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# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT EXECUTIVE SUMMARY

KPMG PEAT MARWICK & PARTNERS FEBRUARY 1992

# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT EXECUTIVE SUMMARY

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# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT REPORT EXECUTIVE SUMMARY

#### INTRODUCTION

Peat Marwick and Partners is pleased to present this Executive Summary covering the significant features of the Management Audit of specified functional areas of Things Jamaican Limited (TJL). The functional areas included in the scope of the study were:

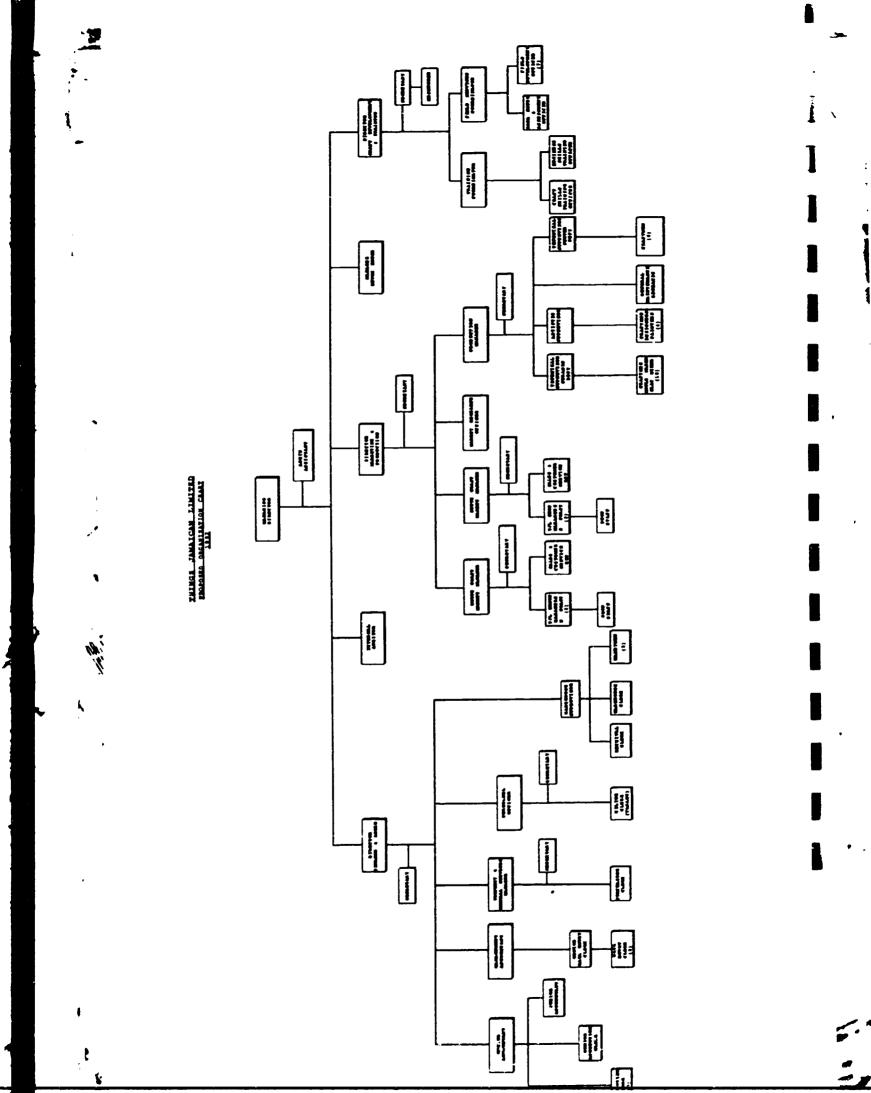
- Marketing
- Craft Development
- Accounting
- Production

In addition, the opportunity is taken within this document, to highlight matters which relate to the overall operation of TJL and do not specifically fall within the terms of reference. These strategically impact on the areas reviewed and as such refer to the anticipated overall direction to be taken by the company. Specifically, these matters relate to personnel, support services, and quality control, which have been discussed in each area of the report. However, we feel that quality is so important to the success of TJL that it should become a core function of TJL and as such we have documented in the report a recommended outline of a comprehensive quality assurance programme.

#### **METHODOLOGY**

The following two phase approach was adopted in the conduct of the Audit:

- A diagnostic review to identify issues in these areas which impede the achievement of functional goals and objectives.
- Analysis of these issues and their recommendations to make the necessary corrections.



#### ORGANIZATIONAL ISSUES

- The existing mission statement seems to have more emphasis on the development of the island's craft industry, rather than the profitability of TIL to drive this development.
- There is a lack of job specifications and descriptions which makes it difficult to manage staff efficiently and assist in recruitment and performance appraisal.
- The existing performance appraisal system is not based on specific performance standards and objectives and does not appear to be effective in identifying consistently poor performers.
- The compensation packages for the senior management levels (i.e. the Directors) are significantly below the compensation levels in the market place for comparable positions. This would be a serious deterrent to attracting and retaining the services of competent management.
- The differentiation between the salaries paid to the various management positions does not adequately reflect the differences in the scope and accountability of the respective positions.
- Lack of documented policies, procedures and organizational charts.

#### RECOMMENDATIONS

 Based on our information gathering, analysis and the strategic direction of TJL we are recommending the following modified mission statement:

"To facilitate the overall development of Jamaica's craft industry by:

- (i) Providing craft producers with technical support in the areas of quality control, product development, product design, training and marketing,
- (ii) Operating a commercially viable enterprise".

In order to achieve this mission we recommend the organization chart on the opposite page. The functional picture of this structure is described fully in this report. Further we recommend a Board with the appropriate mix of skills as outlined below:

- Business entrepreneural skills and experience;
- Craft skills or experience;
- Art and design skills;
- Market connections and/or marketing skills;
- Patron of the Arts connections;

- Tourist Board connections;
- Financial connections;
- Political connections.
- A job evaluation exercise should be undertaken by suitably qualified persons in order to establish an effective salary administration programme.
- The performance appraisal system should be revised and should be based
  on the measurement of performance against documented annual job
  objectives and performance standards. The annual objectives should be
  documented in the relevant department's annual plan and the performance
  standards in the employee's job description.
- The appraisal system should be used to determine training and development needs of employees and should provide factual support for recommendations for merit pay, advancement, or dismissal.

#### FINANCE AND ADMINISTRATION

#### **ACCOUNTING**

#### Operational Issues

- The company has shown poor financial performance, with net profit declining from \$67,000 in 1988 to a loss of \$2.5 million in 1990. However, over this period, Government Grants, which accounted for approximately 38% of the company's total income, declined from J\$4.6M to J\$0.5M.
- TIL's reporting obligations are not being met in a timely manner.
- The controls over and the monitoring of TJL's assets are weak.
- There appears to be inadequate safekeeping of the company's accounting records and files.
- The responsibility for the overall management of TJL's inventories and ensuring that the relevant control systems are in place, is improperly placed.
- The general ledger is very detailed and contains a number of accounts some of which might be redundant, and also includes details of individual consignors accounts.
- The costing system at TIL is not operating effectively, therefore it is not able to provide the management with the necessary information for decision making purposes.
- TJL's annual budget is prepared on an incremental rather than on a Zero Base approach.
- The budget is not used as a tool for asset management and decision making.
- The strategic planning function at TJL has not been developed.
- There are no documented guidelines to assist in the budget preparation exercise.

#### Recommendations

#### Short and Medium Term

- Develop and maintain a computerised Fixed Assets Register.
- Assign custodians for all the company's fixed assets.
- Assign the responsibility of a centralised warehouse to the Director of Finance and Administration.
- Strengthen the management of the company's trade receivables, by establishing a maximum credit period and assigning the responsibility of debt collection internally or to a debt collecting agency.
- Reduce the level of details in the General Ledger.

- Develop a standard costing system.
- Develop a strategic plan for TJL.
- Prepare the annual budget using a Zero Base approach rather than on a purely incremental basis.
- Document budgeting and cost control policies and procedures and include them in a comprehensive Accounting Policies and Procedures manual.
- From the annual budgets prepare monthly and expenditure statements and balance sheets.
- On a monthly basis prepare financial statements with variance analyses and explanation for such variances.
- Computerize the budgeting and cost control system.

#### Lone Term

Request that the government convert its long term loans into non refundable grants.

#### PURCHASING AND INVENTORY MANAGEMENT

#### Operational Issues

- TJL's inventory records are not computerised, and as a result the availability of timely, accurate and complete information is not always possible.
- The company has from time to time experienced problems with its Bin Card system as a result of weak internal controls and not keeping the cards up to date.
- The company does not maintain a stock ledger, therefore it is difficult to monitor the inventory levels and balances.
- The segregation of duties in respect of updating the Bin Cards is weak, therefore, fraud, errors and omissions may go undetected for a considerable period of time.

