

Strategic Professional – Essentials

Strategic Business Leader (SBL)

Time allowed:

4 hours including reading, planning and reflective time.

This question paper is an integrated case study with one section containing a total of 100 marks and

ALL tasks must be completed. All tasks contain Professional Skills marks which are included in the marks shown above.

Do NOT open this question paper until instructed by the supervisor. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

SBL

Carey Jones Group-Introduction

Carey Jones (CJ) set up his first company in 1993, when he won massive inheritance after spending a few years in legal battles. He was an Australian dropout who consistently followed his dream and became a classic hi-tech entrepreneur at a very young age.

Constantly searching for ways to exploit technological opportunities, he understood the need for diversification and was unafraid to take the risks associated with hi-tech start-ups. His current businesses include a wide range of products and services for power generation and transmission, infrastructure, industry solutions as well as medical diagnosis. His aim was to have a one window solution for technology in the power sector from small chips to building dams.

Under the umbrella of Carey Jones Group (CJG), there were numerous start-ups and joint ventures. Although he believed in delegating but finding like-minded people has always been a challenge for him.

You work for a management consulting firm, Brain Works (BW). BW has been working with Carey Jones since 1993, guiding him in his business ventures and assisting with evaluation of new business opportunities.

The CJG portfolio has been transferred to you after the resignation of a senior manager at BW. Your predecessor has not been able to brief you about the group but the information around running assignments at hand are explained in the Exhibits below

While handing over, your predecessor has also mentioned that CJ himself requested BW to look into Joe Bing's (his nephew) clothing business who has asked for CJ's help as he looks up to him as an entrepreneur. CJ does not have any experience of this industry and would prefer for him to get consultancy from professionals. The information given to the team member is available in exhibit 5.

Exhibit 1- Innovative Network Solutions

Exhibit 2- Finch & Smith

Exhibit 3- Starc Manufacturing

Exhibit 4- Advance Tech

Exhibit 5- Times Clothing Company

The case requirements are as follows; your role for all tasks is that of a consultant.

1. Using appropriate models and financial and quantitative data from Innovative Network Solutions to support your analysis, prepare a report on the current position of INS, highlighting major problem areas. (15 marks)

Professional skills marks are available for demonstrating *evaluation* in assessing and appraising the information given. (4 marks)

2. CJ is now seeking to make a planned exit from the business as it currently exists at Innovative Network Solutions. He has asked you to assess each of the three identified exit options in terms of their ability to solve the problems highlighted and prepare a brief presentation to explain this. Prepare a presentation with an appropriate number of slides and accompanying notes. (9 marks)

Professional skills marks are available for demonstrating *communication* in a clear assessment of each option. (2 marks)

3. To prepare for the upcoming AGM at Finch & Smith, prepare working notes which:

- (i) Assess three risks to the Giant Dam Project (9 marks)
- (ii) Evaluate the environmental and sustainability implications of the Giant Dam Project; (8 marks)
- (iii) Discuss the importance of confidentiality in the financing of the early stage working capital needs and give an explanation of how this conflicts with the duty of transparency in matters of corporate governance. (6 marks)

Professional skills marks are available for demonstrating *communication* skills in clarifying and conveying relevant information in the working notes. (4 marks)

4. Prepare briefing notes from Emily Baa to prepare chief executive of Starc for the board meeting as requested. The notes should cover a discussion of the meaning of accountability at Starc, an evaluation of the influence of the Watching Business pressure group and advice on why the demands from Watching Business should be carefully considered. (7 marks)

Professional Skills marks are available for demonstrating *commercial acumen* in evaluating the pressure group's influence. (2 marks)

5. In Advance Tech, the panel has selected the proposal of Professor Fd Wan as the winning proposal.

Draft a concise section of a consultancy report evaluating the three proposals and justifying the selection of the proposal of Professor Fd Wan as the best strategic option for *Advance Tech* to pursue.

(15 marks)

Professional Skills marks are available for demonstrating *commercial acumen* in evaluation of the proposals and the chosen strategy as the most appropriate one.

(4 marks)

6. Most project management methods have an initiation or definition stage which includes the production of a document that serves as an agreement between the sponsors and deliverers of the project. This may be called a project initiation document or a project charter. Defining the business case is also an important part of the initiation or definition stage of the project.

