

1. Country and Facility Location Brief

1.1 General Introduction

Project Sponsor: Thomas Pharmaceutical International Development (TPID)

Client: Thomas Pharmaceutical

Government Agency: Ministry of Health of Rwanda (MOH)

Sponsor Board Members:

Board Member Place of Birth	Project Role
UK	Project Coordinator and Chair
China	Project Management
Spain	Operation and Facilities Management
Japan	Design and Procurement
Greece	Staffing and Training Programme
France	Project Information Management

Proposed Project

The project is to design, construct, validate and operate a complex manufacturing facility that meets world class pharmaceutical standards in Rwanda. The facility will produce the antiretroviral (ARV) Lamizido, one of the 255 drugs approved by the World Health Organization (WHO), which is a mixture of Zidovudine and Lamivudine and is manufactured in doses of 150 and 300 grams.

The new facility will operate at the pharmaceutical level of secondary production and tertiary level.

Issues to address

- Late Delivery of Products
- Problems managing and exceeding the budget
- Poor performance delivery
- Governance and Organisation
- Post Delivery Operations (managing a multi cultured team)
- Lack of Leadership

1.2 Country History

Rwanda has been able to make important economic and structural reforms and sustain its economic growth rates over the last decade. Driven mostly by large public investments for implementation of the National Strategy of Transformation, Rwandan economic growth exceeded 10% in 2019 alone (World Bank). However, as of 2020, the COVID-19 pandemic has managed to disrupt similar growth rates. The disturbance in the international flows of goods and services has had some significant spillovers to

the broader global economy as well. Rwandan GDP for 2021 is projected to drop as far as 9.4 billion USD, compared to the 10.12 billion USD worth of GDP during 2019 (tradingeconomics). The International Monetary Fund (IMF) approved a credit of USD 109.4 million to Rwanda to cushion the impact of lost foreign earnings from trade and tourism—sectors that were hit hardest by the pandemic. Still, this contribution was evidently not adequate for Rwanda to bounce back to the previous numbers. As of 2020 (2nd Quarter), Rwanda’s GDP observed a reduction of 12.4%. Agriculture dropped by 2% while industry and services dropped by 19% and 16% respectively. Trade dropped by 22% and the health sector due to investments in the sector to deal with COVID-19 grew by 5%.

Since 1995, the MoH supported by the WHO, has started the goal of providing quality health services accessible and acceptable to the majority of the population. Rwanda, like many other African countries, relies on China and India for their medicine security. This is why, due to the increase in demand of medical drugs with limited access to such materials, the pharmaceutical industry is among the hardest hit by the pandemic (African Development Bank Group, 2020).

1.3 Rwanda PESTEL Analysis

Political	Economic	Social
<p>Paul Kagame of the Rwandan Patriotic Front has been the president since 2000.</p> <p>The president and other government officials regularly threatened those who criticized the government, showing signs of autocracy.</p> <p>Mysterious deaths and inconclusive missing cases of the members from opposition political parties and journalists display lack of freedom of expression.</p> <p>With the Commonwealth Secretariat’s help, the</p>	<p>Growth averaged 7.5% over the decade to 2018, while per capita gross domestic product grew at 5% annually (world bank). Growth is projected at 8.2% in 2021.</p> <p>As of 2020, the unemployment rate stands at 1.04% (statista.com).</p> <p>A total score of 62.3 is aggregated to the Economic/Business Freedom at Rwanda (heritage.org).</p> <p>A total score of 61.2 is aggregated to the Trade Freedom at Rwanda (heritage.org).</p>	<p>Population of Rwanda is 12,952,218 as of 2020 (worldometer.info).</p> <p>18% of the total population live in the urban areas while the rest reside in the rural areas.</p> <p>Age group ranging from 15-44 comprise 46.2% of the total population (Britannica.com)</p> <p>Languages generally spoken are Kinyarwanda, French, Swahili, and English.</p>

