DECEMBER 2022 PROFESSIONAL EXAMINATIONS
STRATEGIC CASE STUDY (PAPER 3.4)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME

GENERAL COMMENTS AND STANDARD OF THE PAPER

The standard of the paper was good and the questions were clear. The case study was about a company engaged in the manufacturing of electrical cables and wires in Ghana. The case study focused on corporate governance, money market hedge, analysis of competitive advantage and performance of the company, agency conflicts, code of best practices, statements to be disclosed in the annual report of listed companies and risks of automated systems.

The questions were within the scope of the syllabus. The marks were fairly allocated to each question.

PERFORMANCE OF CANDIDATES

The overall performance was poor. Most of the candidates scored zero marks for most of the questions. The candidates displayed lack of knowledge of business issues and their strategic implications. It appears most of the candidates did not prepare well for the examination.

NOTABLE STRENGTHS AND WEAKNESSES OF CANDIDATES

Strengths

No notable strengths were observed.

Weaknesses

The candidates did not demonstrate understanding of business issues. It appears they did not assimilate the content of the study manual. The candidates were ignorant about hedging transactions in the money market. They also did not understand organisational structure as well as the Shell Directional Policy Matrix.

INTRODUCTION

The local manufacture of electrical cables and wires began in Ghana nearly fifty-four years ago when Power and Cable Ghana Ltd (PCGL), a subsidiary of a foreign cable manufacturer, was incorporated in 1968 as the first cable manufacturer in West Africa. Many years later, two cable manufacturing companies, a partially Ghanaian-owned company, Metalex Cable Limited (MCL) and Teknik Cable & Wire Limited (TCWL), wholly Ghanaian-owned company, entered the industry in 1992 and 1997 respectively. This brings to three, companies engaged in the local manufacturing of cables and wires for local use and export to other African countries. All the three companies are located in the heart of industrialisation and the port city of Ghana, Tema, where they have access to some of the best of services and support for their manufacturing activities. This also reduces the cost of transporting imported heavy raw materials to the bonded warehouses from where supplies are issued to production.

THE COMPANY – TEKNIK CABLE & WIRE LIMITED (TCWL)

Mr. Asare Blankson, who holds first degree in Economics from the United Kingdom, set up a trading company and subsequently decided to expand into cable manufacturing by incorporating TCWL as contribution to his long-held view that industrialisation holds the key to the country's long-term development. His ultimate interest is to build a company that will survive the test of time and to change the general narrative in the country where average indigenous Ghanaian businesses remain small, family-owned and fail leaving shareholder(s) bankrupt. This trend accounts for the low percentage ownership interest in multinational companies by Ghanaians compared to what occurs in other countries.

The sole shareholder became the pioneering Chief Executive Officer (CEO) for many years until he stepped down in early 2022. He doubled as the Chairman of the Board in the early years of the company. He later relinquished this position to Dr. Arthur Richardson. The CEO adopted a business model that allowed him to be completely in charge and to have close involvement in the operations of the company. He did this with unalloyed commitment and energy which earned him admiration from the employees and his contemporaries. This approach to management did result in great success, especially in the formative years of the company. The CEO was clear in his thinking and strategy that the model must efficiently deliver quality outputs since the future success of the company depends on that as any lapses could cause electrical fire to properties of customers and damage the company’s reputation.

In pursuant of this business model, there was an initial heavy investment in the state-of-the-art machines and technology to meet the high local and international standards regarding the quality of the cables and wires. This was to match and rival the two existing competitors and to minimise, if not eliminate, rampant fire incidents associated with the use of inferior cables in Ghana. Safety reputation was critical to the survival of the company and the industry in general. Like the other two competitors, the company made over $4 million initial investment in the acquisition of the factory land and building, plant and machinery such as crushing and grinding machine, drawing equipment, heating, insulation, twisting and stranding and extrusion machine. These are world-class machines not available locally and, therefore, were imported from the United Kingdom and the United States. Although the company has endeavoured, over the years, to maintain these expensive equipment and machinery, it has, nevertheless, been difficult because of the dependence on foreigner expertise. This situation is not unique to the company. The company has sponsored its engineers to train abroad but the retention rate has been low in the past, hence this strategy has been abandoned. Further, the company had to rely on externally trained high skilled labour with appropriate level of experience to manage its production and quality departments since same could not be obtained locally. Although very expensive, these employees met both local and international standards and have assisted the company in building its quality reputation.

The company has identified some critical success factors (CSFs) which have influenced its strategic purpose and corporate objectives. These factors continue to drive the company's competitive advantage. The identified CSFs include customer satisfaction, nationwide distribution network, cutting edge technology and innovation, quality and reliability of the cables, strict compliance with regulatory standards, production of environmentally friendly cables and highly trained and dedicated employees. The CEO argues that financial performance is intricately linked to excellent performance in the above CSFs. There are pressure groups as well as large consumers increasingly demanding for products that are environmentally friendly.

THE VISION, MISSION AND CORPORATE VALUES

Mr. Asare is a strong believer in Pan Africanism and, therefore, holds the view that Ghana and Africa should build its own corporate giants that can compete globally. On that premise, the vision he developed for the company was "*to become an African industrial giant in cables and wires manufacturing*". The company's mission states as follows: "*To manufacture high quality and safe cables for our valued customers using the best human and material resources and state-of -the-art technology that minimises negative environmental impact of our products*". The success of the company has been built on six core values, and over the years, the CEO has intentionally inculcated these values in the way things are done in the company. These values, according to the CEO, must not merely remain written words but must find expression in how value is created for the customers and ultimately must be the common denominator that drives all activities in the company. The core values are as follows:

- **Service** - This entails the duty the company owes to deliver high quality products and services to all customers as well as meeting the expectations of all other stakeholders internally and externally.
- **Knowledge** – the company owes a duty to obtain and apply appropriate and up to date knowledge in all its processes.
- **Integrity** – the company undertakes to offer the highest levels of personal and corporate honesty and transparency in all its activities as well as maintaining high ethical standards.
- **Leadership** - to offer cutting edge leadership by example within the company, industry and the corporate world.
- **Loyalty** – the company pledges loyalty to its corporate vision, mission, and quality policy, and to one another in the efficient performance of its duties.
- **Sustainability** – the company undertakes to run its operation in a manner that sustains and enhances the environment and ensures the health of its home planet.

Aside the above cherished core values, the company is also very focused on the strict compliance and enforcement of health and safety within and beyond the company. The company recognises the human capital as its main source of value creation. The company, therefore, seeks to provide its human capital with a secure, safe and healthy working environment, and to eliminate or minimise every circumstance or behaviour that could cause personal injury or occupational hazard.

CORPORATE SOCIAL RESPONSIBILITY AND ACHIEVEMENTS

Being a responsible corporate citizen, helping to make society better, has been one of the key concerns of the CEO. The CEO has been at the forefront of driving the corporate social responsibility agenda because he believes that the company owes obligations to the wider society beyond the shareholder and other internal stakeholders. In this regard, the company has been supplying free cables and wires to support the Government of Ghana Rural Electrification agenda to help extend power to a number of rural communities. This has impacted positively on the economic and the social wellbeing of the people as well as improving the performance of the pupils in schools in the supported communities. Again, the company has also been providing scholarships to several students across the various levels of education in the country. Another important corporate social responsibility the company has been involved in, is the free supply of its products for rewiring of some of the schools that have experienced electrical fire because of the old nature of the electrical system. Although some of the management team members are against the whooping sums of money being sank into these activities, the CEO has remained resolute, since he argues that in the long run the company stands to benefit in terms of good corporate image and increase return to the shareholder.

The company is also very conscious of the possible impact of its production on the environment in terms of emission of Carbon Dioxide (CO2) into the atmosphere. The CO2 emission is causing depletion of the ozone layer which is giving rise to excessively high temperatures and causing rapid melting of the iceberg and glaciers in the Arctic Ocean, hence the rising sea levels. The climate change clearly poses existential threats to both businesses and humanity in general. TCWL's contribution to reversing its environmental footprint is the company's continuous investment in modern technology to minimise CO2 emission as well as producing environmentally friendly cables. The rubber used in insulation and sheathing materials used to coat cables are highly biodegradable. The CEO believes that if drastic and collective actions are not taken by businesses, most businesses will go extinct before the end of the 21^{st} century. At TCWL, the whole production process has been designed to safeguard the environment by going beyond the minimum standards set by Environmental Protection Agency (EPA) and Ghana Standards Authority (GSA).

The company has achieved major milestones since its incorporation. It was the first cable manufacturer to commission armouring lines in 2006 for the manufacture of underground/high pressure power armoured cables locally. In 2007, an aluminium rod manufacturing subsidiary, Solid Rod Limited (SRL) was set up, and remains the only aluminium rod manufacturing plant in West Africa. In 2015, TCWL became the first cable manufacturer in Ghana to commence the compounding of its own insulation and sheathing materials. It is the first indigenous cable manufacturer to be ISO 9001 Quality Management Systems certified in West Africa, in 2004. Despite harsh business and economic environment in recent years, the company is committed to reinvest substantial amount of profit into innovation, research and development, continuous learning and to be seen as a learning organisation providing cutting-edge leadership in developing products that are customer focused and environmentally friendly. This approach would continue to provide the basis for sustaining the gains made so far and critical to the future competitiveness of the company.

The company has received several awards and this is impressive considering the fact that it is the youngest among its competitors in the industry. The awards were given in recognition of the company's commitment to excellence in health, safety, environmental protection and quality, making it to Ghana's top 100 companies and brand leadership.

APPOINTMENT OF THE NEW CHIEF EXECUTIVE OFFICER AND THE MANAGEMENT STRUCTURE OF TCWL

In preparation to exit the CEO role after many years, the founding CEO appointed Mr. Klu Davidson, an experienced management executive, a renowned and very successful CEO of major companies in Ghana spanning nearly three decades, to the position of Deputy CEO in 2020. This appointment was part of the arrangement to transition from the founding CEO to another, to lead the company as it embarks on a new development phase. After two years of transitional period, the deputy CEO finally assumed the office in January 2022 while the founding CEO took over as the Board Chairman. The new CEO holds a Bachelor's Degree in Electrical and Electronic Engineering, and a Master of Business Administration and Diploma from a top University in Europe. The Board Chairman wants the new CEO to keep to the original vision and mission upon which the company was founded even though the new CEO has his own idea about the direction he wants to take the company. The Board Chairman has intimated that he has run and provided leadership to the company for so many years and it was time to step down from the CEO position. He however, wants to be actively involved, albeit indirectly, in the day-to-day management of the company. This informed his decision to assume the chairmanship of the Board so he could assist the CEO in running the affairs of the organisation. After running the company from its inception, he thinks he remains the most important source of institutional memory and must assist to pass on the knowledge to the new CEO.

From its inception, the founding CEO adopted a hands-on approach where he decides on every major issue in the company. Everything begins with him and ends with him. Although, he appointed certain functional heads, they had very minimal power to make decisions without his approval. As the company grew over the years, he relaxed this approach by leaving tactical and operational decisions to the functional heads while he controlled strictly all strategic decisions. The new CEO thinks that the company's current structure is no longer suitable for its operations looking at the number of products and geographical expansion attained. He suggests the adoption of a structure which will make the management work more closely as a team, be more flexible and responsive to the market, and this he believes could result in a higher sense of responsibility and accountability of the managers.

Apart from the CEO, there are seven other management staff comprising Quality Assurance Manager, Logistics Manager, Senior Manager in charge of Project Office, who reports directly to the CEO, Production Manager, Marketing Manager, Human Resources & Administration Manager, and Financial Controller. The company is organised into six functions – Human Resources & Administration, Finance, Sales & Marketing, Production, Quality Assurance and Logistics & Purchasing.

The Production Manager is an experienced electric cable maker who joined the company in early 2016. He was educated in the United Kingdom and started his career with a renowned cable manufacturing company in 1973. After working for that company for 9 years, he moved to South Africa and joined another electric cables manufacturer. He has over 43 years of cable production experience. The Quality Assurance Manager graduated in 1987 with MSc. in Mechanical Engineering from a prestigious technical university in former Union of Soviet Socialist Republics (USSR). She joined TCWL in the year 2000 as Quality Executive and is responsible, among other duties, for the company's Quality Management System. She is a certified ISO Lead Auditor and oversees the overall performance, maintenance, and improvement of the established ISO 9001 Quality Management System requirements standard. The company can boast of a youthful staff, who on the average, have been working with the company for 10 years. Because the company recognises staff as the most valuable internal strategic resource, substantial investment is made in staff development, motivation, and retention. Compared to its rivals in the industry, the company is seen as preferred employer because of its employee-friendly policies.

CORPORATE GOVERNANCE

The Board of the company comprises five members with the founding CEO as the Chairman. He took over the chairmanship from Dr. Arthur Richardson, who held the position for fifteen years. The former Chairman is a long-standing friend of the founding CEO. The former Chairman remains on the board as a member of the Board. The other directors are the CEO, who joined the Board in 2022, and two ladies who have been on the board for over ten years and are close associates of the Chairman.