Prepare a memo addressed to Joe Bing at Times Clothing Company which explains how a business case and a project initiation document would have helped prevent some of the problems that emerged during the conduct of the website re-design project and analyses how effective project management could have *further* improved both the process and the outcomes of the website re-design project.

(11 marks)

Professional skills marks are available for demonstrating *scepticism* skills in discussing shortcomings in the current approach that was adopted and the benefits that effective project management would have brought about.

(4 marks)

Exhibit 1.

Innovative Network Solutions (INS) is a privately owned hi-tech business set up in 1993, when Carey Jones won his case and re-located close to London. INS was the brainchild of Carey Jones looking to meet the needs of the converging computer and telecommunication industries. In his words an entrepreneur is 'someone willing to work 18 hours a day for themselves.... to keep from working 8 hours a day for someone else'.

Structure of the business and key product areas

By 2003 INS was employing 75 full time staff in a new, purpose built factory and office unit. These staff were a mix of technically qualified engineers working in R&D, staff concerned with the manufacturing and assembly side of the business and a small sales and service support team. Its first product was a digital error detection box able to 'listen' to computer signals and detect faults. The original box designed by CJ was way back in his school days and was built on his kitchen table and manufactured in a garage.

INS had developed three distinctive product/service areas. Firstly, data communications components sold to original equipment manufacturers (OEMs) that incorporated INS components into their hardware. Both the OEMs and their customers were likely to be large, international companies. INS's had a less than 1% share of the UK market and faced competition from more than twenty suppliers, most of whom competed internationally. One of INS's main UK customers accounted for 40% of its sales. INS had established a good reputation for the quality and performance of its components, which were competitively priced. The European market for data communications equipment had increased from some \$3.3 billion in 1999 to \$6.0 billion in 2003. Forecasts for 2004 and beyond predicted growth as coming from increased sales to currently installed networks rather than from new networks. As the technology was becoming more mature, so the product lifecycles were becoming shorter. Success came from producing large volumes of relatively low priced reliable components. However, all new components had to be approved by the relevant government approval body in each country being supplied. Approval for new data communication equipment was both costly and time consuming.

INS's second product area was Innovative Network Solutions – hence the name of the company. Once again the customers were typically large companies – but the fault detecting systems were supplied directly to a small number of large end-users such as banks, public utility providers and global manufacturers. INS's approach recognised that no two companies information systems were the same and therefore INS needed to customise its products to meet these specific needs. INS pioneered a 'modular building block' design, which allowed the customer to adapt standard system modules to fit their exact networking requirements. INS products were focused on solving network management problems and the success of its products was reflected in the award of the prestigious 'Queen's Award for Technological Achievement' in the prevention of computer data communication downtime. This was recognition of the excellence of the R&D project teams who developed the software and related hardware. INS's reputation had enabled it to become a successful niche player in this low volume market with healthy gross margins in excess of 40%. INS faced two or three competitors in this specialist market which had the advantage of not requiring new systems to have government approval.

Finally, the complexity of INS products meant that technical support was a third key business area. This reflected continuing concern with customer care. INS had established a reputation for excellent technical support, the only problem being that the company lacked a national network for service support, with all technical support coming from its London base. This contrasted with the international service structure operated by the large, international competitors.

INS's growth had made CJ aware of a number of problem areas the company faced compared with its larger competitors. One problem concerned the ability of INS to read market trends, scan its competitive environment and create marketing strategies and plans. INS's market and sales planning only covered the year ahead. Larger competitors could invest heavily in sophisticated market research analysis and customer relationship marketing.

Accurate sales forecasting was a key input into production planning and scheduling. INS manufactured some 40% of its systems and bought in many items, including semiconductors and microchips, from global suppliers, which were then built into its complex products. Serious problems occurred when component shortages occurred, creating significant delays in manufacturing, assembly, and customer deliveries. The growth of INS had outstripped the largely manual control systems designed to support production and sales.

Emerging problems

CJ was acutely aware of his key role as founder and chairman of the firm. He was finding the skills and attributes necessary for founding and growing the business were no longer as critical to the mature business. Heavily reliant on his extrovert personality and ability to muddle through with informal, flexible systems, the limitations of such an approach were now beginning to show. How could he combine the day-to-day demands of running the business while at the same time planning its future? Functional departments in the shape of Sales and Marketing, Technical (R&D), Manufacturing and Administration were in place but strategic planning, such as there was, was very much CJ's responsibility.

