



- School: Swiss School of Business Research
- Department: Business Management
- Program: PhD by Portfolio - Class of 2023
- Module: 03
- Assignment: Capstone Project
- Student Name: Rajat Sharma
- Student Number: SSBR/2023/PHD310879
- Date: 08th May 2024
- Professor: Dr. Steve Mallon
- Word Count: 6672

1. Introduction:	4
2. Adopting Sustainable Approaches:	4
➤ <i>Good health and well-being:</i>	4
➤ <i>Clean water and sanitation:</i>	5
➤ <i>Affordable and Clean Energy:</i>	5
➤ <i>Responsible consumption and production:</i>	6
➤ <i>Peace, and justice:</i>	6
➤ <i>Gender Equality:</i>	6
➤ <i>Climate changes:</i>	7
3. Sustainable Procurement and Operational Efficiency Strategies:	7
4. Innovation In Products and Process:	8
➤ <i>Birdyback:</i>	11
➤ <i>Piggyback:</i>	11
➤ <i>Fishyback:</i>	12
5. Marketing Strategy:	12
• <i>Marketing Mix:</i>	14
• <i>Product:</i>	15
• <i>Price:</i>	16
• <i>Place:</i>	16
• <i>Promotion:</i>	17
6. Organizational Structure:	18
7. Strategies to Build Resilience for Future Crises or Risk Mitigation:	21
➤ <i>SWOT Analysis:</i>	21

➤ *PESTEL Analysis:* 22

➤ *Recommendation:* 23

8. Conclusion: 24

9. Bibliography 25

Appendix 1: Summary of Module 1 (L04 – Developing a New Strategy):..... 31

Appendix 2: Summary of Module 2 (L04 – Problem Solving and Decision Making):..... 33

1. Introduction:

In the last two decades, the construction industry has witnessed remarkable expansion. Unfortunately, this growth has largely overlooked the importance of environmentally friendly methods, resulting in a concerning lack of sustainability (Lin et al., 2022). Furthermore, the rapid pace of industrialization and globalization in today's world, combined with the additional challenges posed by the COVID-19 pandemic, have further complicated the notion of sustainability (Wang et al., 2018). Rajat, a construction project manager, is determined to address this issue directly by advocating for and implementing sustainable practices within his organization. Rajat proposed the plans outlined in this essay to the CEO and Board of Directors of Worley, securing approval to establish a new Design & Build (D&B) division within the company that will solely focus on sustainable construction practices and innovative solutions for environmental challenges. His goal is to introduce initiatives aimed at reducing waste, preserving natural resources for future generations, and mitigating the harmful effects of construction on all parties involved.

2. Adopting Sustainable Approaches:

Rajat aims to introduce new processes for collaborative problem-solving and decision-making at Worley, implementing them across all operations, including sourcing, production, and waste disposal. His objective is to advance activities that not only enhance the company's profitability but also benefit its employees and contribute positively to the environment. Recognizing the significance of adhering to the UNITED NATION'S GLOBAL GOALS OF SUSTAINABILITY, Rajat seeks to bolster Worley's reputation, expand into new markets, attract a broader customer base, and secure a competitive advantage. To accomplish these objectives, Worley must integrate a new framework fostering innovation in both products and processes, thereby improving operational efficiency and effectiveness. Rajat's primary focus lies in aligning Worley's day-to-day operations with the following global sustainability goals, ensuring compliance with sustainable development initiatives and standards.:

➤ *Good health and well-being:*

Prioritizing good health and well-being aligns with the global goals of sustainability, as emphasized by the United Nations (United Nations, n.d.). In construction, various risks are

associated with building large structures and installing essential utilities like gas, electricity, and water lines (Santiago et al., 2020). To address these challenges, D&B division will aim to construct durable buildings and prioritize the good health and well-being of both internal and external customers. The Human Resources department will be realigned to make strong policies to protect the rights of employees, to give salary raises, incentives, promotions, and zero tolerance for bullying, harassment, and other unethical practices (Smith et al., 2019). Additional measures shall be implemented such as providing free insurance coverage and organizing recreational trips contribute to maintaining a healthy work environment. Performance evaluation systems and precautionary measures further promote well-being and good health among employees (Brown et al., 2021).

➤ *Clean water and sanitation:*

The company will endeavor to provide fresh and clean water in the future, aiming to prevent bacterial diseases such as trachoma, which could lead to permanent blindness if left untreated (World Health Organization, 2020). Awareness campaigns will emphasize the importance of clean water and hygiene practices. Infrastructure initiatives, including drills, wells, and rehabilitated boreholes, will be established to supply clean water to communities (United Nations Development Programme, 2018). Addressing challenges such as the spread of diseases like COVID-19 due to inadequate hand hygiene, the company will emphasize improved sanitation in order to reduce the prevalence of life-threatening illnesses such as respiratory infections, malaria, and diarrheal diseases (Centers for Disease Control and Prevention, 2020). Educational seminars will further enhance community knowledge about hygiene and cleanliness, while improved irrigation systems and rainwater reuse initiatives will contribute to better sanitation practices.

➤ *Affordable and Clean Energy:*

Addressing the challenge of affordable and clean energy consumption will be crucial for sustainable development in the future, especially considering the increasing demands on natural resources. Rajat will propose Worley to divert investments in advanced technologies that will enable the production of energy from renewable sources without compromising future needs (International Energy Agency, 2021). The company will endeavor to utilize thermal, wind, and solar power to generate sustainable and clean energy. Implementing upgraded technology across

different sites will support environmental growth, ensuring that energy consumption for construction purposes remains reasonable, reliable, available, and environmentally sustainable.

➤ *Responsible consumption and production:*

Embracing responsible consumption and production practices is essential for balancing economic growth with environmental preservation. Investments in clean energy technologies, efficient irrigation systems, and sustainable construction materials will not only benefit the company but also society as a whole. These initiatives shall promote productivity, efficiency, and resource efficacy, contributing to a healthier lifestyle. By adopting sustainable practices such as lean management, the company will decouple economic growth from environmental degradation, fostering a more sustainable future.

➤ *Peace, and justice:*

Upholding peace and justice within the organization is crucial for sustainable development and employee well-being. To achieve this, Worley shall align with global goals focused on reducing corruption, promoting responsive decision-making, and ensuring gender equality (United Nations, n.d.). Emphasizing teamwork, peace, and harmony, the company shall implement clear policies and procedures to resolve conflicts and grievances promptly. Recognizing the diverse backgrounds of its workforce, the company fosters inclusivity and equality through fair treatment and opportunities for all employees, regardless of gender or other personal characteristics.