The Chairman believes that the Board, as presently constituted, should be maintained since it has been part of the success story of the company. He holds the view that this is the Board he can trust because it has always ratified or sanctioned all the strategic decisions made by the management led by him in the past. Most of the decisions and ratifications of the Board were made by written resolution without the need for Board meetings to discuss such decisions. The Chairman is happy with this approach since it is faster, effective and has proven to be efficient. Again, the Chairman maintains that he must always be involved actively in the corporate governance architecture of the company. He thinks that there are major benefits for him and the company by remaining the fulcrum around which the corporate governance of TCWL revolves. The meetings held by the Board are largely to fulfill the minimum requirement set by the Companies Act, 2019 (Act 992).

SOURCING AND PRODUCTION OF CABLES AND WIRES

The two main raw materials used in the cable manufacturing, which constitute 70% of the value of inputs are aluminium rod and copper and both are precious metals. Bauxite is used as the main raw material in the manufacture of aluminium. It is a clay mineral found in tropical and sub-tropical areas such as Africa, Australia and the West Indies. Aluminium is obtained from alumina, a compound of aluminium and oxygen which is processed from bauxite. The aluminium ingot which is produced from the alumina which is then further processed into aluminium rod is one of the main raw materials used in cables and wires manufacturing. Of the two main raw materials, aluminium rod is largely sourced locally here in Ghana, with backup foreign supplies when there is disruption in the local supply chain, while copper is strictly imported. Ghana is rich in bauxite with huge reserves at Tarkwa, Nyinahin and Kibi in the Western, Ashanti and Eastern Regions of Ghana respectively. The sole producer of aluminium ingot in Ghana is the Volta Aluminium Company Limited (VALCO). VALCO however, cannot meet the demands of the industry and so the shortfall in local supply is imported.

Currently, VALCO production process, as far as cable manufacturing is concerned, terminates with aluminium ingot. The ingot requires further processing to transform it into aluminium rod which is then used in conjunction with copper to produce various cables. It is this gap that the founding CEO of TCWL sought to fill by setting up SRL. Prior to this, the aluminium rods were imported and since the lead time between placing the order and receiving the rod in Ghana was approximately two months, all the industry players had to make massive investment in the inventory. TCWL and the two other competitors depend on SRL for the supply of aluminium rods since its establishment. This has come as a major relief for industry players in terms of the shorter lead time. Further, the rod supplied by SRL is priced in Ghana cedis with limited fluctuation in the price compared to frequent changes witnessed on the London Metal Exchange (LME), the main trading market for precious metals on which cable manufacturers depend for price quotation. There are occasions when the two competitors would usually fall on the foreign sources for the rod when SRL shuts down for maintenance or when there is break down of plant awaiting repairs by foreign engineers. Same cannot be said of TCWL whose supply is guaranteed even when SRL is not working.

The other main material for the production of cables and wires which is even more important than aluminium rod is copper. Ghana does not have copper, therefore, the cable manufacturing industry depends on imports to satisfy their requirements. As of September, 2022, LME quoted a 3-month contract for copper and aluminium at $7,400 and $2,130 per tonne respectively. A year ago, the Copper price per tonne was $9,370 while that of aluminium was $2,602 per tonne. One major feature about the world market prices of these two metals is the significant fluctuations in prices from month to month. The immediate post-Covid-19 supply disruptions, resulting in the demand outstripping supply and pushing the prices very high, are easing gradually. There is no alternative to aluminium, but copper has an alternative in the form of fiber. Historically, fiber has been more expensive than copper and this trend is not expected to change.

MANUFACTURING PROCESS OF CABLES AND WIRES AND OVERALL QUALITY OBJECTIVES

To forestall any potential shortages and disruptions in meeting customer needs, the company stocks, on the average, three months copper compared to two months on the average by their competitors. On the other hand, the company does not stock aluminium rod as it has a Service Level Agreement (SLA) with its subsidiary, SRL, to supply directly to production as and when necessary. This arrangement does not apply to its two competitors who have to stock sufficient aluminium rod to meet two weeks production.

The production process is highly automated with minimum manual intervention. This is attributable to high investment made in plant and machinery. The cable production process starts with pulling the copper and aluminum rod through a series of synthetic diamond dies, which gradually decrease in size, on the draw bench. This is done with a lubricating and cooling system that increases the life of the dies and prevents the wire from overheating. The next stage is to draw the copper or aluminum that has been taken through the first stage. During the drawing process, tremendous pressure is applied on metal rod to form a thinner wire. The wire, at this stage, must be extremely brittle and can easily be fractured if flexed. The finished wire must be flexible, so in this step, the wire is softened, or is annealed. Annealing is accomplished by heating the wire to its recrystallisation temperature for a period of time. The key here is to avoid oxidation of the wire.

The third stage involves twisting and stranding. At this stage, two or more wires of the same gauge are twisted or stranded together using a proprietary formula to determine twist length. This is done because, given the same cross-sectional area, stranded wire has better flexibility and electrical performance than single wire. The next stage is referred to as extrusion. The wire, now soft and flexible, is passed through an extruder, where the coating of plastic or other insulating materials are applied. Materials are poured into the rear part of the extruder and are pushed forward while heated into melt. Exiting the extruder, the coated wire passes through another cooling system and is coiled on reels.

The final stage is cabling, which involves preparing the basic components of cable. The cable is assembled according to different utilities. This process is done in a cabling station. For the electrical and electronic cables in daily use, one or more strands of wires are wrapped up together with interference-preventing layer if needed, into the protection jacket. In order to have a better forming degree, a filler is used to ensure the finished cable is in a round shape.

Throughout the above processes, a robust quality management system is enforced and continually reviewed to arrest promptly and address any lapses. The company's Quality Management System for inspection, monitoring and testing ensures conformity of product to specified requirements from receipt of raw materials to dispatch to customer. To ensure continuous delivery of quality cables, the company has a world-class cable testing laboratory, staffed with technical experts who ensure the quality of the cables. The laboratory has been licensed and inspected annually by Ghana Standard Authority and has always passed the test.

The company also maintains quality policy by committing to excellence in the manufacture and marketing of cables and wires and to achieving customer satisfaction. In this regard, the company set and review quality objectives in relevant functions. The company utilises the best available human, machinery and material resources to manufacture the cables and wires efficiently. Further, the company satisfies and complies with applicable requirements related to the industry, products and services. It continually monitors and analyses customer feedback and process performances with the aim to enhancing customer satisfaction, maintain environmentally friendly and sustainable manufacturing practices, and continually review and improve the quality management system.

THE PRODUCTS OF TCWL

The company currently offers eight products to diversified customers. These products have performed variedly within the market and sold both in the local and foreign markets.

- **Overhead Line Cables (Bare or Insulated)** – these are cables used in transmission of high voltage power from the point of generation to the transformer for subsequent distribution to the end consumer, whether domestic or commercial.
- **Building (domestic and commercial) Wiring Cables** – these are the products used in wiring all kinds of buildings to allow access to power.
- **High Pressure Cables (Armoured and Unarmoured)** – These are cables that are designed for transmitting power from transformer to commercial buildings and industrial facilities and are usually buried underground.
- **Control Cables** - Control cables are designed for automation control for sending signals that control the equipment, as well as for measurement and regulation. Control cables are used to connect instrument transformers, coils of circuit breakers and contactors, control switches, meters, protection devices and other control and monitoring equipment.
- **Telecommunication Cables** – these cables are used in telecommunication industry for voice and internet connectivity. These cables are increasingly being used less because of more reliance on chips, wireless technology, and fiber optic cables. The company is therefore considering replacing aluminium and copper-based cables by commencing the production of fiber-based telecommunication cables.
- **Solar Cables** – These are used to connect solar system power to the intended receiving system. While the present demand for these cables is low, it is expected that with increasing switch to the use of solar power, there will be a surge in demand in the near future.
- **Accessories (sockets, switches, and lighting fittings)** – These are ancillary devices used in wiring buildings which facilitate connection of machines and gadgets to power within the building. The fortunes of these items are linked to the trend in demand for Building Wiring Cables.
- **Polyvinyl Chloride (PVC) Granules** – these are granulated, and plasticised PVC compounds used for insulating and sheathing purposes across all industries. These granules are most commonly used to make footwear, pipe fittings, polyvinyl flooring, garden hoses, cable coatings, plumbing parts, medical devices, automotive parts, waterproof gear, toys and food packaging. TCWL currently focuses on producing PVC Granules for cables industry in Ghana and West Africa. The demand for PVC Granules is generally high as it is tied to the production of various cables, particularly cables used in wiring buildings.

The cardinal principles that drive the production of all the above products are quality and safety since the company is conscious of the devastating impact of substandard cables on its consumers, society, and the reputation of the company. Already, customers are very skeptical about the quality of cables on Ghanaian market largely because of the imported inferior cables.

DISTRIBUTION OF PRODUCTS AND MARKETING

Nation-wide distribution is very important in creating the awareness and bringing the cables to the doorsteps of the retail customers. This has proven as one of the factors underlying the success of the company in building wiring cables, solar cables and accessories segments. In this regard, the company has set up distribution depots in eight regions of Ghana. There are four depots in the Greater Accra Region, two each in Central and Ashanti Regions respectively, while the remaining regions have one depot each. The final consumer is reached by a combination of key distributors, the depots, and direct sales in the case of large commercial and industrial customers. The company has fifteen key distributors across 6 regions of Ghana.

Greater Accra Region has 8 distributors, with two located in the Volta Region and the rest of the regions have one distributor each. The distributors play an important role in increasing access to retail customers. The consumers who buy overhead line cables, high pressure cables, control cables, telecommunication cables, PVC granules and solar cables for commercial and industrial purposes, are supplied directly by the company.

The wide reach and coverage of the depots and key distributors have been achieved over the years because of the drive to deliver excellent and high-quality customer service through ready access to the products by valued customers. In this direction, the company, in 2021, embarked on the setting up of retail and distribution outlets in the major market centres in the capital and major cities in the regions in which it has no depots and distributors. This marked a major step in the company's effort to reach customers in all the regions of Ghana with its products. This will also be the first in the cable industry where the manufacturer has ventured into direct retailing of the cables to the consumers.

The company does not only make substantial investment in the raw materials but also does same with the finished goods that are held across its various depots. This is to ensure constant and reliable supply of the cables, especially in the fast-moving segments of the market. The customers, are the company's number one priority, and the company owes them that singular duty to meet their needs at all times with great efficiency.

CABLES AND WIRES – THE GHANAIAN MARKET

Apart from the three local manufacturers of cables and wires, the other key competitors influencing the keen competition in the market are the numerous importers, licensed and unlicensed, who mostly bring cheaper and inferior cables into Ghana. The electrical cables and related products are classified as High-Risk Goods (HRGs), and therefore all importers are required to register with the Ghana Standards Authority (GSA). Unfortunately, according to GSA, there are many dealers and importers who are not registered. The main countries from which the cables are imported are China, Turkey, India, Egypt, and United Arab Emirates (UAE). Although GSA has its officers at the main point of entry, Tema Harbour, to ensure that the imported cables meet the required standards, many importers have devised schemes by which they bring the inferior cables through unapproved land entry points to Ghana. Indeed, Ghana land borders are generally porous, and this fact is notoriously known by all and sundry. The required import duty and other related taxes are not paid to the State and by this behaviour the competition within the market is distorted in their favour thereby making high quality locally produced cables and wires extremely expensive and uncompetitive. To clump down on the illegal activities of some importers, GSA conducts regular market surveillance to seize and arrest offenders, but this has done very little to eliminate or reduce to the barest minimum the problem of inferior cables. However, GSA has promised to intensify its market monitoring and to collaborate with Ghana Police Service to completely uproot the problem.

There are five broad categories of local consumers whose needs are satisfied by the cables and wires market. The first significant consumer group is the energy transmission and distribution entities, for example Ghana Grid Company Limited (GRIDCo), who buy Overhead Line Cables to interconnect substations over relatively long distances for onward distribution to the consumers. These consumers make infrequent but high demand for cables as and when required. The next consumers of cables and wires are the entities operating in mining, oil and gas, who are involved in extraction of valuable minerals from either land or sea and they require sophisticated equipment which are powered by durable and dependable connections that cannot fail. Even though this segment of the market has seen significant growth due to expansion in mining, oil and gas activities in Ghana, more often than not, these consumers depend on foreign sources to meet their needs.

Telecommunication infrastructure are another important group of entities who use cables for connecting communication networks. The main entities in this segment are the four mobile network operators in Ghana. There has been increase in demand by these companies because of frequent theft of network cables across the country. The fourth category of consumer group is the manufacturing industry who requires cables to power and control the heavy-duty plant and machinery. All the preceding categories of consumers do not compromise on high quality and insist on strict adherence to high quality standards. These consumers will source both locally and internationally for the best quality to avoid causing damage to their expensive systems and machines. The most frequent and regular yet diversified consumers who make use of cables are the real estate, construction and households for the delivery of power to commercial and residential buildings in the country. It is this category of consumers who have high preference for cheaper cables and therefore tend to demand more of the imported cables. One reason that has been assigned to this situation is the general increase in the cost of construction but with declining levels of net disposable income of these consumers, hence cables are seen as a convenient source of reducing cost.