Recruitment of high calibre staff was also a problem – INS's small size and location near London, meant it was struggling to attract key personnel necessary for future growth. CJ felt acutely aware of the pressure on him to either develop the necessary skills himself, or to develop the right people with the right skills. In CJ's words, starting a business was like 'building your own airplane and then teaching yourself how to fly'.

One further skill set in short supply was the financial capability necessary to deal with growth. His dealings with his bankers and other financial intermediaries had become increasingly difficult and time consuming. The financial control information required to support growth, and more recently, survival was often inadequate. 2003 had started well with INS being approached by a major data communications company as a target for a possible acquisition. The opportunity to realise some of the equity in the business had considerable appeal. Unfortunately, while extended negotiations were taking place, a major downturn in the global economy began and many of CJ's worst fears were confirmed. The order book was drying up and the banks and venture capitalists 'supporting' INS through overdraft and long-term investment became much less sympathetic. The final insult occurred when CJ had been approached by a venture capitalist with a management buyout proposal put together with INS's Financial Director and General Manager. The value placed on the business was a derisory \$50K. CJ was incensed and hurt by the size of the offer and the disloyalty of his senior staff in trying to buy the business. To make matters worse the uncertainty over the future of the business had led to a number of key members of staff deciding to leave the company.

CJ's future at INS

CJ seemed to be confronted by so many options including whether he should leave the business which was his dream at one point. The three main exit options he has identified were, firstly, to personally lead the company out of its current problems, which he largely attributes to the global economic slowdown and float the business on the Stock Exchange as soon as possible. Secondly, to simply walk away and sell the business for a figure which more accurately reflected its real value. Thirdly, to look for acquisition by one of his large customers and to become part of a much larger organisation. By nature a fighter, the recent uncertainties over ownership and the gloomy

forecasts for the global economy, have made him seriously reflect on his own priorities. His hands-on approach and involvement with all aspects of the business seems increasingly inappropriate for solving the problems of a hi-tech business such as INS.

Table 1: Financial data for Innovative Network Solutions

Forecast	2001 \$'000	2002 \$'000	2003 \$'000	2004 \$'000
Sales				
UK sales	4,500	6,300	6,930	6,235
Export sales	300	500	650	520
Total sales	4,800	6,800	7,580	6,755
Cost of sales	2,640	3,770	4,550	4,320
Gross margin	2,160	3,030	3,030	2,435
Expenses				
Admin	500	630	700	665
Distribution	715	940	945	885
Marketing	50	60	70	70
R&D	495	590	870	690
Overheads	200	280	320	325
Operating profit	200	530	125	-200
Interest paid	25	120	150	165
Net profit	175	410	-25	-365
Financing				
Long term debt	160	750	1,000	1,100
Share capital & reserves	375	605	600	575
Other information				
Employees	50	60	75	60
% of orders late	5	7	10	6
Outstanding orders	4,725	4,150	3,150	2,500

Exhibit 2.

CJ's joint venture with Finch & Smith (F&S), a major listed European civil engineering company, was successful in its bid to become principal (lead) contractor to build the Giant Dam Project in an East Asian country. The board of F&S prided itself in observing the highest standards of corporate governance. F&S's client, the government of the East Asian country, had taken into account several factors in appointing the principal contractor including each bidder's track record in large civil engineering projects, the value of the bid and a statement, required from each bidder, on how it would deal with the 'sensitive issues' and publicity that might arise as a result of the project.

The Giant Dam Project was seen as vital to the East Asian country's economic development as it would provide a large amount of hydroelectric power. This was seen as a 'clean energy' driver of future economic growth. The government was keen to point out that because hydroelectric power did not involve the burning of fossil fuels, the power would be environmentally clean and would contribute to the East Asian country's ability to meet its internationally agreed carbon emission targets. This, in turn, would contribute to the reduction of greenhouse gases in the environment. Critics, such as the environmental pressure group 'Stop-the-dam', however, argued that the project was far too large and the cost to the local environment would be unacceptable. Stop-the-dam was highly organised and, according to press reports in Europe, was capable of disrupting progress on the dam by measures such as creating 'human barriers' to the site and hiding people in tunnels who would have to be physically removed before proceeding. A spokesman for Stop-the-dam said it would definitely be attempting to resist the Giant Dam Project when construction started.

