Customer's Name
Instructor's Name
Course Title
Ooth November, 2020



# Proposal for Saginaw Valley State University Housing

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## LETTER OF TRANSMITTAL

# Saginaw Valley State University Housing

[Insert department]

[Insert your name]

[Insert tile]

[Insert address1]

[Insert address 2]

November 00, 2020

Dr. [insert name]

Director, [insert title]

[Insert address 1]

[Insert address 2]

#### Dear Dr. [insert name]

I hereby submit a proposal to request funding support for a research project titled "How to Upgrade Information System at DralleyTech Company", which is to be carried out under my direction at Saginaw Valley State University housing. DralleyTech is a hypothetical name as applied in this project

proposal.

I am requesting funds, which total to \$400,000 estimated cost for the period beginning 0<sup>th</sup> March till 0th June 2020.

Questions concerning any technical aspects related to this project proposal are to be directed to me. Questions regarding administrative aspects should be directed to my proposal project supervisor. I greatly appreciate your consideration of this proposal.

Yours sincerely

[Insert your name]

**Enclosure: Project proposal** 

Cc: [insert name]

## **Executive Summary**

DralleyTech Limited's operations partially rely on the use of information systems and/or information technology. The company uses a small number of core information system capabilities in its production processes to ensure that their quality service corresponds with the ever changing demands of customers. Therefore, the company is currently planning to implement a more advanced remote control, which is scale down replica of a Dralley called 'Predator'. This 'UAV Predator' will be called 'Meisa'. Main information systems' capabilities that DralleyTech employs in its operations include vendor development, contract facilitation, surveillance monitoring, relationship buying, and leadership. The company has contracted numerous vendors and program developers in the USA. However, the company needs to enhance its information management capacities to enable realization of other core capabilities including architecture planning, informed buying, business systems thinking, and relationship building. Moreover, this paper also suggests a number of business intelligence strategies such as ERP, CRM, MRP, and EPM, that DralleyTech can employ to upgrade its information management capacity and capability (Caldeira & Ward 81).

## Introduction

DralleyTech relies heavily on sufficient information management to be able to execute strategies that will enable it to achieve its set objectives. Indeed, information is the fundamental string that connects all structures of DralleyTech Limited.

The company uses information management systems to enable planning and surveillance control of all operations of the company. Therefore, it is essential that DralleyTech embraces all 9 core information system capabilities in order to operate efficiently. In this regard, managerial concerns about information technology at DralleyTech Limited are related to strategic information systems that aim to improve the sales order process of its surveillance products, thereby increasing customer satisfaction. They plan to reduce the cost of doing business by upgrading existing surveillance and material resource planning to accommodate advanced business intelligence techniques that will improve the quality of service delivery (Chaffey 52).

In order to address these management concerns, DralleyTech Limited should rely on technological view of DIKAR model to evaluate how the management transforms organizational data into information. Further, the company will evaluate how the management interprets the transformed information to provide staff with necessary knowledge base to help them carry out organizational actions efficiently. DIKAR model will also enable DralleyTech to examine how knowledge can influence strategic decisions, which influence its operational results.

# **Problem History**

Founded in 2006, DralleyTech Ltd is a world leader in production of surveillances drons, design, and manufacture of EMI-shielded as well as contrast enhancement windows. Its proficiency lies in optical expertise and dry film lamination of plastics and glass filters for displays and enclosures. It is based in Thames, Oxford shire and is registered to ISO9001:2008 for design and manufacture of display surveillance products. The company is a supplier to UAV drons. DralleyTech Ltd has approximately 40 employees in its facilities in United Arab Emirates (Chaffey 85).

DralleyTech outsources information system of its small capacity material resource planning (MRP) software. The company strategically decided to entrust a software company Synopsis Ltd to run its operations. Synopsis Company enables DralleyTech to access and use the software and the facility. The platform of the software is maintained at the contractor's side. Basically, the system supports optical operations in surveillance monitoring, sales order processing, bill of material, accounts, work order creation, and inventory management system (Caldeira & Ward 27). This MRP system is basic and operates only as a storage facility.

Information system outsourcing at DralleyTech involved a contract, which specified business/technical service that the company required Synopsis Company to deliver. DralleyTech used total outsourcing approach where the platform for small scale material management planning system was maintained at Synopsis Company's side. This created partnership between two companies. The main aim of outsourcing strategy was to help

DralleyTech reduce its operational costs. Outsourcing strategy enabled DralleyTech to benefit from the removal of the burden of information technology, thus reducing information technology risks since DralleyTech had Synopsis Company to blame for system failures.