➤ *Gender Equality:*

Promoting gender equality will be integral to the company's commitment to creating an inclusive and supportive work environment. Equal employment opportunities will need to be ensured, with zero tolerance for workplace harassment or discrimination (International Labour Organization, 2020). As a Project Manager, Rajat shall actively encourage participation from individuals of all genders, empowering women within the organization to pursue their career goals. Clear policies shall govern promotions and wage increments based solely on merit, fostering an environment of equality and fairness.

➤ *Climate changes:*

Addressing climate change will require the adoption of sustainable practices that will mitigate environmental impact while promoting economic growth. Recognizing the adverse effects of climate change on health, agriculture, and livelihoods, D&B division shall endeavor to contribute to environmental preservation. Initiatives such as rainwater harvesting, water filtration, and the use of renewable energy sources will be implemented with an aim to mitigate the risk of extreme weather conditions and environmental disasters. By prioritizing green construction practices, the company will reduce its carbon footprint and contribute to a more sustainable future.

3. Sustainable Procurement and Operational Efficiency Strategies:

In the pursuit of sustainable procurement practices for raw materials, Rajat and the team will diligently assess suppliers to ensure they offer eco-friendly products without compromising quality. Embracing the blue ocean strategy, the D&B division aims to carve out a unique market space, fostering differentiation and cost reduction (Kim et al., 2005). Looking ahead, Rajat plans to develop sustainable strategies for products based on various factors:

- **Nuisance Products:** Identifying and addressing products that may cause inconvenience or pose environmental challenges during their lifecycle (Johnson, 2019).
- **Bottleneck Products:** Streamlining production processes and supply chains to mitigate bottlenecks and enhance efficiency in the delivery of essential products (Porter, 1985).
- **Commodities:** Implementing sustainable practices across the production and distribution of essential commodities to minimize environmental impact and ensure long-term viability (Schwartz, 2020).

By integrating these considerations into strategic planning, Rajat aims not only to meet stakeholders' needs but also to advance the business's sustainability objectives. The D&B division will also implement the concept of the 4 R's (reduce, reuse, recycle, and restore) on products (Vanalle et al., 2017). Bottleneck products will be those requiring one-time purchase only, such as machinery, land, and buildings. A location for housing processing and manufacturing facilities with lower environmental and societal impact will be selected. For nuisance products and commodities, buying in bulk will reduce packaging, per unit cost, and help achieve economy of

scale. Lean procurement of these products will eliminate unnecessary resources and time (Hosseinpour et al., 2015).

Moreover, three prevalent challenges that must be addressed alongside these strategies include:

a. Overburden (Muri): It is imperative to establish an effective organizational framework that fosters equity through the equitable distribution of tasks. This approach ensures that workloads are balanced, enabling Worley to harness the full potential of its team members and enhance overall performance (Jones, 2018).

b. Inconsistency (Mura): Rajat will spearhead the development and integration of a comprehensive performance appraisal system aimed at bolstering team motivation and consistency. By implementing regular assessments and feedback mechanisms, the team's performance can be consistently monitored and improved (Smith et al. 2019).

c. Waste (Muda): To reduce waste, Worley will emphasize agility and lean management. COVID-19 has severely affected the economies of major countries, especially third-world countries. To address waste reduction, the D&B division will engage Worley's R&D and procurement departments to purchase and install solar panels at the construction site. These solar panels will not only provide reverse metering but also offset tons of carbon dioxide and about a hundred liters of fuel (diesel, petrol) per week, resulting in a significant positive impact on the planet.

4. Innovation In Products and Process:

Innovation in products and processes is crucial for a business's growth and success (Ahmad et al., 2018). The D&B division will be committed to fostering innovation not only in processes but also in products used in construction project. Despite plastic being a major source of pollution due to its slow decomposition rate, it is still extensively utilized in construction for its durability and low maintenance requirements (Evode et al., 2021). However, the D&B division will prioritize the use of durable and recycled construction materials with minimal plastic content.

Team members will all remain actively engaged in forest management to ensure sustainable sourcing of building materials and wildlife habitat preservation. Additionally, the team will encourage utilizing mud and wool as raw materials for bricks, aiming for comparable strength to traditional bricks while eliminating harmful emissions associated with kiln usage. Specialized

Waste management companies will be contracted for construction sites, and materials suitable for recycling and substituting traditional concrete will be utilized to minimize environmental impact and promote sustainability. This approach will help in significantly reducing carbon dioxide emissions.

Instead of conventional buildings, the focus will shift towards constructing green and hi-tech buildings equipped with automation systems. Reverse metering will be implemented to optimize energy consumption and reduce electricity bills for customers. Refurbishing old buildings will be adopted as a common practice to conserve land and natural resources. Rainwater harvesting systems will be installed on building rooftops, with recycled water being used indoors after treatment. Weather shields will be recommended for building exteriors to maintain freshness despite weather changes. Advanced technologies like drones will be employed for precise construction planning.

Worley will adhere to seven basic principles for sustainable construction, prioritizing:

1. Design,
2. Energy Efficiency,
3. Waste Reduction,
4. Indoor Air Quality,
5. Water Conservation,
6. Building Materials,
7. Durability

Specialized tiger teams shall be engaged to ensure that buildings will be designed to minimize their negative environmental impact. Emphasis will be placed on using robust materials and construction techniques to ensure structures remain resilient, thereby reducing the need for frequent maintenance and replacements. Sustainable performance of buildings will be meticulously evaluated to assess their environmental impact (Hosseinpour et al., 2015).

During project execution, factors such as energy efficiency, water conservation, sustainable materials, waste reduction, and social equity will be carefully considered. Utilization of solar chimneys, windows, natural ventilation, and other eco-friendly features will be increased to enhance indoor air quality and create healthier environments.

During construction, the company will prioritize the reduction of freshwater usage and maximize the utilization of rainwater to minimize water wastage. The D&B division will adhere to the following guidelines when constructing any building:

- Implement regular maintenance and leak detection measures.
- Ensure well-organized irrigation systems are in place.
- Establish a proper rainwater harvesting system.
- Install low-flow fixtures to conserve water.
- Monitor, report, and refine water usage practices.
- Incorporate home filter plants to purify water.

Materials used in construction will be selected based on their durability and sustainability. The company's focus on sustainable construction will involve:

- Utilizing natural fiber-reinforced concrete.
- Incorporating natural fibers into construction materials.
- Integrating carbon-sequestering materials.
- Selecting timbers from sustainable sources.
- Utilizing recycled plastics in construction materials.