#### Recommendations

- The Purchasing Officer should not be given the responsibility for the daily maintenance of the Purchases Journal as outlined in the proposed guideline for the restructuring of the Marketing Department.
- Develop a data base of craft and non-craft suppliers.
- Implement a computerised inventory system that is fully integrated with the general ledger.
- Undertake all reconciliation activities within the Accounting Department, by shifting the functions of the proposed Reconciliation Unit from the Marketing Department to the Accounting Department.

• Improve inventory management through the introduction of a computerised stock ledger.

#### DATA PROCESSING AND REPORTING

#### Operational Issues

- The company's data processing facilities appears to be inadequate, and the processing speed of the current system is very slow.
- The existing data processing facilities are not being fully utilised, due to the lack of knowledge of the capabilities of the computer by most of the data processing staff.
- The security features of TJL's data processing facilities is inadequate.
- The direction, coordination and control of the data processing function is inadequate.

#### Recommendations

#### Short and Medium Term

- Undertake a computer requirements audit, by contracting the services of experienced individuals or consultants to undertake a detailed analysis of TJL's computer hardware and software needs.
- Strengthen the direction, coordination and control of the Data Processing unit by employing a suitably qualified and experienced individual to manage the unit.
- Upgrade the computer skills of the personnel in the Accounts Department, by encouraging them to undertake training in basic computer skills such as Lotus 1-2-3, Word Processing etc.

#### Long Term

• Implement a programme to fully computerise all the company's accounting and reporting systems.

#### INTERNAL AUDIT

#### Operational Issues

- There is no evidence which suggests that proper audit planning practices are being followed.
- The staffing of the Internal Audit Department is inadequate for it to efficiently and effectively fulfill its role.
- Working paper files are not being properly developed and maintained.

#### Recommendations

#### Short and Medium Term

- Establish the Audit Universe for the company and on the basis of this develop audit plans and programmes for the work of the Internal Audit Department.
- Compile a permanent file for each area of the audit universe and ensure that it is adequately maintained.
- Institute the maintenance of current working paper files by the Internal Audit department.

#### **MARKETING**

#### MAIN OPERATIONAL ISSUES

- The TJL marketing function is not exploiting the potential of the Jamaican craft industry as TJL sales revenue represents less than 2% of the potential tourist market for craft products and souvenirs.
- The marketing function is not adequately staffed to exploit the market opportunities available.
- Inadequate process for new product design and development.
- There is no information database on the demand nor the supply of Jamaican craft products to facilitate marketing planning.
- Ouality control is inadequate.
- TJL sales are not adequate to cover overhead expenses and the cost of the craft development and training programme.

#### **RECOMMENDATIONS**

- Quantitative market research and the development of the Jamaican tourist market.
- Development of an appropriate Quality Control and Quality Assurance Programme.
- Distribution management.
- Rationalise existing product line, develop additional designs and introduce a line of special attractions souvenirs.
- Expand direct sales to special customers and corporate market.
- Secondary focus on the export market, i.e. for mid-term development.

#### CRAFT DEVELOPMENT AND TRAINING

#### MAIN OPERATIONAL ISSUES

- Inadequate number of field development officers to carry out the mission of TJL.
- Threatened withdrawal or reduction in funding from the Government and funding agencies which the Craft Development and Training Division depends on for survival.
- Lack or information database on craft producers.
- Difficulties sourcing and acquiring raw materials for the production of craft items.

#### **RECOMMENDATIONS**

The development of training programmes for the following areas:

- Craft Skills Training
- Business Skills Training
- Field Development Services
- Raw Materials Sourcing and Replanting

#### Short-Term

- Expand Field Development Services to at least 6 officers.
- Establish Register of Crafts persons in Jamaica and measure their supply capacity.
- Establish contact with community colleges to explore the feasibility and to develop ongoing programmes of basic business training for craft producers.
- Develop strategies and establish contact and build rapport with potential resource persons (master crafts persons, artists and designers to strengthen product design and development process).
- Review effectiveness of raw material replanting project and upgrade/modify as necessary to ensure sustained supplies of craft materials, e.g.. bamboo, wicker, straws, etc.
- Develop new quality control standards and TJL Stamp of Approval System.

#### Medium-Term

- Upgrade skills of divisional staff and implement new staffing structure.
- Launch new product/new design competition in conjunction with the festival commission as a part of the festival celebration.
- Implement the TJL Stamp of Approval system (Year 2).
- Establish National Quality Assurance Programme (Year 3).
- Seek participation in the Harmony Hall craft fair in August and maintain the annual December Fair (Year 2).
- Launch Business Skills Training Programme in the community colleges, if considered feasible.
- Launch design workshops islandwide using contracted services of master crafts persons, artists and designer (Year 2).

#### Long-Term

 Launch Business Skills Training Programme in the community colleges, if considered feasible.

#### **PRODUCTION**

#### Operational Issues

- High percentage downtime on equipment/machinery
- Lack of appropriate quality and costing systems
- Lack of adequate safety, security and fire prevention programmes
- Inadequate production systems and control
- Unsatisfactory layout and working conditions

#### Recommendations

#### Short and Medium Term

- Develop polices and procedures manual as the framework to guide the production activities.
- Develop annual production plans and conduct weekly production meetings to ensure that production targets are met.
- Modify existing layout and process flow in order to centralise related activities, streamline process flow, and improve working conditions as shown in the recommended layout
- Refurbish all kilns and replace four potter's wheels, ballmill and any other necessary small capital machinery/equipment
- Establish quality audit/quality circles programmes to systematically review operating procedures and raw material specifications. Additional information is provided in this report.
- Develop adequate safety, security and fire prevention programmes.
- Improve overall working conditions by installing adequate lights, acquisition of proper work benches and tables, and automation of certain manual operations.

#### Long-Term

- Develop a machinery/equipment replacement programme with replacement focus on one kiln in 1995 and two in 1996/97.
- Establish small factories at strategic locations in Western and Eastern Jamaica in order to expand craft production and create additional employment.

#### IMPLEMENTATION APPROACH

In order to assist the instigation of the implementation process we have developed Outline Implementation Plans as follows:

Organization Review (Appendix 1)

This outline sets out the major elements of achieving the organisational changes and, putting in place the fundamental building blocks for organizational strengthening.

• Operational Review (Appendix II)

This outline sets out the major elements of achieving the operational changes and strategies to improve overall efficiency of the operation in order to make it commercially viable. These major elements are documented for the four major areas discussed in the report.

#### **CONCLUSION**

This opportunity is taken to record the firm's appreciation of the level of support and cooperation provided to our consultants in the conduct of the study. We are confident that this has contributed significantly to the completeness and accuracy of the report and ultimately, to the overall benefit of TJL.

#### APPENDIX I

# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT REPORT IMPLEMENTATION PLAN ORGANIZATIONAL

Implementation Activities	Action/ Responsibility
Finalize Recommendations.	TJL/PM&P
Develop policy statements regarding need for change and to provide the strategic perspective.	Consultant
Establish and document responsibility for each unit in accordance with recommended structure.	Consultant
Establish Standards; performance, accountability levels, etc.	Consultant
Identify resources to staff the reorganised departments.	TJL/Consultant
Review policies and procedures to ensure adequacy to meet the new organizational arrangements.	Consultant
Document changes in policies and procedures.	Consultant
Develop new policies and procedures where they are found lacking or nonexistent.	Consultant
Conduct a job evaluation exercise.	TJL/Consultant
	Finalize Recommendations.  Develop policy statements regarding need for change and to provide the strategic perspective.  Establish and document responsibility for each unit in accordance with recommended structure.  Establish Standards; performance, accountability levels, etc.  Identify resources to staff the reorganised departments.  Review policies and procedures to ensure adequacy to meet the new organizational arrangements.  Document changes in policies and procedures.  Develop new policies and procedures where they are found lacking or nonexistent.