Moreover, DralleyTech did not fully exploit user involvement in the outsourced technology system. By employing the DIKAR model, management consultant was able to assess how DralleyTech's data are processed to obtain information, which is then interpreted to provide knowledge to the operational staff. The model also enabled programmers to examine how knowledge influences strategic decisions and results of DralleyTech's operations. Accordingly, programmers noted that small scale material planning information system did not attract sufficient attention to behavioral changes among working staff of DralleyTech. This led to outstanding losses that the company associated with the information system. Lack of integration across the board, mainly between the sales department and the production department, resulted from the inefficient information system. This also created a blind spot for the production team in terms of the number of orders expected (Beulen, Ribbers, & Roos 26).

# **Proposed Solution**

In order to upgrade its information systems to ensure efficient operational management, DralleyTech should employ Earl's multiple methodology to guide formulation of strategies that are geared towards attainment of efficient information management system (Beulen, Ribbers, & Roos 29).

DralleyTech should develop information system strategy with clear hierarchical dispensations in terms of needs of the corporate level of the organization, satisfaction of the business unit level, and specific functional needs of the organization. Moreover, the company can form information system steering committees, which will oversee planning and implementation of the new project. This level will be highly involving since it will significantly influence acceptability of the information system developed by the staff of DralleyTech.

Earl's multiple methodology offers three methods, which DralleyTech can use to evaluate its strategic formulation needs. DralleyTech could use the top-down method, where the process begins with general objectives of the business. This methodology requires management to identify critical success factors that influence key decisions and business objectives. These will make up information requirements for the application development portfolio. Information system management developers will use generated information to create a suitable program that will meet information requirements established in a company.

Earl's other methodology is the bottom up approach. In this method, DralleyTech will engage an auditor to audit the current system to establish information requirements that the developer will use to create an information system that will best serve the established requirements. The last methodology that DralleyTech could employ in formulating its strategy is the inside out approach. According to this approach, the management will initiate an inquiry to establish "Brightspark" ideas (Ambrosini & Bowman 49). These ideas will influence the type of information system that the company could use to solve identified issues.

In this regard, DralleyTech could efficiently use the bottom up approach given the management report that served them with all information requirements. Management consultant carried out a full audit of the current system and established necessary information requirements. Management of DralleyTech will use this information to develop an upgraded information system that will address identified current information faults. There are several business intelligence techniques that DralleyTech could employ to tackle information needs identified.

The actual work of making a plane will begin will careful planning. This will involve selecting a model, which can incorporate the use of a remote control. Second, builders need to look for fliers, which are appropriate for making remote control for the designed airplane. After choosing the airplane model, specific materials are sourced because different aircraft controls demand certain items. These materials are then cut into different parts. These parts are finally put together, which demands a lot of skills and care. The model is then assembled and painted and is ready for use.

# **Project Timeline**

The following Gantt chart provides a schedule of activities beginning 5<sup>th</sup> March till 5<sup>th</sup> June 2013.

Activity		Duration each activity																				
Α	1	2	3																			
В	1	2	3	4	5																	
С				1	2	3	4	5	6	7	8	9	10	11	12	13	14					
D				1	2	3	4	5														
E					1	1	2	3	4													
F						1	2	3	4	5	6	7										
G										1	2	3	4	5	6	7	8					
н																		1	2	3	4	5
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Start date	1/ 01	8/ 01	15/ 01	22/ 01	29/ 01	5/ 02	12/ 02	19/ 02	26/ 02	4/ 03	11/ 03	18/ 03	25/ 03	1/ 04	8/ 04	15/ 04	22/ 04	29/ 04	6/ 05	13/ 05	20/ 05	27/ 05
End date			21/ 01		4/ 02			25/ 02	3/ 03			24/ 03					28/ 04					2/ 06

Initial stage of the project will involve setting up the team as outlined in the above diagram. This set-up will begin on 5<sup>th</sup> March. Moreover, the final task will be to supply finished products to various customers. This final task will begin on 5th June. In essence, DralleyTech will evaluate information provided by the management information system to help the management set up a plan for gauging corporate performance of the company. This will enable DralleyTech to establish corporate performance management system.