The preference for inferior and cheaper imported cables by real estate developers and households has been exacerbated by unqualified and unlicensed electrical artisans who are contracted to undertake wiring, and who also have the same preference to maximise their profit. Every electrician is required to register with GSA but more than 80% are unregistered. One of the purpose for registration is to sanction electricians whose work cause fire as a result of the use of inferior cables. This in the long run, would contribute to reducing the use of inferior cables. Presently, cables and wires remain the medium and mechanism by which electrical energy is transmitted to provide power for various electric-dependent systems as well as providing connectivity for voice and data.

In the last ten years, there have been frequent fires in Ghana's major markets as well as residential and commercial buildings nation-wide. The Ghana National Fire Service (GNFS) investigations have attributed these fires to the increasing use of inferior electrical cables and in some instances, to old cables. This situation has resulted in unintended consequences of creating bad news for the local cable manufacturers since the average consumer within the real estate and household segment believes the cables are not of good quality. However, the reality is that the cables responsible for the fire outbreaks are the inferior and cheaper imported cables. Regarding Government buildings with old electrical fittings, the GNFS has made a recommendation for rewiring to stop the frequent incidences of cable related fires. The Government has initiated a policy, through Ministry of Works and Housing to implement GNFS recommendation by sourcing the cables from local producers only.

The annual total demand for cables and wires in Ghana as at the close of fiscal year, 2021, was estimated at 50,000 metric tonnes. The combined capacity of the local producers for the same fiscal year stood at 55%. The gap is filled by imports. The demand for cables and wires is projected to grow at an average annual rate of 15% for the next 10 years. This growth would be fueled by the real estate and construction segment where it is expected that there would be massive expansion in an attempt to close the huge national housing deficit. There is also the projected expansion in manufacturing and industry and major investments by GRIDCo and Electricity Company of Ghana to replace outdated transmission and evacuation overhead cables across the Country to restore the integrity of the national power grid system. Moreover, expected investment by more Independent Power Producers (IPPs) and the Volta River Authority to expand power generation in terms of installed capacity would boost demand for Overhead Line Cables.

In the near future, VALCO is contemplating participating in the downstream sector of the integrated aluminium industry by producing aluminium rods and further produce cables and wires. This is to reduce the quantity of imported cables.

AFRICA AND GLOBAL CABLES MARKET OUTLOOK

The local producers also supply part of the cables and wires to some African countries. The export market constitutes 30% of the cables and wires sold annually by the manufacturers and represents only 5% of the total foreign demand. Africa cables and wires market is anticipated to register enormous growth during 2023 - 2027. The growth is mainly expected to be driven by the urbanization of the cities, and the development in the infrastructure, defense and telecommunication. The rising population is leading towards increasing demand for power.

The global cables and wires market size is expected to grow from $210.35 billion in 2021 to $232.38 billion in 2022 at a compound annual growth rate (CAGR) of 10.5%. The growth in the wires and cables market is mainly due to the companies rearranging their operations and recovering from the COVID-19 impact, which had earlier led to restrictive containment measures involving social distancing, remote working, and the closure of commercial activities that resulted in operational challenges. The wire and cable market are expected to reach $334.60 billion in 2026 at a CAGR of 9.5%.

Technological advances in the communication industry are expected to be a key driver of the wires and cables market. Advances in fiber optic networks, and rising investments in high-capacity network infrastructure and wired broadband technologies will lead to an increase in the demand for fiber optic cables. Fiber optic cables support higher bandwidths and faster data transmission than standard coaxial cables. Therefore, an increase in fiber optics demand will support the manufacturers of new and advanced fiber optic cables.

RECENT DEVELOPMENTS IN THE COUNTRY

Covid-19 induced supply chain disruptions that appeared to have recovered partially towards the end of 2021 has been abruptly interrupted again by Russia-Ukraine war. This has led to increasing prices of fuel and some basic commodities. This has contributed to high inflation in the country which stood at 37.20% as at October 2022. The cost of credit has been rising steadily due to significant increase in the Monetary Committee Policy rate by the Central Bank to contain inflationary pressures and increasing credit risk. Indeed, the average lending rate has increased from 22% at the beginning of 2022 to 38% as at October 2022. The local currency has depreciated by over 40% against US dollar with similar loss of value against the other major international trading currencies. In the bid to reduce budget deficit, the central Government has cut its expenditure by 40%. This will particularly affect capital expenditure, including the proposed spending on revamping and modernisation of the power system in the country in short to medium term.

EXPANSION PLANS AND FINANCING

Since the company began international business, it has exported largely to Anglophone West Africa (AWA) with limited supply to the Francophone West Africa (FWA). This situation is due to the differences in the standards of the cables between the two regions influenced by colonisation antecedents. The AWA countries follow British Standard while FWA region go by French Standard. The increasing shipping costs and import duties in these countries make the company's products less competitive compared to locally produced cables. Again, because of the differences in the standards, there has been low demand for TCWL's cables in FWA region. To overcome these challenges, TCWL has set up a production plant in Nigeria to produce for that market and the neighbouring Francophone countries. The strategy is to produce cables to meet the local standards for the FWA region while at the same time meeting the needs of AWA region as well. This strategy would be a departure from what pertains hitherto.

The company also has plans to expand to Kenya and South Africa to produce for Eastern and Southern Africa respectively. This move is largely influenced by the Africa Continental Free Trade Agreement (AfCFTA) which was launched in July 2020. AfCFTA has increased market access within Africa and the company does not want to be left out from this opportunity. This strategic direction would fulfil the founding CEO's ambition to build an African corporate giant from within the continent to compete with the multinationals from other continents. These proposed investments will commence in 2023.

The new CEO has presented a paper to the Board recommending that the company go public to raise some equity capital to partially finance the expansion plans. He believes that reliance on too much debt capital will make the earnings of the company too risky. In his view, there should be a well thought through balance between equity and debt capital in financing the intended expansion. Further, the CEO has suggested that going public will give true meaning to the chairman's philosophy of wanting to build a company that can compete globally, and which will survive him and the family. The Board is yet to meet to deliberate on the paper and make final decision regarding how to finance the expansion.

The two most recent years' financial statements are presented below:

Statement of Comprehensive Income for the year ended 31 December

	2021	**2020**
	GH¢'million	**GH¢'million**
Revenues	4,211	3,276
Cost of Sales	(1,552)	(1,278)
Gross profit	2,659	1,998
Operating expense	(2,211)	(1,886)
Operating profit	448	112
Finance cost	(66)	(89)
Profit before taxes	382	23
Taxes	(96)	(6)
Profit after tax	**286**	**17**

Statement of Financial Position as at 31 December

	2021	**2020**
	GH¢'million	**GH¢'million**
Non-current assets		
Property, plant & equipment	1,755	1,730
Intangible assets	145	158
Deferred tax assets	110	101
Total non-current assets	**2,010**	**1,989**
Current Assets		
Trade & other receivables	1,279	1,062
Inventories	1,121	893
Prepayments	233	59
Cash and cash equivalent	507	518
Total current assets	**3,140**	**2,532**
Total assets	**5,150**	**4,521**
Shareholder equity		
Stated capital	204	204
Retained earnings	2,445	2,161
Total shareholder's equity	**2,649**	**2,365**
Non-current liabilities		
Non-current debt	1,483	1,429
Total non-current liabilities	**1,483**	**1,429**
Current liabilities		
Trade and other payables	657	463
Accrual and deferred income	285	193
Current debt	76	71
Total current liabilities	**1,018**	**727**
Total liabilities & shareholder's equity	**5,150**	**4,521**

ADDITIONAL INFORMATION

ETHICAL CONSIDERATIONS - THE USE OF CHILD LABOUR

Child Protection International (CPI), a non-governmental organisation, focusing on the protection and advancement of children's rights in Ghana has written to TCWL complaining about the use of child labour by some of its distributors. The affected distributors have responded to the allegation by stating that the children are from poor homes and that is the only means they could make money to support themselves and their education. These distributors strongly argue that by employing the services of children, they are contributing to the financial wellbeing of the children and also helping them to pursue formal education. However, CPI contends that, the children ought to be in school rather than hawking on the streets and that the position taken by the distributors is ethically wrong. CPI is therefore, asking TCWL to stop supplying products to the distributors using child labour as it is ethically wrong. Within TCWL, there are disagreements on whether child labour, as well as the company's continuous supply of the products to such distributors, is ethically wrong or not. While the Board Chairman strongly argues that it is ethically wrong, the CEO takes a contrary opinion. The CEO argues that the children are being helped and that if TCWL stops selling to the said distributors, the company's profit would also be affected negatively.

EXPECTED FOREIGN EXPORT RECEIPT

TCWL received an order in October 2022 for the supply of High-Pressure Cables (Armoured and Unarmoured) from Dynamite Mining Plc (DMP) located in the Republic of Cameroon. The order is valued at US$250,000 for which DMP through its local bank issued and confirmed Letters of Credit (LC) in favour of TCWL on 1 December 2022. The LC was issued upon the receipt of the bill of lading (BL) covering the cables shipped by TCWL. The LC has a six-month credit period and would be settled on 31 May, 2023. The practice in the past was to do nothing and wait for the maturity of the LC and then the money is wired by SWIFT to TCWL's Foreign Exchange Account with its local bank here in Ghana. However, because of the recent significant fluctuations in the local currency against United States dollar, the Board is of the view that the company should hedge its foreign currency risk using money market hedge. This strategy has become very critical because of a high likelihood that the Government of Ghana will secure a deal with International Monetary Fund for which it is predicted by Currency Analysts that the Cedi would appreciate in the first half of the year 2023. This is to hedge against potential loss in the value of the expected receipt in Cedi terms. The interest rate for dollar loans offered by the banks in Cameroon is 25% per annum. The rate offered for fixed deposits by the banks in Ghana is at an average of 30% per annum. The company intends to borrow an amount from one of the banks in Cameroon for six months such that the principal and interest would be settled by the expected receipts from DMP. The spot rate as at 1 December, 2022, GH¢/USD, is 11.4500 – 11.5110 and the forward rate for 31 May 2023 is expected to be 10.8775 – 10.9510.

FURTHER INFORMATION ON THE PERFORMANCE OF THE PRODUCTS

The company carried out performance evaluation of its products by hiring Kofi Gyan, a consultant with experience in using portfolio matrices. The consultant undertook extensive evaluation of the various products using ***Shell Directional Policy Matrix***. The summary of his result for each product is as follows:

- **Overhead Line Cables** – The product has high sector/industry growth rate making prospects for sector profitability attractive, but this product has a weak competitive capability and position because it is not the market leader.

- **Building Wiring Cables** – The prospects for sector profitability are high and very attractive because of high growth rate of the market. The product also has strong competitive position as it is the market leader.
- **High Pressure Cables** – This product has both an average prospect for sector profitability and competitive capability and position because of average growth of the sector as well as average market share respectively.
- **Control Cables** – It has an average prospect for sector profitability but weak competitive capability and position because it is not the market leader.
- **Telecommunication Cables** – It has unattractive prospects for sector profitability because of low sector growth rate, and it has an average competitive capability and position because it is not the leader in the market.
- **Solar Cables** – It has attractive prospects for sector profitability and an average competitive capability and position
- **Accessories** – The prospects for sector profitability are very attractive because of high industry growth rate coupled with strong competitive position because it is the market leader.
- **Polyvinyl Chloride Granules** – this product has average prospects for sector profitability, but it has strong competitive position because of its market leadership.

QUESTION ONE

The new CEO is proposing the adoption of a new organisational structure to match the company's growth. The new structure would have four centralised functional departments – Finance, Procurement & Administration; Sales & Marketing; Production; and Quality Assurance, coupled with four divisions based on geographical areas – Great Accra Division, Northern Division, Central Division and Eastern & Volta Division.

Required:

a) Identify and explain the new organisational structure which the CEO envisages. Support your answer by drawing an appropriate organisational structure. **(6 marks)**

b) Explain the **TWO (2)** main advantages that TCWL stands to gain by adopting the new structure. **(4 marks)**

QUESTION TWO

The competitiveness of a business operating in a country is determined by the presence of a combination of some factors and conditions. The management of TCWL wants to understand the factors in Ghana that have influenced its success or otherwise over the years and which should be considered as it expands to Kenya and South Africa.

Required:

Using ***Porter's model for determining national competitive advantage (Porter's Diamond)***, evaluate **FOUR (4)** factors that have influenced the competitiveness of TCWL in Ghana for which the management must consider as it expands its operations internationally. **(10 marks)**

QUESTION THREE

Mr. Asare Blankson, the sole shareholder, has been actively involved in the management of the company by serving as the CEO for many years and currently as the Board chairman. This could minimise potential agency conflicts associated with separation of the shareholder(s) from management as suggested by Agency Theory of Corporate Governance.