### APPENDIX II

# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT REPORT IMPLEMENTATION PLAN OPERATIONAL

#### **PRODUCTION**

Activity No.	Implementation Activities	Action, Responsibility
1	Develop product costing system.	TJL/Consultant
2	Develop annual and five year plans.	TJL/Consultant
3	Develop incentive and bonus system.	Consultant
4.	Develop a comprehensive quality assurance programme.	TJL/Consultant
5.	Improve working conditions by: installation of proper lighting system, work station facilities, activating the clay piping system, modifying layout and process, etc.	TIL
6.	Develop safety and fire prevention programmes	TJL/Consultant
7.	Refurbish five films, replace four potters wheel and ball mill.	TJL
8.	Improve overall security.	TIL
9.	Develop annual production plans and institute weekly production meetings.	TIL
10.	Establish quality audit/quality circle programmes.	TJL/Consultant
11.	Modify existing layout and process flow	TJL

### FINANCE AND ADMINISTRATION

Activity No.	Implementation Activities	Action/ Responsibility
I	Develop and maintain a computerized Fixed Asset Register.	TJL
2	Assign custodians for all the company's fixed assets.	TIL
3	Establish a maximum credit period and assign the responsibility for debt collection internally or to a debt collecting agency.	TIL
4.	Develop a strategic plan for TJL.	TJL/Consultant
5.	Develop budgeting policies and procedures manual.	TJL/Consultant
6.	Computerize the budgeting and cost control system.	Consultant
7.	Develop a data base of craft and non-craft suppliers.	TIL
8.	Develop and introduce a stock ledger.	TJL/Consultant
9.	Computerize the inventory control system.	Consultant
10.	Undertake a computer requirements audit.	TIL
11.	Establish the audit universe for the company.	TJL
12.	Compile a permanent file for each area of the audit universe.	TIL
13.	Institute the maintenance of current working paper files.	TIL

#### MARKETING

Activity No.	Implementation Activities	Action/ Responsibility
1	Research the local and foreign market and determine the level of demand and details of customers' requirements and competitors pricing.	ТЛ_/Consultant
2	Measure capacity islandwide and classify producers.	TJL
3	Develop new line of souvenirs.	TJL/Consultant
4.	Commission new designs from select artists and craft-persons.	TJL
5.	Employ Market Managers and Market Research Officers.	TIL
6.	Acquire a covered truck or van for transporting goods.	TJL
7.	Upgrade the cashiering facilities at the outlets.	TIL
8.	Open retail outlets in Ocho Rios and Target cruise ship messengers.	TIL

### CRAFT DEVELOPMENT AND TRAINING

Activity No.	Implementation Activities	Action/ Responsibility
1	Establish a register of crafy suppliers in Jamaica and measure their supply capacity.	TJL/Consultant
2	Establish contact with community colleges and explore the feasibility of developing ongoing programmes of basic business training for craft producers.	TJL
3	Develop strategies to establish contact and build rapport with potential resource persons.	TJL
4.	Review the effectiveness of raw material replanting project and upgrade/modify as necessary to ensure sustained supplies of craft materials.	TJL/Consultant
5.	Develop new quality control standards and TJL stamp of approval system.	TJL/Consultant
6.	Implement design workshop programme islandwide using contracted services of master crafts persons, artists and designers.	TJL/Consultant
7.	Develop training programs to provide training in the areas of craft, business, field services, etc.	TJL/Consultant

Peat Marwick and Partners

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# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT

KPMG PEAT MARWICK & PARTNERS FEBRUARY 1992

# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT

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# SECTION 1 FINANCE AND ADMINISTRATION

# THINGS JAMAICAN LTD. MANAGEMENT AUDIT FINANCE AND ADMINISTRATION

#### 1. ORGANIZATION AND STAFFING

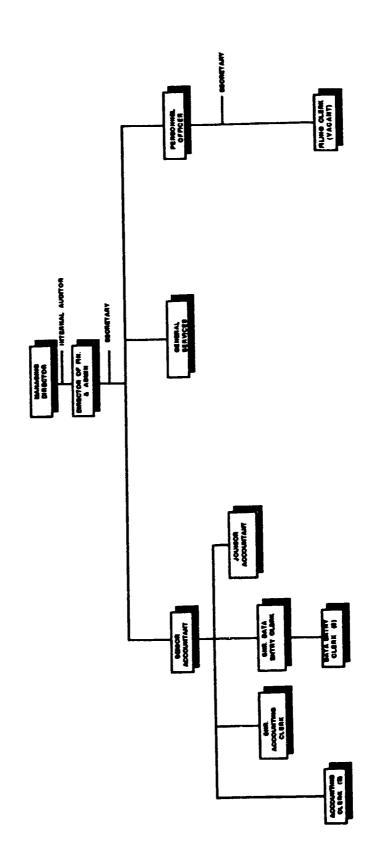
#### 1.1 SCOPE AND OBJECTIVES

We reviewed the organisational aspects of Things Jamaican Limited's (TJL's) finance function to determine whether or not the existing organisation structure, spans of control, staffing levels and qualifications and experience of the existing staff, are the most suitable for the needs of the company.

The specific analysis criteria we used were:

- (i) the existence of documented roles, functions, goals and responsibilities for the unit;
- (ii) the existence of a documentation of reporting relationships which has been communicated to members of staff;
- (iii) the adequacy of organisational and human resources planning practices and procedures;
- (iv) the adequacy of managerial and accountancy skill levels of members of the department;
- (v) the appropriateness of the delineation of functional responsibilities within the unit;
- (vi) the appropriateness of the existing organisation design and the formal structure; and
- (vi) the appropriateness of existing spans of control.

THINGS JAMAICAN LIMITED
EXISTING DISCANSATION CHART
FINANCE A ADMINISTRATION



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#### 1.2 UNDERSTANDING OF THE FUNCTION

TJL's Accounting function is managed within the broad functional area of Finance and Administration which is headed by a Director, who also has responsibility for the overall coordination and control of the General Services and Personnel functions.

The Accounts Department consists of two units:

- (i) General Accounting, and
- (ii) Data Processing.

The existing reporting relationships are depicted by the chart on the opposite page.

Staff recruitment takes place primarily through advertisement in the newspapers and interviews conducted by the Personnel Officer. The Personnel Officer has the authority to hire clerical staff without additional approval, but there is a need for authorization for the recruitment of managerial and secretarial staff.

TJL has been operating a performance appraisal system for at least the past five years. The system requires the completion of pre-printed forms by the incumbent's immediate supervisor. The completed appraisal is reviewed and discussed with the incumbent and signed by him/her. Staff appraisal is generally conducted at least once per year.

#### 1.3 FINDINGS AND OBSERVATIONS

## 1. There is no documented Organisation Chart for the Accounts Department.

• There is no documented Organisation Chart in existence for the Accounts Department. This has contributed to there being some amount of uncertainty as to the reporting relationships which exist within the unit. For example, while the Director - Finance & Administration saw the Senior Data Entry Clerk as reporting to the Senior Accountant, the Senior Data Entry Clerk saw herself as reporting to the Director - Finance & Administration.

### 2. There is a lack of properly developed Job Descriptions

 There is also a lack of properly developed Job Descriptions to assist, inter-alia, with staff recruitment and performance appraisal, and to ensure that each employee is aware of his/her responsibilities, authority and reporting relationships.

## 3. The company has difficulty recruiting upper level management staff.

- The company generally experiences problems in recruiting managerial/supervisory level personnel. This has been attributed to inadequate remuneration. At the lower levels the problem is not acute.
- From time to time individuals are employed on the recommendation of persons employed by or closely connected to the company. This is, however, not sufficiently widespread to adversely affect the quality of staff employed by the company.

## 4. TIL has, in the recent past, found it difficult to retain its accounting staff.

• Table I below gives an indication of the tenure of the existing members of the Accounts Department.

#### TABLE I

Employee Position	Date Employed
Dir. Finance & Administration	Sept. 1991
Senior Accountant	Oct. 1991
Junior Accountant	Sept. 1990
Senior Accounting Clerk	Feb. 1986
Payroll Clerk	Aug. 1990
Accounting Clerk	Aug. 1991

The table shows that seventy percent of persons within the Accounts Department has been with the company for one year or less. At June 1989 there were sixteen persons within the Accounts Department, of which only two are still with the company, and the total staff complement has contracted to seven (7) within the two and one half (2 1/2) years. The adverse impact of this high level of staff turnover will be dealt with in subsequent sections of this report. Some of this have been attributed to low salaries.

## 5. The skills level of most of the members of the Accounts Department is low.

 The highest level of qualification within the Accounts Department is a CAST Certificate in Accounting.

While the adverse impacts of this may be somewhat mitigated by the number of years experience of staff members, such as the Director of Finance and Administration, the Senior Accountant and the Junior Accountant. The limited qualifications impacts the ability of the staff to conceptualise and implement improvements to the finance and accounting function.

Additionally, inadequate training affects the ability of the staff members to assume additional responsibilities. This has manifested itself in the fact that some fairly routine tasks currently being performed by the Director of Finance and Administration, for example the annual budget, could be prepared at a lower level and reviewed by the Director, if the skills level of the members of the Accounts Department was higher.