# **Proposal Budget**

**Cost Analysis.** In this analysis appropriate budgeting will be performed to assess how DralleyTech Company will perform. In essence, budgets form core components of financing activities within a company. Budgets will enable the company to plan properly and give direction and focus to the business. Budgets benefit the company and its management by incorporating proper allocation of funds to investments, divestitures, and on-going projects, which generate more revenue for the company. Consequently, employees of the company will be paid bonuses and other benefits out of company's budgeted income. A company that operates proper budgets is able to plan for its growth and expansion. In addition, the management will not encounter difficulties in explaining variances and anomalies that arise in the course of business operation. For instance, a manager can easily tell why company's budgeted expenditure differs from actual expenditure. This will enable the company to put in place appropriate mechanisms to correct the variance (Chaffey 102).

Moreover, budgets will lead to proper management of company' resources and funds and will put emphasis on areas of firm's activities, which need special attention. This will incorporate the preparation of a master budget.

The order of preparation of items in a master budget is as follows:

- 1. Preparing sales budget;
- 2. Preparing selling and administrative budget;
- **3.**Preparing production budget;

- **4.** Preparing direct materials, direct labor, manufacturing overhead, and ending finished goods inventory budgets;
- **5.** Preparing cash budgets;
- 6. Preparing budgeted income statement;
- 7. Preparing budgeted balance sheet.

#### Sales Budget for June and July 2012

#### **Sales Budget**

Month	Units	Unit Price(\$)	Amount(\$)
June	4000	165	660,000.00
July	2000	220	440,000.00
TOTAL	6000		1,100,000.00

Expected (budgeted) sales for June are \$ 660,000 (4,000\*1650), while the one for July is \$ 440,000 (2,000\*220). It can be observed from the above company's sales budget that there is a reduction in sales by \$220, 000. This can be attributed to certain risks, such as inflation and foreign exchange losses, that the management has foreseen to negatively impact company's sales.

#### **Production Budget**

	March	April	May	TOTAL
Budgeted sales units	4,000.00	2,000.00	4,600.00	10,600.00
plus desired endin				



Required production	4,800.00	3,840.00	6,200.00	14,840.00
Less beginning inventory	-	-	-	-
Total need	4,800.00	3,840.00	6,200.00	14,840.00
ginventory	800.00	1,840.00	1,600.00	4,240.00

#### **Direct Materials Budget** March **April** May 4,600.00 Scheduled production 4,000.00 2,000.00 times raw materials per unit (DC-ML) 80.00 80.00 80.00 **Total raw materials** needed 320,000.00 160,000.00 368,000.00 plus targeted ending 1,840.00 1,600.00 raw materials 800.00 161,840.00 369,600.0 **Total units needed** 320,800.00 less targeted beginning raw materials Raw material purchases (DC-RM) Times estimated cost per unit Cost of raw material purchases 645,680.00 325,760.00 743,880.00

## **Direct Labor Budget**

	June	July	August
Scheduled production	4,000.00	2,000.00	4,600.00
times direct labor hours per unit (DC-LH)	50.00	50.00	50.00
Total direct labor			
hours	200,000.00	100,000.00	230,000.00
	<b>200,000.00</b> 1.00	<b>100,000.00</b> 1.00	<b>230,000.00</b> 1.00

**Note:** 1. cost per direct labor hour is assumed to be \$ 2. The cost codes are in initials, such DC-LH represents 'direct cost- labor hour'.

	Manufacturing Overhead Budget						
	June	July	August				
Scheduled production	4,000.00	2,000.00	4,600.00				
times variable factory overhead (DC-VFO)	20.00	20.00	20.00				
Total variable factory overhead	80,000.00	40,000.00	92,000.00				
Fixed factory overhead (DFFO)	16,000.00	16,000.00	16,000.00				
Total factory overhead	96,000.00	56,000.00	108,000.00				
Less: Depreciation	(4,000.00)	(4,000.00)	(4,000.00)				

**TOTAL** 

532,772.00

	Budgeted Cash Collections					
	June	July				
Scheduled production	21,616.00	22,372.00				
December sales collections	191,760.00	316,800.00				
June sales collections	290,400.00	193,600.00				

503,776.00

	Cash Budget for December
Beginning cash balance	8,600.00
add cash collections	548,600.00
Cash available	
less: cash payments	(563,230.00)
Cash surplus or (deficit)	(6,030.00)
Minimum cash balance	7,400.00

Amounts to be borrowed to maintain the minimum balance of \$ 7,400

13,430.00

DralleyTech will have to borrow cash by the end of December to maintain the minimum balance and to finance the deficit.