To mitigate the adverse environmental impacts of construction D&B division will ensure buildings will be constructed with durability in mind. Carefully selected materials will be utilized to ensure they can withstand various environmental factors such as weather fluctuations, degradation, corrosion, and potential natural disasters like floods and earthquakes.

At Worley, incorporating sustainable construction practices will not simply be an option, but rather an imperative for safeguarding the environment and shaping a resilient future. Environmentally responsible practices will be adopted to minimize their ecological footprint and contribute to sustainable development. In pursuit of a competitive advantage, Worley's future strategies will focus on creating or adding value. These strategies will be developed while considering the five V's:

1. **Volume:** Future considerations will involve optimizing production processes to efficiently meet demand.
2. **Variability:** Managing variations in demand or supply will ensure operational stability and flexibility.
3. **Visibility:** Transparency and communication throughout the supply chain will be enhanced to improve decision-making and customer satisfaction.
4. **Velocity:** Processes and operations will be streamlined to increase speed and responsiveness to market demands.
5. **Value:** Efforts will focus on creating value for customers through product innovation, quality, and customer service to enhance competitiveness and market positioning.

Furthermore, an intermodal transport system shall be used to receive materials depending on the nature of the materials and shipment cost.

➤ *Birdyback:*

When faced with the dilemma of sourcing a product that is both high in price yet low in quality, demanding careful handling during transit, and urgently needed, opting for air cargo emerges as the optimal solution. Utilizing air cargo ensures the safe delivery of the product, mitigating the risk of damage during transportation. Moreover, it significantly reduces lead time, thereby enhancing overall workflow efficiency. As highlighted by Bartle et al. (2021), air transportation boasts minimal chances of damage or loss, making it a reliable choice for time-sensitive and delicate shipments.

➤ *Piggyback:*

Rail services will be used for receiving orders from different cities. This intermodal transportation has always proved to be cost-effective (Sun, 2020). All the heavy types of equipment that are large in quantity shall be delivered by train where possible. This is the cheaper way of sourcing goods that are needed for the construction company. The team will be able to also track the shipments by using the app and different trackers. There is no limitation on weight as the railway can transport the product in bulk.

➤ *Fishyback:*

To capitalize on the benefits of economy of scale, the procurement strategy will primarily focus on importing materials in bulk, utilizing ships for container reception. This proactive approach not only reduces material costs but also streamlines the overall shipment process. Materials, machinery, and equipment sourced from international suppliers or different geographical regions will be prioritized for shipment via ships. This strategic choice not only lowers shipment expenses but also enhances operational effectiveness and efficiency, contributing to the company's overall success.

5. Marketing Strategy:

No matter what position a business is in, it always requires good investment in marketing and promotion to attract and satisfy more customers. The goal of marketing is to engage potential customers in your products or services (Chapuzet et al., 2021). As a project manager Rajat has to consider the long-term planning that promotes sustainability. Word of mouth, ads on social media, and promotions are the marketing strategies that are currently adopted by Worley to increase visibility and overall profit. In the next three years, Rajat aims to expand Worley's business by taking mega commercial construction projects and as well as other projects to promote sustainability. It is important to build trust or to gain the trust of customers for the good growth of the business. The marketing strategies mentioned below will be adopted in the coming three years to meet the maturity phase of the business.

- **Content Marketing:** Webinars, podcasts, blogs, and vlogs have tremendously changed the concept of traditional marketing (Rautela et al., 2020). The marketing team will focus more on content marketing in the next three years to make the customers feel connected with the company. It will always be a win-win to create valuable and informative content as Worley will get more chance to meaningfully connect with customers of different geographical areas.
- **Advertising:** Telephonic calls, messages, emails, pop-ups, ads on YouTube channel and social media will be used to promote Worley across the globe.

- **Emails and Newsletter:** One of the oldest ways and still in trend marketing strategy is by sending emails and newsletters to keep the old, new, and future customers up-to-date. Leads will be generated with the assistance of emails and newsletters. The team will use marketing automation software to reach out to the audience in real time, but along with this, they will also maintain direct contact with customers. The database will be used to send the latest trends in construction and to spread awareness of sustainability.
- **Social Media Marketing:** The best way to gain traffic to the website, increase visibility and have one one-on-one communication with people is by using social media. Social media has changed the traditional marketing trends and now people spend more time on social media to explore more without going anywhere (Savale). Tik Tok, Instagram reels, YouTube channels, and Facebook will be used to reach new potential customers. Aim will be to spread awareness about the UN's sustainable global goals on social media and the ways Worley will be adopting to reserve resourcing without compromising on quality.
- **Search Engine Optimization:** To make the brand discoverable, desirable, and accessible, a search engine optimization marketing strategy will be implemented. To increase visibility any keyword or letter that is familiar with Worley's name, products, or even processes like sustainability, environmentally friendly construction, or save energy and water will give lead or direction to Company's website and page.
- **Affiliate Marketing:** The ultimate goal of D&B division within Worley will be to build buildings by using high-quality materials and equipment, promote sustainability, and to follow post-COVID-19 protocols. Affiliate marketing will be adopted to generate revenue by signing contracts with companies having a good brand image and market reputation. This paid partnership with the other companies from where products for construction projects shall be sourced will boost sales.
- **Retargeting:** People who once visited company's website or pages and are familiar with Worley will get regular updates. Brand awareness is the most important factor in marketing and with the help of retargeting strategies, the team will make sure that people always

remember Worley whenever they want to make a purchase or want to give a construction project that will be beneficial for them and for the environment. By offering discounts and trials shall boost sales as well. Reminding people who once visited Worley's website and showed interest will also help in increasing revenue.

- **AI Marketing:** The trends are rapidly changing because of Artificial Intelligence marketing (De et al., 2020). AI-powered techniques and tools are utilized to target the desired audience, automate tasks, and to provide flexibility more efficiently and effectively. The company's sustainable practices will be marketed in a customized manner by using:
 - a) **Personalized Recommendations:** Past purchase history, online behavior, and interest can become a base for marketing to reach the desired target market.
 - b) **Chatbots:** Chatbots are software to reach customers and to respond to queries within no time. The marketing team will focus more on this strategy as it will help them to generate leads, answer questions, and to provide customer support.
 - c) **Targeted advertising:** AI shall be used to reach customers by picking the information of interests, demographics, and patterns of buying. This mode of marketing should cost less as compared to other marketing strategies and the chances of return on investment (ROI) should be comparatively higher.