The project was intended to dam one of the region's largest rivers, thus creating a massive lake behind it. The lake would, the critics claimed, not only displace an estimated 100,000 people from their homes, but would also flood productive farmland and destroy several rare plant and animal habitats. A number of important archaeological sites would also be lost. The largest community to be relocated was the indigenous First Nation people who had lived on and farmed the land for an estimated thousand years. A spokesman for the First Nation community said that the 'true price' of hydroelectric power was 'misery and cruelty'. A press report said that whilst the First Nation would be unlikely to disrupt the building of the dam, it was highly likely that they would protest and also attempt to mobilise opinion in other parts of the world against the Giant Dam Project.

The board of F&S was fully aware of the controversy when it submitted its tender to build the dam. The finance director, Sally Grignard, had insisted on putting an amount into the tender for the management of 'local risks'. Sally was also responsible for the financing of the project for F&S. Although the client was expected to release money in several 'interim payments' as the various parts of the project were completed to strict time deadlines, she anticipated a number of working capital challenges for F&S, especially near the beginning where a number of early stage costs would need to be incurred. There would, she explained, also be financing issues in managing the cash flows to F&S's many subcontractors. Although the major banks financed the client through a lending syndicate, F&S's usual bank said it was wary of lending directly to F&S for the Giant Dam Project because of the potential negative publicity that might result. Another bank said it would provide F&S with its early stage working capital needs on the understanding that its involvement in financing F&S to undertake the Giant Dam Project was not disclosed. A press statement from Stop-the-dam said that it would do all it could to discover F&S's financial lenders and publicly expose them. Sally told the F&S board that some debt financing would be essential until the first interim payments from the client became available.

When it was announced that F&S had won the contract to build the Giant Dam Project, some of its institutional shareholders contacted CJ, the chairman. They wanted reassurance that the company had fully taken the environmental issues and other risks into account. One fund manager asked if Mr. CJ could explain the sustainability implications of the project to assess whether F&S shares were still suitable for his environmentally sensitive clients. Mr. CJ said, through the company's investor relations department, that he intended to give a statement at the next annual general

meeting (FDM) that he hoped would address these environmental concerns. He would also, he said, make a statement on the importance of confidentiality in the financing of the early stage working capital needs.

Exhibit 3

Starc is a large international company with direct investments in 65 countries. It is a manufacturer of high-end technology products, with each Starc factory typically employing over 3,000 people. Starc factories also support local supply chains employing many more people so each Starc plant is considered a vital part of the regional economy in which it is located.

In early 90's, Starc was widely criticised for its operations in Arrland, a developing country with an oppressive and undemocratic government. Investigative journalists produced material showing the poor conditions of workers, and pollution around the Starc factories in Arrland. They also showed evidence suggesting that Starc had paid bribes to the Arrland government so that local opposition to the Starc operation could be forcefully stopped, leading to management buy-out with the help of Mr. CJ in mid 90's. After this acquisition, the company became very sensitive to criticism of its operations in developing countries. A press statement at the time said that Starc, in future, would always uphold the highest standards of integrity, human rights and environmental protection whilst at the same time 'responsibly' supporting developing countries by providing jobs and opportunities to enable greater social and economic development.

The board of Starc is now deciding between two possible large new investments, both directly employing about 3,000 people. Both options have a number of advantages and disadvantages and Mr. Woo, Starc's finance director, has recently made clear that only one can be chosen at this stage. The two options are of similar investment value and are referred to as the 'Jayland option' and the 'Pealand option'.

The 'Jayland option' is to build a new large factory in Jayland and to recruit a completely new local workforce to work in it. Jayland is a developing country with few environmental and labour regulations. It has a poorly developed education and training system, and is generally considered to be undemocratic. Its president, Mr. Popo, has been in office since he seized power in a military coup 30 years ago. Human rights organisations say that he maintains order by abusing the rights of the people and cruelly suppressing any dissent against him. In early exploratory talks between Starc and the Jayland government, Starc was given assurances that it could pursue its activities with little regulation from the government as long as the Jayland president, Mr. Popo, received a personal annual 'royalty' (effectively a bribe) for allowing Starc to operate in his country.

Finance director Mr. Woo said that some stakeholders would probably criticise Starc, perhaps in the international media, for investing in Jayland. Starc may be accused of supporting the dictatorship of Mr Popo in that country, especially if the 'royalty' was ever discovered. Mr Woo calculated that the NPV (net present value) of projected pre-tax returns of the Jayland option over a ten-year period was \$2 billion but that there was also a risk of potential political instability in Jayland during the lifetime of the investment.