# **Project Assessment**

The project can be assessed by using an evaluation process that involves analysis of performance of the program through feedback that is provided by the participants. It will also involve timely evaluation of the program based on collection of data and information. This will help the program manager to make more effective decisions as compared to previous decisions through data analysis. During the course of the program the costs are also taken into consideration to make sure that program manager is not going over-budget.

Moreover, according to central concept of risk management, it is advisable to fully understand the industry in which the company operates and all activities involved. This is important because it will facilitate proper planning, measuring as well as evaluating of the entire industry. Moreover, there are two major types of risks, which are likely to affect the performance of the company. For instance, growth risks will affect future performance of the company. On the other hand, sensitivity risks emanate from external forces, which are likely to negatively impact performance of the company (Brookins 49).

## Conclusion

Due to global internalization and customization, information management has become an essential component of organizational management systems. Information system has always been crucial for organization. DralleyTech Ltd

has been using information systems and/or information technology in its operations on a small scale. However, the company has recently took advantage of a number of information systems' capabilities in its production processes. This was done in an effort to ensure high quality service that meets dynamic demands of its customers. Design and development of "UAV Predator" will be the most important goal of the company. DralleyTech plans to implement an incorporated management information system that will enable the company to address various informational needs of clients, management, and shareholders, thus improving the profit margin.

DralleyTech suffered the drawbacks of inefficient outsourced information technology. The company did not involve all the staff in the development of the system in addition to the fact that the system was merely basic and failed to provide the staff with necessary data to ensure informed management decisions. Consequently, it is recommended that management of DralleyTech uses customer relationship management system to help the company address identified informational needs of the sales department. Further, CRM will provide mid level management with necessary statistics about essential characteristics of company's customers. Additionally, the company should employ an integrated management information system that incorporates information provided by the CRM, UAV Predator, and upgraded MRP information systems of DralleyTech Ltd.

# **Appendices**

### **Employee's Evaluation**

The following balance scorecard will be used by DralleyTech for its employee management and evaluation.



#### **Phase 1: Strategic Foundation**

Step 1: Strategic Alignment. Here, the personnel tend to align and communicate organization's mission with clear strategy, especially to employees. The strategy is a lead to the balanced score card.

Step 2: Key Strategic Initiatives and Focus Areas. The company determines

and focuses on strategic areas that will help employees focus on goals that must be achieved to implement company's vision.

*Step 3: Strategic Grid and Model.* Strategic model is built for each initiative or an area of focus of the company. This step is always considered as the most difficult one as it requires one to take and transform an entire strategy to what employees can understand. Every link is then combined to create one strategic model that is complete.

## **Phase 2: Three Critical Components**

Step 4: Key Performance Indicators. Each strategic grid must have an objective, which needs to have at least one measurement. It is this measurement feedback about the progress the DralleyTech will be making in terms of meeting its strategic objectives.

Step 5: Goals and Targets. A corresponding target is always provided for each measurement in company's balanced score card.

Step 6: Programs and Initiatives. It is important to note that nothing will happen if the company undertakes projects initiatives. In order to close links and loops, the company should focus on effective programs and strategic initiatives. This will help the organization to move the enterprise from its starting point.

### **Phase 3: Deployment Process**

This phase is fundamental in the development of DralleyTech's score card. It has three main steps, which are discussed in the discussion that follows.

Step 7: Integration. Management and development of action plans are required. Periodic score card and reviews are used to verify and validate employee performance measurements. The company can create an annual review performance plan for its employees and include coaching seasons in their calendar.

Step 8: Cascade. After validation and verification of an initial score card, it is time the company applies the entire process to the remaining parts of the organization until the point where the whole process creates a single coherent system of performance management. Employees' targets and measurements should be established, and the link between different score cards should be verified at each department level.

Step 9: Management. At this stage, the balanced score card can be implemented to manage performance of employees. Improvement opportunities should at all times be given priority and should be made available. This is based on the impact on the balanced score card. Essentially, DralleyTech should try to improve its data sources and measurement systems.

Moreover, the balanced score card is beneficial to both human resource management and workers. This is because it encourages motivating employees through subsidies and allowances for the extra work done, thus improving welfare of these stakeholders. The scorecard also facilitates communication between the human resource management and its

employees. This allows management easily deal with any complaints that might arise due to lack of information (Grant, Hackney, & Edgar 76).