Marketing Mix:

To expand its market reach and attract new customers, Worley recognizes the critical importance of focusing on the marketing mix. The marketing mix, often referred to as the four Ps (Price, Place, Product, and Promotion), serves as the cornerstone for effectively reaching and engaging with a diverse customer base (Lim, 2021). By carefully defining and strategizing around these four elements, Worley can convey a compelling message about its brand and offerings to its target audience.

 Product:

Central to Worley's marketing mix strategy will be the range of products and services it provides to its customers. Beyond merely physical goods, Worley's D&B division will provide a comprehensive suite of offerings aimed at meeting various customer needs and preferences. These include:

- Development and construction of residential houses, public buildings, and commercial infrastructure projects.
- Provision of services such as architectural designs, consultations, and commercial building designs, all of which prioritize customer satisfaction and environmental sustainability.
- Implementation of projects focused on conserving essential resources like water, gas, and energy, aligning with Worley's commitment to sustainability.
- Undertaking sustainable construction initiatives that emphasize energy conservation through the principles of the 4 Rs (reduce, reuse, recycle, and restore).
- Provision of critical infrastructure facilities such as transportation, water supply, gas distribution, electricity grids, and telecommunication networks.

The above-mentioned offerings are divided into two further categories:

- a) **Core Products:** Worley's core products will encompass fundamental living spaces, including residential houses, accommodations, and other essential buildings. These core offerings will be carefully tailored to meet the basic needs of customers, ensuring access to essential utilities such as gas, clean water, electricity, and telecommunications. Before embarking on any construction project, Worley's team shall conduct thorough assessments of the surrounding area to ensure proximity to essential amenities such as schools, grocery stores, and healthcare facilities.
- b) **Augmented Products:** In addition to core offerings, D&B division will also focus on providing augmented products that enhance the overall value proposition for customers. These augmented products will encompass various factors beyond the physical structure itself, including creating a conducive environment, implementing robust security measures,

and offering additional amenities and facilities that contribute to a superior customer experience.

By meticulously considering and strategizing around the elements of the marketing mix, particularly regarding product offerings, Worley aims to strengthen its competitive position in the market while delivering exceptional value to its customers.

Price:

The fluctuating exchange rates of currencies, including the dollar, impact the overall construction costs, subjecting them to frequent changes due to variations in the economy. Effective communication and negotiation between the company and the customer play a pivotal role in sealing the relationship between the two parties (Obstfeld et al., 2023). To ensure successful construction deals, Worley's D&B division shall carefully consider the following points:

- Analysis of current marketing trends and construction costs, taking into account design innovations and industry developments.
- Examination of competitors and their offerings to gauge market positioning and potential pricing strategies.
- Conducting thorough cost-benefit analyses before finalizing any agreements to ensure favorable outcomes for the company.
- Evaluation of location-specific costs and factors that may influence construction expenses.
- Negotiating contracts that not only benefit the company financially but also contribute to enhancing its brand image and fostering long-term relationships with clients.

Place:

Marketing aims to ensure that the product reaches the customer at the appropriate time and location. The selection of an optimal location to target customers and facilitate the movement of goods from producers to end-users is facilitated by the marketing channel. While expanding housing or living spaces in various locations may not be feasible, convincing individuals to contract Worley for the construction of their future homes, commercial buildings, and customized parks and malls is achievable. Collaborating with like-minded real estate agents can further

facilitate connections with prospective customers seeking to construct new buildings, whether for personal or commercial purposes.

 Promotion:

To expand its customer base, the marketing team will leverage digital marketing channels to disseminate information about the brand, accompanied by various promotional incentives such as early bird discounts. Upon entering new markets, Worley will implement a price penetration strategy to gain traction. Additionally, the company will utilize word-of-mouth referrals and showcase its existing projects to bolster brand visibility. Prototypes of upcoming projects will also serve as compelling promotional tools.

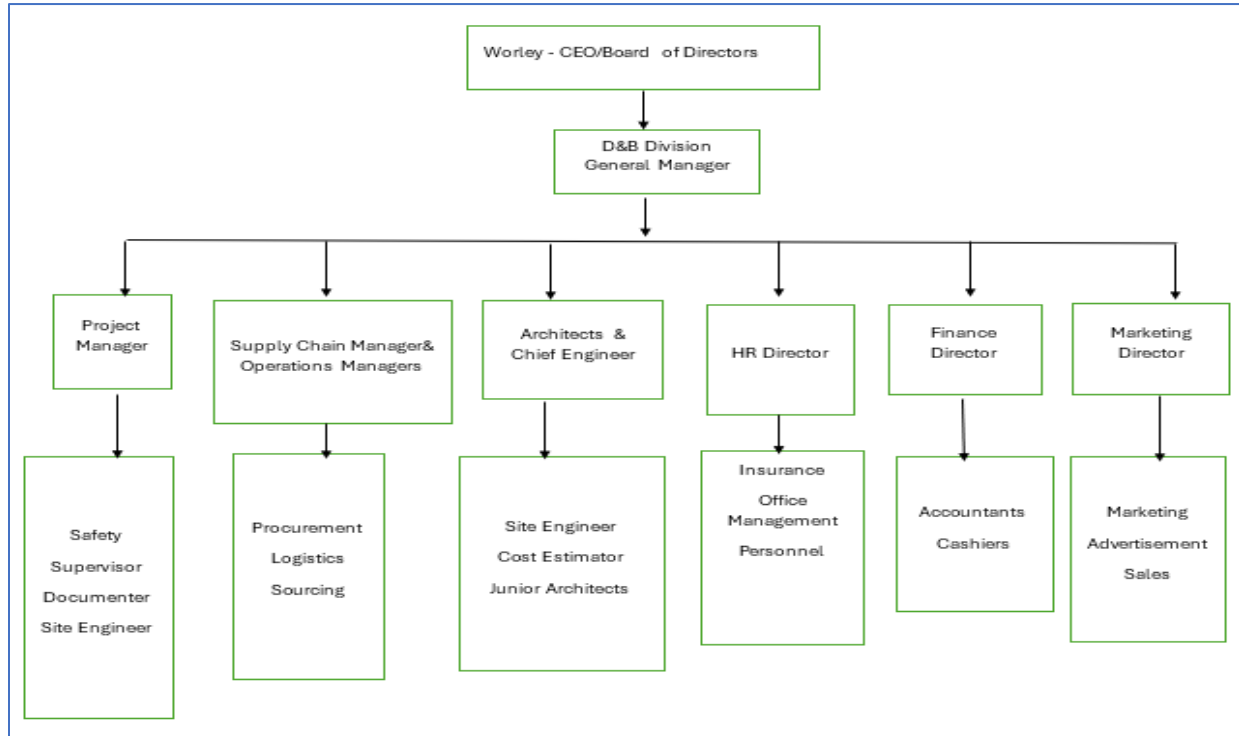
Over the next three years, Worley plans to extend its product promotion efforts to different cities, offering tailored designs endorsed by architects to align with varying topography, budgets, customer preferences, and environmental considerations. Given the D&B division's commitment to delivering quality products while prioritizing sustainability, the team will meticulously assess customer requirements and their potential environmental impact before selecting the most suitable designs to ensure environmental preservation.