<p>Rwanda government has strengthened systems to fight corruption. Significant progress on Transparency International's Corruption Perception Index can be seen.</p>	<p>Increased domestic demand has moved the inflation rate up to 1.6%. (afdb.org)</p> <p>Import grew faster than exports as the trade deficit widened from 3.5% to 11.3% of GDP in 2019 (afdb.org).</p>	
Technological	Environmental	Legal
<p>The high costs of transport and energy, due to Rwanda's landlocked position and poor logistics system, constrain its ability to attract investments and keep its private sector from expanding in job-intensive industries.</p> <p>State-run Rwanda Information Technology Authority announced that it had completed a nationwide 2,300-kilometre fiber-optic cable. It provides fast internet access to a wide range of broadband services. (un.org)</p> <p>Rwanda is currently distributing free mobile phones to thousands of community health workers throughout the country. These are used to provide updates on health issues to local clinics via text messages.</p>	<p>The average land available is 0.60 ha per household. This causes overexploitation of land and such malpractices have disastrous consequences for other land resources as well.</p> <p>Water resources occupy 8% of the national territory.</p> <p>Rwanda doesn't have a master town plan. Towns have been developed spontaneously without considering any environmental aspects. (Environmental Profile of Rwanda—European Commission)</p>	<p>Private property shall be inviolable. No infringement shall take place except for the reason of public utility, in the cases and manner established by law, and in return for fair and prior compensation.</p> <p>Standards for physical space and organization of pharmacies are developed by the MOH.</p> <p>The Investment Production Law offers incentives to foreign investors. These incentives may be particularly attractive for foreign manufacturers that are facing rising domestic labour costs.</p> <p>Mandatory EIA report submission is required. Upon submission to the authority, the EIA shall be a public document and any person can access it (elaw.org).</p>

Rwanda currently has one international airport and no railways.		
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1.4 Potential Challenges (Source: <https://www.doingbusiness.org/en/rankings>)

Ease of Doing Business	Rwanda	UK
Rank within group	38	8
Starting a business	35	18
Dealing with Construction Permits	81	23
Getting Electricity	59	8
Registering Property	3	41
Getting Credit	4	37
Protecting Minority Investors	114	7
Paying Taxes	38	27
Trading Across Borders	88	33
Enforcing Contracts	32	34
Resolving Insolvency	62	14

Advantages of doing project in Rwanda
English and French are the accepted business languages.
Trades with UK under the protocols of the European Union.
Recognized as the safest country in Africa (also the cleanest one).
Ranked 9 th among African nations to have reduced extreme poverty between 2000 and 2015 (worldbank.org).
Manufacturing sector contributed 17% of the total GDP in 2019.
Second easiest place to do business in Africa (worldbank.org).

1.5 Facility Location

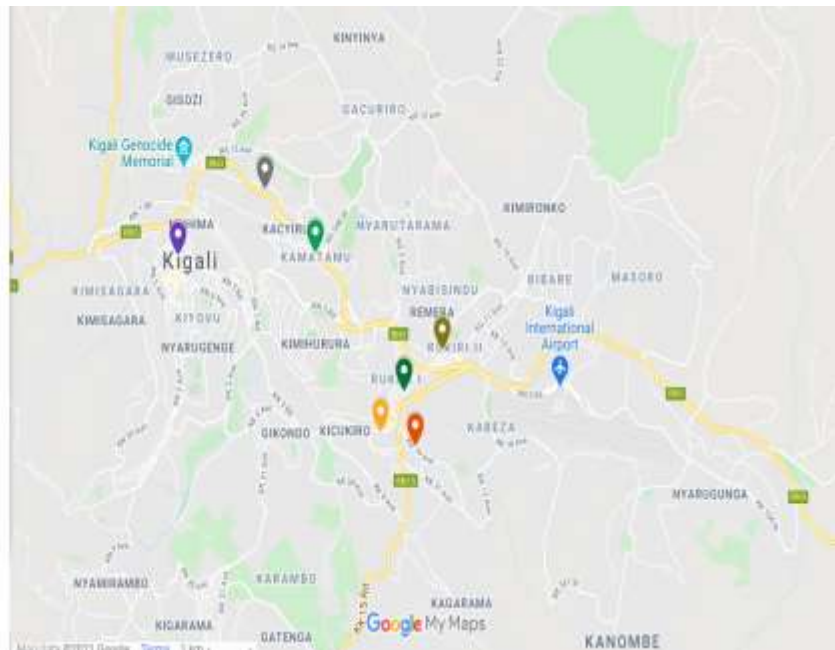
TPID, like any other responsible manufacturing facility, is expected to file an Environmental Impact Assessment (EIA) to the Rwanda Development Board (RDB) before its establishment in Rwanda. This assessment ought to address significant factors such as social influences, environmental impacts, management plans, monitoring strategies, and mitigation measures of the business.

