

**JULY 2023 PROFESSIONAL EXAMINATION
STRATEGIC CASE STUDY (PAPER 3.4)
CHIEF EXAMINER'S REPORT, QUESTIONS & MARKING SCHEME**

EXAMINER'S GENERAL COMMENTS

This examination was based on a pre-seen scenario which described **SavvyTech Plc**, a Ghanaian-based Tech Company and manufacturer of 'wrist-top' computers for personal and industrial use. SavvyTech plc was established in 1990 by Prof. Ernest Kofi Mensah, a former Professor at Kwame Nkrumah University of Science and Technology (KNUST) Kumasi, Ghana. The company was floated on the Ghana Stock Exchange in October 2015. Company largely owned by CEO and Staff Union facing a number of internal challenges including delayed in developing new products, intra departmental conflict, unstructured organic growth and tension among the Management Team. Research and Development (R &D) investment is critical as most of its current star products are ending their life cycle hence profit margin decreasing. New project HVSC is developed with management considering a "Project breakthrough" but with number of challenges as a result of Local Council restrictions imposed to expansion of Production facilities.

Options considered with huge responsibility on Management Team to discuss and agree options to propose to Board of Directors. Option being proposed was to acquire a Subsidiary in Utopia. Information necessary for engagement with the stakeholders, Subsidiary, Board of Directors and Staff Union who owned significant shares remain unresolved. Finance leadership role to provide necessary information was at the heart of most of the question with **"Infographic"** chart provided as part of the pre-seen material to support candidates advance preparation.

SavvyTech plc has traditionally been strong in food retailing and manufacturing, building construction, horticultural retailing and landscaping before restructuring to concentrate on the current core business, Information Technology. The wrist-top computer has traditionally been a very specialised niche of its market, hence dominated the market since first innovating the concept in 1995. Market geographical footprint for SavvyTech plc is the West Africa (30% of sales), East Africa (20% of sales), South Africa (25% of sales), and Europe (18% of sales). The company has made few inroads into the lucrative US and Asia markets with 7% of sales, where it has little market knowledge or experience, and few contacts.

The scenario was made available in advance of the exam. This is a very interesting industry and candidates were expected to be familiar as part of preparation toward the examination. The pre-seen was detailed and well-prepared candidates should have been able to provide good answers in the context of the Information Technology industry. The unseen scenarios were interesting and presented some realistic questions of agreed option by Management Team to finance the acquisition

withholding 2022 year-end dividend hence the question of “stakeholder position/importance matrix.

The standard of the paper was extremely good, and the questions were clear with preambles to assist candidates. The coverage was broad and in line with the syllabus. The paper was heavy on the strategic application. All the questions were based on the recommended syllabus and study material of the Institute (ICAG). The standard of the paper also shows remarkable improvement over the previous exam’s diets since the Institute of Chartered Accountants, Ghana introduced the Case Study in November 2019 with Case Study knowledge area that candidates can relate with. Marks allocation followed the weightings in the syllabus and was fairly distributed to each question.

PERFORMANCE OF CANDIDATES

Trend of performance is well below average compared with March 2023 exams diet with few candidates marginally performing well. Many appeared to be ill-prepared for this examination and did not demonstrate the required level of technical knowledge and application of knowledge to the case study especially the pre-seen material. Overall, candidates performed poorly, especially question numbers one, five and six. There were a number of concerns relating to candidates’ performance in several other areas, this applies to most of questions especially question related to calculation of group profit of SavvyTech. In many cases candidates described wrong strategic models despite the fact that the questions required specific models and that is the reason of scenario/ background information provided before the questions requirements. Model application to the case study remains a challenge to candidates resulting in losing valuable marks to achieve a pass. All answers must be applied to the case study and should bring in aspects of the pre-seen information as well as the unseen additional information material. Answers which are purely rote learning were quite common in some requirements and this approach is awarded very low marks.

There were also a number of candidates who gave very theoretical answers and did not apply them to the case study. Many candidates’ answers lacked depth of development and therefore, although demonstrating a basic understanding and application of knowledge, they failed to accumulate sufficient marks due to not developing their answers sufficiently. Some answers were just short and incomplete. Few candidates set their own question and answer which is very strange but evidence of lack of preparation.

NOTABLE STRENGTHS & WEAKNESSES OF CANDIDATES

Strengths

The candidates did well, not for a full question but sub questions such as the internal trigger to change by relating it to the SavvyTech case study. Question of why SavvyTech need to research, innovate and develop existing products to sustain market share and profit. Writing of internal memorandum to Management Team to support decision making. Partial calculation of SavvyTech group profit other than challenges of exchange rate computation error by candidates. Question of why Accountants as professionals dominate during Management Team decision making, about 30% of candidates did extremely well while the remaining 70% approximately deviated. Majority of candidate start questions on new page which is a good practice and commendable.

Weaknesses

- ***Poor preparation by the candidates.*** The compelling evidence from the scripts points to poor preparation on the part of the candidates. Most candidates scored very low marks because the answers provided were very shallow in terms of meeting the exact requirements. A good number of the candidates failed to answer all questions because they were not prepared. Over 40% of candidates not attempting questions which is evidence of poor time management and application of exams techniques.

Despite the fact that all necessary information including unit price, transfer price with margin, variable and fixed cost were given, candidates failed to apply them to the relevant questions and rather resorted to using other ratios resulting in waste of exams precious time. About 70% of the candidates who attempted question Five scored below 20% of the total allocated 20 marks while a significant number did not answer the question at all. Key to question five is the application of previous management account knowledge of variable cost. Most candidates ignored exchange rate translation from Ghana cedis and Utopia dollar.

- ***Poor or limited understanding of questions.*** The scripts revealed that candidates deviated in answering some of the questions. For example question One Full-cost accounting (FCA), question Two (a) “stakeholders position/importance matrix”. This problem was common with other questions that demand application of some basic concepts, standards or frameworks. The question that suffered most in this regard was question six which essentially required candidates to explain Code of ethics application to a scenario. Most candidates who attempted it deviated. Syllabus coverage remain a challenge especially question Six (b) which tested the Professional Accountant role in solving conflict between CEO and Director of Human Resources and Organisational Development. The question required specific policy guidance and referred to Institute of Chartered Secretaries and Administrators (ICSA). Over 80% of candidates deviated hence scoring zero.

Most candidates ignored the allocation of marks to questions which resulted in poor time management especially question number Five and Three.

- **Poor use of language.** The examination scripts were characterised by poor English language construction and avoidable spelling mistakes. This affects the quality of the answers provided by some candidates not forgetting challenging handwriting. The problem of poor use of English language has featured in the previous Chief Examiners' reports. The candidates are encouraged to use language appropriately and practice questions to improve on their handwriting in terms of eligibility of writing.

FUTURE EXAMINATIONS-LOOKING AHEAD

The purpose of publishing the pre-seen material in advance of the examination is to reduce time pressure on the candidate in the examination room. Candidates should read the pre-seen material carefully and come into the examination understanding and a mind map of the industry and the company which will be the focus of the exam and practice questions in the candidate manual. This will help candidates formulate good answers that relate to the tasks they are given. Candidates must manage their time well and make sure they do not run out of time on questions they know well at the expense of others. Candidates must answer what is being examined, read the questions very carefully, plan and answer what has been asked. Answers which are not applied to the case will not score high marks hence the need to review, analyse and mind map the pre-seen material with some questions practice and be ready for the unseen material.

CASE STUDY PRE-SEEN MATERIAL

SavvyTech Plc:

Introduction

SavvyTech plc is a Ghanaian-based Tech Company and manufacturer of ‘wrist-top’ computers for personal and industrial use. The ‘wrist-top’ computer is similar in design to the ‘palmtop’ and may be used across a similar range of applications, though it is smaller, lighter, more robust and more portable. The ‘wrist-top’ is strapped to one wrist and is operated by the fingers on the opposite hand. The wrist Organiser 3 Series and the Wrist Voice 1 computers represent the company’s key product offerings.

In 2022 the company had a turnover of GH¢159 million. SavvyTech plc is the Ghana market leader and takes pride in being at the leading edge of emerging technology. For example, SavvyTech plc was the first to introduce a voice recognition system, so that the user could give instructions by voice, for a ‘hand-free’ operation. This feature has proved very popular in a number of work environment, such as supermarkets, warehouses, production line, landscape design, and building construction sites. There has been considerable interest in the company within the Ghanaian business environment and this has provided SavvyTech plc with a high profile despite its fairly modest size.

SavvyTech plc was established in 1990 by Prof. Ernest Kofi Mensah a former Professor at Kwame Nkrumah University of Science and Technology (KNUST) Kumasi, Ghana. The company was floated on the Ghana Stock Exchange in October 2015. SavvyTech plc has had a consistent policy of long-term organic growth since its foundation while the board is chaired by his longtime friend Emeritus, Dr Dickson Agyeman Badu, a renowned governance expert.

