategies. Customer service, construction quality, and warranty all have a significant impact on the performance of small construction enterprises, according to numerous studies. Most small construction enterprises in KSA fail or have trouble determining their workload, meeting deadlines, and successfully coordinating the various tasks in progress. These factors have a negative impact on their sincere client service [34].

Quality is closely linked to the concept of Building Information Modeling (BIM) in managing and improving the execution of construction projects to achieve better performance in terms of saving time, satisfying customers, increasing profits, reducing costs, meeting safety requirements, and maintaining coordination and integrity with project basic parameters (time, cost and quality). The goal of the study in is to examine the significance of and assess the influence of Building Information Modeling (BIM) on the implementation of building projects in KSA, as well as the extent to which it is related to Quality ideas over the last ten years [35]. To realize the aim of the study, the descriptive analytical approach was employed by distributing 12 questionnaires in engineering offices and construction companies. SPSS program was utilized to process the collected data. The study found that the development projects in KSA still suffer from the weaknesses

within the application of Building Information Modeling (BIM), lack of administrative, scientific, and technical competencies and poor application of the standards of the standard concepts within the execution of construction projects.

The construction sector is fraught with dangers that endanger workers' physical well-being as well as the financial well-being of business owners. On building sites, safety performance can help reduce risks. The goal of the research in is to investigate and identify the factors that influence KSA's construction industry's safety performance. Based on a review of the literature, 37 characteristics that influence safety performance have been discovered from research studies all around the world [36]. Through survey questionnaires, Saudi Arabian industry participants evaluated these criteria and rated them according to their mean values. In addition, exploratory factor analysis was utilized to reduce dimension, revealing, and discussing 10 components that clustered the 37 factors.

Construction organizations must distinguish between risks and opportunities, aiming to maximize revenues by taking advantage of available possibilities while avoiding or mitigating risks to minimize potential losses. The purpose of the research in is to report on extensive study conducted to identify the significant hazards associated with KSA's building industry [37]. With an annual growth rate of 4.5 percent and a total value of more than \$30 billion, KSA's construction industry is one of the most important. The study relied on quantitative methodologies based on a questionnaire survey to gather risk data from construction industry specialists working on a variety of projects throughout the Kingdom. Economic and political risks have the greatest impact on the implementation and success of construction projects in KSA, according to the findings of the study. In addition, among all the building risks, the risks of delayed payment to contractors and unjustly imposed tight timelines rank first and second, respectively.

KSA's building industry is the largest and fastest growing in the Gulf area. However, there are significant service quality gaps that have an impact on the overall success of building projects. Managing interconnected organizational processes as well as company-specific practice and culture are key to achieving high quality in building projects. The study in develops a Quality Management System (QMS) for Saudi construction enterprises in this setting [38]. The QMS is based on three basic sources: a literature review, case studies on real-world QMS implementation procedures in KSA, and ISO 9001. The findings show that top management commitment, facilitation of QMS application, corporate and project based QMS, and evaluation and correction are all important factors to consider when implementing a QMS.

Delays are one of the problems that must be overcome when completing building projects. Over the last three decades, various public construction projects have been performed in KSA as part of the government's national development objectives. One of the most serious issues with these projects is the frequent and extended delays. The causes of delays in Saudi public construction projects are investigated in this article. The reasons for delays were divided into four categories depending on the stages of a building project: (1) variables before tendering, (2) factors during tendering, (3) factors after tendering, and (4) general issues. A focus group was used to identify 50 delay factors in [39]. A questionnaire was administered and distributed to 211 construction industry participants. The top 20 reasons for lateness have been determined. To calculate the effect of each cause of delay on site,

a final streamlined formula was constructed. Using the developed simplified formula, a case study was conducted to demonstrate the time delay % compared to the master schedule. The study's conclusions are meant to equip individuals working on public construction projects with effective ways for avoiding delays.

Construction is a fast-paced activity. It is constantly influenced by the interaction of both the internal and exterior environments. As a result, it's only natural to anticipate ongoing changes and modifications to the project scope to accommodate new requests. These adjustments can even be sluggish and unauthorized, with no impact on the project's other aspects such as budget and timelines. Scope creep is a term used to describe this problem. Instead of categorizing the event as a boon or a burden, the research in tries to research and analyze it in depth to understand its true nature [40]. This study used a pre-formulated questionnaire that was given to 50 respondents from construction companies in order to get real-time feedback from those who are participating in the process. Given the limitations of stretching resources beyond a point, this study concentrated on deducing the perceptions of a small number of people, picked at random from ten construction enterprises in and around Riyadh.

In hot climates, excessive heat exposure poses a considerable risk to employees. The intensity and duration of heat stress exposure among residential construction workers in southeastern KSA during the summer of 2016 was investigated in [41]. The study's goals were to identify work factors that contributed to heat stress exposure, measure environmental heat exposure at construction sites, assess heat stress risk among workers using the wet bulb globe temperature (WBGT) index, and see if temperature-humidity indices could be used instead of WBGT to manage heat stress risk on construction sites. Extreme heat exposure poses a severe danger. The intensity of heat stress and its consequences are expected to worsen because of climate change, highlighting the urgent need to strengthen present protective measures and set occupational heat stress exposure recommendations in South Africa.