The 'Pealand option' is to buy an existing plant in Pealand which would then be refurbished to facilitate the manufacture of Starc products. This would involve 'inheriting' the workforce of the previous owners. Pealand is a 'new democracy', and a transitional economy, having gained its independence ten years ago. In an attempt to purge the corrupt business practices associated with its past, the Pealand government has become very thorough in ensuring that all inward investments, including Starc's factory purchase, meet exacting and demanding standards of environmental protection and work conditions. Mr. Woo, the finance director, said that the NPV of projected pre-tax returns over a ten-year period was \$1 billion for the Pealand option but that the risk of political instability in Pealand was negligible. Both of the returns, the forecast \$2 billion for Jayland and the \$1 billion for Pealand, were considered to be acceptable in principle.

Mr. Woo also said that there were issues with the two options relating to the effectiveness of necessary internal controls. Whichever option was chosen (Jayland or Pealand), it would be necessary to establish internal controls to enable accurate and timely reporting of production and cost data back to head office. So a number of systems would need to be put in place to support the production itself. One staff member, Emily Baa, who had previously worked in Jayland for another company, gave her opinion to the board about some of the issues that Starc might encounter if it chose the Jayland option. She said that Jayland was very under developed until relatively recently and explained how the national culture was unfamiliar with modern business practice and behaviour. She said that property security may be a problem and that there was a potential risk to assets there. She also said that, in her opinion, there was a lack of some key job skills among the potential workforce in Jayland such as quality control and accounting skills. She explained that quality control skills would be necessary to ensure product specifications were met and that accounting skills would be necessary for the provision of internal and external reporting. As a manufacturer of very technologically advanced products, a number of stringent international product standards applied to Starc products wherever in the world they were produced.

Meanwhile, news that Starc was considering a large investment in Jayland leaked out to the press. In response, Starc's chief executive, CJ received two letters. The first was from a prominent international human rights lobbying organisation called 'Watching Business' (WB). In the letter, the lobby group said that because of its 'terrible track record' in Arrland and elsewhere, Starc was being carefully monitored for its 'unethical business practices'. WB said its interest in Starc's activities had been rekindled since it had received intelligence about the possible investment in Jayland and warned Mr. CJ not to make the investment because it would provide credibility for the 'brutal dictatorship' of Mr Popo.

Whilst Mr. CJ, known for her forthright manner, would normally dismiss threats from groups of this type, she knew that WB had a lot of support among senior politicians and legislators in many parts of the world. She believed that WB could achieve some power through mobilising public opinion through effective use of mass media, such as newspapers and television. WB was also respected as a research organisation and its advice was often sought by politicians and trade organisations.

Mr. CJ said he was frustrated whenever anybody got in the way of her accountability to the Starc shareholders, but that some interests could not be ignored because of their potential to influence. WB fell into this category.

The second letter he received was from the head of Quark Investments, Starc's single biggest institutional shareholder after Mr. CJ. The letter sought to remind Mr. CJ that the Starc board was employed by its shareholders and that Mr. CJ should be determined and resolute in maximising shareholder returns. The letter encouraged the board not to be diverted by 'well-meaning but misinformed outsiders concerned with things that were actually none of their business'.

Aware that he had to manage two competing demands placed on his Mr. CJ sought advice from Emily Baa, who had experience of life in Jayland. So he asked Emily Baa to prepare some notes for the next board meeting to clarify whom the board of Starc was actually accountable to and how it might respond to the letter from WB.

Exhibit 4.

Advance Tech was established in 1990. The company began by specialising in the supply of low voltage, low emission, quiet, recyclable components to the electronic industry. Its components are used in the control systems of lifts, cars and kitchen appliances. Two medium-sized computer manufacturers use *Advance Tech* components in selected 'green' (that is, environmentally-friendly) models in their product range. Recent market research showed that 70% of the global electronics industry used *Advance Tech* components somewhere in its products.

In 1993 with a strategic investment from CIG the company innovated another way of doing business and the company began a catalogue mail order service (now Internet-based) selling 'green' components to home users. Most of these customers were building their own computers and they required such components on either environmental grounds or because they wanted their computers to be extremely quiet and energy efficient.