Table 1: Key Product Introductions by SavvyTech plc (1995-2022)	
1995	The original ‘wrist-top’ introduced (2k RAM,8-Bit)
2012	Wrist Organiser 2 introduced
2016	Wrist Organiser 3 introduced (128k RAM, 16-Bit)
2017	Wrist Organiser 3a introduced (512k RAM)
2018	Wrist Organiser 3b introduced (2Mb RAM)
2020	Wrist Voice 1 introduced (4Mb RAM)
2022	Wrist Voice 2 introduced (8Mb, 32bit, email & internet facility)

In the years following floatation, sales have increased by 1250%, and the share price by over 2000% (ten times All -Shares index), a compound growth of around 30% per annum. The company had an extremely successful year in 2020, with substantial increases in turnover of 37% and gross profit of 35%, largely linked to the launch of the ‘Wrist Voice 1’. However, 2021 proved to be a much more difficult year for the company, according to the Board Chairman’s Statement in the Annual Report for the year. These problems were attributed to the local currency fluctuation and COVID-19 pandemic’s negative impact. The company’s fortunes saw a major improvement in 2022.

Table 2: Key Financial Data for SavvyTech plc (2020-2022)			
Year	2020	2021	2022
Sales Turnover	GH¢124.2 million	GH¢142.0 million	GH¢159.0 million

Pre-tax Profit	GH¢16.0 million	GH¢11.4 million	GH¢23.3 million
Net profit	GH¢10.4 million	GH¢7.7 million	GH¢18.6 million
Earnings per share	14.6 pesewas	10.3 pesewas	24.6 pesewas
Dividend per share	2.25 pesewas	2.5 pesewas	2.8 pesewas

The Market Place

The wrist-top computer has traditionally been a very specialised niche in the market and SavvyTech plc has dominated the market since first innovating the concept in 1995. Geographically the key markets for SavvyTech plc are the West Africa (30% of sales), East Africa (20% of sales), South Africa (25% of sales), and Europe (18% of sales). The company has made few inroads into the lucrative US and Asia markets with 7% of sales, where it has little market knowledge or experience, and few contacts. A number of industry observers have argued that the company has been too cautious and not aggressive enough in its sales approach. In terms of sector, SavvyTech plc has traditionally been strong in food retailing and manufacturing, building construction, horticultural retailing and landscaping before restructuring to concentrate on the current core business, Information Technology.

However, SavvyTech plc faces threats from two key directions. Firstly, the increased competition amongst palm-top manufacturers such as SAP Ghana and Ace Technologies, has made it difficult for SavvyTech plc to maintain the traditional market as its application stronghold. Secondly, the high-profile of SavvyTech plc and its innovations, plus the growth in the size of the niche it has serviced since 1995, is beginning to make it attractive to large computer and electronic firms such as Apple, Microsoft, and Alphabet Inc.

In its favour, SavvyTech plc has a strong corporate and product brand image associated with innovation, quality, and style described recently by the Business and Financial Times (B&FT), as ‘a cool company, with a cool product’. A company for the next generation, not a bureaucratic electronics goliath of the previous millennium. Industry observers have argued that diffusing the image more actively and widely, would greatly help SavvyTech plc sell its products in markets where it is presently weak.

Table 3. Research and Development (R&D) Expenditure at SavvyTech plc			
Year	R&D Expenditure	Turnover	R&D/Turnover
2015	GH¢1.585 million	GH¢21 million	7.55%
2016	GH¢1.456 million	GH¢35 million	4.16%
2017	GH¢1.484 million	GH¢41 million	3.42%
2018	GH¢2.710 million	GH¢61 million	4.40%
2019	GH¢5.579 million	GH¢91 million	6.10%
2020	GH¢12.400 million	GH¢124 million	10.00%
2021	GH¢14.200 million	GH¢142 million	10.00%
2022	GH¢15.900 million	GH¢159 million	10.00%

Table 3 above highlights the rapid increase in Research and Development expenditure at SavvyTech plc between 2015 and 2022. However, this has to be placed in the context of Research and Development expenditure by its key competitors. See Table 4 below (local and foreign companies’ information translated into SavvyTech plc functional currency for analysis purpose).

Table 4. Comparative Research and Development Expenditure 2022			
Company	R&D Expenditure	Turnover	R&D/Turnover
SAP Ghana	GH¢11.3 million	GH¢160 million	7.1%
SavvyTech plc	GH¢15.9 million	GH¢159 million	10.0%
Meta Planform	GH¢11.0 million	GH¢199 million	5.5%
Oracle	GH¢704.0 million	GH¢9,543 million	7.4%
Alphabet Inc	GH¢2,078.0 million	GH¢13,676 million	15.2%
Tencent Holding	GH¢942.0 million	GH¢15,058 million	6.3%
Microsoft	GH¢1,445.0 million	GH¢21,492 million	6.7%
Apple	GH¢1,721.0 million	GH¢29,083 million	5.9%

A number of conclusions can be drawn from the figures on Research and Development expenditure in Table 3 and Table 4. Firstly, Research and Development spending by SavvyTech plc as a percentage of its turnover has increased dramatically between 2016 to 2020 and is now above average in comparison with its international competitors, and substantially higher than one of its key competitors – SAP Ghana, which is of a similar size, and product and market focus. Within Ghana, SavvyTech plc is ranked 10th overall in terms of Research and Development expenditure, and 2nd within the Ghana Information Technology (IT) sector. Secondly, from a product perspective, although SavvyTech plc (like SAP Ghana) is very small compared to its two main US rivals- Oracle and Apple (less than 1% of their turnover), it concentrates its Research and Development solely on wrist-tops, rather than a wide range of consumer electronic products. Thirdly, from a core-competence perspective, Research and Development spending by SavvyTech plc in absolute terms is very small compared to its rivals (again around 1%). Oracle and Apple, for example dedicate their Research and Development efforts to the development of range of technological core competences, such as electronic displays technology, where Apple is aiming to be the world leader. Thus, these large firms can cross-fertilise ideas and leverage technologies between Research and Development projects, in ways that will benefit a range of their products.

Leadership, Corporate Vision & Approach to Innovation

Prof. Ernest Kofi Mensah (Founder, Chief Executive Officer), and Director of Product Development and Innovation) is the ‘driving force’ and principal source of the top management’s commitment to innovation within SavvyTech plc. He retains firm control over the strategic direction of the company with a 35% personal shareholding in SavvyTech plc while the Workers Union own 60%. The remaining 5% is own by a Mutual Fund. He describes his corporate innovation strategy as ‘riding the front of the technology wave.’ Prof. Ernest Kofi Mensah is the company’s key product champion, having ‘...an exuberant passion for innovation, manufacture, and education. He is particularly scathing about those who want to turn Ghana into a service culture...’. He believes that the growing convergence of computer and communication technologies throughout the world will mean that more and more high-tech companies will have to become involved in joint ventures. However, at the same time he is committed to developing new products with SavvyTech plc: ‘What we do is innovation and development and we are always moving towards and pursuing added-value with high margin products- that’s why we don’t invest to produce low margin products with short life cycle’, he said.

Prof. Ernest Kofi Mensah describes his style of management as ‘collegiate’, which allows the organisation to be flexible and able to meet the changing needs of the market. This approach

creates an environment within the company that fosters creativity and knowledge sharing. At the same time, Prof. Ernest Kofi Mensah demonstrates his commitment to those who helped establish the company: 'A lot of people have been with SavvyTech plc since the early days. I feel an intense sense of loyalty towards them'. Innovation is seen as a company-wide activity that draws everyone into product development from an early stage in the process. Prof. Ernest Kofi Mensah's personal business philosophy is based on '*chutzpah*', which is an old Yiddish word meaning audacity or impudence. While he is quite prepared to take and accept risks, this is not a 'do-or-die' attitude of an irrational maverick; his entrepreneur vision is backed up by high levels of expertise in electronic engineering, financial management, and a clear understanding of cutting-edge product markets to the benefit of humanity. His management experience has largely developed through 'hands on experience' and he is a strong believer in 'learning by doing'. However, he believes also that experience should be supplemented by formal training, he himself having undertaken an Executive Master of Business Administration (EMBA) at the prestigious Ghana Institute of Management and Public Administration (GIMPA-Green Hill) in the early 2000s.

Overall, it appears that SavvyTech plc has an effective approach to innovation. However, Prof. Ernest Kofi Mensah became very ill during 2021, infected by COVID-19, and although he has made full recovery, it remains to be seen how long he can maintain the energy, drive, and enthusiasm, that has undoubtedly contributed substantially to the company's success.

Although first to the market with its innovations, SavvyTech plc has in fact adopted a fairly cautious approach to innovation, taking 4 years before bringing its first product (the Wrist Organiser) to the market in 1995. The introduction of the "Wrist Top" product firmly established the company as a leading manufacturer of personal organisers. The company was then able to 'move up the gear' following its floatation in 2015, and the subsequent injection of cash. The main growth of the company came with the phenomenal success of the 'Wrist Organiser 3' which was first introduced in 2016. Subsequent product developments have continued this same growth. By 2021, SavvyTech plc had sold over 7.8million wrist-top world-wide, and profits were employed to develop the existing line of organisers (i.e. Wrist Organiser 3a and 3b) as well as the new generation of organisers (i.e. Wrist Voice 1 and 2). Although the company has been able to speed-up the incremental development of existing line, it still takes the company around 4 years to bring a new product range to the market. This is putting significant pressure on SavvyTech plc liquidity (cash flow).