- 6. T.IL's salary levels within its Accounting Department are significantly below those existing for comparable positions in other organisations.
  - Table II below gives a comparison of salary levels for a number of
    positions within TJL's Accounting Department and salary levels to
    be found within the market revealed by a Salary Survey of about
    fifteen (15) companies conducted by PM&P in 1991.

# TABLE II COMPARATIVE SALARIES (\$J)

CATEGORY	SALARY SURVEY	TJL'S
Senior Accountant	123,000 - 303,000	84,000
Junior Accountant	70,000 - 117,000	48,000
Senior Accounting Clerk	45,000 - 70,000	26,000
Accounting Clerk	33,000 - 63,000	18,000
Data Entry Supervisor	52,000 - 111,000	22,000
Data Entry Clerk	29,000 - 83,000	26,000
Payroli Clerk	33,000 - 63,000	26,000

The table shows that TJL's salary levels are significantly below the market's as ascertained from PM&P's salary survey. The above data supports information obtained through interviews. Employees generally felt that salary levels were too low and that this contributed to the high level of staff turnover, and demotivated the employees.

#### 1.4 RECOMMENDATIONS

The following recommendations are aimed at strengthening the organisational and staffing aspects of TJL's finance and accounting function.

#### 1. Undertake a Job Evaluation exercise.

We recommend that TJL contracts the services of suitably qualified and experienced consultant(s) to carry out a Job Evaluation exercise. A Job Evaluation exercise should normally include:

- (a) the development of Job Descriptions and the formalisation of reporting relationships;
- (b) the establishment of minimum qualification and experience requirements for each position; and
- (c) the development of a just and equitable pay structure.

This exercise should, therefore, address the following issues:

- (i) the lack of properly developed job descriptions;
- (ii) low salaries;
- (iii) unclear reporting relationships; and
- (iv) the level of staff turnover.

#### 2. Implement an incentive scheme

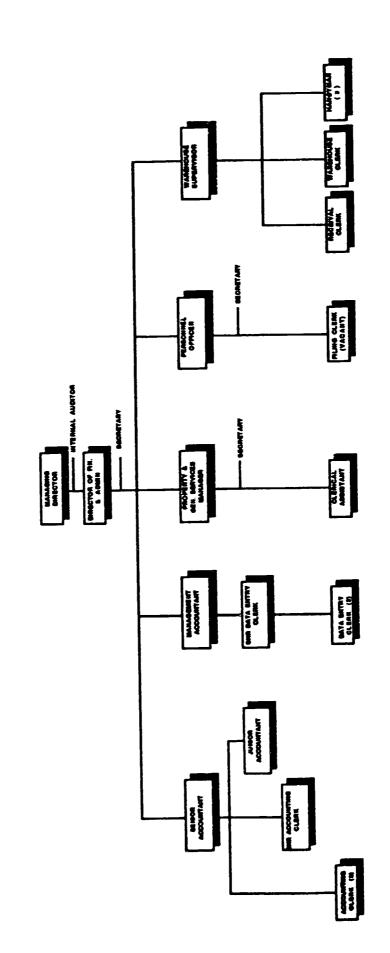
We recommend that TJL develops and implements an appropriate productivity incentive scheme. This will have to be one which is seen as being fair and accepted by all parties involved. It is most likely this may be a scheme which gives the Production and Marketing Department a greater level of reward than say the Accounting Department.

The productivity incentive should reward the staff for cost savings, increased production, and the attainment of agreed profit levels and quality standards. This will effectively increase their level of remuneration and generally motivate them towards improved performance.

The above criteria could possibly be met by the introduction of a straight piece work plus profit sharing system for the production department and a profit sharing system for the rest of the organisation, coupled with a stringent quality assurance programme.

THINGS JAMAICAN LIMITED

PROPOSED ORGANISATION CHART



#### 3. Implement a new organisation structure

We recommend that the finance and accounting function be structured as depicted on the opposite page. The justifications for the structure being recommended are contained in subsequent sections of the report. The recommended structure is aimed at strengthening the management reporting and data processing aspects of TJL's operations and requires:

- (i) the addition of one new position that of Management Accountant;
- (ii) the employment of one additional Accounting Clerk; and
- (iii) the deletion of the position of Data Processing Manager,

#### 2. DATA PROCESSING

#### 2.1 SCOPE AND OBJECTIVES

We reviewed TJL's Data Processing function in order to determine whether or not it:

- (i) adequately supports the goals and objectives of the organisation; and
- (ii) provides sufficient data processing support for the Accounting function.

The specific analysis criteria utilised were:

- (i) the adequacy of the hardware and the software utilised by the department;
- (ii) the availability of experienced and qualified persons to carry out the functions of the department;
- (iii) the adequacy of the organisational arrangements for effective coordination and control; and
- (iv) the accuracy and timeliness of data processing outputs.

#### 2.2 UNDERSTANDING OF THE FUNCTION

The Data Processing Department has a staff complement of three permanent employees and one Japanese volunteer who functions as a Management Accountant.

The department utilizes the following hardware and software:

Hardware: Five IBM PC XTs (8 Bit, 640 KB CPU)

Five 20 MB Hard Drives Five Keyboards and VDUs

Three Printers

Software: Great Plains Accounting Package

Lotus 1-2-3 Easy Write Wordstar R Base

The following aspects of the company's accounting systems/records are computerised:

Accounts Payable sub - ledger; Accounts Receivable sub - ledger, and General Ledger. Source documents (sales invoices, payment vouchers, credit/debit memos, etc.) are coded within the Accounting Department, batched and submitted to the Data Precessing Department along with a Batch Control Sheet which has the following information:

Type of Transaction;
Account to be Posted;
Prepared by;
Approved by;
Date Received by the Data Processing Department;
Date posted by the Data Processing Department;
Batch Number.

Before submission to the Data Processing Department details such as Period Number, Batch Number, Application, Description and the total amount of each batch is recorded in a batch control book.

Within the Data Processing section, Data Entry Clerks input the relevant data into either the General Ledger Transaction Register, the Accounts Payable Sub-ledger or the Accounts Receivable Sub-ledger, run an edit listing and submit this to the Accounting Department for checking. If errors are discovered these are corrected until a clean edit listing is produced, after which one of the following reports is printed:

Accounts Receivable Detail Aged Trial Balance; Accounts Payable Detail Aged Trial Balance; General Ledger Transaction Register.

This report is submitted to the Accounting Department for checking of net balances, reconciliations etc., and approval for postings to the General Ledger to be done. The reports are then filed until needed.

#### Security

#### TJL'S computer security arrangements include:

- back-ups at the end of each day, at the end of each month, and before the start of postings to the General Ledger,
- storage of month end back-up files in a fire proof vault which is situated in another location;
- use of passwords;
- provision of a fire extinguisher within the section;
- quarterly servicing of the computer hardware;
- power surge protection through a trip breaker; and
- Operating rules such as;
  - (i) no liquid allowed near the computers; and
  - (ii) the covering of computers when not in use.

#### 2.3 FINDINGS AND OBSERVATIONS

#### 1. TIL's Data Processing facilities appears to be inadequate

• The hardware utilised by TJL's Data Processing Department is among one of the earlier attempts by IBM at manufacturing personal computers. Users complain that the processing speed is too slow for the needs of TJL. It takes over two days to run a detailed trial balance. The personal computers utilised are 8 bit machines and it is estimated that a 32 bit machine is needed.

#### 2. TIL's existing data processing facilities are not being fully utilised

- TIL's computer resources are used largely to process Accounts Receivable, Accounts Payable and the General Ledger. The Great Plains Accounting Package utilised has, Payroll, Job Costing and Inventory Accounting capabilities in addition to the above. These are for one reason or the other not being utilised and no one seems to know why this is so. The slow processing speed could be a contributory factor.
- There is a general lack of understanding and knowledge of the capabilities of the personal computers within the company, how to maximise this and a commitment to the continued utilisation of computers. For example, rather than a concerted effort being made to have the computerised accounting system functioning properly, the Director of Finance and Administration is planning to implement a manual General Ledger system so as to reduce the reliance on the computerised system.

 Report preparation and data manipulation capabilities of programmes such as Lotus 1-2-3 and R-base are also not being utilised in areas such as budget preparation, cost control and reporting, commitment tracking and budgetary control.

## 3. The security of TJL's data processing facilities is not as effective as it could be.

- Although passwords are used, these have not been changed for over one year and the individuals within the department know each other's password.
- The uninterruptable power supplies have not functioned for the past three years.