From 2005, *Advance Tech* also offered fully assembled computer systems that could be ordered and configured over the Internet. All *Advance Tech's* components are purchased from specialist suppliers. The company has no manufacturing capability, but it does have extensive hardware testing facilities and it has built up significant technical know-how in supplying appropriate components. The management team that formed the company in 1990 still runs the technical division of the company.

Finance and revenue

The company has traded profitably since its foundation and has grown steadily in size and revenues. In 2008, its revenues were \$64 million, with a pre-tax profit of \$10 million. The spread across the three revenue streams is shown in Figure 1:

All figures in \$million	2008	2007	2006
Component sales to electronics industry	40	36	34
Component sales to home users	20	18	16
Fully assembled green computers	4	3	2
Total	64	57	52

Figure 1: Turnover by revenue stream 2006–2008

The company has gradually accumulated a sizeable cash surplus. The board cannot agree on how this cash should be used. One beneficiary has been the marketing budget (see Figure 2), but the overall spend on marketing still remains relatively modest and, by April 2008, the cash surplus stood at \$17 million.

Figure 2: Marketing budget 2006–2008

All figures in \$	2008	2007	2006
Internet development & marketing	100,000	70,000	60,000
Display advertising (manufacturers)	50,000	40,000	30,000
Display advertising (domestic customers)	20,000	15,000	15,000
Exhibitions & conferences	30,000	20,000	15,000
Marketing literature	10,000	5,000	5,000
Total	210,000	150,000	125,000

Company Doctor

In 2008 a television company wrote to *Advance Tech* to ask whether it would consider taking part in a television programme called 'Company Doctor'. In this programme three teams of consultants spend a week at a chosen company working on a solution to a problem identified by the company. At the end of the week all three teams present their proposal for dealing with the problem. A panel of experts, including representatives from the company, pick the winner and, in theory, implement the winning proposal. *Advance Tech* agreed to take part in the programme and selected their future strategic direction as the problem area to be analysed. Their cash surplus would then be used to fund the preferred option. The show was recorded in September 2008 to be transmitted later in the year. A brief summary of the conclusions of each team of consultants is given below.

- The accountants Lewis-Read suggested a strategic direction that planned to protect and build on *Advance Tech's* current strategic position. They believed that the company should invest in marketing the fully assembled 'green' computers to both commercial and home customers. They pointed out that the government had just agreed a preferential procurement policy for energy efficient computers with high recyclable content. 'This segment of the market is rapidly expanding and is completely under-exploited by *Advance Tech* at the moment', Lewis-Read concluded.
- The corporate recovery specialists, Fenix, put forward a strategic direction that essentially offered more services to *Advance Tech's* current customers in the electronics industry. They suggested that the company should expand its product range as well as being able to manufacture components to respond to special requirements. They also believed that potential supply problems could be avoided and supply costs could be cut if *Advance Tech* acquired its own manufacturing capability. 'You need to secure the supply chain, to protect your future position.' They felt that the surplus cash in the company should be used to acquire companies that already had these manufacturing capabilities.
- The third team was led by Professor Fd Wan from MidShire University. Their main recommendation was that *Advance Tech* should not see itself as a supplier of components and computers but as a supplier of green technology. They suggested that the company should look at many other sectors (not just electronics) where quietness, low emissions and recyclable technology were important. 'The company needs to exploit its capabilities, not its products. It is looking too narrowly at the future. To compete in the future you need to develop your markets, not your products', concluded the professor.

Figure 3, which was shown on the television show, illustrates how each solution came from a different part of an amended Ansoff product/market matrix.

	Product		
		Existing	New
Markets	Existing	Protect/Build <i>Lewis-Read (option 1)</i>	Product development with new capabilities
	New	Market Development option with new uses and capabilities <i>Professor Fd Wan (Option 3)</i>	No team chose this diversification <i>Fenix (option 2)</i>

Figure 3: Adapted Ansoff matrix showing the position of the three solutions

In the television programme, the panel chose option 3 (as suggested by Professor Fd Wan's team) as being the most appropriate strategic direction and, much to everyone's surprise, Mr. CJ began to pursue this direction with much vigour. Objectives and goals were established and a set of processes was designed to facilitate business-to-business transactions with potential new customers. These processes allow customers, by using computer-aided design software, to view the specification of products available, to assemble them and to integrate their own components into the design. This means that they are able to construct virtual prototypes of machines and equipment. This process design, delivered through a web service, is still under development.