Structure and Culture

Despite the creative and positive experience, Prof. Ernest Kofi Mensah had had while working at KNUST, he decided to organise his own enterprise around the much looser collegial structure and culture of the academic world, rather than copy the traditional corporate structure. In the late 1990s during the early years of the life of the organisation, Prof. Ernest Kofi Mensah organised SavvyTech plc around what is sometimes termed the 'lattice' organisation, based on an organisational form developed by Dr W. L Gore. This is one of the 'purest' examples in the corporate world of an organic organisation structure. Dr. W.L Gore is the founder and driving force behind Gore Associate whose highly innovative products such as 'Goretex' are used widely for sportswear, outdoor pursuits, and leisure wear. Under this system of organisation, they are not called by their titles rather each employee is referred to as an 'associate'.

During the late 1990s internal personnel documents at SavvyTech plc defined this loose form of organisation. The lattice organisation rejects the use of authoritarian title that denotes a pyramid of command. The necessary functions are organised by voluntary commentary and universal agreement on the objective. For the lattice organisation to be attractive and efficient, everyone must know each other. There is also the 'Sponsor' system which is seen as one of the contradictions of the lattice organisation. The sponsor is responsible for providing instructions concerning the feedback for new associates.

In the early 2000s this form of organisation served SavvyTech plc and Prof. Ernest Kofi Mensah very well leading to the development of highly innovative products. However, in the latter half of the 2000s with the growth in size of the organisation to over 100 employees, this lattice form of organisation became too loose. During this period, Prof. Ernest Kofi Mensah responded by introducing a relatively flat hierarchy (but nevertheless with management and reporting lines), loose job definitions and a number of formal procedures and processes. However, the organisation remained relatively organic compared to other firms, even within the Information Technology (IT) sector. The latter years of 2000s brought about new tensions in the organisation structure. Further growth in the firm to 500 employees, required more hierarchy and formalisation of procedures to ensure coordination between the various project teams and functions within the organisation. More importantly, the late 2000s saw emergence of more serious competition, requiring SavvyTech plc to deal with the contradictory pressures as a result of the loose and flexible structure to allow for innovation, and mechanistic in structure to promote efficiency in processes. Efficiency in processes was needed to reduce costs, particularly in production reduce lead-times of getting products from idea-conception to the market-place, and to ensure product quality and timeliness of deliveries to distributors.

Although he was firmly in control, Prof. Ernest Kofi Mensah has built up a strong management team around him during the 1990s. They are; Mrs. Anna Afi (FCIM-UK), Director of Marketing and Sales, Mrs. Eunice Akosua Dodson (Fellow ICAG), Director of Finance and Operations, Mrs. Ama Emilia Kuma (FCIPD) Director of Human Resources and Organisational Development, and Professor Willian Kisi Asamoah, Director Production and as said earlier Prof. Ernest Kofi Mensah is both CEO and Director of Product Development and Innovation. Prof. Ernest Kofi Mensah was keen to maintain an organic structure and as open a culture as possible. There is also a head office business assurance function. The Management team were increasingly aware of the growing problems of the control and maintaining consistently high product quality. Furthermore, the size of the company has continued to grow, with employees now numbering 750, apportioned approximately between production 60%, marketing & sales (10%), finance & operations (20%), and product development (10%). The compromise had been piecemeal change to the structures and procedures within the organisation, particularly around the production function, but also within the marketing and sales functions. Prof. Ernest Kofi Mensah had been adamant that the production development function would remain as open and organic as possible. By the late 2000s these slow and piecemeal changes had nevertheless begun to create quite substantial differences between the openness and flexibility of the culture and structure within different parts of the organisation. These extremes, represented by product development at one end, and production at the other, were creating divisions within the organisation, particularly between the functions, and the low morale within the production function. Production staff felt discontented that those in product development were able to agree 20% (i.e. one day a week) of their time on 'personal

projects', work very flexible hours, and were subject to few rules and regulations. In contrast, they felt they were constrained constantly by strict monitoring of their time and activities. (Refer to **Table 6 & 7** (the tables are an extract from a full report) where Director of Human Resources and Organisational Development presented slide to management team 'Type of 'Matrix Management Structure' and 'Performance Management' to support effective performance management and communication and looking forward for the board approval to implement as part of change management system since she is new to the organisation).

In her frustration, the Director of Finance and Operations as part of the presentation to the management team meeting enforced with a quote '*Performance management is an essential aspect of any organisation, and it plays a critical role in a matrix management structure. Performance management in a matrix structure is more complex than in a traditional hierarchical structure due to the multiple reporting lines and the need for collaboration and coordination among teams* incorporated in **Table 7**.

SavvyTech Plc Location

SavvyTech plc is situated in a town near KNUST, and thus is about an hour by road away from Kumasi, the regional capital of Ashanti Region. Prof. Ernest Kofi Mensah had founded the company in the location for two reasons; firstly, his personal connection with KNUST and the local area (principally the golf course) which he still held a strong fondness for and secondly, the technical skills that were available within (academics) and through (highly trained graduates) by the University. Many of his employees within the product development and marketing & sales functions at SavvyTech plc had been either BSc or PhD graduates from KNUST. This has created a strong identity within and between these functions, but as an unintended result has led many in production to feel marginalised. The feeling has been compounded by recent structural and procedural changes within the organisation.

Due to local planning restrictions on new building construction, the company was no longer able to expand its facilities within the village. This was particularly problematic if SavvyTech plc were to increase the number of units manufactured to meet the rising consumer demand. The management team were discussing a number of options, including moving the whole company to the city, Kumasi, or separating production and relocating only this function to Kumasi. Mrs. Eunice Akosua Dadson (Director of Finance and Operations) had dared to suggest at a recent management team meeting that given all the problems associated with production, maybe they should just 'bite the bullet' and outsource production entirely, possibly to another country. This suggestion had outraged Prof. Ernest Kofi Mensah, who sees this as a dismantling of his company, and all he had worked toward. While the Director of Production Prof. William Kisi Asamoah, was understandably nervous about such a possibility. The other directors were coming round to agree on what could be termed as a neat solution to many of the existing tensions within the company.

Alliances

With companies such as Microsoft, Alphabet, Apple and Meta Platform, now planning to enter the palm-top and wrist-top markets in earnest, SavvyTech plc has to find ways of reducing its 'time-to-market' for few products, if it is to remain the market leader for wrist-top computers. Their latest offering incorporates 32-bit technology, although this was widely available in Personal Computers (PCs) at least two years prior. Furthermore, the 'Sony Playstation' and Nintendo games

consoles already employ 64-bit technology and 128-bit is available in cutting edge next generation supercomputers.

While SavvyTech plc has many informal relationships with academics with KNUST, the company has made little effort to foster relationships with other technology companies. Prof. Ernest Kofi Mensah has been keen to keep and develop technical skills and competences within the company, and for the company to develop its products and technology originally rather than through acquisitions or alliances. Such an approach was fine when competition was relatively low. But with the rising level of competition, SavvyTech plc has to find ways in which it can increase the speed with which it develops new technology, incorporates this technology within products, and brings these products to the market place. Although Prof. Ernest Kofi Mensah is still very reticent. The remainder of the management team are coming to the conclusion that for a relatively small technology company, the only way of reducing the 'lead-time' for new products and to operate in an increasing competitive environment is to develop range of collaborative arrangements with other organisations to outsource partially, production since there is no opportunity to expand the production line due to restrictions from the local government.

Corporate Governance

SavvyTech plc is committed to high standards of corporate governance. The board recognise that creating sustainable shareholders value depends on a full understanding of the organisation impact on society and the responsibility of management of the business in a manner consistent with SavvyTech plc values and principles. The board understand how the behaviour of the organisation can impact on the wider society and are working hard to earn the trust of all stakeholders as a company that tries to live up to its corporate responsibilities.

The board of directors is chaired by Emeritus, Dr. Dickson Agyeman Badu. The Board has its terms of reference, regular meetings and adhere to a combined code of ethics. Reporting to the board are several committees with particular responsibilities relating to governance, finance, audit, risk & assurance and control, as well as the management of the company. The Head Office business assurance function regulates the process of internal control throughout the company. Strategies have also been developed to motivate the way management approach relationships with customers and shareholders, both existing and potential. Another strategy point is the way it relates with governments and public institutions in the jurisdictions it operates.