Required:

Explain **FIVE (5)** potential agency conflicts that could be minimised or avoided by Mr. Asare Blankson's involvement in the management of the company as a former CEO and the current Board Chairman. **(10 marks)**

QUESTION FOUR

a) TCWL plans to expand to Kenya and South Africa to produce for Eastern and Southern Africa markets respectively. This move is largely influenced by the Africa Continental Free Trade Agreement (AfCFTA) which was launched in July 2020. This strategic direction would require substantial investments to upgrade production facilities to meet the new market demand.

Required:
Using ***Johnson and Scholes suitability/feasibility/acceptability model***, evaluate the non-financial factors that could influence the success of this strategic decision. **(10 marks)**

b) The Board Chairman wants the new CEO to keep to the original vision and mission upon which the company was founded but the new CEO has his own idea of the direction he wants to take the company. He, therefore, desires to implement some changes, including introduction of new organisational structure.

Required:

i) Explain **FOUR (4)** ***levers of change*** that the CEO must adopt to successfully implement the changes he desires in TCWL. **(6 marks)**

ii) Briefly discuss **FOUR (4)** benefits of an external change agent if the CEO decides to engage the services of the one to lead the proposed changes. **(4 marks)**

QUESTION FIVE

The Board has directed the CEO to take the necessary steps to arrange with its bankers, a money market hedge for the expected receipts from DMP, to protect the company against the downside risk of expected Cedi appreciation.

Required:
As the Financial Controller of the company, the CEO has asked you to ***calculate*** the following relating to money market hedge:

a) The initial dollar amount of loan that TCWL could take from the bank in Cameroon on 1 December, 2022 and the cedi equivalent of the initial loan if converted on the same date. **(3 marks)**

b) The total Cedi amount and interest the company will earn by 31 May 2023, if the converted amount is invested in Ghana for the duration of the money market hedge. **(3 marks)**

c) The Cedi gain or loss that TCWL would make by hedging. **(2 marks)**

d) The effective forward rate of the Cedi to U.S dollar on 31 May, 2023. **(2 marks)**

QUESTION SIX

a) The Consultant undertook analysis of the performance of TCWL products using ***Shell Directional Policy Matrix***. The management of the company is interested in receiving a report that contains the matrix and the strategies to be adopted for each product.

Required:
Using the summary of the result for each product, you are required to present a report to the Board on the performance of the products as follows:

i) Draw ***Shell Directional Policy Matrix*** and clearly locate each product in an appropriate quadrant/cell in the matrix based on the product's performance. **(2 marks)**

ii) Recommend and explain the ***appropriate strategy or strategies*** that TCWL should adopt for each product as suggested by ***Shell Directional Policy Matrix***. **(8 marks)**

b) The Board chairman and the CEO have disagreed on whether the use of child labour by the distributors and continuous supply of the company's products to the affected distributors is ethically wrong. The two have approached you as an expert in ethics to determine which of the positions is correct.

Required:
Using the two main theories of ethics, ***deontological theory*** and ***teleological theory***, determine whether child labour is ethically wrong. **(10 marks)**

QUESTION SEVEN

The Ghana Code of Best Practices for Corporate Governance specifies a number of disclosures that should be included in an annual report of a listed company, in addition to those required by law or other regulation. The new CEO has presented a paper to the Board recommending that the company should go public to raise some equity capital to partially finance its expansion plans. The listing of the company would result in an increased number of shareholders.

Required:

a) Explain to the Board **SIX (6)** statements that must be disclosed in the annual report of TCWL after listing on Ghana Stock Exchange. **(6 marks)**

b) The Code of Best Practices recommends measures that aim at maximising attendance and involvement by shareholders in the company. Briefly discuss **FOUR (4)** of those measures. **(4 marks)**

QUESTION EIGHT

a) TCWL production processes and operations are highly automated, and this may expose the company to major risks with high potential of negative consequences for the business.

Required:
Explain **FOUR (4)** major risks that TCWL automated systems could suffer. **(5 marks)**

b) The risks that TCWL automated systems could be exposed to can be controlled and managed through embedding risk awareness in the culture of the organisation. Creating a culture of risk awareness is the responsibility of the board of directors and senior management of TCWL.

Required
Explain **FOUR (4)** ways by which the Board can create and embed risk awareness in the culture of TCWL to ensure that systems risks are controlled effectively. **(5 marks)**

(Total: 100 marks)

SUGGESTED SOLUTION

QUESTION ONE

a) **Organisational structure as recommended by the new CEO.**

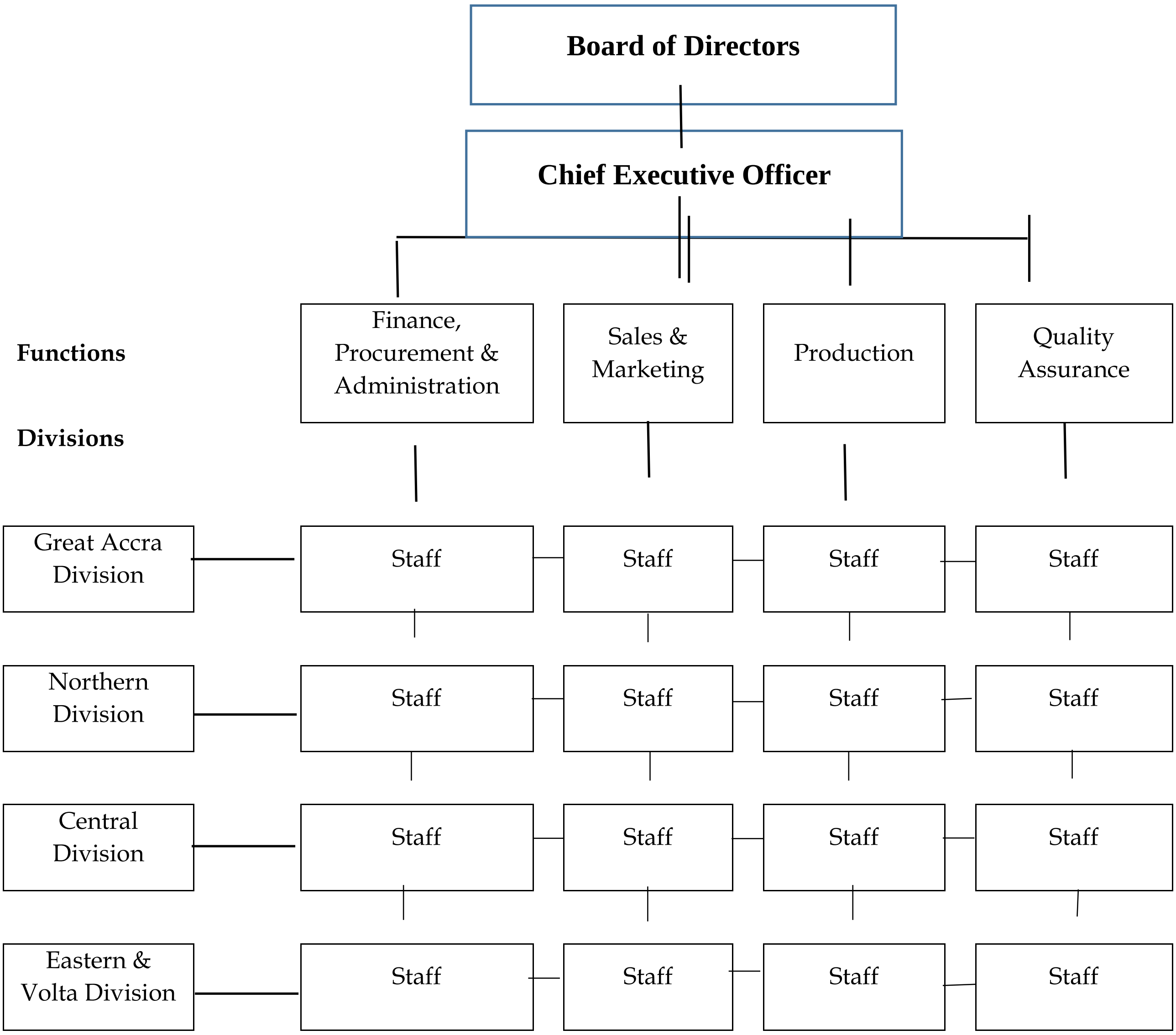
The appropriate structure as envisaged by the new CEO is a **matrix organisational structure**. A matrix structure combines different structural dimensions simultaneously, for example product divisions and geographical territories or product divisions and functional specialisms or geographical divisions (as in the case of TCWL) and functional areas. A matrix organisation has been defined as: 'any organisation that employs a multiple command system that includes not only a multiple command structure but also related support mechanisms and an associated organisational culture and behaviour pattern' (Davis and Lawrence 1977).

In matrix structures, staff typically report to two managers rather than one. This dual reporting makes matrix structures complex, but they can be effective responses to today's complex environments. A matrix structure is an organizational design in which vertical and horizontal flows of authority and communication (hence the term matrix) are created whereby functions are horizontally arrayed and divisions, products, or projects are vertically arrayed. In contrast, functional and divisional structures depend primarily on a vertical chain of command and authority.

A matrix structure is an attempt to increase organizational flexibility to meet the needs of a rapidly changing environment. It aims simultaneously to maximize the benefits from functional specialisms that occur from the division of labour while increasing the efficiency of coordination across these functions. It involves learning new roles and modes of behaviour. In a matrix structure, an individual reports to two managers. This will include their functional head (for instance, the head of Production) and also a Sales and Marketing Manager.

The new CEO is seeking to combine four centralised functional areas (**Finance, Procurement & Administration, Sales & Marketing, Production, and Quality Assurance**) alongside four geographical divisions (**Great Accra Division, Northern Division, Central Division and Eastern & Volta Division**). Functional managers at head office would be responsible for the major functions identified by the CEO across the entire entity – which include **Finance, Procurement & Administration, Sales & Marketing, Production, and Quality Assurance**. Divisional managers, on the other hand, would be responsible for the sale of TCWL products in each geographical division (**Great Accra Division, Northern Division, Central Division and Eastern & Volta Division)** and for the profitability of the market or the product. This would allow the divisional managers to focus on the business within their geographical areas while the functional managers would take care of the functional activities such as finance, human resources issues, etc. in each geographical division.

The diagram illustrating the matrix organisational structure is below:



Marks allocation
Identification of the appropriate structure =1 mark
Explanation of the appropriate structure = 3 marks
Drawing of the appropriate structure = 2 marks
6 marks

b) Two main advantages to be realised by TCWL in adopting matrix organisational structure.

The advantages include the following:

- It should improve communication within the organisation. Matrix structure would **encourage communication** throughout TCWL because the structure ensures that functional and divisional managers work together which is usually lacking in functional and divisional structures. The managers would be forced to work together in TCWL because of dual reporting, vertically and horizontally. Employees report horizontal to their divisional managers on business related matters while they would report vertically on functional issues to the functional heads. The functional heads and divisional heads must invariably communicate to address issues that may arise in the course of business.

- Matrix structure **places emphasis on 'getting the job done' rather than each manager defending his or her own position**. Adopting matrix structure would result in all the managers working together to get work done within TCWL and this would ensure that the company continue to gain competitive advantage. Matrix structure is result-oriented in the sense that all the top managers work together to ensure that customers' needs are satisfied.
- **This structure also avoids the weaknesses of functionalism and tendency of dividing instead of uniting the company associated with functional structure and divisional structure respectively**. Functionalism is the situation where functional heads tend to think not of the whole company but of their individual functions while divisional structure may lead to division in the company as every division may work in its own interest to the detriment of the whole company.
- **Matrix organisations are flexible, because they allow different dimensions of the organisation to be mixed together**. They are particularly attractive to organisations operating globally, because of the possible mix between local and global dimensions. For example, as TCWL expands globally, it may prefer geographically defined divisions as the operating units for local marketing (because of their specialist local knowledge of customers) coupled with centralised functions that may be located in the home country or other countries where the company may enjoy cost benefits.
- **Matrix structures are effective at knowledge sharing and management because they allow separate areas of knowledge to be integrated across organisational boundaries**. If this structure is adopted, the knowledge and competences in one division can be disseminated throughout TCWL since all the managers work closely together. In divisional and functional structures, knowledge and ideas sharing is very limited, if not absent, because of the unhealthy competition to out-perform a function or a division without thinking of the bigger picture. Thus, matrix structure provides for inter-disciplinary co-operation and a mixing of skills and expertise.

(Any 2 points @2 marks each = 4 marks)

(Total: 10 marks)

EXAMINER'S COMMENTS

This question had two parts. In Part A, the candidates were asked to identify and explain the new organisational structure which the CEO envisages. In Part B, the candidates were to explain two advantages that TWCL could by adopting the new organizational structure.