Furthermore, the company will conduct awareness campaigns and offer consultation services to enhance product visibility and educate customers. Notably, regions characterized by natural features such as rivers, forests, and mountains will receive specialized attention, with experts designing and promoting buildings tailored to the unique terrain.

Recognizing the diverse preferences stemming from urban and rural demographics, which encompass factors like gender, ethnicity, education, and socio-economic status, Worley will tailor its promotion strategy to resonate with the distinct needs of each demographic segment.

6. Organizational Structure:

The formal division of work among employees is known as organizational structure. The proposed organizational outline of the D&B division is as below:



The organizational structure of the D&B division will serve as a framework outlining reporting relationships, information dissemination channels, and task allocation among employees. The division will adhere to a hierarchical or top-down system, with the Company's CEO and Board of Directors occupying the top tier. Their responsibilities will include defining organizational goals, devising strategies, and ensuring alignment with the company's vision and mission. Additionally, they will establish rules, procedures, and policies, while also identifying and addressing project risks through proactive mitigation strategies. They will empower the General Manager of the D&B division, delegating authority to oversee processes and tasks, ensuring adherence to quality standards at every stage.

In his role as Project Manager, Rajat will assume responsibility for setting SMART goals to drive the company's mission forward. He will prioritize the security of both internal and external stakeholders and maintain regular communication with his team to stay updated on project

developments. Rajat will resolve conflicts, issues, or uncertainties in a timely manner and oversee quality assurance processes to uphold project standards. Additionally, he will emphasize problem-solving techniques and explore innovative approaches to enhance efficiency and productivity. Fostering teamwork and promoting a harmonious work environment will be integral aspects of Rajat's role. He will actively identify opportunities for new projects that contribute to revenue generation while ensuring adherence to sustainable practices in alignment with the company's mission and vision. Furthermore, Rajat will establish timeframes and deadlines for tasks to ensure project timelines are met effectively.

The Supply Chain Manager and Operations Managers will assume responsibility for procuring the necessary materials and equipment required for smooth processing and operations at the site. They will meticulously select the appropriate mode of transport for both inbound and outbound logistics, considering the lead time of each product to ensure timely deliveries. Maintaining up-to-date inventory levels will be crucial to mitigate the risk of delays, with a keen eye on the transformation process or manufacturing process of bricks and other materials. These managers will undertake comprehensive planning, organization, leadership, control, monitoring, evaluation, and corrective actions throughout the entire process.

On the other hand, Architects and the Chief Engineer will be tasked with designing buildings tailored to the specific land and preferences of customers. The division will place a strong emphasis on sustainable practices, with architects proposing designs that align with the company's and customers' sustainability goals. Assignments for architects and engineers will encompass site visits, consideration of topography, evaluation of available resources, assessment of nearby facilities, and the incorporation of strategies for both utilizing and preserving natural resources. Moreover, they will be responsible for crafting unique yet comfortable spaces for customers, ensuring that every aspect of the design aligns with the company's vision and customer expectations. Recognizing the collaborative nature of the process, input and ideas from team members will be actively sought and utilized to foster innovation and create distinctive personal and commercial spaces.

The Human Resource Director and Manager will play a pivotal role in crafting job descriptions and specifications for every position within the company. Their primary responsibility will involve recruiting and selecting the most suitable candidates who can contribute value to the organization.

Furthermore, they will establish rules, policies, and procedures to ensure transparency and accuracy within the system. Additionally, the HR Manager will be tasked with defining performance evaluation criteria and determining the corresponding rewards and penalties. Decisions pertaining to salary raises, increments, leaves, promotions, demotions, downsizing, and insurance matters will also fall under their purview.

Given the nature of the construction industry, particular attention must be paid to security and employee safety, especially for laborers engaged in tasks such as constructing buildings on uneven surfaces and installing utilities like gas, electricity, and water lines. To safeguard the well-being of laborers, precautionary measures should be proposed and implemented to mitigate potential risks.

On the financial front, the Finance Director will be responsible for formulating budget plans, conducting cost-benefit analyses, and performing financial ratio analyses. They will be entrusted with making major decisions such as investment allocations, dividend distributions, and financial strategy determinations. By closely monitoring financial trends in the business landscape, they will be equipped to make informed decisions regarding resource allocation. Additionally, the finance team will oversee audits and fraud prevention measures, with accountants and cashiers reporting directly to the Finance Manager. Budget allocations, profit and loss assessments, investment strategies, and financial planning for grants and welfare initiatives will also be managed by the Finance Manager.

The fundamental objective of marketing is to generate value for customers while fostering profitable relationships with them. In pursuit of this goal, the Marketing Manager will develop comprehensive plans and strategies to effectively promote the company's offerings. Tasks such as sales, advertisements, promotions, and overall marketing initiatives will fall under the purview of the marketing team. Emphasizing the importance of the marketing mix, the Marketing Manager will strive to capture maximum market share and attain competitive advantages for the company.

Furthermore, each department within the D&B division will operate autonomously, aligning its respective goals with the overarching objectives of the company. Embracing principles of equal employment opportunities and diversity, the company will actively seek to diversify its workforce. By engaging local talent for labor and technical roles across various construction projects in different cities and sites, the company will contribute positively to the employment rate of the country. This inclusive approach will foster diversity and create additional employment

opportunities, attracting individuals from diverse backgrounds including varying mindsets, cultures, races, genders, ethnicities, and languages.

7. Strategies to Build Resilience for Future Crises or Risk Mitigation:

Expanding a business always entails inherent risks and potential losses. Both micro and macro-level factors will need to be carefully evaluated before making significant decisions. SWOT and PESTEL analysis will be done to check the impact of both internal and external factors.

➤ *SWOT Analysis:*

Strength: The following factors will be considered as the D&B division's strengths and will help the company to gain competitive advantages.