Corporate Social Responsibility

SavvyTech plc is in partnership with Help the Aged Society, an NGO, to combat social isolation and exclusion of the aged through its annual "Stepping Out" event. Research reveals that around one-fifth of older people limit their use of telephone or going out to social occasions. With poverty affecting nearly half of the people aged Sixty years and above in deprived urban neighborhoods globally, social isolation and exclusion is a fact of life for older people. SavvyTech plc and Help the Aged Society will organise a month-long global activity programme with an aim to address key factors contributing to social isolation and exclusion by encouraging tens of thousands of older people to take part in "Stepping Out", which would be running from 1st- 31st July 2023. Nearly One million older people globally in a year, took advantage of the hundreds of discounts of products on offer by SavvyTech plc during the "Stepping Out" event in previous years.

Another regular “Stepping Out” partner, ‘Heaven Out’, is on board to provide a range of discounts of shows and attractions while SavvyTech plc proposed a special discount during the sale of a new product, HSVC to the aged. As part of this year’s events, ‘Heaven Out’ is offering unprecedented deals including 25% discount for the first visitors to its Properties (facilities).

Product Development Breakthrough (HVSC)

Since he was a child, Ghanaian born innovator and entrepreneur, Prof. Ernest Kofi Mensah dreamt of producing a performance “**Virtual Console**” that can be used to communicate virtually irrespective of the location of the user. He calls the device “**High Virtual Speed Console**” (HVSC). The new revolutionary device is going to be use as a necessary radar by Satellite Media Houses, Film Industry, Aviation Industry, Mobile Telecommunication Industry, Meteorological Weather Forecasting, Arial Land Surveying, National Security Surveillance, Seafarers’ Navigation Device, Environmental Pollution System Monitoring, Road Traffic Management, and Mineral Exploration with a social component call Technology for Social Impact (TSI). The TSI was designed purposely for the benefit of the aged in society to reduce their social isolation and exclusion as part of the organisation’s Corporate Social Responsibility (CSR).

Prof. Ernest Kofi Mensah had taken the HVSC from a design concept to a prototype and finally in commercial production after SavvyTech plc secured all the necessary ‘intellectual capital’. This includes resources such as patent, trademark, brand name and copyright. He had invested over 10 years of his life and substantial amount of money in the HVSC product. His pride in the HVSC was, of course, without equal with the hope that the product is going to change the fortunes of SavvyTech plc when launched globally. Environmental impact assessment of HVSC is ongoing to determine full life cycle cost using the prototype data information collected.

“Back in the 1990s they said it would never be done, they pointed to the botched attempts made by investors before. The HVSC point to what can be done when the best minds in engineering come together to share a dream. The product will be launch globally since every human being is a potential customer”, said Prof. Ernest Kofi Mensah. The management team are excited but concerned of the extent of resource requirements (initial investment) to meet the projected global market demand for the product HVSC. Two million (2,000,000 units) would be produced, if the proposed strategic work strands as illustrated in Table 5, are implemented on schedule.

Table 5: Infographic HVSV Strategic Work Strands and Timelines

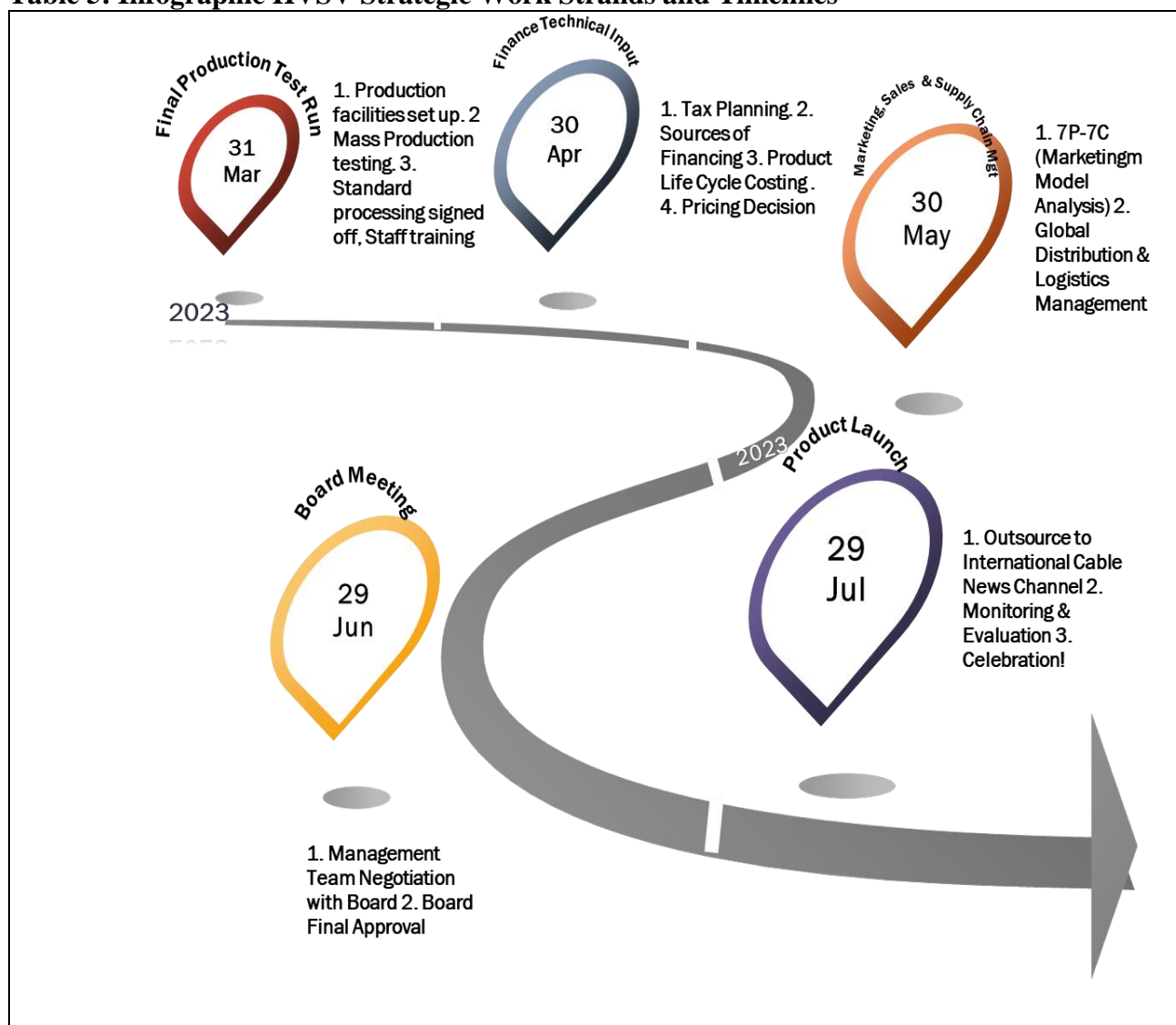


Table 6: Types of Matrix Management Structure

Weak Matrix	Balanced Matrix	Strong Matrix
<ul style="list-style-type: none"> In these matrix systems, the project manager has a limited amount of authority. This could mean they have no one reporting to them. In a weak matrix, the power shifts to the functional manager, and project managers take on more of a project coordinator role. 	<ul style="list-style-type: none"> In a balanced matrix, project managers and functional managers have equal authority and power. Project managers determine the skills needed for a project, whereas functional managers assign employees to meet those needs. Team members keep both managers informed on their progress and priorities. 	<ul style="list-style-type: none"> Under a strong matrix, project managers have the most authority and team members report to them. This means that the project managers also distribute resources and allocate tasks to each team member. In a strong matrix, one professional typically holds the most authority regarding a project, which allows team members to focus their communication to this specific manager.

Table 7: Performance Management in a Matrix Management Structure



Performance management is an essential aspect of any organisation, and it plays a critical role in a matrix management structure. Performance management in a matrix structure is more complex than in a traditional hierarchical structure due to the multiple reporting lines and the need for collaboration and coordination among teams.

ADDITIONAL INFORMATION

The financial ecosystem has been reviewed by SavvyTech plc management team led by the Director of Finance and Operations, seeking financing opportunities to directly invest in the production of HVSC. Pressure is mounting on the management team to explore the best financing option to ensure that SavvyTech plc take advantage of the new breakthrough product, HVSC. Following extensive deliberations, they agreed that the only option is to acquire a foreign company as a subsidiary in Utopia by withholding 2022 dividend payout (Cash) to investors. The Management team shall require urgent stakeholders mapping and engagement since 60% of SavvyTech plc's shares is owned by staff union groups. Production department owns 80% of the 60% staff union groups' shares.

The management team agreed with their colleague Director of Finance and Operations' suggestion. They however want the following reviews to be undertaken to firm up the decision that is evidence based with financial sustainability analysis information:

1. Product life cycle costing to ascertain how much investment shall be required. To be done by internal finance staff to avoid leaking HVSC confidential information to competitors.
2. Outsource to a "Consulting firm" to assist SavvyTech plc management team to review detailed stakeholders mapping to help determine stakeholders' position/importance as well as power/interest.

After these reviews, they would follow up with an engagement with the board and finally with the subsidiary management team in Utopia. The Director of Finance and Operations would then have the time to review details of finance data including impact of transfer pricing, tax rules, tax rate, double taxation agreement and withholding tax on transfer prices ahead of meeting the board to assure them that the option being recommended is financially viable and sustainable. Impact of the decision on shareholders' value is critical.