## 4. The direction, coordination and control of the data processing function is inadequate.

- The management of the Data Processing unit is low-keyed. Day-to-day operations are supervised by the Data Entry Supervisor, and there is some uncertainty as to whom she reports to as stated earlier. The Director of Finance regards the incumbent as reporting to the Senior Accountant. This is inappropriate as the Senior Accountant is not able to provide the necessary supervision and at the same time carry out his/her other functions.
- There is a position of Data Processing Manager in the organisation structure, but this has been vacant for the past two years.

## 5. The equipment configuration of T.IL's data processing facilities may not be the most appropriate one for its needs.

• The stand-alone configuration of TJL's computing facilities is not one of the more efficient ways of handling the data processing requirements of the company as it creates the need for manual intervention in the processing of transactions. This increases the risk of accidents and loss of data.

## 6. The computer skills level of the staff members within the Accounts Department is low.

• Generally the members of the Data Processing Department, including the Supervisor, are basically key punchers with very little knowledge of other aspects of personal computers operations and use. Also, the exposure of the other members of the Accounts Department to their use is minimal.

This affects the extent to which the company is able to utilize the computer to increase productivity and efficiency. This factor may contribute to why the computers are seen by some members of staff as the cause of most of the problems of the Accounts Department.

#### 2.4 **RECOMMENDATIONS**

We have developed the following recommendations to address the weaknesses identified within the Data Processing unit.

#### 1. Undertake a computer requirements audit.

Contract the services of an appropriately qualified and experienced consulting firm or individual(s) to undertake a detailed analysis of TJL's computer hardware/software and management information needs. Such a review should determine the adequacy of TJL's computing facilities and say whether or not the company needs to, in the short-term:

- (a) change its existing hardware; or
- (b) change one or more of the software packages utilised; or
- (c) some combination of (a) and (b)

An important product of this review should also be a comprehensive strategic Management Information System plan and suggested implementation programme for TJL.

## 2. Strengthen the direction, coordination and control of the Data Processing unit.

Employ a suitably qualified and experienced individual to be responsible for the management of the Data Processing unit and the preparation of various management and other ad hoc reports. This individual should report to the Director of Finance and Administration and have well developed computer and problem solving skills and the ability to utilise spread sheets and data base programs. He/she will also be required to, in conjunction with the Director of Finance and Administration, develop and implement appropriate cost control and management reporting systems, policies and procedures.

This will:

- (i) make the company better able to maximise the benefits which can accrue from a computerised data processing and reporting system;
- (ii) ensure that adequate attention is given to the development, maintenance and operations of the company's computer facilities; and
- (iii) ensure that the Data Processing aspects of TJL's operations are managed at a level within the organisation commensurate with its importance.

Document the policies and procedures governing the operations of the Data Processing unit and make them available to data processing staff and other members of the Accounts Department. This will ensure that the data processing staff are aware of their functions and will be an easy source of reference and training for new staff members.

## 3. Upgrade the computer skills of the members of the Accounting Department.

It would benefit the organisation if the members of the Accounts Department had, at the very minimum, an appreciation of the benefits to be derived from the utilization of computers. This can be had from basic computer training courses and we suggest that members of the Accounting Department at the level of Junior Accountant and above be given this training.

#### 4. Fully computerise the Accounting and Reporting Systems

We recommend that TJL adopt a policy to fully computerise all its accounting and reporting systems in the short to medium term. The company has a number of product lines and outlets and in order to properly manage the operations, information on profitability by product line and by outlet would be very useful. This type of information, because of the volume involved, would be most efficiently produced by a computerised accounting and reporting system.

#### 3. FINANCIAL ACCOUNTING AND REPORTING

#### 3.1 SCOPE AND OBJECTIVES

We reviewed and assessed the efficiency and effectiveness of TJL's accounting function and the related reporting systems, in meeting the information needs of the organisation.

The specific analysis criteria utilised were:

- (i) the adequacy and appropriateness of the financial reporting systems utilised;
- (ii) the adequacy of internal control systems;
- (iii) the extent of accounting automation and integration among major accounting systems;
- (iv) the timeliness of financial and management reports; and
- (v) the existence of adequate and comprehensive accounting policies that reflect standard accounting practices.

#### 3.2 UNDERSTANDING OF THE FUNCTION

The broad responsibilities of the Accounting Department are as follows:

- Maintaining records of all financial transactions;
- Preparation of financial statements, reports and statistics;
- Safeguarding the assets of the company;
- Ensuring that the company meets its liabilities on a timely manner.

The specific functions performed within the section are:

- Reconciliation of bank accounts and subsidiary ledgers;
- Payment of weekly and monthly payrolls;
- Preparation and disbursement of cheques;
- Recording the purchase of goods and services;
- Recording the sale of goods;
- Preparation of monthly financial reports;

#### THINGS JAMAICAN LIMITED FINANCIAL PERFORMANCE

	1988	1989	1990	
RATIOS				
LIQUIDITY	1.32	0.71	0.28	
Quick	0.67	0.18	0.10	
Working Capital	1,510,933.00	-1,458,882.00	-3,643,662.60	
LEVERAGE Debt-Equity	-5.84	-1.02	-0.62	
COVERAGE Interest Coverage	1.#3	-72.05	-27.80	
ACTIVITY Lavestory Tumover	2.40	3.83	6.69	
Debtors Turnover	14.26	21.89	38.00	
Average Collection Perind	25.25	16.44	9.47	
Fixed Asset Turnover	4.05	6.68	4.79	
Total Asset Temover	0.91	2.00	2.28	
Capital Employed Turnover	-10.68	-2.70	-0.97	
PROFITABILITY  Gross Margin	0.66	0.66	0.76	
Net Profit Margin	0.01	-0.16	-0.40	
Return on Assets	0.01	-0.32	-0.92	
Return on Capital Employed	-0.10	0.43	0.39	
Return on S/Holders Equity	-0.10	-0.43	-0.39	
Earnings per Share	668.13	-16,207.43	-24,596.69	
Dividends per share	Nü	Nü	Ni	
Dividend payout	N/A	N/A	N/A	

## THINGS JAMAICAN LIMITED FINANCIAL PERFORMANCE

	1968	1989	% Change	1990	% Change
TURNOVER	7,365,179	10,309,281	40	6,079,162	(41)
CURRENT ASSETS	6,258,422	3,599,402	(42)	1,397,978	(61)
CURRENT LIAB.	4,747,489	5,058,284	7	5,041,640	
STOCK	3,0 <i>67,697</i>	2,694,299	(12)	908,934	(66)
LT-RECEIVABLE/INVESTMENT	NE	NE		NE	
LONG-TERM DEBT	4,030,344	3,896,818	(3)	3,896,818	
SAHOLDERS EQUITY	(689,250)	(3,812,137)	453	(6,271,806)	હ
NET PROFIT AFTER TAX	66,813	(1,620,743)	(2,526)	(2,459,669)	52
NET PROFIT BEFORE INT & TAX	147,232	(1,598,556)	(1,186)	(2,374,274)	49
INTEREST RECD	Na	Na		NB	
INTEREST PAID	80,419	22,187	(72)	85,395	285
GROSS SALES	7,365,179	10,309,281	40	6,079,162	(41)
DEBTORS	516,537	470,865	(9)	159,993	(66)
FIXED ASSETS	1,216,216	1,543,533	(15)	1,268,674	(18)
CAPITAL EMPLOYED	3,321,749	84,651	(97)	(2,374,988)	(2,906)
GROSS PROFIT	4,852,276	6,961,478	43	4,596,060	(34)
PREFERENCE DIVIDENDS	Nil	Nii		NE	
NO. OF O/SHARES OUTSTANDING	100	100		100	
EARNINGS PD TO S/HOLDERS	פא	Nü		NE	

NOTES:

Accounts receivable includes prepaid expenses.

- Preparation of annual trial balance;
- Custody and lodgement of cash;
- Preparation of source documents for data entry.

The company's Accounts Payable, Accounts Receivable and General Ledger systems are computerised, however, a purchases journal and sub-ledger and a number of sales journals and sub-ledger are also manually maintained.

#### 3.3 FINDINGS AND OBSERVATIONS

#### 1. TIL's financial performance in the recent past has been poor.

The opposite pages set out some key ratios and figures which give an indication of the company's financial performance during the period 1988 to 1990.