Regarding a location for constructing a complex TPID manufacturing site, I'd definitely suggest Kigali, the capital of Rwanda. I propose so because during the construction of a manufacturing site, several elusive issues could rise up that are associated with

pharmaceutical production or medical facilities. In such cases, central spots like the National Pharmacy Council, Ministry of Health, and East African Business Council. all which are situated within Kigali, will be of huge assistance to TPID. This will not only save time but also make it easier for TPID to solve numerous debatable concerns. Furthermore, well-known locations such as the Rwanda Biomedical Center, Rwanda Medical and Dental Center, Rwanda Medical Supply, BUFMAR pharmaceuticals, CAMERWA pharmaceuticals, and several other district pharmacies are established within the Kigali territory. Therefore, a partnership could be an asset to TPID. As far as the mobility (imports and exports) of medications and production is concerned, Kigali International Airport, the primary airport in Rwanda, will be of huge advantage. This makes Kigali a worthwhile location for the construction of a TPID manufacturing site.

Kigali, Rwanda

-  National Pharmacy Council
-  Ministry of Health
-  Rwanda Biomedical Centre
-  Rwanda Medical and Dental Council
-  The East African
-  BUFMAR
-  Rwanda Medical Supply Ltd



2. Cultural and Communication Challenges

2.1 Governance and Organisation

Smooth and effective project governance are quintessential for TPID to operate smoothly. However, certain cultural and communication challenges during the process of organising and governing the TPID manufacturing site are inevitable. These may include international cultural differences, structural differences, management difficulties, and many more. Hence, it is important for us to identify these challenges

and implement proper mitigation measures or design appropriate contingency plans as soon as possible in order to reduce the casualties. A proper governance ensures legislative compliance, preservation of the sector's image and integrity, and well-operated production.

Challenge	Description	Mitigation
Differences in Ideologies	Sometimes, while constructing an entirely new business site, even the closest people might have thoughts that differ from one another.	Regular meetings could be organized and memorandums could be issued to the board of representatives at regular intervals.
International Cultural Differences/Language Barriers	While working in an international project, something that might seem comfortable for one group of workers might offend other groups. This might lower the morale and motivation level of workers/employees.	TPID should allow Project Sponsors and a few key members of the project team in Rwanda to see and comprehend the cultural differences. Even better if a Rwandan project manager or supervisor is recruited for the team.
Exceeding Budget	Over valuation of resources or minor levels of corruption within the business could result in the budget limit being exceeded.	Partnership with WHO or Rwanda FDA, who have more insight on allocating adequate resources and into the problems of corruption, could benefit TPID to use established and referred network links.
Restrictive Practices	Failure to recognise certain differences can have disastrous effect on TPID's organising strategies. Some words have unfortunate meanings when translated into other languages. Colours can have different significances too—in the Far West, white rather than black is associated with mourning.	Proper research team should be set up so that minor errors can be prevented. Sometimes these small errors could turn out to be too dangerous for the firm. Therefore, before making any important decisions, revision of the decision is extremely essential.
Legislative Compliance/Licensing	Legal differences might impact international	Going through all the legal materials and codes of

	marketing in several ways. For example, in Rwanda, using the photographs of government buildings for product advertisements without proper license is against the law. Similarly, plastic packaging might result in the business being halted.	conduct before taking actions is necessary for TPID in order to continue its operation. TPID could outsource a lawyer who is able to distinguish between the rights and the wrongs of TPID. This way TPID can operate smoothly without going against any conducts.
Differences in Business Practices	Accounting standards and auditing formats can vary in Rwanda and UK. The ease of setting up a manufacturing site varies widely as well—it can take a few days in UK, yet the formalities and form-filling can take more than few weeks in Rwanda.	Appointing a native auditor to go through the TPID books of account would be a wise decision to avoid any sorts of discrepancies.
Means of Communication	While constructing an entire manufacturing site in Rwanda, it's quite not possible to have all British employees. Most of the workers indeed belong to Rwanda. These workers could be adapted to different means of communication than the one TPID plans to use.	Surveying the workers for a proper means of communication could solve the problem. Diverse modes of communication being used in separate levels of the business could be useful as well. Practicing oral communication in the manufacturing unit and IT and web-based media at the management level would be the way to go.

2.2 Project Management

Application of proper processes, skills, methods, and experience to attain specific project objectives will be a key to success for TPID. To be completely well-functioning, this project needs to be planned and managed, costs determined and times allocated, and problems dealt with. Key elements for such project management are:

- Defining the project carefully, including the setting of clear objectives.
- Dividing project up to manageable tasks and activities.