Tackling operational problems

In parallel, *Advance Tech* has decided to make tactical changes to current processes where the company has received poor customer feedback. One of these is the ordering of fully assembled green computers. The current Internet-based process for ordering and configuring these computers is described below. A swim-lane diagram (flowchart) showing the process is also included as Figure 4.

On-line customers use the *Advance Tech* web site to enter the specific computer configuration they require. These details are fed through to the sales department at *Advance Tech* which then e-mails Xsys—*Advance Tech's* Korean manufacturer—to ask for a delivery date for the requested computer. Xsys e-mails the date back to *Advance Tech* which then e-mails the customer with delivery and cost details. The customer then decides whether they wish to proceed with their order. Currently, 40% of enquiries proceed no further, which is of concern to *Advance Tech* as it means that time and effort have been wasted.

For those enquiries that do proceed, customers are invited to enter their payment details (credit card only). These details are sent directly to Equicheck—a specialist credit checking Agency. About 20% of orders are rejected at this point because the potential customer has a poor credit rating. For orders that pass the credit check, a payment confirmation is raised by *Advance Tech* and sent to the customer and *Advance Tech* place a confirmed order with Xsys for the computer.

When Xsys has completed the construction of the computer it arranges for the international logistics company EIM to deliver the machine to *Advance Tech* for testing. After acceptance testing the machine, *Advance Tech* e-mails the customer, agrees a delivery date and arranges for delivery by courier.

Recent feedback from customers suggests that missing promised delivery dates is their biggest complaint. This is because the delivery date agreed early in the order process cannot necessarily be matched by Xsys when it actually receives the confirmed order. Figure 4 shows the process involved.