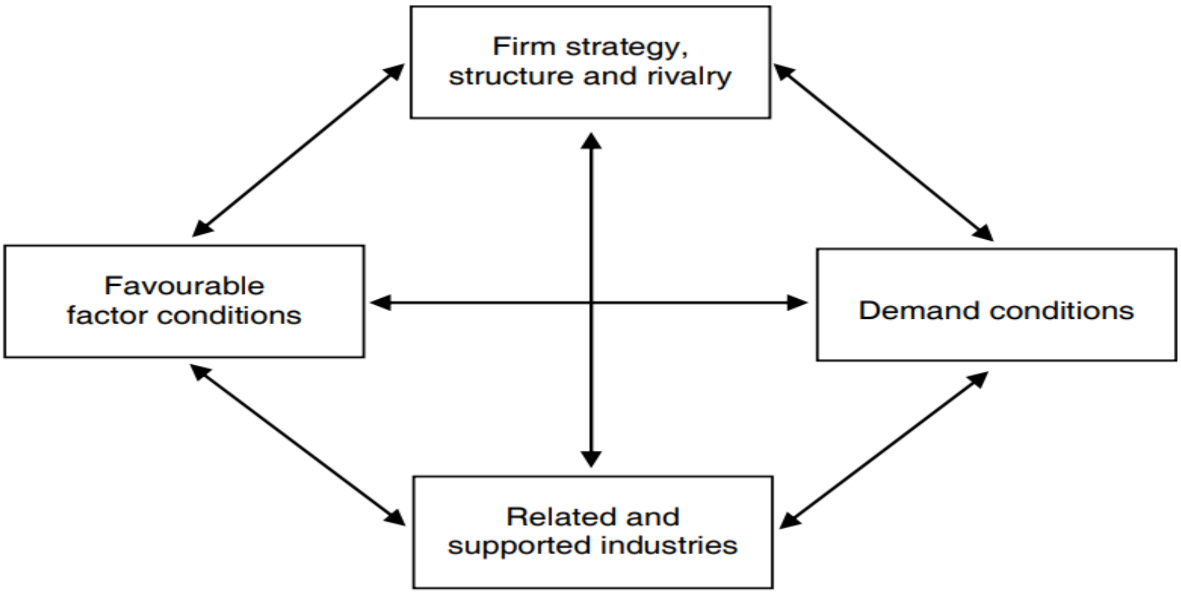
The candidates did not do well in this question. A significant number of them could not identify nor explain the new organizational structure, let alone to explain the advantages of the structure. The candidates were very familiar with organisational structure. This is evidenced by the vague diagrams they presented.

QUESTION TWO

Porter's Diamond model provides an analysis of the factors that give a country or a region a comparative competitive advantage which ultimately inures to the advantage of businesses operating in that country or region. Porter argues that the national domestic market plays an important role in creating competitive advantage for companies on a global scale. Companies operating in a strong domestic market can develop competitive strengths. They can then build on the strength of their 'home base' to extend their business operations into other countries, where their competitive advantage will also apply and help them towards success.

Porter discusses four inter-related factors which underpin national competitive advantage hence that of businesses operating in a country. These factors are: **Favourable factor conditions, Related and supporting industries, Demand conditions in the home market,** and **Firm strategy, structure and rivalry**. These factors collectively determine whether or not TCWL cables would be expensive relative to cables manufactured in other countries.

Porter presented the four factors in a diagram in a diamond shape, as follows.



Favourable factor conditions

Factor conditions are the economic factors of production – land, labour, capital (equipment) and raw materials. Porter argues that the state and condition of these factors determine the extent to which a company can gain competitive advantage. Factor conditions in a country can be divided into two categories: **basic factors** and **advanced factors**. **Basic factors** are factors of production that exist naturally in the country such as land for agriculture; large quantities of natural materials, mineral resources such as oil and precious metals and a favourable weather climate. **Advanced factors** are factors that are 'created' and developed over time such as high labour skills and knowledge, technological resources and infrastructure such as excellent transport networks and telecommunications networks.

TCWL has enjoyed some limited advantages from basic factors while it has experienced cost disadvantages because of absence of some of the advanced factors in Ghana which would have to be imported. In terms of the basic factors, Ghana is rich in bauxite, the main raw material used in the production of alumina, which is used in processing aluminium ingot, with huge reserves at Tarkwa, Nyinahin and Kibi. The production of aluminium ingot and aluminium rod in Ghana is a source of cost advantage to TCWL compared to copper which has to be imported. However, Ghana does not have the other major raw material, copper, hence TCWL would have to depend on foreign sources which adds additional cost to the production in terms of shipping costs, import duties and persistent depreciation of Ghana cedi because the company has to pay for copper in dollars.

With regard to advanced factors, the major machines used in the production by TCWL are not available locally and, therefore, would have to be imported from the United Kingdom and the United States. If these machines had been locally available, the company would have avoided the cost associated with the importation. Further, the company had to rely on externally/foreign trained high skilled labour with appropriate level of experience to manage its Production and Quality departments since same could not be obtained locally. The lack of some high skilled labour is reflected in TCWL depending on the foreign engineers to maintain its machines. It is stated that these employees very expensive and they meet both local and international standards and have assisted the company in building its quality reputation. Had these employees been locally available, they would have been relatively cheaper. In totality, availability of some basic factors like bauxite in Ghana has given TCWL some limited cost advantages while absence of some basic factors like copper and lack of advance factors including high skilled labour and capital, on the other hand, have contribute to major cost disadvantages which ultimately make cables and wires produced locally expensive and relatively less competitive.

Demand conditions in the home market

Demand conditions refer to the pressure home consumers bring to bear on companies and industries to produce high quality, sophisticated and innovative products at affordable prices – value for money. Countries with demanding consumers drive firms in that country to meet high standards, upgrade existing products and services, and create innovative products and services. High demand conditions will help to make local firms more innovative and competitive globally. When local firms sell their products on global markets, the innovation and competitiveness created in local markets will help them to succeed internationally by offering products and services of the same quality at relatively cheaper price compared to goods and services from other countries offered by their rivals/competitors.

Some group of consumers that TCWL serves demand for high quality cables and wires. These consumers include energy transmission and distribution entities, the entities operating in mining, oil and gas, telecommunication and infrastructure companies and the manufacturing industry. These consumers do not compromise on high quality and insist on strict adherence to high quality standards. They would source both locally and internationally for the best quality to avoid causing damage to their expensive systems and machines. This situation has kept pressure on TCWL and other competitors to keep to high standards. Another source of demand conditions is the pressure on the firms to produce quality cables by the regulator, Ghana Standard Authority (GSA). However, real estate, construction and households consumers of cables do not demand for quality cables because of economic reasons. These consumers prefer imported inferior cables to the local ones that are more quality although expensive. If TCWL should continue to invest in research and development to innovate and become more efficient in the production of quality cables, it stands to be more competitive on the global stage in the long run.

In the conclusion, the reason TCWL has been producing quality cables is because of the high pressure by some consumers as well as GSA which is necessary to keep local companies under pressure to maintain high standards and continuous innovation. Ultimately, TCWL and its rivals are able to innovate in response to the high demand conditions, they can produce high quality and affordable cables which will be more competitive on the international stage.

Related and supporting industries

The related and supporting industries consists of suppliers who provide inputs and components to feed another company in producing its goods and services. The more innovative, efficient and cheaper the related and supporting industries are, the more efficient companies that depend on them would be. Thus, competitive success in one industry is linked to success in related industries. Related and supporting industries also refer to companies and entities that buy the finished products of a company. One of those entities is the Government which is usually the biggest spender in an economy. A country's industry is made more competitive, compared to other countries, when there is strong competition and innovation in related and supporting industries. When supporting industries are highly competitive, costs are reduced, and innovation occurs continually. Some of the benefits of lower costs and innovation in a supporting industry (or related industry) are passed on to business entities in industries that the supporting industry serves.

The location of TCWL is at Tema, the heart of industrialisation and the port city of Ghana, gives the company access to some of the best of services and support for its manufacturing activities. This location provides additional advantage in terms of low transportation cost since the harbour is in close proximity.
One major service support that TCWL needs but not available is local expertise for maintaining and repairing the machines use in production. This has resulted in reliance on the expatriates for this service which makes the service expensive and therefore TCWL cables and wires expensive and less competitive.

Another main source of support to businesses in a country is availability of cheap credit that can be used to finance business expansion. The cost of credit has been rising steadily due to significant increase in the Monetary Committee Policy rate by the Central Bank to contain inflationary pressures and increasing credit risk. Indeed, the average lending rate has increased from 22% at the beginning of 2022 to 38% as at October 2022. This makes finance cost, one of the major inputs to production, very high thereby making locally produced cables expensive and less competitive.

Again, Government spending on the output of businesses is another source of major support to companies. If Government spending increases, it would mean the goods and services produced would be highly patronised while the opposite is true as well. The demand for the Overhead Cables is expected to slow down because in the bid to reduce budget deficit, the central Government has cut its expenditure by 40%. This will particularly affect capital expenditure, including the proposed spending on revamping and modernisation of the power system in the country in short to medium term. However, in the long-term, the expected increase spending by Government on revamping power system would be a major boost for TCWL and cables and wires industry in general.

Firm strategy, structure and rivalry
Porter suggests that other factors that create national competitive advantage are the **strategy of firms and their owners**, **the organisation structure of firms** and **the rivalry between local firms in the industry**. Rivalry between local firms is an important factor in maintaining national or regional competitive advantage. This is because rivalry forces producers to innovate, and to keep on looking for ways of meeting customer needs better than their competitors.

TCWL's strategy has been anchored on producing high quality cables and providing customers across the country with quality customer service. To ensure that customers always have access to TCWL products, the company takes all measures including stocking of adequate materials and finished products to avoid shortages and to have nation-wide distribution outlets/network. This is one of the reasons TCWL is gaining competitive advantage.

In terms of structure, the founding CEO was concerned with the situation where average indigenous Ghanaian businesses remain small, family-owned and die with shareholder(s). This situation obviously does not allow for building of large companies that can undertake large transactions and this also affect the competitiveness of Ghanaian companies relative to companies from other jurisdictions. The proposal by the new CEO for TCWL to go public and list on the stock exchange will change the structure of the company from current one of a private company with sole shareholder to a public company with diversified shareholders. This should help the company raise equity capital to finance local and international expansion. Internally, TCWL initially had power concentrated in the hands of the pioneering CEO for whom everything started and ended with.

This approach was subsequently relaxed by decentralizing some of tactical and operations decisions to the managers. The new CEO is proposing the adoption of a structure which will make the management work more closely as a team, be more flexible and responsive to the market, and this he believes could result in a higher sense of responsibility and accountability of the managers. The proposed change in the internal structure of TCWL and opening up of the company for public participation should lead to competitive advantage.

Finally, there is firm rivalry in the cables and wires industry of Ghana as there is an intense competition amongst local producers and importers. There are three local producers and various importers making rivalry among firms very high and for TCWL to remain competitive, the company is committed to reinvest substantial amount of profit into innovation, research and development, continuous learning and in providing cutting-edge leadership in developing products that are customer focused and environmentally friendly.

The four factors explained above collectively determine the extent of TCWL competitive advantage and these factors should be borne in mind as the company decides to expand to Kenya and South Africa. The company should consider whether the two countries have more advanced factors than basic factors, whether there is high demand condition, whether there are efficient and effective related and supporting industry and the nature of the firm strategy, structure and rivalry.

(4 points @ 2.5 marks each = 10 marks)

EXAMINER'S COMMENTS

The candidates were asked to use Porter's model for determining national competitive advantage (Porter's Diamond) to evaluate four factors that have influenced the competitiveness of TWCL for which the management must consider as it expands its operations internationally.

The Porter's Diamond is a popular area but most of the candidates were ignorant of the model. A number of them deviated when they presented the answers using Porter's competitive forces. A few of them even presented SWOT analysis. Most of the candidates scored zero in question.

QUESTION THREE

Agency theory defines the relationships between principals, such as shareholders, and agents, such as company executives and managers. The shareholders, who represent the principals of the business, are said to employ the agents to carry out tasks. Managers are the shareholders' agents and are given authority by principals to manage the company. According to the agency theory, shareholders expect agents to act and make decisions in the best interests of the principals as an agent is expected to do in the law of agency. On the contrary, the agents may not always act in the best interests of the principals. The managers are assumed to be selfish and opportunistic. Managerial selfishness and opportunism results in agency conflict and this give rise to agency cost – loss of shareholder value. Agency conflicts are differences in the interests of a company's owners and managers.

Since at TCWL, the sole shareholder has been involved in the management of the company, formerly as CEO and presently as the Board Chairman, the following agency conflicts could be minimised or avoided altogether:

- **Moral hazard**: A manager has an interest in receiving benefits from his or her position as a manager. These include all the benefits that come from status, such as a company car, use of a company airplane, lunches, attendance at sponsored sporting events, and so on. Jensen and Meckling suggested that a manager's incentive to obtain these benefits is higher when he has no shares, or only a few shares, in the company. The biggest problem is in large companies.
  This conflict may not arise or may be very minimal at TCWL because the shareholder, Mr. Asare, was the CEO for a considerable period and now Board Chairman. The Chairman also appointed the other non-executive directors who are his friends and therefore would not approve unnecessarily huge compensation and other perks for managers that have not been sanctioned by him. All things being equal, Chairman would not allow the Board to approve managerial benefits which could negatively affect the company since that would directly affect him as a sole shareholder and jeopardise the future of the company, he has toiled for all these years. Managers compensation and incentives are strategic decisions which Mr. Asare was responsible for when he was CEO and now as Chairman, he will lead the Board in discussing and approving such benefits.