- Commitment to sustainable practices
- Emphasis on achieving the United Nations' global sustainability goals
- Promotion of diversity within the workforce
- Possession of a highly experienced team
- Fostering a collaborative work environment
- Adherence to ISO standards
- Utilization of advanced machinery and equipment
- Implementation of the 4 Rs (reduce, reuse, recycle, and restore)
- Offering unique architectural designs for homes and commercial buildings
- Operating with a low-cost structure

Weaknesses: Some factors that will need more attention are:

- Dependence on workers from diverse geographical areas
- Limited division of power within the organizational structure
- Reliance on imported goods for operations

Opportunities: Potential avenues for growth and expansion for Worley will be:

- Capitalizing on emerging trends such as the rental market akin to Airbnb
- Developing residential properties in tourist destinations

- Venturing into the construction of various commercial infrastructures like plazas, malls, offices, schools, hospitals, and parks
- Offering customization options for clients
- Establishing a robust online presence
- Cultivating a strong brand image to deter new competitors.

Threats: External factors that will pose risk to Worley's expansion and D&B division's functioning:

- Decline in performance levels among employees or teams
- Imposition of tariffs and taxes affecting operational costs
- Restrictions on imports impacting the supply chain
- Shortage of skilled labor in the industry
- Increases in interest rates affecting borrowing costs
- Introduction of new government policies impacting business regulations and practices.

➤ *PESTEL Analysis:*

The factors that may affect Worley directly and indirectly at the macro level are:

Political Factors: Political factors such as new Government, laws, policies, and rules can affect the set-up and functioning of D&B division and impact overall strategy.

Environmental Factors: Environmental factors are one of the major factors that can affect the functioning of the new division. Global warming, climate changes, floods, rain, and other environmental factors can delay construction, so it will be necessary to take precautionary measures by regularly checking weather conditions. Waste management can positively impact the environment by following GO GREEN concept.

Social-Cultural Factors: Socio-cultural factors including diversity, ethnicity, language, race, culture, norms, traditions, and other demographic variables can also affect the performance. Less awareness of waste management and old-designed constructions can lead to pollution and more waste of natural resources.

Technological Factors: Advanced machinery to reduce, recycle, reuse, and restore waste can decrease pollution and overall construction costs. It will not always be possible to install advanced technology on all sites. This barrier can affect the performance of the D&B division.

Economy: Low wages, high inflation rate, low per capita income, fluctuation in the stock exchange market, high tariffs and taxes, and high interest rates can affect the business by increasing the turnover rate. Strategies will need to be made and contingencies shall be put in place to lower the negative economic impact.

Legal Factors: Lack of policies and regulations against unsustainable practices, lack of rewards for managing waste, and legal actions against all unethical practices can promote fraud and pollution. Proper incentives for waste management and sustainable practices will be considered to motivate the business to focus more on the triple bottom line.

In order to mitigate risks conducting SWOT and PESTEL Analyses before starting any construction project will be made mandatory.

➤ *Recommendation:*

The D&B division must meticulously analyze both internal and external factors, considering aspects at both the micro and macro levels, to effectively steer towards its objectives (Smith, 2023). It's imperative for Worley to align its overarching vision and mission statement with sustainable goals, ensuring that every endeavor contributes to long-term environmental and societal well-being.

Emphasizing the adoption of high-quality, eco-friendly materials is paramount. Not only do such materials offer superior durability and strength compared to traditional options, but they also underscore Worley's commitment to responsible practices (Johnson et al. 2021). By prioritizing sustainability in its product choices, Worley not only enhances its reputation but also minimizes its ecological footprint.

Adhering to internationally recognized ISO standards and providing comprehensive health and safety insurance for its workforce are indispensable steps. These actions not only ensure compliance with industry best practices but also safeguard the well-being of employees, fostering a culture of trust and security within the organization (Brown, 2020).

With a skilled and dedicated workforce at its disposal, Worley possesses the potential to expand its operations beyond domestic borders. By leveraging the expertise and capabilities of its manpower, Worley can confidently venture into global markets, driving growth and establishing itself as a formidable player in the construction industry worldwide (Taylor et al., 2019).

8. Conclusion:

In the wake of the COVID-19 pandemic, there has been a notable surge in the appreciation of sustainable practices, fueled by heightened awareness among the populace. Unfortunately, the construction industry has often overlooked these practices, leading to exacerbated air, land, and water pollution. However, amidst this backdrop, it becomes increasingly evident that essential human needs—clean water, adequate shelter, and clothing—are intrinsically linked to the preservation of our environment.

As citizens, it is incumbent upon us to embrace sustainable practices that not only mitigate waste but also restore the environmental balance, all while maximizing profitability and safeguarding natural resources. Moreover, the incorporation of sustainable principles aligns with the broader interests of stakeholders and shareholders alike, serving as a cornerstone for responsible corporate conduct.

When embarking on construction endeavors, it becomes imperative to prioritize the satisfaction of customers' needs, tailoring buildings to their specifications and preferences. Simultaneously, by harmonizing these efforts with the preservation of nearby communities' natural landscapes, companies like Worley can cultivate a synergistic relationship that not only enhances profitability but also fosters societal well-being.

In this vein, the establishment of Worley's Design and Build (D&B) division emerges not merely as an economically lucrative venture but also as a conduit for realizing Worley's sustainability objectives, thereby effecting positive change within society.

9. Bibliography

Ahmad, S., et al. (2018). Sustainable product design and development: A review of tools, applications and research prospects. [Online] Resources, Conservation and Recycling, 132, 49–61. Can be accessed at: <https://doi.org/10.1016/j.resconrec.2018.01.020> [Accessed on 12.04.2024]

Andrew D (2017). Prioritize Your Opportunities with This Checklist. [Online] HBR IdeaCast/Episode 572. Can be accessed at: <https://hbr.org/2017/09/prioritize-your-opportunities-with-this-checklist> [Accessed on 01.05.2024].

Anthony S. (2017). To Reinvent Your Firm, Do Two Things at the Same Time. [Online] HBR IdeaCast/Episode 572. Can be accessed at: <https://hbr.org/podcast/2017/04/to-reinvent-your-firm-do-two-things-at-the-same-time?authuser=0> [Accessed on 26.04.2024].

Bartle, J. R., et al. (2021). Sustainability and air freight transportation: Lessons from the global pandemic. [Online] Sustainability. Can be accessed at: <https://www.mdpi.com/2071-1050/13/7/3738> [Accessed on 02.05.2024].

Brown, A. et. al. (2020). Ensuring Workplace Safety: Best Practices for Construction Companies. *Construction Management Journal*, 24(3), 45-57.

Brown, A., (2021). *Employee well-being in the workplace: Strategies for promoting health and productivity*. Wiley.