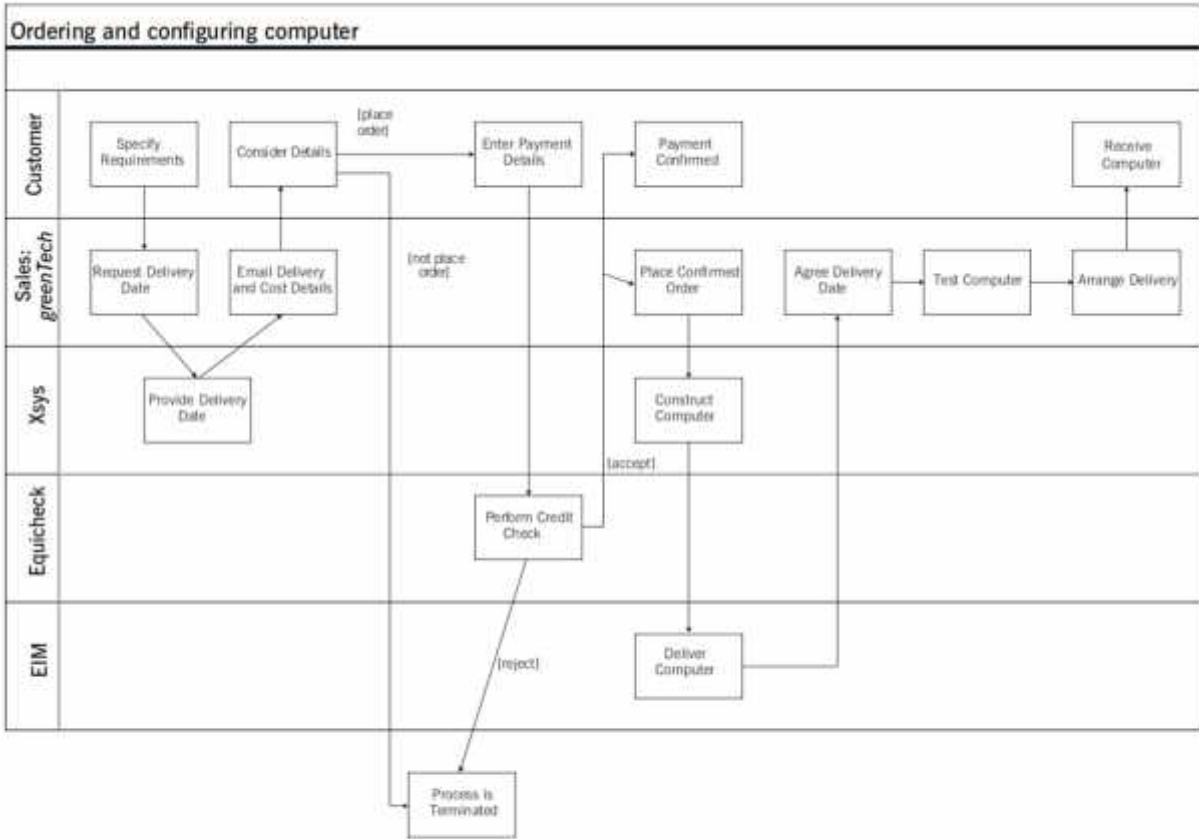


Figure 4: The process of ordering and configuring a computer

Exhibit 5

Joe Bing started Times Clothing Company (TCC) five years ago but has not been actively involved in its management. He has appointed his best friend as the CEO and rarely questions his decisions. However, he was recently made aware of issues faced in the re-design of the website and it is with this aspect that he has requested for help.

Times Clothing Company (TCC) sells 40% of its goods directly to customers through its website. The marketing manager of the company (MM) has decided that this is insufficient and has put a small team together to re-design the site. MM feels that the site looks 'amateur and old-fashioned and does not project the right image'. The board of the company has given the go-ahead for the MM 'to re-design the website'. The following notes summarise the outcomes of the meetings on the website re-design. The team consists of the marketing manager (MM), a product range manager (RP), a marketing image consultant (IC) and a technical developer (TD).

Meeting 1: 9 July attended by MM, RP, IC and TD

The need for a re-designed website to increase sales volume through the website and to 'improve our market visibility' was explained by MM. IC was asked to produce a draft design.

Meeting 2: 16 August attended by MM, RP, IC and TD

IC presented a draft design. MM and RP were happy with its image but not its functionality, suggesting that it was too similar to the current site. 'We expected it to do much more' was their view.

Meeting 3: 4 September attended by MM, RP and IC

IC produced a re-drafted design. This overall design was agreed and the go-ahead was given for TD to produce a prototype of the design to show to the board.

Meeting 4: 11 September attended by RP, IC and TD

TD explained that elements of the drafted re-design were not technically feasible to implement in the programming language being used. Changes to the design were agreed at the meeting to overcome these issues and signed off by RP.

Meeting 5: 13 October attended by MM, RP, IC and TD

The prototype re-design was demonstrated by TD. MM was unhappy with the re-design as it was 'moving too far away from the original objective and lacked functionality that should be there'. TD agreed to write a technical report to explain why the original design (agreed on 4 September) could not be adhered to.

Meeting 6: 9 November attended by MM, IC and TD

It was agreed to return to the 4 September design with slight alterations to make it technically feasible. TD expressed concerns that the suggested design would not work properly with all web browsers.

At the board meeting of 9 December the board expressed concern about the time taken to produce the re-design

and the finance director highlighted the rising costs (currently \$25,000) of the project. They asked MM to produce a formal cost-benefit of the re-design. The board were also concerned that the scope of the project, which they had felt to be about re-design, had somehow been interpreted as including development and implementation.

On 22 December MM produced the following cost-benefit analysis of the project and confirmed that the word 'redesign' had been interpreted as including the development and implementation of the website.

	Year 1	Year 2	Year 3	Year 4	Year 5
Costs	\$50,000	\$10,000	\$10,000	\$10,000	\$10,000
* Benefits	0	\$15,000	\$25,000	\$35,000	\$35,000

*These benefits are extra sales volumes created by the website's extra functionality and the company's increased visibility in the market place.

On 4 January the board gave the go ahead for the development and implementation of the website with a further budget of \$25,000 and a delivery date of 1 March. TD expressed concern that he did not have enough developers to deliver the re-designed website on time.

Meeting 7: 24 February attended by MM, RP, IC and TD

A partial prototype system was demonstrated by TD. RP felt that the functionality of the re-design was too limited and that the software was not robust enough. It had crashed twice during the demonstration. He suggested that the company delay the introduction of the re-designed website until it was complete and robust. MM declared this to be impossible.

Conclusion

The re-designed website was launched on 1 March. MM declared the re-design a success that 'had come in on time and under budget'. On 2 and 3 March, numerous complaints were received from customers. The website was unreliable and did not work with a particular popular web browser. On 4 March an emergency board meeting decided to withdraw the site and reinstate the old one. On 5 March, MM resigned