The ratios show a steadily worsening financial position, with net profit declining from a profit of J\$67,000 in 1988, to a loss of J\$2,500,000 in 1990. Significantly, over the same period Government Grants declined from J\$4.6M in 1988 to J\$0.5M in 1990. This resulted in a negative return on assets and on capital employed for the greater part of the period. At the same time gross sales, increased from J\$7,400,000 in 1988 to J\$10,300,000 in 1989 and declined to J\$6,100,000 in 1990. The movements in sales were, therefore, not reflected in the company's profits. This indicates a failure to control costs and/or to increase selling prices sufficiently to compensate for inflationary cost increases.

The results for the 1990/91 financial year are unavailable. However, the results for the first eight months of the 1991/92 financial year shows sales of J\$9.14m which when annualised indicates sales of J\$13.71m. Actual costs for the period are unavailable, and so, whether operations were profitable or not cannot be determined.

#### 2. TIL's reporting obligations are not being met in a timely manner.

At November 1991, adjustments were still being made to the General Ledger balances in order that a trial balance, and thereafter, a Financial Statement could be prepared for the year ended March 31,1991. In addition, no processing of transactions for the year 1991/92 had taken place up to that time.

Additionally, we were unable to obtain information on the profitability of each outlet.

This situation defeats the very purpose for the existence of an accounting department i.e. the provision of timely and accurate financial information to aid in the proper management of the entity. Without accurate financial information, many other financial/accounting processes and systems break down, for example, budgeting and cost control, and the management's fiduciary responsibilities to the general public and shareholders cannot be met.

The above situation was to some extent, attributed to inadequate staffing and a lack of continuity within the department due to the high staff turnover rate. Specifically, a decision was taken at the end of the 1990/91 financial year to write off long overdue receivables and payables balances. This, and other year end audit adjustments were not done due to the overall management and staffing problems, and are currently being undertaken so that a trial balance can be prepared and the audit carried out.

The accounting/record keeping systems have, however, not broken down completely, in that some aspects of the system are being manually maintained, such as the sales and purchases journal, which are up-to-date. These are used to prepare a monthly financial report, but this is time consuming and represent inefficient use of resources. Additionally, the Director of Finance and Administration does not have much faith in the accuracy of the monthly report. Incorrect inventory figures and other significant errors have been discovered from time to time in the monthly financial report.

#### 3. The controls over and the monitoring of TJL's assets are weak

- A Fixed Asset Register is not currently being maintained to provide management with current and accurate information such as, location, custodian, cost and net book value of each asset. The need for its maintenance is recognised by the Director of Finance and Administration, and someone has been assigned to carry out this function, however, this task is not being given priority.
- From interviews we learnt that the incidence of pilferage of finished goods is very high, indicating an insufficiency of controls to prevent unauthorised removal of assets from the company's premises.
- The internal monthly financial report at May 1991 shows that 92% of the
  company's receivables have been outstanding for between 120 days and
  over one year and that inactive balances account for 48% of the total
  receivables. Additionally no specific responsibility has been assigned for
  following up debtors.

A decision was taken at the beginning of the 1990 financial year to write off long outstanding receivable balances, however, whether or not sufficient efforts were made to collect these amounts is not known.

- 4. There appears to be inadequate safekeeping of the the company's accounting records and files.
  - For the year ended March 31, 1989, the company's auditors were unable to express an opinion as to whether or not the company's financial statements give a true and fair view of the results of its operations for the year because a number of accounting books and records could not be found. For example, the cash book and subsidiary records for most of the company's bank accounts, imprest accounts, cash floats and the company's detailed General Ledger could not be found.

The 1989 report is the latest auditors' report and there is no evidence to indicate that the situation has changed since.

- 5. The responsibility for the overall management of TIL's inventories and ensuring that the relevant control systems are in place, is improperly placed.
  - The Internal Auditor has been given the responsibility of managing the
    company's inventories. The day to day management of the operation of
    systems of control is not within the scope of the duties of an internal auditor
    whose duties, broadly, are to evaluate systems, test their operation and
    recommend improvements to systems upon the identification of
    weaknesses.
  - The Marketing Department is responsible for:
    - Making contact with suppliers;
    - Ordering goods and negotiating trade credit;
    - Receival of goods;
    - Warehousing of goods;
    - Distribution of goods to the outlets;
    - Sales and cash receival.

The Accounting Department therefore has very little involvement in the purchasing, warehousing and the sale of goods by TJL. This arrangement does not represent a good division of responsibilities between organisational units and adversely impacts the ability of the Director of Finance and Administration to control an important area of the company's operations; inventories.

6. TIL's General Ledger includes individual consignors accounts and is yery detailed.

TJL's General Ledger is very detailed for example, it contains approximately 23 different types of bank accounts, some of which are redundant. It also contains a number of individual consignors accounts. The large number of accounts serves to increase the processing time and contribute to the trial balance taking 2 1/2 days to run

- 7. The costing system at TJL is not operating effectively, therefore, it is not able to provide the management with the necessary information for decision making purposes.
  - The standards used for costing purposes are outdated, hence the possibility
    exists that inventory is being valued below cost, and also that goods are
    being sold below their cost of production.
  - The personnel who are responsible for costing the goods produced do not understand the mechanics of how a standard costing system operates.

#### 3.4 RECOMMENDATIONS

1. Convert the Long Term Debts to non-refundable grants

The company should request that the government convert its long term debts into non refundable grants in order to improve the company's current financial structure.

2. Develop and maintain a computerised Fixed Asset Register

We recommend that a computerised Fixed Asset Register be set up to assist in the monitoring of the company's assets and to improve the availability of information for managerial purposes.

The following specific benefits will accrue to the company as a result of this:

- The company will be able to quickly calculate depreciation charges for all its fixed assets.
- It will provide a permanent record of the specifications and whereabouts of all TJL's fixed assets.
- It will assist in tracking fixed asset acquisitions, retirement and disposals.

3. Assign custodians for all the company's fixed assets.

We recommend that each department manager be assigned custodial responsibilities for all the company's assets in their respective department. This should greatly enhance accountability and asset security.

## 4. Assign responsibility for the management of a centralised warehouse to the Director of Finance and Administration

We recommend that the Director of Finance and Administration be made responsible for the stores/warehousing function, i.e. the Storekeeper should report directly to him. This will improve internal controls by appropriately segregating duties and responsibilities between organisational units.

#### 5. Strengthen the management of the company's receivables

- Assign the responsibility of monitoring and following up the company's
  receivables to the Senior Accountant. He/she will ensure that debtors are
  contacted, in writing and by telephone (where possible), regarding any
  balances outstanding for more than 45 days and that these are brought to the
  attention of the Director of Finance and Administration.
- Adopt a policy of referring debtors with balances outstanding for more than 120 days to a debt collecting agency for action to be taken.
- Establish a maximum credit period of 30 days, and also set credit limits for each credit customer in order for them to be aware of their credit status with the company. All credit sales should be approved by either the Marketing Director or the Manager at each outlet.
- Institute a policy whereby approval is obtained from Outlet Managers for all sales which are paid for by cheque. It should be mandatory that each customer paying by cheque present a valid identification, before cheques are accepted in lieu of cash.

#### 6. Reduce the level of details within the General Ledger

We recommend that if the analysis of the computer requirements of TJL shows that it should not change its existing computer package, then the company should take steps to reduce the number of accounts it currently has in its General Ledger. It should remove individual consignor's accounts from the General Ledger and also, where possible, merge related accounts, for example the numerous bank accounts. Also, accounts which are no longer being used should be removed from the General Ledger.

#### 7. Develop a Standard Costing System

We recommend that TJL develops a standard costing system for use primarily in ceramics and pewter production. This would enable the standard cost per unit of production to be determined. The benefits to be gained from such a system include:

- Carefully planned standards provide an aid to more realistic budgeting and pricing.
- Standard costs provide a yardstick against which actual cost can be measured.
- A target of efficiency is set for employees to reach, hence cost and quality of raw materials consumed consciousness is stimulated.

- A target of efficiency is set for employees to reach, hence cost and quality of raw materials consumed consciousness is stimulated.
- Variances can be calculated, with a view to taking any neccessary control action.

These standards should be reviewed frequently and adjusted to reflect changes in the operating environment.

Training also should be provided for persons who will be responsible for co-ordinating and using the system.

#### 4. INTERNAL AUDIT

#### 4.1 SCOPE AND OBJECTIVES

We have reviewed the Internal Audit function of TJL from the viewpoint of whether it provides the Board of Directors with an objective assessment of the financial operations, and provides constructive recommendations to improve operational and financial disciplines.

#### Analysis Criteria

- Independence of the Internal Audit.
- Effectiveness of Internal Audit procedures to develop appropriate audit plans, prepare and conduct adequate audits, and appropriately follow up audit results.
- Reporting relationship with the Management, and the extent of interaction with the them.
- The effectiveness of risk assessment techniques to identify and prioritise audit areas.
- Existence of adequate goals and objectives and strategies to achieve them.
- Adequacy of operational auditing practices.