#### **Proposal**

DralleyTech is one of the main suppliers of 'drons' (UAV's). The company runs numerous low volume businesses, which basically are a part of IT surveillance industry. Due to the nature of its production, DralleyTech always needs to employ skillful assembly operators, programmers, and engineers to work on its production volume. In this regard, DralleyTech should ensure that information technology functions go through the reorganization stage of the core capabilities evolution model. This will enable company's management to move some information systems responsibilities to the business unit, thereby improving skills of assembly operators while ensuring improvement of resulting sales volume (Evans & Wurster 86).

Additionally, the company aims to deliver high quality products at competitive price as well as it emphasizes timely delivery and short lead time management. Further, the company is looking forward to increase its market share in the United Kingdom and the United States. Consequently, DralleyTech has outsourced its material resource planning to an outside company to efficiently increase company's capacity (Caldeira & Ward 22). The use of core capabilities model will enable the company to transform its information system to a relatively smaller one, which is staffed with highly qualified personnel. This is significant in ensuring efficiency in DralleyTech that has relatively small staff of about 40 workers in its UK facility (Caldeira & Ward 27).

#### **Management Techniques**

In order to comprehensively address information requirements, DralleyTech will adopt an incorporating management information system that will adequately satisfy information needs of all stakeholders of the company. The system will align organizational strategies to attain information technology objectives, including real time information flow among the staff and clear visibility of key performance indicators (KPIs). The system will incorporate elements of customer relationship management system and upgraded material resource planning information systems. CRM will be integrated in the material resource planning (MRP). Upgraded MRP will improve information delivery at warehouse management, productions – capacity processes, and material usage. Integration of both MRP with CRM will provide DralleyTech with a holistic information system that strives to satisfy identified informational needs of the company (Brookins 47).

Formulation and implementation of incorporated management information system will improve decision making process at DralleyTech. Customer relationship management component of management information system will provide middle level management with sufficient information about the most sellable products, the best time of product sales by type, and will allow to see trends in sales and predict sales volume in the future. This information is necessary for top management to carry out required decision making processes, thereby providing real-time information. Real-time information will enable DralleyTech's management to make wise decision faster, which will ensure growth of the business (Brookins 97).

#### **Risk Management**

In order to manage risks, it is advisable to fully understand the industry in which the company operates and activities it is involved in. This is important to facilitate proper planning, measuring as well as evaluating of the entire industry. Moreover, there are two major types of risks, which are likely to affect performance of the company. For instance, growth risks will affect future performance of the company. On the other hand, sensitivity risks emanate from external forces, which are likely to impact performance of the company in a negative way (Brookins 49). The following calculations have been used to make risk analysis for the project.

#### **DralleyTech Company's Project Evaluation**

#### **Key Inputs**

Initial cost \$ 4,000,000.00

Plant life 5

Salvage value 400000

Variable cost % 45%

Fixed operating cost \$ 1,000,000.00

Tax rate 38%

Working capital 10%

Required rate of return 15%

Timeline of Annual Cash Flow	0	1	2	3	4
Sales volume		1,000,000	1,500,000	3,000,000	3,500,000
Unit price		2.00	2.00	2.50	2.50
Revenue		\$2,000,000.00	\$3,000,000.00	\$7,500,000.00	\$8,750,000.00
Variable operating cost		\$900,000.00	\$1,350,000.00	\$3,375,000.00	\$3,937,500.00
Fixed operating		\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00
Depreciation expense		\$800,000.00	\$800,000.00	\$800,000.00	\$800,000.00
Net operating income		\$(700,000.00)	\$(150,000.00)	\$2,325,000.00	\$3,012,500.00
Less: Taxes (38%)		\$(266,000.00)	\$(57,000.00)	\$883,500.00	\$1,144,750.00
NOPAT		\$(434,000.00)	\$(93,000.00)	\$1,441,500.00	\$1,867,750.00
Add: Depreciation		\$800,000.00	\$800,000.00	\$800,000.00	\$800,000.00
Less: CAPEX	(4000000.00)	-	-	-	-
Less: Working capital	(200000.00)	(100000.00)	(450000.00)	(125000.00)	375000.00
Free cash flow	(4200000.00)	\$266,000.00	\$257,000.00	\$2,116,500.00	\$3,042,750.00
NPV	1249521				
IRR	18.01%				

Some of the key sources of risk are the initial cost, the variable cost percentage, and the sales price.