Cable D (2018). Why People Lose Motivation — and What Managers Can Do to Help. [Online] HBR. Can be accessed at: <https://hbr.org/2018/03/why-people-lose-motivation-and-what-managers-can-do-to-help> [Accessed on 03.05.2024]

Celebrating creativity and innovation (2021). [Online] McKinsey & Company Article. Can be accessed at: <https://www.mckinsey.com/featured-insights/themes/celebrating-creativity-and-innovation> [Accessed on 24.04.2024].

Centers for Disease Control and Prevention. (2020). [Online] Hand hygiene recommendations. Can be accessed at: <https://www.cdc.gov/handhygiene/providers/guideline.html> [Accessed on 03.05.2024]

De Bruyn, A., et al. (2020). Artificial intelligence and marketing: Pitfalls and opportunities. [Online] Journal of Interactive Marketing, 51(1), 91-105. Can be accessed at: <https://www.sciencedirect.com/science/article/am/pii/S1094996820300888> [Accessed on 21.04.2024]

Evode, N., et al. (2021). Plastic waste and its management strategies for environmental sustainability. [Online] Case Studies in Chemical and Environmental Engineering, 4, 100142. Can be accessed at: <https://www.sciencedirect.com/science/article/pii/S2666016421000645> [Accessed on 25.04.2024].

Hapuzet, A. C. et al. (2021). New Way Modern Marketing: New Perspective Of Marketing In Digital Era For Effective Marketing in Digital Age. [Online]. Can be accessed at: https://www.researchgate.net/publication/362846611_New_Way_Modern_Marketing_New_Perspective_Of_Marketing_In_Digital_Era_For_Effective_Marketing_in_Digital_Age [Accessed on 28.04.2024].

Hosseinpour, M., et al. (2015). Lean procurement: An emerging trend in supply chain management. *International Journal of Scientific & Engineering Research*, 6(7), 1320-1326.

Hosseinpour, A., et al. (2015). A benchmark-based method for sustainable product design. [Online] Benchmarking, 22(4), 643–664. Can be accessed at: <https://doi.org/10.1108/BIJ-09-2014-0092> [Accessed on 22.04.2024]

Innovation: Your launchpad out of the COVID-19 crisis, (2021). [Online] McKinsey & Company Article. Can be accessed at: <https://www.mckinsey.com/featured-insights/themes/celebrating-creativity-and-innovation> [Accessed on 04.05.2024].

Innovation in a crisis: Why it is more critical than ever (2020). [Online] McKinsey & Company Article. Can be accessed at: <https://www.mckinsey.com/capabilities/strategy-and-corporate->

finance/our-insights/innovation-in-a-crisis-why-it-is-more-critical-than-ever [Accessed on 06.05.2024].

International Labour Organization. (2020). [Online] Gender equality in the workplace: A global perspective. Can be accessed at: <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/innovation-your-launchpad-out-of-the-covid-19-crisis> [Accessed on 02.04.2024]

International Energy Agency. (2021). [Online] Global renewable energy outlook. Can be accessed at: <https://www.iea.org/reports/renewables-2021> [Accessed on 30.04.2024]

Jesuthasan R (2019). The 8 Ways Companies Get Work Done, and How to Align Them. [Online] HBR. Can be accessed at: <https://hbr.org/2019/08/the-8-ways-companies-get-work-done-and-how-to-align-them?authuser=0> [Accessed on 29.04.2024]

Johnson, M. (2019). *Environmental Sustainability in Product Design and Production Processes*. Academic Press.

Johnson, R., et al. (2021). *Sustainable Construction Materials: A Comprehensive Guide*. New York, NY: Routledge.

Jones, P. (2018). *Organizational Behavior: The Psychology of Effective Management*. Palgrave Macmillan.

Kim, W. C., et al. (2005). *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Harvard Business Review Press.

Kirsner S. (2021). Don't Let Financial Metrics Prematurely Stifle Innovation. [Online] HBR. Can be accessed at: <https://hbr.org/2021/03/dont-let-financial-metrics-prematurely-stifle-innovation?authuser=0> [Accessed on 14.04.2024].

Lim, W. M. (2021). A marketing mix typology for integrated care: the 10 Ps. [Online] Journal of Strategic Marketing. Can be accessed at: <https://www.tandfonline.com/doi/abs/10.1080/0965254X.2020.1775683> [Accessed on 21.04.2024]

Lin, C. Y., et al. (2022). Development of renewable energy resources by green finance, volatility and risk: empirical evidence from China. [Online] Renewable Energy. Can be accessed at: <https://www.sciencedirect.com/science/article/abs/pii/S0960148122015798>. [Accessed on 26.04.2024]

Muda, Muri, Mura – Toyota Production System Guide [Online]. Can be accessed at: <https://mag.toyota.co.uk/muda-muri-mura-toyota-production-system> [Accessed on 07.05.2024]

Obstfeld, M. et al. (2023). The global dollar cycle. [Online]. Can be accessed at: https://www.nber.org/system/files/working_papers/w31004/w31004.pdf [Accessed on 23.04.2024].

Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press.

Project Management Institute. (2017). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)–Sixth Edition*. Project Management Institute.

Rautela, M. A., et al. (2020). A review of modern marketing tools in the era of covid-19. [Online] PalArch's Journal of Archaeology of Egypt/Egyptology, 17(6), 11583-11602. Can be accessed at: <https://archives.palarch.nl/index.php/jae/article/download/2986/2922> [Accessed on 29.04.2024]

Santiago, E., et al. (2020). [Online] Risk assessment in construction projects. Can be accessed at: <https://www.scielo.br/j/urbe/a/VyfNVsNTdGYnfXrMj4qGpWz/?lang=en> [Accessed on 05.04.2024].

Savale, T. K. et al. (2022). Effect of Social Media on Consumer's Internet Buying Behaviour in Maharashtra. [Online]ijemr.in. Can be accessed at: <https://ijemr.in/wp-content/uploads/2022/04/Effect-of-Social-Media-on-Consumers-Internet-Buying-Behaviour-in-Maharashtra.pdf> [Accessed on 02.05.2024]

Schwartz, P. (2020). *The Art of the Long View: Planning for the Future in an Uncertain World*. Currency.

Sharma R. (2024), Module 1 – Assignment L04, Developing New Strategy.

Sharma R. (2024), Module 2 – Assignment L04, Problem Solving and Decision Making.

Smith, J. (2018). *Sustainable Procurement: Practices and Strategies*.

Smith, J. (2023). Strategic Analysis in Construction: Integrating Micro and Macro Perspectives. *Construction Business Review*, 12(2), 112-125.

Smith, R., et al. (2019). *Performance Management: Aligning Employee Goals with Organizational Objectives*. Routledge.