#### 4.2 UNDERSTANDING OF THE FUNCTION

The Internal Audit is an independent function within the Finance department of TJL. This section consists of one person who carries out the internal audit function. The primary functions of the internal audit section are seen as follows:

- To ascertain the adequacy of internal controls, determine compliance with same, and to suggest remedial action if controls are not in place.
- To evaluate the efficiency of operations using both qualitative and quantitative bases.
- To safeguard the assets of the company.

We observed that the Internal Audit section has not been in operation for a very long time. This section is presently involved in the process of streamlining all major aspects of TJL's accounting and internal control system, so as to improve their efficiency and effectiveness. This aspect of the function of the Internal Auditor might somewhat be conflicting with his duties and responsibilities as he is setting up the systems that he wi'l in turn audit, thus reducing his independence. A charter has also been developed which states the following as its goals and objectives:

- To assist Management by supplying objective analyses, appraisals, recommendations, and information on the organisation's control and performance;
- To assist the Board of Directors in achieving effectiveness in the organisation's systems of control and quality of performance as it relates to their accountability;
- To achieve organisational independence and professionalism in audit work so that:
  - auditees and fellow workers will accept and come to rely on the appraisals, recommendations, counsel and information; and
  - the external auditors will use the results of the audits to complement their own work.

At present, the internal auditor is the only person employed to this section, however with the advent of time, it is anticipated that additional persons will be employed.

#### 4.3 FINDINGS AND OBSERVATIONS

We present below our findings and observations associated with TJL's Internal Audit function.

- 1. There is no evidence which suggests that proper audit planning practices are being followed
  - There are no documented audit programs setting out the audit area under consideration, and the audit procedures that are to be followed.
  - There is no audit scheduling system to support audit plan considerations, nor are there any evidence of risk assessment practices to determine the relative risk of each audit area and to select high risk areas.

- There is no documentation of the company's audit universe, which defines
  the control objectives of each area, and the areas which are of high risk and
  exposure to which efforts should be focused.
- There is no formal documentation of the internal control system.

# 2. The staff complement in the Internal Audit Department seems inadequate to carry out the department's function efficiently and effectively

• At present only one person is employed in the department to carry out the relevant functions. This is not adequate for the department to function effectively.

## 3. Working Paper Files are not being properly developed and maintained

- The internal audit department does not maintain a permanent working paper file in order to ensure that all areas in the audit universe are adequately addressed, and also to provide a means for future reference.
- The current working paper files which are designed to document the work being performed by Internal Audit are not being properly documented and filed.

#### 4.4 RECOMMENDATIONS

The following recommendations have been developed to address our findings and observations. Their purpose is to strengthen the internal audit function.

#### 1. Develop an Audit Universe

An Audit Universe should be developed, which sets out the major areas of the company within which Internal Audit should perform its functions, with priorities being defined in relation to the degree of monitory risk. Within these areas, Internal Audit would be expected to perform appraisals and examinations. These appraisals should result in recommendations with respect to any internal control issues that come to light during the examination.

#### 2. Audit Planning

An audit plan should be drawn up each year, which ensures that all areas defined in the Audit Universe are adequately covered. In planning audit activities, a priority should be assigned to each area in the Audit Universe in order that the greatest risk to irregularity etc., receive appropriate attention, thereby optimising the effectiveness of the Internal Audit Department.

#### 3. Audit Programmes

Audit programmes should be developed in order to meet the specific requirements of all areas defined in the audit universe. Audit programmes will enable the auditor to better perform his work, as it sets out the procedures that the auditor is expected to follow, and the level of testing which will have to be performed to test compliance to key controls. The audit programmes should describe:

- How the test is related to the objective that is needed to be achieved.
- The documents, records or files which are to be examined.
- The number of items in, or the extent of the sample.
- The method of testing items in the sample.

This detailed documentation of audit procedures has two principal benefits:

- (i) it ensures that the audit is planned, and focused on important issues;
- (ii) it aids in the training of new staff members and allows for maximum supervision of junior members of staff.

#### 4. Develop a Permanent Working Paper File

To ensure that all areas in the audit universe are adequately addressed, there is the need to compile a permanent file for each area in the audit universe. The following items should be included (but not limited to):

- Organisation Chart
- A list of key personnel.
- Narrative description of the functions of each division of the company.
- The overall control objective of each division.
- A documentation of internal controls of these divisions.
- An identification of the key controls.

#### 5. Maintenance of Current Working Paper File

Current working paper files should be properly maintained in order to provide evidence with respect to the work performed and also the quality of the work performed. Broadly speaking, some of the items that should be contained in the current working paper files are:

- A list of key controls.
- A list of the overall control objectives to be reviewed.
- A critical evaluation of the effectiveness of internal controls.
- A detailed documentation of the audit procedures.
- A summary of conclusions.

With the use of standard working paper formats, it allows for the easy transference of audit steps from the tailored audit programmes to the working papers designed to test the internal controls. The production of working papers for all work performed should be mandatory.

#### 5. BUDGETING AND BUDGETARY CONTROL

#### 5.1 SCOPE AND OBJECTIVES

Our objective in the review of budgeting and budgetary control was to determine if appropriate budgeting and budgetary control practices are employed, and whether the financial and operational data utilized are current and relevant.

#### Analysis Criteria

- The existence and adequacy of qualified personnel in key positions of responsibility.
- The efficiency of the budgetary system.
- The existence of a strategic plan, its adequacy and relationship with the budgetary policies and procedures.
- The extent of automation of the budgetary process.
- Timely, complete and appropriate budgeting and budgetary control information for decision making purposes.

#### 5.2 UNDERSTANDING OF THE FUNCTION

Budgeting and budgetary control usually include the following functions:

- Planning and budgeting activities related to the overall planning process of each department.
- Co-ordination of the budgeting process and obtaining approval of the budgets.
- Monitoring and evaluating the planned performance and budgeted expenditures compared to actual results.

The overall responsibility for budgeting lies with the Director of Finance and Administration. The budget preparation exercise usually begins during the third quarter of the current financial year. The heads of each department prepares their respective estimates and submits them to the Director of Finance and Administration who reviews and discusses them with the various persons involved before its incorporation into the master budget. The final budget is then submitted to the Board of Directors for discussion and subsequent approval.

#### 5.3 FINDINGS AND OBSERVATIONS

We present below our findings and observations associated with TJL's Budgeting and Budgetary Control.

1. The company's annual budget is prepared on an incremental basis which tends to be a subjective method of budgeting.

There was no evidence to indicate that a Zero Based Budget has been prepared after a critical analysis of costs during the recent past.

- 2. The budget is not used as a tool for asset management and decision making.
  - Even though budgets are prepared, there has been a breakdown in the system of budgetary control. This has resulted from a lack of timely and complete information, of actual results. This, therefore, makes it difficult to monitor the expenditure on an annual basis and prepare monthly variance reports with explanation for the variances.
  - No internal budget is prepared for balance sheet items in order to control these items and improve financial management at TJL.
- 3. The strategic planning function at TJL has not been developed.
  - TJL does not have a detailed strategic financial plan that has been prepared after a critical analysis of the market needs, and which sets out the long term financial goals of the company.
- 4. There are no documented guidelines that can be used for the preparation of the budget, nor is the budgeting process automated.
  - There is no policies and procedures manual on budgeting to assist managers in the preparation of their budgets.
  - The annual budget is still being prepared manually, hence the budgeting process tends to be slow and does not easily lends itself to sensitivity analysis or other financial models.

#### 5.4 RECOMMENDATIONS

The following recommendations have been developed to address our findings and observations. Their purpose is to:

- (i) Improve budgeting and budgetary control.
- (ii) Strengthen supervision controls and improve decision making.

#### I. Improve budgeting and budgetary control.

- The Director of Finance and Administration should be responsible for the preparation and co-ordination of a strategic plan for TJL. Thereafter, the budget should be based on this Strategic Plan.
- The approved budgets should be used to prepare the budget after reviewing it on a Zero Base Basis.
- The approved budgets should be used to prepare monthly Income and Expenditure Account and the Balance Sheet. This will facilitate the following:
  - Monthly variance analysis to enable early remedial action against adverse variances.
  - Improved working capital management due to budgeted stock, accounts payable, accounts receivable, cash and fixed asset levels.
  - Planning purchases.
  - Cash forecasting.
- The proposed budgeting policies and procedures manual should be prepared. This will assist to speed up the budgeting process thus improving efficiency.