- Controlling the project at every stage (both production and distribution) to check that time limits are being kept to.
- Giving each team employee a clear role.
- Providing controls over quality issues and risks.

Challenge	Description	Mitigation
Structural Differences	TPID manufacturing unit will need to carry out a lot of tasks simultaneously. This means that a lot of employees are needed for this new TPID site. It's not possible to recruit employees who are all similar and have comparable preferences. Someone who has previously worked under a matrix structure might find it difficult to follow the orders of a supervisor, while someone adapted to the hierarchical structure could be hesitant to work in a team without a leader.	As we know that coming up with an entirely new structure and implementing that structure within a completely new environment is extremely difficult, we could at least try to make some changes to the existing organisational structures. It may be by appointing a group monitor to a matrix structured team or designing a hierarchical structure that includes members from all functional departments. TPID could even organize weekly training programs for employees so that they get comfortable working in their respective groups.
Employment Practices	Most countries have their own employment practices to safeguard the rights of their employees and promise them a favoured working environment. This is mainly to prevent exploitation of workers.	Before beginning the process of recruitment, TPID should carefully go through the laws that control the relationship between employers and employees. These legal constraints usually cover employment contracts and termination of those contracts, health and safety at work, minimum

		wages, and trade union rights and responsibilities.
Competition	As a non-native company trying to construct a new manufacturing site in a new, unfamiliar nation, it is obvious that TPID is going to face a lot of competition from other firms who operate and produce similar products in Rwanda. Those firms who have a strong control over the market (monopoly) could try and give TPID a tough time by convincing suppliers to delay the delivery of raw materials or disrupt the supply chain.	It would be really beneficial if TPID could form a kind of partnership with another pharmaceutical production firm in Rwanda. This will not only assist TPID workers to adapt to a new environment quicker, but also ensure that they are not being exploited as an unaccompanied unit. As for the delivery of raw materials for production, TPID should sign contracts with trusted suppliers so that they get their deliveries in time and do not require to delay their production and supply schedule. Developing a strong relationship with the WHO could solve issues associated with an oligopolistic market and chances of getting exploited in a new territory.
Technology	Although Rwanda observed a technological revolution after genocide, it still lags behind the UK in terms of technological advancements. This might lead to serious concerns that TPID should be aware of. Rwandan employees might be unaware and not skilled enough to use the machineries and	Before designating any employee to a particular unit, no matter what country he/she belongs to, it is extremely necessary to test their skills in using certain technologies or machineries. Human Resource Department should take over the role to train manpower so that they can use advanced

	technologies TPID has made available to them This causes the quality of products to be compromised and, in the worst case, serious physical injuries to workers.	techs. Furthermore, direction manuals for machines should be made available to every employee. These steps will ensure timely production of goods along with lower risks of physical injuries.
Political Differences	Changes of governments can cause instability in some countries and this increase the risk of doing business there. Acts of terrorism or threats of civil violence, which might lead to destruction of company's assets, will all add to the problems of production and distribution.	Trying to ignore politics entirely isn't reasonable, especially when something newsworthy happens. When employees have different political views, acknowledging these differences makes them respect each other's opinions. If there are threats of civil violence, better get a meeting with high ranked dignitaries of the government and take steps to reduce casualties to the business as much as possible.

2.3 Stakeholder Management

Managing stakeholders is a critical factor of any project or programme. In TPID, the main stakeholders are identified as follows:

- Rwanda Ministry of Health
- World Health Organization
- Shareholders
- Government of Rwanda
- Sponsor Board (TPID)
- Project Manager
- Financial Authorities
- Project Team
- Local Community
- Employees

- Trade Unions
- Competitors
- Suppliers
- Environmental Groups
- Press or Media
- Customers
- Distributors