- **Effort level**: Managers may work less hard than they would if they were the owners of the company. The effect of this 'lack of effort' could be lower profits and a lower share price. The problem will exist in a large company at middle levels of management as well as at senior management level. The interests of middle managers and the interests of senior managers might well be different, especially if senior management are given pay incentives to achieve higher profits, but the middle managers are not.
  This conflict is reduced to the barest minimum, if not totally avoided, because the sole shareholder as CEO for many years and gave off his best effort in managing the company. Even after retiring as CEO, the sole shareholder continues to give his

best effort to the company by becoming the Board Chairman. It was stated that the CEO adopted a business model that allowed him to be completely in charge and to have close involvement in the operations of the company. He did this with unalloyed commitment and energy which earned him admiration from the employees and his contemporaries. This is evidence of committing the highest level of effort to the business of the company and this would have set the right tone from the top for other managers to follow.

- **Earnings retention**: The remuneration of directors and senior managers is often related to the size of the company, rather than its profits. This gives managers an incentive to grow the company, and increase its sales and assets, rather than to increase the returns to the company's shareholders. Management are more likely to want to re-invest profits in order to make the company bigger, rather than pay out the profits as dividends.

  This conflict does not arise at TCWL because under the leadership of the shareholder as CEO, the company has been reinvesting substantial amount of profit into innovation, research and development, continuous learning to be seen as a learning organisation and to provide a cutting-edge leadership in developing products that are customer focused and environmentally friendly. This approach, he stated, would continue to provide the basis for sustaining the gains made so far and critical to the future competitiveness of the company. The former CEO has also been investing money in corporate social responsibility because he believes in the long run the company stands to miximise shareholder value. Thus, the Board Chairman knows exactly the balance to maintain between how much should be retain in the business and how much should be paid out as dividend to him.

- **Risk aversion**: Executive directors and senior managers usually earn most of their income from the company they work for. They are therefore interested in the stability of the company, because this will protect their job and their future income. This means that management might be risk-averse, and reluctant to invest in higher-risk projects. In contrast, shareholders might want a company to take bigger risks, if the expected returns are sufficiently high.

  At TCWL, there is no dichotomy between risk aversion or preference between management and shareholder since both reside largely in the same person, formerly as CEO and present as the Board Chairman. Therefore, risk aversion conflict does not arise. The shareholder is involved in the management of the company and can decide on the appropriate level of risk that is tolerable and acceptable to him. The shareholder would not assume risk he thinks will jeopardise the future survival of TCWL all in the name of taking bigger risks to sufficiently high returns to him.

- **Time horizon**. Shareholders are concerned about the long-term financial prospects of their company, because the value of their shares depends on expectations for the long-term future. In contrast, managers might only be interested in the short-term. This is partly because they might receive annual bonuses based on short-term performance, and partly because they might not expect to be with the company for more than a few years. Managers might therefore have an incentive to increase accounting return on capital employed (or return on investment), whereas shareholders have a greater interest in long-term share value.

This conflict is also minimised since the shareholder is involved in the management of TCWL, he will certainly ensure that a long-term view of the company prevails over any short-term tendency. This explains the reason why when some of the management team members were against the whooping sums of money being sank into corporate social responsibilities, the CEO remained resolute, because he argued that in the long run the company stands to benefit in terms of good corporate image and increase return to the shareholder.

(5 points @ 2 marks each = 10 marks)

EXAMINER'S COMMENTS

This question focused on potential agency conflicts that could be minimised or avoided in the management of the company by the current Board chairman, who previously served as the CEO of the company. Once again, the candidates performed poorly in this question. One was expecting the candidates to have done well in this question because agency conflicts and measures for minimising them is a popular area.

QUESTION FOUR

a) **JOHNSON AND SCHOLES SUITABILITY/FEASIBILITY/ACCEPTABILITY MODEL**

Investment appraisal techniques identify whether the financial factors associated with an investment decision are acceptable in terms of the whether the investment helps a company to achieve its corporate objectives. They provide a mechanism to allow a company to identify the "best" course of action in terms of a financial objective. However, no investment decision is based on financial objectives alone. Companies must also consider non-financial factors. One possible approach to identifying non-financial factors is to use the **Johnson and Scholes suitability/feasibility/acceptability model**.

Johnson and Scholes **suitability/feasibility/acceptability model** is an approach which identifies non-financial factors/considerations that could influence the success of a strategic decision like that made by TCWL to expand to Kenya and South Africa to produce for Eastern and Sothern Africa markets respectively. This model is used in corporate strategy to appraise strategic decisions. Whilst all investment appraisals would not necessarily fall into that classification, the technique provides a useful framework for looking at scenario to identify possible issues. Based on this model, the three main non-financial factors that could influence the success of this strategic decision are **suitability, feasibility** and **acceptability**.

SUITABILITY OF A STRATEGIC DECISION

Suitability of a strategic decision regarding capital project/investment is concerned with whether it will achieve its intended purpose. A strategy is suitable if it would achieve the strategic objective for which it is intended. For instance, if the project is intended to increase production capacity by a given date, will it satisfy that requirement? Some projects do not necessarily achieve a return that is measurable. If the purpose of the strategy is to gain competitive advantage, it is necessary to assess how the strategy might do this, and how effective the strategy might be. Will the strategy succeed in reducing costs, if this is its purpose? Will the strategy succeed in adding value, if adding value is the purpose? If the purpose of the strategy is market development, how successful might the strategy be?

Suitability is also concerned with assessing which proposed strategies address the key opportunities and threats an organisation faces through an understanding of the strategic position of an organisation: it is therefore concerned with the overall rationale of a strategy. Thus, at the most basic level, a suitability analysis involves assessing the extent to which a proposed strategy exploits the opportunities in the environment and avoids the threats and capitalises on the organisation's strengths and avoids or remedies the weaknesses. Suitability also deals with the question of whether the proposed strategies are consistent with organisation's purpose which may include vision, mission, goals and objectives. Will the strategies help organisation achieve its strategic purpose?

The two main non-financial objectives for which TCWL is expanding to Kenya and South Africa is to take advantage of Africa Continental Free Trade Agreement (AfCFTA) which has increased market access within Africa and to fulfil the founding CEO's ambition to build an African corporate giant from within the continent to compete with the multinationals from other continents. TCWL's expansion would exactly achieve the two-prong purposes/objectives, hence the strategic decision can be deemed as suitable. Again, this strategic decision accords with the vision of TCWL which is "to become an African industrial giant in cables and wires manufacturing".
Finally, there is a huge opportunity with respect to expected high growth in the cables and wires industry in Africa. Africa cables and wires market is anticipated to register enormous growth during 2023 - 2027. The growth is mainly expected to be driven by the urbanization of the cities, and the development in the infrastructure, defense and telecommunication.

ACCEPTABILITY OF A STRATEGIC DECISION

The acceptability of a strategy is concerned with whether it will be acceptable to key stakeholders. How will it affect our customers/employees/local community etc. What will be the impact of the new investment on the wider business? What will be the impact on customers? What will be the impact on employees? What will be the impact on shareholder? What will be the impact on the community at large? What will be the impact on the reputation of the business? If it is not acceptable to a key stakeholder, the stakeholder will oppose the strategy. Management should then consider whether a strategy that is not acceptable to a key stakeholder should be undertaken or not. In most cases, management are likely to reject a strategy that will not be acceptable to a key stakeholder.

In terms of the wider business impact, TCWL is likely to increase its market size, increase sales, reduce average cost because of economies of scale and some locational advantages, increase profitability and balance sheet size which will ultimately make the company more competitive globally than it is currently.

Customers of TCWL should benefit from cost reduction in terms of reduced prices of its products. Expanding internationally would also bring pressure on the company to research and innovate in how it produces its products thereby increases the chance to produce high quality cables at affordable prices for its customers.

At TCWL a key stakeholder is the founding sole shareholder, and any strategic decision must be acceptable to him before it can be implemented. The other very important stakeholder group is the Board of TCWL who would have to approve any strategic decision before it can be implemented. The Board is chaired and controlled by the sole shareholder who appointed other directors. Therefore, any strategic decision must meet the aspirations, values and expectations of the sole shareholder and his Board. In setting up TCWL, the shareholder clearly stated his aspirations to build a company that will survive the test of time and to change the general narrative in the country where average indigenous Ghanaian businesses remain small, family-owned and fail leaving shareholder(s) bankrupt. Therefore, expansion to Kenya and South Africa would fulfil his aspiration to build an African corporate giant, hence the said decision would be acceptable to him and the Board.

Employees also stand to gain from this expansion in terms of career progression opportunities beyond Ghana. They may have a chance to work in Kenya or South Africa office of TCWL by way of promotion or transfer. This would impact positively on staff motivation and boost their morale to even put in their best effort in what they do.

FEASIBILITY OF A STRATEGIC DECISION

The feasibility of a strategy is concerned with whether it will work. A strategy is feasible if it can be implemented successfully. Assessing whether or not a strategy is feasible will require some judgement by management. Some of the questions to consider are as follows: Can we achieve the necessary level of quality that the strategy will require? Do we have the marketing skills to reach the market position that the strategy will expect us to achieve? Do we have enough employees with the necessary skills to implement this strategy successfully? Can we obtain the raw materials that will be needed to implement this strategy? Will our technology be sufficient to implement the strategy successfully? For example, will our IT systems be good enough? If there are serious doubts about the feasibility of a strategy, it should not be selected.

TCWL has about 25 years' experience in the cables and wires industry here in Ghana and abroad. The company has rich experience and core competences in producing cables and wires locally and internationally – operating in Nigeria. It can leverage on this know-how and experience to successfully set up and operate in Kenya and South Africa. The highly resourceful management being led by the CEO who is an experienced management executive, a renowned and very successful CEO of major companies in Ghana spanning nearly three decades. Further, the Board is chaired by the former CEO who successfully pioneered the company for several years. The very experience management staff, especially Production and Quality Managers, can be used to nurture the operations to be set up in Kenya and South Africa.

The company has a subsidiary, Solid Rod Limited (SRL), that produces one main raw material, aluminium rod, use in the production of cables and wires and has experience in sourcing copper for all these years. Therefore, sourcing raw materials for the new factories to be set up in Kenya and South Africa would not be a challenge.

The company also has some competence in marketing its products through establishment of depots, retail outlets and the use of key distributors across the country which can be replicated in the new foreign markets.

With TCWL wide array of resources, competences and core competences, the proposed strategic expansion to foreign market is feasible in non-financial terms. However, the company is yet to determine how to raise long-term capital to finance the expansion. The Board is yet to consider the financing options proposal presented by the new CEO.

(3 points @ 3.33 marks each = 10 marks)

b) **LEVERS OF CHANGE AND THE USE OF EXTERNAL CHANGE AGENT**

i) **Levers of Change**

The following are the levers of change that are needed for successful implementation of change by the new CEO:

- He must communicate **a clear understanding of the need for change, and what will be the desired result of the change**. The CEO must clearly communicate the reasons for which he is proposing to make changes and the possible result of the changes if made. For example, CEO would have to get stakeholders (i.e. employees and the Board, especially Chairman) of TCWL to understand that the existing organisation structure can no longer serve the needs of the company which has seen astronomical growth within and beyond Ghana.
- **The commitment of the entity's leaders to the change**. The CEO must walk the talk by demonstrably showing his commitment to effect change that he believes in. The CEO must persevere in case of any setbacks he may encounter in the course of implementing change. It is the CEO's commitment to effect change that may win the support of stakeholders who may be resisting proposed changes.
- **Effective communication with everyone affected by the change.** This should be two-way communication. The CEO and management should listen to all persons affected by intended changes and the provide feedback which addresses their concerns and fears. The two-way communication is very important because management will get feedback from the stakeholders and in return communicate management position on the issues.
- **The CEO and management should have the required qualities to implement change successfully**. Rosabeth Moss Kanter suggested some of the qualities that change managers must possess which include tuning in to environment, challenging prevailing organisational wisdom, communicating a compelling aspiration, building coalitions and learning to persevere.
- **The organisation structure and relationships within the organisation should be adapted to meet the requirements of change.** The new CEO thinks that the company's current structure is no longer suitable for its operations looking at the number of products and geographical expansion attained. He suggests the adoption of a structure which will make the management work more closely as a team, be more flexible and responsive to the market, and can result in a higher sense of responsibility and accountability of the managers.
- **Reward systems should be amended, so that rewards to managers and other employees are based on performance targets that are consistent with the requirements of the change**. The new CEO must introduce performance-based remuneration system to reward high performing employees and this may also force those not performing to put in their best.