Sun, Y. (2020). Green and reliable freight routing problem in the road-rail intermodal transportation network with uncertain parameters: a fuzzy goal programming approach. [Online] *Journal of Advanced Transportation*. Can be accessed at: <https://www.hindawi.com/journals/jat/2020/7570686/> [Accessed on 05.05.2024].

Taylor, M., et al. (2019). Global Expansion Strategies for Construction Companies. *International Journal of Construction Management*, 17(4), 321-336.

The innovation commitment (2019). [Online] McKinsey & Company Article. Can be accessed at: <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/the-innovation-commitment> [Accessed on 21.04.2024].

United Nations. (n.d.). [Online] Sustainable Development Goals. Can be accessed at: <https://www.undp.org/sustainable-development-goals#:~:text=The%20SDGs%20are%20a%20bold,conflict%20and%20climate%2Drelated%20disasters> [Accessed on 09.04.2024]

United Nations Development Programme. (2018). [Online] Access to clean water and sanitation: A global challenge. Can be accessed at: <https://www.un.org/en/desa/achieving-clean-water-and-safe-sanitation-all#:~:text=UN%2DWater's%20SDG%206%20Synthesis,and%20cross%2Dborder%20water%20management> [Accessed on 10.04.2024]

Vanalle, R. M., et al. (2017). *Implementing the circular economy in business: The concept of the 4R's and implications on supply chain management*. Resources, Conservation and Recycling, 123, 135-146.

Vanalle, R. M., et al. (2017). Green supply chain management An investigation of pressures, practices, and performance within the Brazilian automotive supply chain. *Journal of Cleaner Production*, 151, 250–259.

Wang, J., & Dai, J. (2018). Sustainable supply chain management practices and performance. *Industrial Management and Data Systems*, 118(1), 2–21.

World Health Organization. (2020). [Online] Trachoma prevention and control. Can be accessed at: https://www.who.int/health-topics/trachoma#tab=tab_1 [Accessed on 10.04.2024].

Worley, Annual Report [Online]. Can be accessed at: <https://www.worley.com/-/media/files/worley/investors/results-and-presentations/2023/wor-annual-report-2023.pdf>. [Accessed on 24.03.2024]

Appendix 1: Summary of Module 1 (L04 – Developing a New Strategy):

The document provided a thorough look into Worley's strategic path under Rajat's leadership, stressing the importance of careful planning and foresight in steering the company through the ever-changing global business landscape. It highlighted how the merger significantly affected Worley's operations and emphasized Rajat's crucial role in shaping the company's strategic direction.

Rajat's responsibilities revolve around navigating the complexities within Worley, fostering cultural change, and aligning strategies with worldwide trends. The strategic plan, spanning 48 months, aims to redefine Worley's position in the market, focusing on refining structures, evolving culture, and embracing sustainability.

Through a detailed analysis, Worley's strengths, weaknesses, opportunities, and threats were uncovered, stressing the need for better cross-functional communication and collaboration. Rajat's team advocates for a more inclusive planning process, emphasizing broader stakeholder involvement for a holistic approach.

The strategy's development phase tackles organizational hurdles, aligns cultural values, and optimizes resource use. Rajat prioritizes transformative leadership, effective talent management, and fostering an environment conducive to innovation to enhance Worley's efficiency and adaptability.

Sustainability and diversity are integral to Worley's strategic framework, reflecting Rajat's commitment to leveraging these aspects for innovation and competitiveness. The document outlines three strategic options—enhancing in-house project management, diversifying into new sectors, and forming strategic partnerships—with detailed action plans aimed at driving Worley's growth.

Central to implementation is setting clear objectives, allocating resources wisely, adhering to timelines, and executing communication and change management strategies seamlessly. A robust monitoring and evaluation framework is proposed to ensure progress tracking and accountability, emphasizing a results-oriented approach.

In conclusion, Rajat's strategic vision embodies Worley's aspirations for sustainable growth and industry leadership, emphasizing meticulous planning, cultural alignment, and global engagement. Adaptability, customer satisfaction, and effective communication are highlighted as crucial elements guiding Worley's path to success in the construction industry's dynamic landscape.

Appendix 2: Summary of Module 2 (L04 – Problem Solving and Decision Making):

The document emphasized the critical importance of effective problem-solving and decision-making in achieving success, highlighting the necessity for a structured approach to overcome challenges. Its main objective is to present a detailed problem-solving process, offering clear steps and rationale for decisions made, serving as a valuable guide for implementation.

In today's competitive business environment, delivering seamless service and maximizing value are essential for consumer satisfaction, underscoring the significance of sound decision-making. However, Rajat's experience reveals how time constraints often result in rushed problem-solving methods, exacerbating initial issues through trial and error.

The essay aims to introduce a robust problem-solving and decision-making framework tailored for Worley, Abu Dhabi, with the aim of enhancing organizational efficiency. It intends to utilize brainstorming and decision matrix techniques to facilitate effective idea generation and evaluation.

To fully understand existing challenges, Rajat and his team plan to internally review issues and gather input from management and employees at various levels, seeking a comprehensive understanding of diverse perspectives.

The proposed process focuses on collaborative problem-solving and decision-making within Worley's operations, involving project teams and decision-makers across departments. It will unfold in five phases over 30 months, incorporating risk assessment and action research to validate hypotheses in real-world scenarios.

The overview highlights Worley Abu Dhabi's diverse workforce and decentralized operational approach, presenting decision-making challenges due to varying timeframes and locations where employees work. The company's strategic mission prioritizes industry leadership through superior problem-solving and decision-making, evident in initiatives to train employees in these skills.

Decision-making challenges at Worley often stem from the complex and rapidly changing nature of construction projects, resulting in decisions based on perception or rushed discussions. The strategic mission underscores the importance of problem-solving proficiency in transitioning to a results-driven industry.

The essay will delve into stakeholder identification and analysis of Worley's organizational structure and leadership style, aiming to develop a tailored process aligned with the company's requirements. While Worley's flat organizational structure facilitates quick information flow, it may pose challenges in supervision and decision-making consistency. Rajat advocates for a participative leadership style to foster a supportive environment and encourage employee involvement in problem-solving.

Overall, the task outlines a comprehensive approach to collaborative problem-solving and decision-making within Worley Abu Dhabi, led by Rajat and his team. It emphasizes analyzing current resources and capabilities, leveraging technological advancements, and adopting a multifaceted approach to decision-making assessment. The process encompasses problem definition, solution generation, pre-implementation steps, operational and strategic implementation, training, monitoring, and evaluation.