Financial analysis information estimated that if the foreign company is acquired in another country (Utopia) it will ensure that SavvyTech plc meet all market demand considering the fact that production plan in Ghana cannot be expanded due to local government restrictions.

To ensure confidentiality, the expected operating arrangement of the new group is that the parent company will export a component to the subsidiary, then the subsidiary would use the component to make HVSC that would be sold in Utopia. The management of SavvyTech plc have to decide what the transfer price for the component should be using the projections below:

Table 8: HVSC Forecast Data - August 2023 to July 2024

Ghana (annual)		Utopia (annual)	
Components transfer to Utopia	1,000,000 units	Unit of Products to be sold in Utopia	1,000,000 units
Variable Cost	GH¢15	Sales price per unit	US\$150
		Local variable cost per unit	US\$16
Fixed Cost	GH¢9,000,000	Local fixed cost	US\$6,000,000
Tax rate	30%	Tax rate	25%

Forecast exchange rate GH¢1=US\$4 (One Cedi is equivalent to four Utopia Dollar (U\$))
Withholding tax of 10% would be charged on all remittances of interest and dividends from Utopia.
The Ghana parent company intends to transfer all available profits from Utopia to Ghana.

There is a double taxation agreement between Ghana and Utopia; Tax on income distributions in one country may be credited against tax liability on the same income in the other country.

QUESTION ONE

- a) Sustainability assessment and test for Full-Cost Accounting (FCA) of HVSC is to measure the impact over the full product life cycle. The Management team is concerned about the great deal of judgement that would be exercised. Conceptually, FCA appears straightforward, it is also not an easy technique to develop and use in practice if adopted by SavvyTech plc.

The Sustainability Assessment Model (SAM) measures the impacts on sustainability of a product such as HVSC over its full life cycle from raw material extraction through the production process to final usage and disposal.

Required:

Explain the *SAM four-step approach* to measuring product HVSC over its entire life cycle.

(6 marks)

- b) After the presentation of the SAM four steps approach to the management team, the Director of Finance and Operations made the following statement: ‘The data required for FCA is usually only available in organisations that are at the forefront in responding to the environmental agenda’ (Bebbington, Gray, Hibbitt and Kirt, 2001).

Required:

Explain to the management team why it might be difficult to use FCA to support the ongoing discussion about the new product HVSC.

(4 marks)

QUESTION TWO

- a) The Management team of SavvyTech plc is concerned about how the staff union group with 60% shareholding might react if 2022 dividend payout is withheld to finance the subsidiary acquisition in Utopia, particularly, the production staff with 80% shareholding of the total staff union’s interest of 60%. There are a number of stakeholder mappings. Two most popular are ‘the stakeholders position/importance matrix’ and ‘the stakeholders power/interest matrix’.

Required:

You have been contracted as an independent consultant by SavvyTech plc to review the stakeholder mapping using ‘*the stakeholders position/importance matrix*’. *Draw the diagram, illustrate, and explain* using brief internal memo to guide the management team’s engagement with the stakeholders as presented in the case study.

(10 marks)

- b) SavvyTech plc’s management team is debating on the corporate parenting strategy that should be adopted. Corporate parenting refers to the relationship between the Head Office and the strategic business unit staff in Utopia.

Required:

As a lead consultant explain to SavvyTech plc management team **THREE (3)** broad parenting style that might be adopted as described by Goold and Campbell (1991).

(10 marks)

QUESTION THREE

- a) Change happens continually within organisations and the markets within which SavvyTech plc operate is not an exception. Strategic development inevitably results in some changes, which needs careful management. Some of SavvyTech plc internal triggers of change are motivated or caused by developments within the organisation.

Required:

Review SavvyTech plc case study, identify and explain **FIVE (5)** internal triggers of change with specific examples from the case.

(10 marks)

- b) Business entities must innovate to survive and grow. The Director of Marketing and Sales, in a meeting, presented a product market annual performance analysis report and highlighted that '*Wrist Organiser 3b*' introduced in 2018's sales trend in 2022 reduced by 75% and in 2021 by 50%.

Required:

As a member of SavvyTech plc management team, identify and explain **FOUR (4)** reasons why it is necessary to research, innovate and develop existing and new products as an organisation.

(10 marks)

QUESTION FOUR

- a) Essential aspect of risk management and control is the 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.

Required:

You are the 'Risk and Assurance Manager' of SavvyTech plc with the responsibility of creating a culture of risk awareness in the organisation. Prepare an internal memo for the management team to be discussed with the board of directors on what they must do to show their own commitment to risk management in the things that they say and do.

(10 marks)

QUESTION FIVE

- a) As the Head of Finance of SavvyTech plc, the Director of Finance and Operations has assigned you to use the forecast data (**Table 8**) and the “additional information” provided to calculate the following to support engagement by the management team with the Board.

Required:

Calculate the *group profits* to be realised from the sale of HVSC, if the transfer price for the component is set at its market price, which is **GH¢26 per unit (total Ghana cost)** plus 25% of Utopia’s unit cost. **(15 marks)**

- b) When companies retain profits in the business, the increase in the retained profits adds to equity reserves. This view was suggested by SavvyTech plc management team to the board. The Board is not convinced and seek for further explanation.

Required

Explain **TWO (2)** benefits to the board of directors, what it means to increase long-term capital using retained profits in SavvyTech plc. **(5 marks)**

QUESTION SIX

- a) Some of the SavvyTech plc management team is concerned that the Director of Finance and Operations is domineering during the acquisition engagement processes at meetings. The Director of Finance and Operations mentioned in anger that ‘arguably, accountancy has an influence on business and government and that is both:
- i) continuous and
 - ii) more extensive than any other profession’

Required:

As a newly qualified Chartered Accountant responsible for code of ethics in SavvyTech plc, identify and explain **FIVE (5)** reasons in support of why the Director of Finance and Operations seems to be projecting finance over other functions. **(10 marks)**

- b) The Director of Human Resources and Organisational Development is concerned that her recent presentation (*refer to case study*) about matrix management structure and performance management should be sent to the board for approval. Prof. Ernest Kofi Mensah vehemently disagree. He referred her to the Institute of Chartered Secretariat and Administrators (ICSA) guidance.

Required:

Identify and explain **FOUR (4)** of the Institute of Chartered Secretariat and Administrators (ICSA) guidance on decision-making responsibilities that the board should reserve to itself and should not be delegated to individual or executive managers to confirm and comment on the

view that the Director of Human Resources and Organisational Development's matrix structure presented is not one of issues which require board approval before implementation.

(10 marks)

SOLUTION TO QUESTIONS

QUESTION ONE

- a) The SAM is used to measure the performance of a company such as SavvyTech plc on an index of sustainability (SAMi). This measures the percentage distance that the company is from achieving sustainability.

The Sustainability Assessment Model (SAM) four-step approach to measuring the impact of HVSC over its entire life cycle, from cradle to grave.

- **Step 1:** A SAM exercise should be established by SavvyTech plc management. The objective of the exercise is to identify what will be subjected to evaluation. This might be the HVSC product, process, SavvyTech plc operations partially or whole operations system to enable boundaries of evaluation defined.
- **Step 2:** The boundaries of the SAM evaluation are then defined. All HVSC cost and benefits to be included, including environmental and social costs or benefits, are identified over the full life cycle of the product.
- **Step 3:** The impact of the HVSC is measured under four heading should be discussed and agreed by SavvyTech plc management.
 - ✓ **Economic** including profit benefits to shareholder majority who are SavvyTech staff. The direct economic cost of the product HVSC.
 - ✓ **Resources use**, including production objectives and targets i.e. what does that two (2) million production units resources requirements.
 - ✓ **Environmental**, to identify the aspects of SavvyTech plc business that have impact on the environment.
 - ✓ **Social** such as the benefit to the isolated and socially excluded, aged.

Some of these measurements might be in monetary terms, but many of the cost and benefits will be non-monetary measures including physical environmental measures. Typically, the economic and social impacts should normally be positive (benefits), whereas the resources use and environmental impacts are negative.

- **Step 4:** These non-monetary measures are converted into a common basis of measurement, money. This total money measurement will then provide the full cost analysis of HVSC, process or operation.

(4 steps @1.5 marks each = 6 marks)

- b) Full-cost analysis requires substantial amount of physical data of HVSC to allow SavvyTech plc extensive modelling of real-world relationships, hence the comment by the Director of Finance and Operation referring to Bebbington, Gray, Hibbitt and Kirt, 2001. The main problem is SavvyTech management deciding how to convert the physical measurements impacts into monetary measures. This needsto be at the forefront in responding to environmental sustainability challenges.