Challenge	Description	Mitigation
Marketing Behavior	An appealing marketing behavior might get you a large group of consumers while one that bothers people does you no good. Once consumers become aware of the TPID products, the next phase is to generate preference compared to other competitive products. As challenging this step might be, it is really essential to get TPID going in a day-by-day expanding global market.	First and foremost, to establish awareness of TPID products within the market, mass media marketing, such as television or radios, are of massive importance. Through these means, TPID can reach out to very large audience. However, getting those audiences to prefer your products more than those of your consumers is pretty challenging. This requires more detailed and targeted communications to consumers to influence their decision-making. It can be through the development of websites to increase interactions or sample surveys.
Corporate Social Responsibility (CSR)	Fulfilling the CSR is not as easy as people might think it is. It demands for total transparency and disclosure. Additionally, those looking to invest capital are more likely to invest in companies with high marks for corporate responsibility and	However, the economic incentive for proactive CSR activities have proven to be powerful. In 2014, a pharmacy chain CVS stopped selling tobacco products and sacrificed about \$2 billion worth of sales. Two years later, the same company had a 66%

	<p>sustainability. Furthermore, connecting CSR to value chain and profitability is an ultimate challenge for TPID.</p>	<p>higher stock price than before it dropped tobacco. This proves the effectiveness of proactive CSR activities. Studies have found that 63% of consumers worldwide buy from companies aligned with their values. Performing CSR reduces employee turnover by almost up to half. Ultimately, we can allude that CSR helps a company thrive in the market.</p>
Differing Priorities	<p>As a drug manufacturing company, the TPID production facility will obviously end up with a lot of waste and harmful materials, chemicals, or by-products. While environmental groups emphasize on the proper disposal of those harmful materials and suggest purchasing expensive machineries that end up with less by-products, shareholders desire increased profits and higher expenses made on increasing the production. This mismatched interest leads to conflict between the stakeholders.</p>	<p>In order to prevent disputes between the stakeholders, TPID could get its priorities straight before beginning the production. This way, those who desire to invest in TPID manufacturing site know what they are getting into. It would be totally reasonable to stop those investors later on in case they diverge from the original priorities of TPID. Similarly, carrying out activities that appeal to most stakeholder groups at regular intervals is prone to keep stakeholders interested and invested towards TPID and its functioning. This may be done through grand Annual General Meetings (AGMs), issuing bonuses, organising community cleaning campaigns, conducting meetings with trade</p>

		unions, participating in press meetings, and developing partnership with competitors.
Insufficient Communication Technologies	<p>As a complex manufacturing site, TPID is going to have multiple units carrying out separate tasks simultaneously. HR Department involves in the process of staff recruitment, Finance Department prepares audit reports, manufacturing department carries out the production of drugs, and transportation department looks after the delivery of products and ensures raw materials are made available to the manufacturing unit in time. Besides these, there are several other activities that take place within the company. Hence, proper communication is particularly important to guarantee coordination within these departments. However, without enough communication mediums, fitting coordination cannot be attained which tends to disrupt the entire operation of the company. Furthermore, in case of emergencies, if the information is interrupted within the hierarchy of the company before reaching the desired party, serious problems could arise.</p>	<p>Sufficient means of communication should be made available throughout the company in order to achieve the best communication and information exchange between employees and employees or employees and supervisors. Developing company only text groups for emergencies, departmental text groups for good team dexterity, and team leader text groups for tracking each other's progress could be a strong position to start. Placing enough telephones connected to a single network throughout the company ensures smooth exchange of information between workers. Whether it's the late delivery of products or absence of employees during workdays, all these problems can be potentially solved with the availability of sufficient modes of communication in the company.</p>

	These could even be serious enough to jeopardize the entire functioning of TPID.	
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3. Critical Success Factors

Critical Success Factors are key points that, when well executed, define and ensure the development and growth of a company and its business, as well as achieving its goals. In contrast, when these same factors are overlooked or ignored, they can contribute to the failure of an organization.

Critical Success Factors should and need to be found through a thorough study of the company's goals, deriving them from its mission, vision, and values, making them mandatory and essential references for the company to survive, to be competitive and succeed whatever the industry.

Examples of general Critical Success Factors:

- Financial Strength Reputation: Employ an accountant to look after the financial aspects of the projects.
- Management Qualifications: Ensure all financial management procedures and processes are transparent.
- Knowledge of the Market: Perform proper market research and prepare a report regarding target group of consumers.
- Image with Stakeholders: Share reports with clients every month which indicates time and money spent.
- Available Equipment: Purchase and use high-end machineries and technologies that are productive, have less chances of injuring the workers physically, and are easy to be handled.
- Relationship with Suppliers: Understand current position of contracts and have some control.
- Expertise in Controlling Costs: Perform best practices financial management practices regularly such as filing documents and back up.