- **Critical success factors and key performance indicators should be revised, so that they are consistent with the requirements of the change**. The CEO must review the critical success factors that the company identified and where necessary update them to reflect the proposed changes he wants to implement. Key performance indicators must be developed to be used to measure the success of the change.
- **Employees should be given education in the purpose of change and training to meet the operational requirements of the change.** Education would be a major enabler of change, hence CEO must take education of staff very seriously.

(Any 4 points @ 1.5 marks each = 6 marks)

ii) **Change agent**

Using an outside consultant as the change agent will have the following advantages:

- **An outside consultant is perceived to be independent and fair**. This will minimise any mistrust that may arise if employees from within the company are used to lead CEO's proposed changes.
- **The consultant will have experience in managing the change process**. Managing and implementing change can be a complex process, hence persons with similar experience in executing change would be very helpful in successfully implementing change in TCWL. TCWL has become a big company and the change being contemplated by the new CEO, especially the proposed change in organisation structure, which has been in existence for a very long time, is certainly a complex one and a change agent with requisite experience is required for effective change to happen in TCWL.
- **The consultant will have experience of many organisations and should be able to advise on which changes are desirable**. Thus, an external consult can benchmark TCWL change to best practice elsewhere and to companies he/she had participated in implementing change and accordingly advise on changes to and not to implement.
- **Large-scale changes can easily go wrong.** Management will want all the help and advice available. The CEO would require the help of an external consultant to convince the sole shareholder to accept intended changes because he has indicated his intention to keep to the vision and mission of the company. Thus, the sole shareholder and the current Board Chairman evinces his possible resistance to the proposed changes. Again, since any proposed change would have to be approved by the Board under the chairmanship of the sole shareholder, the CEO would need external consultant to play a key role in convincing the entire Board to approve his planned changes.

(Any 4 points @ 1 mark each = 4 marks)

EXAMINER'S COMMENTS

This question had two parts. Part A required the candidates to use Johnson and Scholes suitability/feasibility/acceptability model to evaluate the non-financial factors that could influence TCWL's plan to expand to Kenya and South Africa. In Part

B, the candidates were to explain four levers of change and the benefits of using an external change agent.

Although this question was within the syllabus, most of the candidates provided wrong solutions. Most of them were not familiar with the Johnson and Scholes suitability/feasibility/acceptability model and therefore could not apply the model to the case. In Part B of the question, the candidates could also not explain the levers of change.

QUESTION FIVE

a) The dollar loan amount that TCWL could take on 1st December 2022 and the cedi equivalent if converted at the spot rate on the same date are calculated as follows:

The dollar loan that TCWL could take on 1st December 2022 is the present value of $250,000 since the company wants to settle the loan (i.e., principal and interest) with the expected inflows at the end of the loan period or hedging period. Thus, if the present value is compounded six months the principal and interest would be equal to $250,000.

Present Value (i.e., Loan to be taken) = $250,000 * $\frac{1}{[1+(25\%/2)]}$

Present Value (i.e., Loan to be taken) = $250,000 * $\frac{1}{[1.125]}$

Present Value (i.e., Loan to be taken) = $250,000 * 0.8889 = **$222,225**

Cedi Equivalent of the loan = Dollar Loan Amount * Spot Rate on 1st December 2022
= $222,225 * 11.4500 = **GH¢2,544,476.25**

Note: The foreign currency trader buys low and sells high hence, the lower spot rate should be used in converting the dollar loan to cedi amount.

Marks allocation:
Workings = 2 marks
Final answer = 1 mark
3 marks

b) The Interest and total cedi amount to be received if the converted amount (GH¢2,544,476.25) is invested in fixed deposit in Ghana for six months. Fixed deposit interest rate in Ghana is 30% per annum, hence 6-month rate is 30%/2 = 15%

Total Amount Receivable by TCWL = Amount Invested *(1+r)
= GH¢2,544,476.25* (1.15)
= GH¢2,926,147.69

Interest Earned = Total Amount Receivable - Total Amount Invested
= GH¢2,926,147.69 - GH¢2,544,476.25
= GH¢381,671.44

Alternatively, Interest earned = Converted amount * interest rate
Alternatively, Interest earned = GH¢2,544,467.25 * 30%/2

= GH¢381,671.44

Marks allocation:
Total amount earned = 1.5 marks
Interest earned = 1.5 marks
3 marks

c) The forward rate of the Cedi to U.S dollar on 31st May, 2023 and the Cedi equivalent of amount the company would have received without the money market hedging.
Cedi Equivalent of amount to be received without hedge = Forward rate * Foreign Receipt

= 10.8775 * $250,000
= GH¢2,719,375

The Cedi gain or loss the TCWL would make by hedging.
The Cedi Gain/(Loss) = Cedi Amount Receivable with hedging - Cedi Amount Receivable without hedging

= GH¢2,926,147.69 - GH¢2,719,375.00
= GH¢206,772.69

With TCWL using money market hedge, the company makes a gain of GH¢206,772.69

Marks allocation:
Workings = 1 mark
Final answer = 1 mark
2 marks

d) Effective forward rate is the exchange rate derived by dividing the total cedi amount earned in Ghana by the amount of dollar receipt which is used to settle the loan.

Effective Forward Rate = $\frac{\textbf{Total Cedi Amount Realised in Ghana}}{\textbf{Total Amount of Dollar Used to Settle the Loan}}$

Effective Forward Rate = $\frac{GHS2,926,147.69}{USD250,000}$

Effective Forward Rate = 11.7046

The effective forward rate of 11.7046 reflects the **spot rate** and **interest rate differential between Ghana and Cameroon**. **This ought to have been the right forward rate using the interest rate parity.**

Marks allocation:
Workings = 1 mark
Final answer = 1 mark
2 marks

(Total: 10 marks)

EXAMINER'S COMMENTS

This question was on money market hedge to protect TCWL against the risks of expected cedi appreciation. It was shocking that the candidates displayed lack of knowledge of short-term decisions involving foreign currency. Although the question looks straightforward, a good number of the candidates did not attempt the question and the few who did, performed poorly.

QUESTION SIX

a) Shell Directional Matrix

i) The **Shell Directional Policy Matrix** with the products plotted based on the summary of the Consultant's work is below.

<table>
<tr><td></td><td></td><td colspan="3">Prospects for Sector Profitability</td></tr>
<tr><td></td><td></td><td>Unattractive</td><td>Average</td><td>Attractive</td></tr>
<tr><td rowspan="3">Product's Competitive Capability or Position</td><td>Weak</td><td>n/a</td><td>• Control Cables
Strategy: Phased withdrawal</td><td>• Overhead Line Cables
Strategy: Double or Quit</td></tr>
<tr><td>Average</td><td>• Telecommunication Cables
Strategy: Phased withdrawal</td><td>• High Pressure Cables
Strategy: Custodial</td><td>• Solar Cables
Strategy: Try Harder</td></tr>
<tr><td>Strong</td><td>n/a</td><td>• Polyvinyl Chloride Granules
Strategy: Growth</td><td>• Building Wiring Cables
• Accessories
Strategy: Leader</td></tr>
</table>

(2 marks)

ii) **The recommended strategy for each of the products are explained below:**

- **Telecommunication Cables and Control Cables –** The strategy recommended by the Shell Matrix for these two products is **phased withdrawal/harvest (i.e. no further investment and redirection of resources to more profitable products)**. This strategy involves cessation of any further investment in these products and gradually withdrawal them from the market as well as reallocating resources their resources/cash to other profitable products. Thus, the process of shutting them down should commence with cash and resources being re-directed towards SBUs which show greater potential. The resources/cash generated by these products should be harvested and redirected to other profitable products. They should be phased out gradually. The cash realized should be invested in more profitable ventures. While less urgent action is needed for these products than those in the disinvest segment, these SBUs are not going to continue into long term.

- **Overhead Line Cables –** the strategy for this product is either **double or quit**. **Double** refers to the strategy of making selective investment to grow the product while **quit** is the strategy of divesting or withdrawing a product from the market. These products are like question marks in Boston Consulting Group Matrix and have two potential future outcomes – success or failure. If they have potential future success, then the company should invest selectively in them (i.e. double), otherwise the company should withdraw them (i.e. quit) because they would fail in the near future. These products are, therefore, potential major future products which represent a gamble for the company. They could go either way (i.e. succeed or fail). The company will need to decide whether to take the gamble and invest the capability into this product, or whether to withdraw the product from this segment. Either invests more to use the prospects presented by the market or else better to quit the business. TCWL should double by investing in the capability of this product since in the long-term Government is seeking to revamping the national power system, hence the growth potential of the segment is high.

- **High Pressure Cables -** the strategy for this product is **custodial (i.e. maintaining its market share to generate cash for other profitable products)**. Products in custodial segment are very similar to cash generation and therefore the strategy is to maintain the market share of this product while maximising resource/cash generation from this product and reallocating the resources to other potentially profitable products. This strategy involves maximising cash generation with minimal new resources – minimal investment to generate maximum cash inflow. They are similar to products in the BCG matrix that have recently moved into the cash cow segment. They should be used to generate resources which can be invested into other products, but no further invested in themselves. This product is just like a cash cow, milk it and do not commit any more resources.
- **Solar Cables -** the strategy for this product is **try harder (i.e. selective investment – this product should only be invested in after investing the in the priority product – leader)**. This involves selective growth/investment, where the company only invests in this product after satisfying the resource/investment requirements of the products in **leader** quadrant. The investment in this product is to move it to a market leader. This product is performing adequately for the time being, but it may become vulnerable over longer period of time. It needs additional resources to strengthen its capabilities. The company tries harder to exploit the business prospects thoroughly. TCWL, therefore, should make selective investment in the Solar Cables to make it a market leader since the solar energy has been identified as the future of that sector. Thus it was stated that, the present demand for these cables is low, but it is expected that with increasing switch to the use of solar power, there will be a surge in demand in the near future.
- **Polyvinyl Chloride Granules -** the strategy for this product is **growth (i.e. selective investment/growth)**. There should be selective investment in this product – investing in this product after meeting the needs of the product in the leader segment who are the first priority of TCWL. Just enough resources should be allocated to this product to allow it to continue to grow. TCWL should grow the market for this product by focusing just enough resources here. This product needs funds to support product innovations, research and development activities, etc.
- **Building Wiring Cables and Accessories Market -** the strategy for these products is **leader/investment to grow (it entails investment to grow market share and subsequently maintain its leadership.** It is the product with highest priority

which require resources to grow and maintain it. Resources should be focused on these products in this quadrant/cell. They are priorities for investment and represent the greatest potential for returns. Major resources are focused upon these products. It must receive top priority. It has been stated that Building Cables have regular and high demand the real estate, construction and households consumers and that the fortunes of accessories (sockets, switches, and lighting fittings) are linked to the trend in demand for Building Wiring Cables. These products are like Stars in BCG Matrix and should be the top-most priority of TCWL in resource allocation.

(8 marks)

b) **Determination of whether child labour is ethically wrong using deontological theory** and **teleological theory of ethics**

The two main theories for determining whether an act or a conduct by an entity or a person is ethically right or wrong are **deontological theory** and **teleological theory.** In determining whether the use of child labour by the distributors and continuous supply of the TCWL's products to the affected distributors is ethically wrong, we have to evaluate the conduct against what each of the theories defines as ethical or unethical conduct. We can then conclude under each theory whether the position of the Board Chairman or CEO is the right one.

Deontological theory/non-consequential theory of ethics

Non-consequential theory of ethics is theory based on the view that what is right or wrong does not depend at all on the consequences of the action or decision. This approach to ethics is a duty-based approach. It is based on the view that certain moral obligations are self-evident and need no further justification. Actions are inherently 'good' or 'bad', regardless of their consequences, and a clear distinction can be made between 'right' and 'wrong' without considering consequences or utility.

The deontological approach is therefore always do the right thing, do the right thing because it is right, regardless of the consequences and do not do the wrong thing, because it is always wrong.

Applying deontological ethics to business would mean that acts considered unethical intrinsically, such as corruption, **child labour** and bribery, cannot be justified by business even if the end result is profit to the business. Thus, by this ethics there are wrong and right acts and business consequences are irrelevant in judging whether or not a business has been ethical.

All deontological ethics theories are non-consequentialists. This means that they place the emphasis on the decision or action itself – on the motivations, principles, or ideals underlying the decision or action – rather than being concerned with the outcomes or consequences of that decision or action. This reasoning is founded on the desirability of principle (usually duties or rights) to act in a given situation.

The two main non-consequentialist theories are **ethics of duties** and **ethics of rights and justice**. Ethics of duties is to the effect that a person has certain fundamental duties that he or she must always uphold, and there are no circumstances when breaching those duties is morally correct. **Ethics of rights and justice** is an aspect of the deontological approach to ethics which hold the view that the rights of an individual in any situation should be protected and upheld, and the law should always be respected. Both of these are rooted in assumptions about universal rights and wrongs and responsibilities. This means that people who promote these types of ethical principles usually believe that they should be applied to everyone, everywhere in the world.