(1 mark)

Full-cost analysis might show the entire cost of HVSC including its social and environmental impacts or externalities. However, it might have benefits for strategic planning in SavvyTech plc, for example in future be SavvyTech would be required to pay for their impact on the environment by:

- Paying a carbon tax to their carbon emissions when transporting the product input and output between Ghana and Utopia
- Having to take back HVSC from customers at the end of the useful life of the product.
- Having to comply with stricter environmental standards to obtain ISO 14000 certification etc.

Companies that are aware of the full costs incurred by their products should be in a better position than other companies to plan reductions in those costs, by acting now to reduce carbon emission, improve environmental standards.

(3 points for 3 marks)

EXAMINER'S COMMENT

The question (a)required candidates' to explain the "Sustainability Assessment Model" four-steps to ensure SavvyTech Plc Management Team put in place full life cycle assessment cost of the product before it is introduced to the market. Preamble as part of the question background provided to guide candidates. Candidates struggled due to lack of knowledge of the model hence poor performance and/or deviations which is very disappointing. Most of the candidates who answered this question could not identify the four-steps not to talk about relating it to the case study. The requirement was specific, hence general answer was not adequate to earn pass marks for this question. The application of the question is assessment of the full cost of a product before it is introduced to the market and the challenge of how to get data since this is a new product.

Candidates should adequately cover the syllabus prescribed by the Institute.

Part (b) requested candidates' appreciation of how "Full-cost analysis" which requires substantial amount of physical data of HVSC to support SavvyTech Plc extensive modelling of real-world relation of the new breakthrough product. Application to the question was very weak, which evidence that candidates are not current with societal development which rely heavily on inputs of accountants as a critical stakeholder in terms of provision of information. Candidates' performance was well below average with over 65% scoring less than 20% of the marks allocated.

QUESTION TWO

- a) A business entity such as SavvyTech plc should manage its stakeholders, particularly those with the greatest influence. As of the review of the strategic position of a company, management should identify its major stakeholder groups, their power and expectations.

One way of presenting the results of a stakeholder assessment is to prepare a “stakeholders map”. This is a simple diagram showing the main stakeholders or stakeholder groups, and their relative significance. The purpose of stakeholders mapping is to assist the directors of SavvyTech plc to obtain an appreciation of who the main stakeholder groups are and what their real and potential influences are over the entity and the entity’s strategies.

One approach to stakeholder mapping is ‘stakeholder position/importance matrix’. This matrix compares:

- The position of the stakeholders on a particular issue, on a scale ranging from “strong opposition” (+5) to “strong support” (-5)
- The relative influence of the stakeholders, on a scale from “not important” (-5) to “very important” (+5)

(2 marks)

		Importance of the stakeholder	
		(-5)	(+5)
Position on the issue	Oppose (-5)	Problematic	Antagonistic
	Support (+5)	Low Priority	Supporter

(2 marks)

INTERNAL MEMORANDUM

To: Management of SavvyTech Plc

From: Independent Consultant (or Name)

Date: 7th July 2023

Subject (Re): Explanation of Stakeholder Position/ Importance Matrix to SavvyTech Plc Management Team

The stakeholder position/importance matrix can be used by the directors of SavvyTech plc to assess the actions. Management Team should try to win the support of each stakeholder group in the organisation. Management should give more attention to the important stakeholders such as the “Staff Union” the production staff with 80% shareholding of the total staff union’s interest of 60%. In the matrix shown in the diagram, the main concern should be how to deal with important stakeholders such as the Production Staff who shall be possibly losing their employment opportunities if decision to outsource production to Utopia yet they own significant shareholding of 48% ($80\% \times 60\%$) in total of SavvyTech plc.

(1.5 marks)

These would be shown in the top right hand (Antagonistic) corner of the matrix. The directors of SavvyTech plc should consider what measures should be taken to try to reduce the opposition of these stakeholders. Their decision will be influenced by what consequences for the company might be if stakeholders remain antagonistic. The solution might be to find a compromise solution, which reduces their opposition.

(1.5marks)

SavvyTech management should also try to win support from the “problematic stakeholders, although their opposition is relatively unimportant. Management should also try to maintain their goodwill of ‘supporters’, important stakeholders who support the acquisition plans in Utopia.

(1 mark)

Yours Faithfully

Consultant

(Structure of memo: 2 marks)

- b) The extent to which the parent company (SavvyTech plc) staff become involved in the business strategy development process will vary hence the need for discussion and agree the best approach which would depend on number of factors including increasing shareholders value. The degree of involvement that SavvyTech plc management will have significant impact on the role of the central management such as human resources, , production, finance, marketing etc.

(1 mark)

Goold and Campbell (1991) identified three broad parenting management style that can be adopted:

i. Financial control

The parent (SavvyTech plc) acts on behalf of the shareholders to identify and acquire assets and businesses. The parent sets performance standards for the Strategic Business Unit (SBU) in Utopia, for the purpose of control, monitoring and evaluation of financial performance of the SBU. Examples include negotiation of double taxation agreement, transfer pricing, profit repatriation etc.

With the agreed Key Performance Indicators (KPIs), SBU are given the autonomy for carrying out business activities and decision making at their level.

(3 marks)

ii. Strategic planning

The corporate parent SavvyTech plc aims to enhance the synergies across the Strategic Business Unit. This can be achieved through the provision of central services and resources, facilitating communication cooperation between the SBU in Utopia and establishing a common purpose.

(3 marks)

iii. Strategic control

The parent deploys its own resources and competences to the Strategic Business Unit in order to build value in Utopia. The parent's own capabilities are therefore used to seize opportunities and advance growth. SavvyTech plc management should note that the primary role of corporate parenting is to manage the Strategic Business Unit within the organisation by providing opportunities for the SBU to create value while adding costs to the SBU would destroy value. SavvyTech plc during the discussion of parenting strategy is to create and not to destroy value.

(3 marks)

EXAMINER'S COMMENT

This question was in two parts; (a) required candidates to use the approach of stakeholders mapping “stakeholders position/importance matrix and then to write internal memorandum report. Marks are therefore allocated to cover format, correct labelling and explanation of the diagram to support SavvyTech Management Team with the stakeholders. Most candidates attempted this question but performed poorly. Over 70% of candidates never applied the pre-seen or additional information to answer the question. A number of candidates wasted time without consideration to the marks allocated resulting in not attempting all questions. Most of marks scored were from structure of the internal memorandum report with none from the application of the stakeholders mapping matrix to illustrate power dynamic to support Management Team engagement appropriately for example antagonistic and problematics.

(b) required candidates to use the “ Goold and Campbell (1991) to identify three broad parenting management style that can be adopted by SavvyTech Plc. The application is to suggest to Management Team the best approach. It is a straightforward question but over 35% deviated because candidate’s syllabus coverage is weak. Few identified the three broad parenting management style but could not relate it to the case study especially linking pre-seen and unseen material (SavvyTech verses Utopia Subsidiary).

QUESTION THREE.

- a) Triggers for change are the reasons for making a change, or the reasons for the motivation to change. A trigger for change might come from either outside or inside the entity. Change might be motivated or caused by development within the organisation.

SavvyTech plc internal triggers of change include the following as presented in the case study.

i. Product development and innovation breakthrough-(new product HVSC).

Need to restructure to expand production capacity to accommodate the breakthrough product HVSC. Following management deliberations and discussions and considering the organisation ownership structure, management decided to withhold 2022 cash dividend payout to acquire a foreign subsidiary in Utopia but facing the challenge of how “Staff Union” might react. The option being considered to outsource production to a foreign country in Utopia might trigger internal changes including parenting strategies to be adopted.

ii. Senior management decision to acquire a foreign subsidiary

Senior management discussion and options to relocate “Production Unit” as suggested by Director of Finance and Operation to ‘bite the bullet and outsource turned to be the option agreed and would result in significant internal changes including operations and management structure from the centralized organic structure to some level of semi-autonomy.

iii. Reorganization and rationalization of business unit's workflow

Current organisation structure and operations system vary from department to department. Whiles Research and Product Development Unit staff are having some level of flexible working hours as a motivation to innovate the system is completely different with that of Production Unit with strict operations system with no flexibility. This system has triggered internal changes to allow for matrix performance system yet to be implemented. The Management Team were increasingly aware of the growing problems of the control and maintaining consistently high product quality. Furthermore, the size of the company has continued to grow, with employees now numbering 750.

iv. Organisational structure and culture change due to Increase in staff headcount

In 1990 at the beginning of SavvyTech plc used what is sometimes termed the 'lattice' organisation, based on an organisational form developed by Dr W. L Gore. This serves the organisation well in the 1990s and early 2000s. However, in the latter half of the 2000s with the growth in size of the organisation to over 100 employees, this lattice form of organisation became too loose with associated challenges. Further growth in the firm to 500 employees, required more hierarchy and formalisation of procedures to ensure coordination between the various project teams and functions within the organisation. More importantly, the late 2000s saw emergence of more serious competition, requiring SavvyTech plc to deal with the contradictory pressures as a result of the loose and flexible structure to allow for innovation, and mechanistic in structure to promote efficiency in processes.

v. Internal conflict

By the late 2000s these slow and piecemeal changes had nevertheless begun to create quite substantial differences between the openness and flexibility of the culture and structure within different parts of the organisation. These extremes, represented by product development at one end, and production at the other, were creating divisions within the organisation, particularly between the functions, and the low morale within the production function. Production staff felt discontented that those in product development were able to agree 20% (i.e., one day a week) of their time on 'personal projects', work very flexible hours, and were subject to few rules and regulations. In contrast, they felt they were constrained constantly by strict monitoring of their time and activities

vi. Changes in Senior Management which continue to affect the management and operational structure.