- Location: Target demographic areas with potential consumers, easy access to resources, institutions that could assist the client in case of emergencies, and proper infrastructure.
- Lines of Products and Services: Focus on the production of goods unique in the market. Design a unique selling point for the products or differentiate the products from those that are sold by the competitors. Actively fulfill the Corporate Social Responsibilities.
- Expertise in Distribution and Logistics Channels: Conduct training campaigns for workers/employees and outsource experts in the field of logistics and distribution.
- Expertise in Promotional Campaigns: Emphasize on proper marketing and advertisement.



To successfully implement this project, TPID must translate its research outcomes into actionable insights. It is obvious that TPID uses market research tools, including patient pathways, physician segmentation, and focus groups before manufacturing the products. However, the only way it can succeed is with successful launches that transform the market data into actionable insights. These messages are grounded in clinical data and built on efficacy and safety, but besides these, consideration should be given to the cognitive shortcuts that doctors deploy when they learn about new treatments. Only after the completion of this process, the final decisions ought to be made. Understanding these

pathways can help TPID communicate the benefits of its medicines more effectively. A good example to learn from could be Bayer's successful launch of its anticoagulant drug Xarelto. Its once-a-day dosing compared with twice-daily Boehringer Ingelheim acted as a differentiation factor and rapidly paved a path for it to become a market leader. (bain & company)

A second important success factor is conducting post-launch studies to close any remaining gaps in data and ensure superior data quality over competing products and new entrants. High-quality data, in turn, enhances market access. Organising post-launch evidence-generation plan in place about a year before launching the actual product generates a steady stream of data that supports the product's efficacy.

Similarly, in order to lead the pharmaceutical sector, TPID must build customer advocacy through superior customer experience. Physicians today consider a much wider set of factors beyond clinical data when deciding which drug to prescribe, including clinical protocols, drug price, the type of patient to whom a drug can be prescribed, and overall treatment regimen. And these physicians are rapidly shifting to broader array of information sources, especially online sites and peers.

According to a research done by *Bain & Company*, a global management consultancy, at least 40% of physicians' brand preference is attributable to customer experience factors beyond the product, including, for example, how well pharma companies support physicians by providing answers to medical questions, identifying patients, and connecting physicians with peers. Many pharma companies, however, focus their advocacy activities on the most influential physicians in a given field—the key opinion leaders—and miss the opportunity to create advocates among the day-to-day prescribers. TPID should especially avoid these minor errors that could potentially limit their consumer group and prevent them from getting a strong grip over the medication market in Rwanda.

Within TPID, the leadership team can start to analyse their road to success by posing the following questions:

- How did our last three launches perform vs. expectations, and what were the reasons for underperformance or overperformance?
- Have we identified all potential differentiation areas of our drug and incorporated them into our messaging?
- Which interactions matter most for our target physicians, and do we provide a superior customer experience?
- What are the three largest internal challenges the launch team faces, and what would it take to eliminate them?

4. Summary and Conclusion

4.1 Risk Analysis

	Insignificant	Minor	Moderate	Major	Catastrophic
Rare (<3% Chance)					
Unlikely (3%-10% Chance)		Restrictive Practices, Technological Barriers			Insufficient Communication Technologies
Moderate (10%-50% Chance)				Corruption	Legislative Compliance
Likely (50%-90% Chance)		Political Differences	International Cultural Differences	Governance and Organisational Structural Differences, Differing Priorities of Stakeholders	
Certain (>90% Chance)			Competition		

Risk	Likelihood	Impact	Score (Likelihood x Impact)	Action Taken
Corruption	3	4	12	5
International Cultural Differences	4	3	12	2
Governance and Organisational Structure Differences	4	4	16	3

Restrictive Practices	2	2	4	1
Legislative Compliance	3	5	15	4
Competition	5	3	15	2
Technological Barriers	2	2	4	3
Political Differences	4	2	8	1
Differing Priorities of Stakeholders	4	4	16	3
Insufficient Communication Technologies	2	5	10	4

4.2 Recommendation

TPID should come up with a project management team and an appropriate project plan immediately. Devising an efficient plan to continue this project is the most essential step for its success. This will not only reduce complications in the later stages of the project, but also be useful to guide both project execution and project control. Project plans could be of assistance for a wide range of tasks including the documentation of blueprints, facilitation of communication among the project stakeholders, recruitment of labours and other employees, identification of a proper organisational structure, and the selection of the variety of products to be manufactured.