Applying deontological theory to the issue of whether child labour is ethically wrong, it is obvious that the position taken by the Chairman that the practice of child labour is ethically wrong is the correct position as against the contrary opinion by the CEO that the said conduct is ethically right because children are being helped and that if TCWL stops selling to the said distributors, company's profit will also be affected negatively. Clearly, Chairman is looking at the act of child labour itself to come to the conclusion that it is ethically wrong since intrinsically child labour is recognised as abuse of the fundamental rights of the child, such as right to education, right not to be abused, etc. On the contrary, the CEO is looking at the positive consequences of child labour, such as helping the child make a living and the company to make profit, to come to the conclusion that child labour is ethically right. The CEO would have been right if **teleological theory** of ethics is applied to the issue in contention.

Teleological theory/(Consequential theory) of ethics
The second theory of ethics that is used to evaluate whether child labour is ethical or not is **teleological theory/(Consequential theory) of ethics.** Consequential theories of ethics are also known as teleological theories or results-based theory. This is the theory that "of all the things that a person might do at any given moment, the morally right action is the one with the best overall consequences/outcome". Thus, whether child labour is ethically right or wrong ought to be judged based purely on the outcome/consequences of the practice.

According to this view, nothing is inherently 'wrong': it all depends on the outcomes or consequences. Whether something is right or wrong depends only on results. This means that faced with a moral dilemma, an individual or an entity should choose the action that will provide the best possible consequences (or the 'least worst' consequences).

The teleological theories accept utility as the basis for morality. According to this perspective, actions are right as they produce and promote the greatest happiness, wrong as they promote unhappiness; happiness refers to pleasure and the absence of pain; unhappiness, on the other hand, means pain and the deprivation of pleasure.

The two main consequentialist theories which are ***ethical egoism*** and ***utilitarianism***. Utilitarianism is the view that the morally correct decision in any situation is one that produces the best possible outcomes for people as a whole (for 'mankind'). The aim should be to maximise well-being or 'utility' for people. Ethical egoism takes the view that people should always do what is in their own best interests, not what is in the best interests of people generally. Thus, this theory promotes individual person or entity happiness and so long as an act inures to the benefit of the company or an individual, then the said conduct is ethical.

Teleological ethics can be used to justify the profit motive in business. It can be argued that when a business is profitable, many people benefit. Shareholders benefit from higher returns and dividends; employees benefit from the employment that a profitable business provides; customers benefit from the goods and services that a profitable business is able to provide (that it would not be able to provide if it did not make a profit); the general public benefits from the benefits to the economy from profitable businesses and additional economic activity.

According to **teleological theory** of ethics, child labour would be ethically right, because in the context of TCWL, it produces positive consequences of helping the children make money to support themselves eke out a living since their families are very poor and according to the CEO, TCWL ceasing selling to the said distributors would negatively affect the company's profit. To this extent, it can be concluded that the position of the CEO that child labour is ethically right is correct while that of the Board Chairman is incorrect since he is not considering the positive effect of child labour but rather judging the practice itself because it is intrinsically/inherently considered unethical.

Marks Allocation:
Definition and explanation of each theory, 1 mark each = 2 marks
Identification of the sub-theories of each ethical theory, 2 marks each = 4 marks
Application of the theories to determine whether child labour is ethically wrong, 2 marks each = 4 marks
10 marks

EXAMINER'S COMMENTS

This question was in two parts. Part A was on Shell Directional Policy Matrix. The candidates were required to draw the Shell Directional Policy Matrix and locate TCWL's product in the appropriate quadrant. They were also required to recommend and explain the appropriate strategy(ies) that TCWL should adopt for each of its products. Most of the candidates were not familiar with the Shell Directional Policy Matrix and therefore obtained low marks.

In Part B, the candidates were required to use deontological theory and teleological to determine whether child labour is ethically wrong. The performance was poor in this part of the question.

QUESTION SEVEN

a) **The disclosures to be made in the annual report of TCWL once it gets listed on the stock exchange**

The Code of Best Practices specifies a number of disclosures that should be included in the annual report of a listed company, in addition to those required by law or other regulation. These are:

- A **Chairman's Statement**, which should provide a reasonable and balanced summary of the company's performance for the year, and its future prospects: this should represent the collective view of the board. Mr. Asare, the existing sole shareholder, if he remains the Board Chairman after listing on the stock exchange would have to present Chairman's Statement on the affairs of TCWL annually.
- **Statement of Board's Responsibility**. A statement by the board of its responsibility for the information contained in the report and financial statements. The directors are responsible for the preparation and fair presentation of the financial statements in accordance with accounting standards and the requirements of the relevant laws (for example Companies Act, 2019 (Act 992) and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. This responsibility must be disclosed under the section known as "directors' responsibility and approval of financial statements" in the annual report.
- **Statement on adequacy of internal controls**. A statement by the board of the adequacy of the company's internal control mechanisms and procedures. The Board has ultimate responsibility for overseeing the internal control systems in TCWL. Hence, the Board must provide statement on how it has discharged this responsibility.
- **Statement of compliance with legal requirements**. A statement by the board about the degree of compliance by the company with any regulatory or other legal requirements that apply to its operations, and the extent to which any statutory payments for the period have been met. It is the Board's responsibility to ensure that TCWL is complying with all the relevant legislations that affect its operations. A statement must be made on how the Board has ensured that the TCWL is compliant.
- **Statement of compliance with corporate governance best practices**. A statement of the extent to which the company has complied with the corporate governance practices specified in the Code of Best Practices. TCWL Board must indicate the extent to which the company has complied with the best practices enshrined in the Code of Best Practices.
- **Statement of going concern**. A statement from the board indicating that it is satisfied that the company is a going concern. In preparing the financial statements, the directors of TCWL are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

(6 points @ 1 mark each = 6 marks)

b) **Encouraging attendance by members of TCWL**

General meetings of shareholders are another means by which the board of directors should communicate with shareholders. The Code of Best Practice states that the annual general meeting is the main method for meeting and interacting with shareholders by the board.

The annual general meeting must conduct the business required by law. In addition, it provides shareholders with an opportunity to ask questions and obtain the views of board members. In some circumstances, it provides an opportunity for shareholders to submit resolutions of their own to be voted on.

The Code of Best Practices makes several comments about general meetings, and the annual general meeting in particular. The aim should be to maximise attendance and involvement by shareholders. The Code of Best Practices recommends measures that are aimed at maximising attendance and involvement by shareholders in the company and these include:

- **Adequate notice of meetings should be given to shareholders, together with details of the matters to be discussed**. After listing on the stock exchange, TWCL must ensure that members receive adequate notice of members/shareholders meetings, whether annual general meetings or extraordinary general meetings. This will allow for participation of majority, if not all the shareholders.
- **The meeting should be held at a time and a place that will 'facilitate' attendance by shareholders.** TWCL should hold meetings at a venue that is easily accessible and meetings should be held at times when members are likely to be available.
- **Opportunities of voting by mail and other means should be supported**. TCWL should expand methods by which members can vote, especially electronic methods can be considered since they are virtual and shareholders can vote where they are. The company is already making massive investment in technology, hence this should not pose a challenge to TCWL.
- **The chairmen of board committees should attend general meetings, to respond to shareholder questions**. The chairmen of any committees of the board that TCWL may have must avail themselves at annual general meeting to provide answers to questions that may be posed by the shareholders.
- **Shareholders should be given an opportunity ("within the ambit of the law" and the company's constitutional rules) to place matters on the agenda for deliberation**. TCWL should encourage shareholders to suggest critical matters which are key to the development of the company to be added to the agenda to be discussed at general meetings.
- **Separate issues should not be bundled into a single resolution for voting on**. In other words, the board should give shareholders the opportunity to vote on separate issues individually, and the board should not try to get the shareholders to accept a proposal by bundling it into the same resolution as a more popular proposal.

(Any 4 points @ 1 mark each = 4 marks)

EXAMINER'S COMMENT

In this question, the candidates were asked to explain six statements that must be disclosed in the annual report of TCWL after listing on the Ghana Stock Exchange. In addition, they were to discuss four measures in the Code of Best Practices. This is the only question where most of the candidates performed relatively well. Most of the them provided very good answers to the question.

QUESTION EIGHT

a) **Risks to automated systems**

Computer and other automated systems need to be kept secure from errors, breakdown, unauthorised access and corruption. Maintaining computerised and automated systems security, even for small home computers linked to the internet, is a permanent problem and the risks must be managed continually.

Some of the major risks to TCWL automated systems may include the following:

- **Human error**. Individuals make mistakes. They may key incorrect data into a system. In some cases, they may wipe out records, or even an entire file, by mistake. Human error is also a common cause of lapses in automated systems. The human error could cause a breakdown of the systems TCWL uses in manufacturing of cables.
- **Technical error**. Technical errors in the computer hardware, the software or the communications links can result in the loss or corruption of data. TCWL must guard against the technical errors that may arise during operations to minimise production disruptions. There could be technical errors with the programmes that control automated machines and may cause malfunction of the machines and since the technical expertise for fixing TCWL machines are not readily available locally, this can pose a major risk to smooth and effective use of machines.
- **Natural disasters**. Some computerised and other automated systems may be exposed to risks of natural disasters, such as damage from hurricanes, floods or earthquakes. TCWL which is located at Tema may be affected by natural disaster such as tsunami, which is triggered by an underground earthquake, which has a potential to wipe off most of the companies operating in the area. The climate change is a major source of natural disasters afflicting businesses and indeed the Board Chairman expressed his fears that if drastic and collective actions are not taken by businesses to address climate change, most businesses will go extinct before the end of the 21st century.
- **Sabotage/criminal damage**. Automated systems are also exposed to risk from criminal damage, or simply theft. Risks from terrorist attack are well publicised. Losses from theft and malicious damage are much more common. TCWL is not insulated against increasing criminal activities such as theft of automated system hardware and potential terrorist attacks which could damage the entire automated systems of the company.
- **Deliberate corruption**. All computer systems are exposed to risk from viruses. Hackers may also gain entry to a system and deliberately alter or delete software or data. The programmes that control TCWL machines could suffer virus attacks, and this may lead to improper functioning of machines which may lead to production of substandard cables and wires for the market.
- The **loss of key personnel** with specialist knowledge about a system. For example, the risk that a senior systems analyst will leave his job in the middle of developing a complex new system. TCWL has had to contend with this risk where the engineers sponsored to train abroad do not stay long with the company on their return, hence this strategy has been abandoned. The company has to depend on

foreign expertise which is obviously expensive and may not be readily available under emergency situation.

- The **exposure of system data to unauthorised users**. For example, hackers and industrial espionage. TCWL automated system can be attacked by unauthorised persons, who could steal some vital business data and strategy.

(Any 4 points @ 1.25 marks each = 5 marks)

b) Embedding risk awareness in the culture of an organisation

An essential aspect of risk management and control is the risk culture within the organisation. The culture within the organisation is set by the board of directors and senior management (the 'tone at the top'), but it should be shared by every manager and employee.

Risk awareness is 'embedded' in the culture of the organisation when thinking about risk and the control of risk is a natural and regular part of employee behaviour. Creating a culture of risk awareness should be a responsibility of the board of directors and senior management, who should show their own commitment to the management of risk in the things that they say and do.

TCWL Board can embed risk awareness in its culture in the following ways:

- **There should be reporting systems in place for disclosing issues relating to risk.** There should be a sharing of risk-related information. The Board should create the culture which promotes free disclosure and sharing of information about risk incidents that may occur in TCWL. This will provide real life examples of events that can cause risk in the company which will guide all stakeholders in the company.
- **Managers and other employees should recognise the need to disclose information about risks and about failures in risk control**. Employees in TCWL should appreciate the importance of sharing information about risk failures that may occur in the company to forestall future recurrence.
- **There should be a general recognition that problems should not be kept hidden.** 'Bad news' should be reported as soon as it is identified. The sooner TCWL identifies problems, the sooner control measures can be taken (and the less the damage and loss).
- **To create a culture in which problems are disclosed, there must be openness and transparency.** Employees should be willing to admit to mistakes in the company. This should not be used to victimize affected employees. This will promote voluntary disclosure by employees at TCWL.
- **Openness and transparency will not exist if there is a 'blame' culture.** Individuals should not be criticised for making mistakes, provided that they own up to them promptly. Mistakes are bound to happen in every human endeavour, hence TCWL would have to recognise this fact and focus on how to prevent such mistakes and errors from happening again in the future.
- **The attitude should be that problems with risks will always occur.** When they do happen, the objective should be to take measures to deal with the problem. Mistake should be analysed by TCWL in order to find solutions and prevent a repetition of the problem. Risk management should be a constructive process.

(Any 4 points @ 1.25 marks each = 5 marks)

EXAMINER'S COMMENTS

This question was in two parts. The first part required the candidates to explain four major risks that TCWL automated system could suffer. The second asked the candidates to explain four ways in which the Board of Directors of TCWL can create and embed risk in the organizational culture. Most of the candidates performed poorly in this question.