(5 points well explained @ 2 marks each = 10 marks)

- b) Every product has a life cycle, and eventually even the most successful products reach the end of their economic life as being experienced by SavvyTech plc. SavvyTech plc as of 2022 spent 10% of its sales revenue on Research and Development (R & D) and second compared with Alphabet Inc, the leader with 15.7%. Research, innovation and development of existing and new products is necessary for several seasons.

i. Product renewal

Changing the design of a product can help to renew and prolong its life. Evidence by the analysis from the Director of Marketing and Sales highlighted that 'Wrist Organiser 3b' introduced in 2018's sales trend in 2022 reduced by 75% and in 2021 by 50%. Perhaps SavvyTech could undergo design changes during the life, in order to maintain or increase sales.

ii. Product adaptation

Products of SavvyTech plc can be adapted for a new market segment. Example 'Wrist Organiser 3b' introduced in 2018 that is marketed successfully in Ghana and current market might be adapted for sale in US and Japan where customer needs might be different from those of current markets.

iii. Developing new products

New products are continually being invented and developed. As indicated in the case study SavvyTech is struggling to match with its competitors and considering Joint Ventures. Many new products ideas are unsuccessful as evidenced by Founder and CEO comment, Prof. Ernest Kofi Mensah when HVSC product breakthrough was realised *"Back in the 1990s they said it would never be done, they pointed to the botched attempts made by investors before. The HVSC point to what can be done when the best minds in engineering come together to share a dream"*.

HVSC product development took such a long time however, when a product is successful, the first to enter the market and develop the firm will often be the market leaders throughout the product life as long as there is no close competitor.

iv. Developing new technology

New technology becomes available which creates opportunity for new products and also for new ways of doing things. Changes in information technology and communications technology are the most notable. SavvyTech plc's successful introduction of HVSC with additional benefits to support the aged is technology breakthrough that the organisation can take advantage as the market leader.

Note: Candidate explanation should include sustaining competitive advantage, maintaining market share and emerging market.

(4 points @ 2.5 marks each = 10 marks)

EXAMINER'S COMMENT

This question is of two parts; the part (a) required candidates to identify and explain relating it to the case study "internal triggers of change". Although it was a standard theory question with limited application, majority of candidates did not attempt. Significant of those who attempted wrote about external factors with focus on PESTLE hence deviated and scored zero marks. Instead of candidates using their prior knowledge of the pre-seen and the new additional unseen material, they rather wrote extensively on environmental change factors which are external to SavvyTech Plc such are restrictions imposed by the Local Council. Over 40% of candidates scored well below average of the marks. Few candidates were able to explain by relating it to the case study.

Part (b), a straightforward question, asked candidates to explain why SavvyTech as a business entity must innovate to survive and grow. As a member of SavvyTech plc management team, identify and explain four (4) reasons why it is necessary to research, innovate and develop existing and new products. Over 15% of candidates deviated by using the Ansoff Matrix Growth Strategy. It is not clear why the deviation resulting in scoring low marks. Less than 30% of candidates scored 50% of the marks allocated and spent time writing on rote knowledge or deviated wasting the precious allocated time hence did not attempt all question. Research, innovation and development features significantly in the pre-seen material, hence it is difficult to understand why candidates did not review the syllabus to apprise themselves of *issues relating to Research and Development (R &D)*.

QUESTION FOUR

a)

INTERNAL MEMORANDUM

To: Management Team-SavvyTech Plc

From: Risk and Assurance Manager-SavvyTech Plc

Date: 7th July 2023

Subject (Re): Embedding risk awareness in the organisation culture of SavvyTech-Senior Management Commitment

SavvyTech plc creating a culture of awareness should be the 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, known as 'the tone at the top'.

As the Risk and Assurance Manager, this internal memorandum is to highlight how we can embed risk awareness into the organisation culture of SavvyTech for your further discussion with the Board of Directors and approval for implementation.

Key discussion notes to support your discussion with the Board of Directors

- i. There should be a reporting system in place for disclosing issues relating to risk. There should be a sharing of risk-related information.
- ii. Managers and other employees of SavvyTech plc should recognise the need to disclose information about risks and about failures in risk control.
- iii. There should be general recognition that problems should not be kept hidden. Bad news should be reported as soon as it is identified. The sooner problems are identified, the sooner control measures can be taken and the less the damage and loss.
- iv. To create a culture in which problems are disclosed, there must be openness and transparency. Employees should be willing to admit to mistakes.
- v. Openness and transparency will not exist if there is a 'blame' culture. Individuals should not be criticized for making mistakes, provided they own up to them promptly.

- vi. The attitude should be that problems with risks will always occur. When they do happen, the objective should be to have measures to deal with the problem. Mistake should be analysed in order to find solutions and prevent repetition of the problem. Risk management should be a constructive process.

Conclusion

In addition to creating a culture of risk awareness within SavvyTech plc, it is also important to establish systems, procedures and procedures in which the management of risk is 'embedded'

As I wait for your feedback and/or further clarifications of the above suggestions to embed risk in all SavvyTech plc internal and external operation. I will be working closely with Eunice Akosua Dodson (Fellow ICAG), Director of Finance and Operations, Mrs. Ama Emilia Kuma (FCIPD) Director of Human Resources and Organisational Development Director of Human Resources. Reason being to assist me with engagement with employees and financial resources.

Yours Faithfully

Risk and Assurance Manager
Name.

(Any 4 key discussion notes @ 2 marks each =8 marks and report structure 2marks)

EXAMINER'S COMMENT

This question is a practical application question which required candidates to write a report to support Management Team engagement with Board of Directors. As a Risk and Assurance Manager, how to ensure "tone at the top" in relation to risk awareness, management and mitigation. Marks are therefore allocated to cover report format, approach to risk management and how Management Team creates systems and processes to keep risk on the front burner of management decision making. Most candidates attempted this question which is very encouraging. However over 40% of candidates never applied the pre-seen or additional information to answer the question. A number of candidates wasted time without consideration of the marks allocated resulting in not attempting all questions.

QUESTION FIVE

Tax on the profit in Utopia will be 25%, but there will be an additional withholding tax of 10% since all available profits will be remitted to Ghana. The total tax payable on income in Utopia is therefore 35% which is higher than the rate of Ghana tax. This means that the profits earned in Utopia will not be taxed at all in Ghana.

i. Transfer price=market price

Parent company, Ghana	GHC	GHC
Component sales (GHC26 per unit)		26,000,000
Variable costs (GHC15 per unit)	15,000,000	
Fixed Costs	<u>9,000,000</u>	
		<u>24,000,000</u>
Profit before tax		2,000,000
Tax 30%		<u>(600,000)</u>
Profit after tax		<u>1,400,000</u>

The transfer price in Utopia dollars is $\text{GHC}26 \times \$4 = \104

(2 marks)

ii. Subsidiary Company, Utopia	U\$	U\$
Product sales (U\$150 per unit)		150,000,000
Transfer costs (U\$104 per unit)	104,000,000	
Local Variable Costs (U\$16 per unit)	16,000,000	
Local fixed cost	<u>6,000,000</u>	
		<u>126,000,000</u>
Profit before tax		24,000,000
Tax at 25%		<u>(6,000,000)</u>
Profit after tax		18,000,000
Withholding tax at 10%		<u>(1,800,000)</u>
Profit in Utopia		<u>16,200,000</u>

Utopia profit equivalent in Ghana (GH¢1=U\$4) GH¢4,050,000

The total group profit will be GH¢1,400,000 + GH¢4,050,000 = GH¢5,450,000

(4 marks evenly spread using ticks)

OR.

WORKINGS

Calculation of transfer price

Total cost per unit plus price/Unit

U\$ 16 plus U\$ 6 (6m/1m) = U\$22

25% of Utopia unit cost = 25% * U\$22 = U\$5.5

Convert into Ghana Cedis:

U\$5.5/4 = GH¢1.375

Transfer price = GH¢26 + GH¢1.375 = GH¢27.375

Parent Company, Ghana (1million Units)

	GH¢	GH¢
Component Sales (GH¢27.275/Unit)		27,375,000
Variable Cost (GH¢15/unit)	15,000,000	
Fixed Cost	<u>9,000,000</u>	<u>(24,000,000)</u>
Profit before tax		3,375,000
Tax @30%		<u>(1,012,500)</u>
Profit after tax		<u><u>2,362,500</u></u>

Transfer price from Ghana to Utopia \$

Transfer price in Utopia = $\text{GH¢}27.375 \times 4 = \text{U\$ } 109.5$

Subsidiary Company in Utopia

	U\$	U\$
Product sales (U\$150/unit)		150,000,000
Transfer Cost (U\$109.5/unit)	109,500,000	
Local Variable Cost (U\$16/unit)	16,000,000	
Local Fixed Cost	6,000,000	<u>(131,000,000)</u>
Profit before tax		18,500,000
Tax @ 25%		<u>(4,625,000)</u>
Profit after tax		13,875,000
Withholding tax @10%		<u>(1,387,000)</u>
Profit in Utopia to be remitted to Parent in Ghana		12,487,500

Total Group Profit	GH¢
Parent Profit	2,362,500
Utopia profit remitted (U\$12,487,500/4)	<u>3,121,875</u>
Group Profit	<u>5,484,375</u>

The higher transfer price will provide a bigger after -tax profit for the group.