In order to minimize conflicts with stakeholders and have a healthy relationship with them, the high-ranking management or board of TPID should consult with at least one representative from every hierarchy or department within the project. They should analyse what is important for certain groups within the organisation and make sure that any decisions taken do not adversely affect these interests. Furthermore, inviting stakeholder representatives to presentations, involving them as much as resources allow, and including them in the decision-making process tends to strengthen the relationship between stakeholders. Arranging regular meetings to track the progress of the project and address certain problems employees might be facing could be a huge source of motivation for the employees. Boosting their morale will significantly skyrocket their productivity and get things done faster and with ease. However, it is important to beware of other negative stakeholders passing wrong and demotivating information to others. Dealing with these members of the project will reduce the level of toxicity and maintain a friendly working environment. The management could seek the opinions of these people and discuss why their opinions might not be of the best interest for the project.

Anyways, the main act is to look after the stakeholders and counter any negative influence others might have on them. This way, there will be no lack of investment during

peak times, consistent support will inspire workers to give their best, and the process of project implementation can be accomplished with ease.

Now, regarding an appropriate structure to be practiced within the TPID manufacturing site in Rwanda, a Matrix structure would be the way to go. Problem with a hierarchical structure might be that the feeling of authority might get on the heads of the project management team while lower-level workers could suffer from imposter syndrome. This might result in lack of collaboration, management might become obsessed within their departments and become ignorant regarding the progress made by other groups, and a lot of bureaucracy could be commenced. Additionally, we have already discussed the devastating consequences that improper communication carries. Moving forward with a hierarchical structure could lead to just this. Some workers might avoid communicating at all because they distrust the leaders of the organisation. This spreads negative energy within the workplace.

When a manager is not available within the hierarchical organizational structure, there is a void that must be filled for the benefits of this structure to be maintained. If a manager doesn't fill this void, a team member will often try to step into the role, and this change in leadership can cause confusion.

Applying a matrix organisational can solve all, if not most, of these issues. The problem associated with the absence of a manager is automatically solved because within a matrix structure, employees report to two or more managers/leaders of their particular team rather than one manager who overlooks every aspect of the project altogether. This will help employees develop a tight-knit relationship with their respective team leaders, adapt to their working styles, and even in their absence, carry out their tasks with utmost precision. Similarly, in a country like Rwanda where the primary language spoken is Kinyarwanda, matrix structure becomes even more appealing. There might be employees who are comfortable speaking only English or only Kinyarwanda. Therefore, if a language expert is appointed to each functioning team, the barriers for communication could be shattered and tasks could be carried out without any hindrances. Team members reporting the project progress to the team leaders and team leaders discussing this progress with the project managers makes the communication process in a matrix structure extremely efficient. There's no loss of information and orders can be given and executed without the fear of being autocratic or too dictative. This way, employees will have much more autonomy and input in projects and this encourages employee contribution and places value on workers' points of view.

A matrix structure allows project managers to work in the areas of their expertise rather than being pulled across multiple projects, boosting the overall contribution of their talents. This allows resources to be utilized to their fullest because of how resources are shared across each functioning team. Furthermore, being exposed to a specialized team where various actions are being executed simultaneously can increase employee development and enhance their professional skills.

4.3 Conclusion

Constructing, validating, and operating a complex manufacturing facility in Rwanda is by no means a task too demanding to accomplish. There certainly will be walls of challenges to phase through, but in order to succeed in a project of this magnitude, these challenges shouldn't be the reason to stop. Once a proper project management plan is put into place and adequate workers are employed to commence the execution, there should be no reasons to halt the progress. As this project is being carried out in a different country than the UK, it is important to understand the culture and learn the best ways to communicate within the company structure and with stakeholders. Delving deeper into the legal aspects of the project, researching similar projects/pharmaceuticals already established, and identifying the best sources of marketing within the new business environment is also recommended.