Construction procedures in the KSA waste a lot of money, time, and resources, and as a result, they have a direct impact on the national economy and socioeconomic growth of the country. These pricey procedures exacerbate the building industry's current challenging economic predicament. Sustainable construction methods have been introduced in both developed and developing countries, and knowledge of the environmental consequences of construction processes is growing. The KSA has taken the initiative to encourage and implement green building concepts, although there are still several factors preventing the complete implementation of sustainable construction. The study in investigates and assesses the variables that have become a barrier to the construction industry's adoption of sustainable construction practices [42]. A new settlement in KSA's Jubail Industrial City has been used as a case study. Using the analytic hierarchy process (AHP) to analyze the priority ranking of the challenges involved in sustainable construction principles, this study assessed some

of the barriers discovered in earlier studies based on their level of importance.

Contractors must make important decisions such as whether to bid on a job. This is owing to the ambiguity and complexity of the decision, which is influenced by a variety of circumstances. Given the problem, the goal of the research in was to identify the essential elements influencing contractors' bidding decisions in Saudi Arabian construction projects [43]. Contractors in the first, second, and third grades were given a questionnaire survey with 31 questions. There was a total of 67 answers. The most critical factors were ranked using median and relative relevance index (RII) approaches. The top six key elements, according to the respondents, were "scale of the job," "kind of job" "company's strength in the industry," "designer/design quality," "rate of return" and "project cash flow." "Job start time" and "labour environment (union/nonunion/cooperative)" were the least important criteria. The conclusions of this survey reveal that all contractors agree on the most important factors. Contractors and subcontractors would benefit from the findings because they would have a better knowledge of the primary elements influencing the bidding choice process. Contractors who have access to this type of information will be better able to improve the efficiency and efficacy of their bidding decision-making process.

Construction site accidents can be reduced by taking preemptive measures based on factors that influence the safety climate, such as prediction models. The study in Ref. identified a collection of relevant safety climate predictors and constructed a prediction model of the safety climate seen by construction site staff in KSA [44]. A bootstrapped multiple ordinal logistic regression model was used to build the model with data obtained from 401 active construction site staff. Supervisory, guidance, and inspection; social security and health insurance; management's commitment to safety; management's safety justice; and colleague influence were all found to be significant predictors in the model. 67% of safety evaluations are correctly predicted by the model. The established predictors demonstrate the significance of safety support, dedication, and engagement on construction sites, as well as its impact on personnel perceptions of the safety climate. Furthermore, the prediction model can assist decision makers in the construction industry, safety policy designers, government organizations, and stakeholders in estimating the present safety climate and assessing the current situation. Furthermore, the model can aid in the formation of a better knowledge and the identification of areas for development, resulting in improved safety performance.

### **Methodologies and Findings**

There is number of studies has been reported over the last decades on construction companies in which we have selected some recent work from KSA to overview there methodologies adopted and the final results obtained as a finding. Some of the observations regarding the construction companies in KSA can be seen in the Table 2.



**Table 2: Latest studies on implementation in strategic management**

Objective	Methodology adopted	Findings	References
Study the impact of the application of Building Information Modeling (BIM) on the implementation of construction projects in KSA.	Descriptive analytical approach was used by distributing 12 questionnaires in engineering offices and construction companies.	Construction projects in KSA continue to be plagued by flaws in the use of Building Information Modeling (BIM), a lack of administrative, scientific, and technical expertise, and a poor application of Quality Concepts standards in project execution.	[35]
Study the impact of honest customer services provided on time on the success of small construction companies in KSA.	A primary qualitative data collection method was used to collect the data from the 10 participants recruited from renowned small construction companies.	The results have shown a better understanding of the success of construction companies based on success factors	[34]
The purpose of this article is to identify the significant hazards associated with KSA's building industry.	The study relied on quantitative methodologies based on a questionnaire survey to gather risk data from construction industry specialists working on a variety of projects around the Kingdom.	Economic and political risks have the greatest impact on the implementation and success of construction projects in KSA, according to the findings of the study.	[37]
Scope creep, i.e., slow, and unauthorized changes without concomitant changes in the other factors of the project such as budget and deadlines.	This study used a pre-formulated questionnaire that was given to 50 respondents from construction companies to get real-time feedback from those who are participating in the process.	The findings reveal that deciding whether scope creep is necessarily positive or bad is based on circumstantial evidence. Something that jeopardizes the project's very structure should be avoided at all costs; unfortunately, things are not always as clear and straightforward as they appear.	[40]
Identify work factors related to heat stress exposure among workers in construction companies in KSA.	Worksite walkthrough surveys and environmental monitoring were performed at 10 construction sites.	Workers were exposed to excessive heat stress with the highest intensity from 9:00 am to 12:00 pm	[41]
Development of a Quality Management System (QMS) for Saudi construction companies.	The QMS is based on three basic sources: a literature review, case studies on real-world QMS implementation procedures in KSA, and ISO 9001.	The findings show that top management commitment, facilitation of QMS application, corporate and project based QMS, and evaluation and correction are all important factors to consider when implementing a QMS.	[38]

**Contribution of Construction Companies on Sdg's**

The KSA strives to address issues such as poverty, inequality, climate change, prosperity, peace, justice, education, health, social protection, and the availability of employment opportunities, and recognizes that these issues are intertwined and ensures that they are all addressed in its national strategy [45]. Construction companies will be a critical factor in the success of Vision 2030 projects to achieve the following Five Goals as shown in Figure 3.