However, the tax authorities in Utopia might not agree to accept the proposed transfer price.

(Marks are evenly spread = 15 marks)

Either method is acceptable

- b) Increasing long-term capital by retaining profits has several major benefits for the company. The following are the two benefits that can be used to explain to the Board of Directors of SavvyTech.
- i. **New shares issuing costs is avoided:** When new equity is raised by issuing shares, there are large expenses associated with the costs of the issue. When equity is increased through retained earnings, there are no issue costs, because no new shares are issued.
 - ii. **Finance is readily available when shareholders agree and approve:** The finance is readily available, without having to present a business case to a bank or new shareholders. Shareholder approval is not required for the retention of earnings.
 - iii. **No pressure on cash flow/liquidity, no issue about capacity gearing, retain earning cost of capital is lower than weighted cost of capital etc.**

(2 points @ 2.5 marks each = 5 marks)

EXAMINER'S COMMENT

This question is in two parts. The question required candidates to prepare SavvyTech Group Profit to support Management Team engagement with Board of Directors as part of acquisition decision. Significant heads-up information provided under the “infographic” flow chart information, issues around transfer pricing, option to possibly outsource production and/relocated featured prominently as part of Management Team engagement are some of the pointers but sadly candidates ignored them as part of their preparation. Additional information provided was ignored or misread especially exchange rate information. Most candidates assumed that Ghanaian Cedi is always the weaker currency. The case study additional information was clear with Utopia currency (U\$) exchange rate to the cedi. Candidates failed to appreciate previous knowledge of Financial Management and Management Accounting principles. Over 65% of candidates ignored the 15 marks question part (a) or did not attempt the question at all. Most candidates' challenges were calculation of transfer pricing, currency translation from Cedis to Utopia Dollar, variable costs, structure of presenting etc. Performance was well below average with a number of scripts scoring less than 25% of the total marks allocated. Most candidates ignored the information resulting in losing 40% of the marks allocated to (a) which were readily available without any workings from the additional information case study (unseen material). Two suggested solutions were provided with marginal differences in the final group profit.

The (b) required candidates to explain to SavvyTech Board of Directors the advantages of using retained profit to increase long-term capital. The scenario before the question provides candidates with the necessary guidance but over 55% failed to attempt the part (b) of the question. Although candidates could have earned some marks but did not attempt the question or could not explain the importance i.e. cash flow benefit, cost of capital benefit if new shares are not to be issued with the associated cost, impact on gearing, weighted average cost of capital etc which are necessary knowledge from Financial Management. Prior knowledge from financial management to support the acquisition decision was not appreciated by candidates which is the standard practice and core role of Chartered Accountants. A number of candidates could not appreciate SavvyTech additional information. As a result, majority of the candidates who attempted the questions earned less than 10% of the allocated marks while majority did not attempt the question sadly.

QUESTION SIX

- a) The function of the accounting profession is to record financial transactions and to report the financial performance and position of the business entity to stakeholders including the Board of Directors. Information about business and other organisations comes largely from accountants. Accountancy has an influence in any organisation management decision making which require financial information of which SavvyTech plc is not an exception.

As a newly qualified Chartered Accountant responsible for code of ethics in SavvyTech plc, these are some of the reasons in support of why Director of Finance and Operations seems to be projecting finance over other functions:

i. Financial reporting

Accountants are involved in the preparation of financial statements, which are used by shareholders and other investors to assess companies and government organisations to make their investment decisions. Financial reports are often used to prepare information about companies for the interested parties such as government for tax purposes and employees. Without financial information SavvyTech plc management team can't make informed decisions considering the ongoing acquisition discussion.

ii. Auditing

Accountants also check the financial statement of companies and government organisations, and report on their 'accuracy' to shareholders and government. Shareholders rely on the opinion of the auditors to obtain reasonable reassurance that the financial statement give a true and fair view. The need by investors for reliable financial reporting and auditing is critical to corporate governance i.e. independent verifiable report before SavvyTech plc can engage with Utopia authorities and shareholders.

iii. Management accounting

Management accountants provide information to management, to assist managers with decision-making. In many organisations, management accountants have extended their involvement with management information systems to the provision of strategic as well as short-term management information, financial and non-financial information. SavvyTech plc need monthly management accounts to support internal discussions and engagement with Board of Directors.

iv. Tax

As tax advisors, accountants can help corporate clients to avoid payment of tax through tax avoidance schemes. A criticism of tax avoidance schemes is that they enable wealthy individuals and profitable companies to avoid paying tax, which means that the tax burden is shared by poor members of society. Knowledge of tax is needed before one can engage with tax authorities. Such analytics can only be provided by SavvyTech plc Finance Unit.

v. Consultancy

Accountancy firms may provide consultancy services to a range of different clients. Major strategic decisions by government and companies might be influenced by the advice of and recommendations from consultants. In Ghana for example, the major accountancy firms have been involved in providing advice to the government on the introduction of private capital into financing of public investments.

vi. Public sector accounting

Accountants within the public sector are responsible for recording financial transactions within government departments and government-owned organisation, and for financial reporting and auditing within the government sector. Double taxation agreement between Ghana and Utopia need engagement with the respective government institutions.

The above reasons are in support of why the Director of Finance and Operations seems to be projecting finance over other functions.

(Any 5 points well explained @ 2 marks each = 10 marks)

- b) The Board of Directors of SavvyTech plc should reserve to itself and should not delegate to individuals or executive managers guidance as provided by Institute of Chartered Secretaries and Administrators (ICSA). These include:

i. Approving of annual report and accounts

Decisions that the board is required to make by law, such as approving the annual report and accounts. The issue in question is about approval of new matrix management structure of SavvyTech plc.

ii. Rules of the stock exchange

Matters that the board is required to deal with to meet the rules of the Ghana Stock Exchange (GSE) such as approving circulars to shareholders before these are sent out. Again, GSE rules excludes approval of matrix structure as being discussed by SavvyTech plc management team.

iii. Long-term strategic decision

Matters that a board will typically be expected to reserve for its own decision making, such as deciding SavvyTech plc long-term objectives and strategy, approving major capital expenditure and large contracts, major acquisition or disposal, approving the annual budget and oversight of the company's management and operations. Oversight of management operation such as matrix management organisation structure is a long-term decision which would need the Board of Directors approval hence Director of Human Resources and Organisational Development is right. SavvyTech plc Management Team need to present the change to the Board of Directors for approval.

iv. Recommendations to Board by its committees

Approving recommendations made by Board by its committees such as the remuneration and audit committees. Committee responsible for Human Resources and Organisational Development needs to review the proposed changes and recommend to the SavvyTech plc Board of Directors for approval before it can be implemented.

(4 points well explained @ 2.5 marks each = 10 marks)

(Total: 100 marks)

EXAMINER'S COMMENT

This question is of two parts with preamble provided before the question to assist candidates.

Part (a) of the question required candidates as a newly qualified Chartered Accountant responsible for code of ethics in SavvyTech plc, to identify and explain reasons in support of why the Director of Finance and Operations seems to be projecting finance over other functions. Candidates used the IESBA Code (Fundamental principles) of professional accountant rather than functions hence deviated. Over 30 % of candidates either deviated or scored well below average of the marks. Few candidates were able to provide and explain five reasons to support why finance is projected over other equally important

functions as provided in the syllabus. This question does not require much application and could be well answered if candidates are well prepared.

Part (b) is the least answered question although there were few well prepared candidates who scored high marks. Over 65% of candidate's scripts evidence that they are not familiar that ICSA guidance principle is part of the ICAG syllabus. Challenge of not attempting can be related to two factors; either candidates did not cover enough of the syllabus or specialised. In previous Chief examiners reports, the issue of not covering the syllabus were highlighted. Candidates preparing for the case study syllabus should ensure they are adequately prepared. Governance is broad in the case study syllabus to ensure that candidates appreciate the complexity of governance issues in strategic management or organisations. The question focusses on the non-negotiable role of the Board of Directors that should not be delegated i.e. long-term decision about SavvyTech Plc matrix management structure. Most candidates did not even appreciate that the part (b) of the question was about governance. Less than 10% of candidates pass this question. Most candidates did not attempt the question at all.