5. References

Accenture, (December 5, 2018), *Majority of Consumers Buying From Companies That Take A Stand on Issues They Care About and Ditching Those That Don't*, Accenture Study Finds, Available at: <https://newsroom.accenture.com/news/majority-of-consumers-buying-from-companies-that-take-a-stand-on-issues-they-care-about-and-ditching-those-that-dont-accenture-study-finds.htm>, New York, Accessed: March, 2021

African Development Bank Group, (December, 2020), *Rwanda Economic Outlook*, Available at: <https://www.afdb.org/en/countries/east-africa/rwanda/rwanda-economic-outlook#:~:text=Real%20GDP%20was%20estimated%20to,capita%20increased%206.1%25%20in%202019.>, Accessed: March, 2021

Clay and Lemarchand (Feb 26, 2020), *Republic of Rwanda*, Available at: <https://www.britannica.com/place/Rwanda>, Accessed: March, 2021

Environmental Law Alliance Worldwide, (no date), *Rwanda*, Available at: <https://www.elaw.org/eialaw/rwanda>, Accessed: March, 2021

Heritage, (2021), *2021 Index of Economic Freedom, Rwanda*, Available at: <https://www.heritage.org/index/country/rwanda>, Accessed: March, 2021

Human Rights Watch, (2019), *Rwanda Events of 2019*, Available at: <https://www.hrw.org/world-report/2020/country-chapters/rwanda>, Accessed: March, 2021

International Growth Center, (2020), *Rwanda's response to COVID-19 and future challenges* [online], Available at: <https://www.theigc.org/blog/rwandas-response-to-covid-19-and-future-challenges/>, Accessed: March, 2021

Murphy, K, (July 27, 2020), *The Challenges of Corporate Social Responsibility*, Planergy, Available at: <https://planergy.com/blog/corporate-social-responsibility-challenges/>, Accessed: March, 2021

National Institute Of Statistics of Rwanda, (September 18, 2020), *Gross Domestic Product (GDP)—2020-Q2: Press Release* [online], Available at: <https://www.statistics.gov.rw/press/press-release/gross-domestic-product-gdp-%E2%80%93-2020-q2-press-release>, (Accessed: March, 2021)

Republic of Rwanda, Ministry of Health, 2020, *Rwanda Health Sector Performance Report 2019-2020*, p26-28, p49-57, p72-76

Schlegel et al, (September 6, 2017), *How to Make Your Drug Launch a Success*, Bain & Company, Available at: <https://www.bain.com/insights/how-to-make-your-drug-launch-a-success/>, Accessed: March, 2021

Tafirenyika , M, (April, 2011), *Information technology super-charging Rwanda's economy*, Africa Renewal, Available at: <https://www.un.org/africarenewal/magazine/april-2011/information-technology-super-charging-rwandas-economy>, Accessed: March, 2021

The Commonwealth, (2021), *Rwanda : Constitution and politics*, Available at: <https://thecommonwealth.org/our-member-countries/rwanda/constitution-politics>, Accessed: March, 2021

Trading Economics, (2020), *Rwanda GDP1960-2019 Data | 2020-2021 Forecast | Historical | Chart | News* [online], Available at: <https://tradingeconomics.com/rwanda/gdp>, Accessed: March, 2021

Twagiramungu, F, (July, 2006), *Environmental Profile of Rwanda*, p23, 29, 32, Available at: <https://www.vub.be/klimostoolkit/sites/default/files/documents/rwanda-environmental-profile.pdf>, Accessed: March, 2021

United Nations Rwanda, (June, 2020), *THE SOCIO-ECONOMIC IMPACT OF COVID-19 IN RWANDA*, p8-30

Uwizeyimana, T et al. (January 20, 2021), *Drug supply situation in Rwanda during COVID-19: issues, efforts and challenges*, Journal of Pharmaceutical Policy and Practice (12, 2021), Available at: <https://doi.org/10.1186/s40545-021-00301-2>

World Bank, (May, 2019), *Ease of Doing Business*, Available at: <https://www.doingbusiness.org/en/rankings>, Accessed: March, 2021

World Bank, (2019), *Manufacturing, value added (% of GDP) - Sub-Saharan Africa*, Available at: <https://data.worldbank.org/indicator/NV.IND.MANF.ZS?locations=ZG>, Accessed: March, 2021

World Bank, (2021), *The World Bank in Rwanda* [online], Available at: <https://www.worldbank.org/en/country/rwanda/overview>, (Accessed: March, 2021)

Worldometers, (2020), *Rwanda Demographics*, Available at: <https://www.worldometers.info/demographics/rwanda-demographics/>, Accessed: March, 2021

Zheng, Silwal, and Newhouse, (September 26, 2019), *Here are the top 10 Sub-Saharan African countries that have reduced poverty the most*, World Bank Blogs, Available at: <https://blogs.worldbank.org/opendata/here-are-top-10-sub-saharan-african-countries-have-reduced-poverty-most>, Accessed: March, 2021