The contribution of the construction companies will be through the execution of related small and mega project to achieve the sustainable development goals. Successful implementation of these projects will eventually lead to strong organizations and economy which contribute to better cities and communities [45]. The construction industry in KSA is going through a huge development due to the high demand from the Vision2030 projects, especially the Mega-projects. KSA has seen an unprecedented construction boom in the last two decades, as the country's infrastructure has expanded rapidly (including the construction of new cities, airports, public and private buildings, highways, and other infrastructure), attracting construction professionals from around the world. KSA's building industry grew in lockstep with the country's booming economy, which was powered by massive oil profits.



**Figure 3: Vision 2030 projects to achieve the following Five Goals**

Strategic management is a concept that deals with making decisions and implementing corrective actions to attain an organization's long-term plans and goals. The relationship between strategic management and organizational performance can be used to determine the importance of strategic management in a company. In general, strategic management methods can help firms become more efficient [46]. Short-term and tactical planning has given way to long-term and strategic planning in economic and corporate planning, due to a variety of circumstances, including the business environment's unique challenges [27,47]. as a result of increased global competitiveness in a variety of industries [48]. Strategic management is a crucial activity since it has a significant impact on the success of companies. Examining the relationship between strategic management and organizational performance can provide insight into the value of strategic management in a business. Strategic management has a good impact on major corporations, particularly in terms of profitability [5].

Because of the attention they pay to business strategy in Japan, Japanese contractors have successfully out-thought construction enterprises in several marketplaces throughout the world [49]. Banks with a strategic commitment to planning and regular strategic management training have a greater return on equity in the United States. The Body Shop, Sony, and Merck are examples of companies that have successfully implemented visionary strategy. Although strategic management has been a low-profile activity in many construction firms until recently, it is now being adopted more broadly by many large enterprises that are devoting significant resources to the effort and generally strategic management practices can improve efficiency in various organizations [21].

### Key Goals and Objectives of Vision 2030

By 2030, the percentage of non-oil-based ex-ports will have increased from 16 percent in 2016 to 50 percent. Some other key goals of vision 2030 are to raise the percentage of FDI in GDP from 3.8 percent in 2016 to 5.7 percent by 2030 and to raise the private sector's contribution to GDP from 40% in 2016 to 65% by 2030, allowing private sector actors to participate in a wider range of industries. By 2030, the public investment fund's revenues will have increased from USD159.89 billion in 2016 to USD1,865.40 billion. In addition, Vision 2030 envisions 36 million pilgrims visiting the country's holy lands each year.

### Key Initiatives to Achieve Vision 2030

KSA plans to establish a sovereign wealth fund worth roughly USD2 trillion to finance the Vision 2030 development initiatives. FDI worth \$1 trillion is expected to pour into the nation between 2017 and 2032, increasing private-sector development.

### Construction Sector Contribution to Achieve Vision 2030

By providing job possibilities in both residential and non-residential building operations, the construction sector is projected to significantly contribute to moving KSA's economy away from an oil-based economy. The country's building sector is being fueled by increased urbanization and a growing population. The nation wants to boost the construction sector's contribution to overall GDP from 5% in 2017 to 10% by 2030 [50].

### Conclusion

In this review, a literature has been made based on the three major factors: Strategic management, Construction companies, and SDGs and it has follows

- It has been found that KSA's construction companies could

show improvement towards the achievement of sustainable goals and implement the strategic management system to achieve the vision 2030.

- Some studies have been found to follow the SDGs goal to improve the performance of management system in construction companies and it has proved significant towards the growth of industries.
- Successfully overviewed the Key Performance Indicators (KPIs) for construction companies and then highlight the internal strength and weaknesses with the external opportunity and threats, towards best strategic management practice of the construction industry companies in KSA as a case study.
- In summary, guidelines for construction engineer and manager using SDGs with strategic management are presented in this study for the construction companies. The critical literature of management system for construction companies and SDGs was termed, examined, and explored in these guidelines. The study will give you a general idea of the research areas for management system.
- In short, this study will be useful for future research in the best possible solution on implementation strategic management depending on the goals and the source of companies. It will also help to identify and overcome any existing limitations of such construction companies' issues.

**Acknowledgement:** The authors wish to acknowledge the support of the Prince Sultan University for successful completion of this work.

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