#### II. Strengthen supervision controls and improve decision making

- Monthly Financial Statements should be prepared and submitted to the
  management with variance analysis and explanations for adverse variances
  and the proposed action for reversing these variances. This would serve to
  keep the management of TJL informed, and also obtain their assistance in
  solving problems and making appropriate and timely decisions.
- In addition to the above, consideration should be given to computerising the budgets. This would require an upgrading of the computer system in order to store monthly budget data and compute variances.

#### 6 PURCHASING AND INVENTORY CONTROL

#### 6.1 SCOPE AND OBJECTIVES

We have reviewed and assessed the Purchasing and Inventory Control function for its efficiency and effectiveness. This was to determine if there were any potential issues relating to timely acquisition of inventory and non-inventory equipment and materials, and economical stocking policies and practices.

#### Analysis criteria

- The efficiency of the procurement process to support efficient and effective purchasing.
- The effectiveness of inventory planning to adequately plan for material requirements.
- The effectiveness of inventory control methods to ensure efficient inventory operations.
- Physical controls to safeguard inventory from theft, deterioration, damage and obsolescence.

#### 6.2 UNDERSTANDING OF THE FUNCTION

#### 1. Purchasing

#### Raw Material and Supplies

Purchase orders are used for all purchases made by TJL. Certain minimum levels of stock are maintained, and when this re-order level is reached, a request is made by the storekeeper for the amount of supplies needed. A Request For Expenditure (RFE) is prepared and sent to the accounts department for approval. When the RFE has been approved, the purchase order is prepared. The basic purchasing functions of the Purchasing Section are the preparation and approval of purchase orders. This aspect of the purchasing function falls under the responsibility of the Support Services Manager who ensures the following:

- that purchase orders are approved;
- adequate sourcing of goods and services;
- that goods and services are procured at least cost;
- that the correct goods are purchased and that specifications are met;
- that goods are delivered in the shortest lead times.

#### Cottage Craft and Non-Craft Items

The current system of purchasing craft and non-craft items is not formally defined. There is one field officer who is responsible for the purchasing of straw and craft products. The purchasing function as it relates to cottage craft and non-craft items, falls under the umbrella of the Marketing Department and is administered by the Director of Marketing and Production. The current system now in operation is not concentrated on going to suppliers to purchase these items, rather than purchasing of items is restricted to what craft producers and manufacturers bring to the marketing warehouse for sale.

#### 2. Inventory Control

Inventory control is performed at the different outlets and at the warehouse at Bumper Hall. Inventory at the outlets consists of finished goods, while inventory at the warehouse at Bumper Hall consists of finished goods, raw material for resale to craft producers and raw material used for production.

TII currently operates a manual inventory system. Bin cards are maintained for each inventory item, and all details of receivals and issues are recorded on them. Physical stock taking is done at least once per year, however, plans are now in place to carry out this exercise every three months.

#### 6.3 FINDINGS AND OBSERVATIONS

From our review of the Purchasing System, we identified the following perceived strengths:

- Re-order levels are set, thus reducing the possibility of a stock out situation, as the need for additional stock is identified at an early stage.
- Efforts are made to ensure that the best possible prices and payment terms are obtained.
- The purchasing function is centralised, thus allowing for better control over expenditure.

However the following weaknesses were also identified:

#### 1. TJL's inventory records are not computerised

• The accounting package currently being utilised by TJL has an inventory control routine, but this is not being utilised by the company. TJL, in addition to selling the items it manufactures, purchases and sells a wide variety of craft items from producers island wide. Computerised inventory records would greatly assist in the preparation of complete, accurate and timely financial statements on a monthly and annual basis.

## 2. The company has from time to time experienced problems with its Bin Card system

- TJL's internal auditor, in his review of cash and inventory control at March 31, 1991, found that the Bin Card system had broken down at almost all of the outlets, and in some instances The Bin Cards were as much as 2 1/2 months in arrears. No review of the system and the cards were being done and most individuals seem not to understand the reason for the system and the value of its maintenance.
- There was no control over the cards. Sales Clerks had free access to them, and there was no system to ensure continuity from one card to another. Old cards could therefore be destroyed, and new ones written without any account being given of the old ones. This would make it impossible to reconcile the stock records to any physical count.
- The identification of individual items is poor, with the same items having varying names from shop to shop, and even some having varying names within the same shop.

- In order to solve the problems that were being experienced with the inventory system the Internal Auditor has proposed the setting up of a Reconciliations Unit within the Marketing Department. This unit will be responsible for:
  - (i) Maintaining the Bin Cards;
  - (ii) Checking calculations on sales invoices;
  - (iii) Reconciling lodgements with sales;
  - (iv) Reconciling local and foreign cash;
  - (v) Performing other checks on sales transactions.
- 3. The company does not maintain a stock ledger, therefore it is difficult to monitor inventory levels and balances.
  - TJL currently does not maintain a stock ledger in order to monitor stock levels, their value and maintain a control on the balances appearing on the bin cards. This will adversely affect inventory management because there are no records with which to reconcile the physical count and thereby spot discrepancies. This situation can also have an adverse impact on the accuracy of the financial statements.
- 4. The segregation of duties in respect of updating of the Bin Cards is weak, therefore, fraud, errors and ommissions may go undetected for a considerable period of time.
  - The sales clerks have the responsibility of updating the bin cards on a daily basis. This indicates a weakness in the internal control system, which could give individuals the opportunity to both perpetrate and conceal an error or irregularity.

#### 6.4 RECOMMENDATIONS

We refer to the document 'Outline for the Streamlining of the Various Functions in the Marketing Department at Bumper Hall', which was prepared internally, and sought to address some of the problems being experienced with respect to the procurement of Craft and Non-Craft items. This effort on the part of the company is quite commendable, and most of improvements suggested are quite feasible, and, if implemented, will result in improvement in the system. From our review of this document, the following recommendations are being made to further improve the integrity of this proposed system.

### 1. The Purchasing Officer should not be given the responsibility for the daily maintenance of the Purchases Journal

Maintenance of the purchases journal by the Purchasing Officer would not be ideal if the internal control system is to work effectively. This function is currently being performed in the accounts department, and it is suggested that it should remain. All source documents pertaining to the purchase of goods should be submitted to the accounting the department for recording into the accounting system, however, as a control mechanism copies of the purchase orders should be kept in the department. The purchasing officer should liaison with the accounting department, in order to ensure that the necessary reports that might be required are produced on a timely basis.

#### 2. Develop a data base of Craft and Non-Craft suppliers

It is proposed that the Purchasing Officer maintains supplier files with a record of all purchases made from each supplier and the range of goods available from each. We agree that this is a necessary short-term measure. However, it would be more efficient in the long-run, to develop a data base of craft suppliers. Such a data base should be able to give information on location and supply capabilities in terms of product lines, quantities etc., of each supplier.

#### 3. Computerize T.IL's inventory control system

Consideration should be given to computerising the company's inventory system. This can be achieved by making use of the existing software that the company has, but which is not being used. The system should be fully integrated with the General Ledger, and should be able to provide management with the necessary reports as needed.

## 4. Undertake the Reconciliation Activities within the Accounting Department

We recommend that the functions of the proposed Reconciliations Unit be performed within the Accounting Department, and not the Marketing Department, as this function is more of an accounting nature than a marketing one. Reconciliation of the sales sheets is currently being done in the accounting department and since the proposed functions of the Reconciliation Unit are somewhat related, any decision to have it carried out in the marketing department might result in unnecessary duplication. This function should be placed under the direction and control of the Director of Finance and Administration.

## 5. Improve Inventory Management through the introduction of a Stock Ledger

The Stock Ledger should be introduced to enable TJL to have a comprehensive inventory listing at any point in time. This system should be computerised and fully integrated with the General Ledger.

In order to improve the internal control system with respect to the updating of bin cards, the current practice should be discontinued and the updating of the bin cards be placed under the supervision and control of the proposed Reconciliation Unit as recommended by the Internal Auditor.

# SECTION 2 MARKETING AND SALES

# THINGS JAMAICAN LTD. MANAGEMENT AUDIT MARKETING AND SALES

#### 1. MARKETING

#### 1.1 SCOPE AND OBJECTIVES

- To recommend appropriate changes to make TJL profitable within the next three years i.e. 1992/93, 1993/94 and 1994/95.
- To recommend appropriate short-term and long-term marketing strategies for the five year period 1992/93 to 1996/97.
- To recommend changes to the organisation and staffing required to implement these strategies.

#### 1.2 UNDERSTANDING OF THE FUNCTION

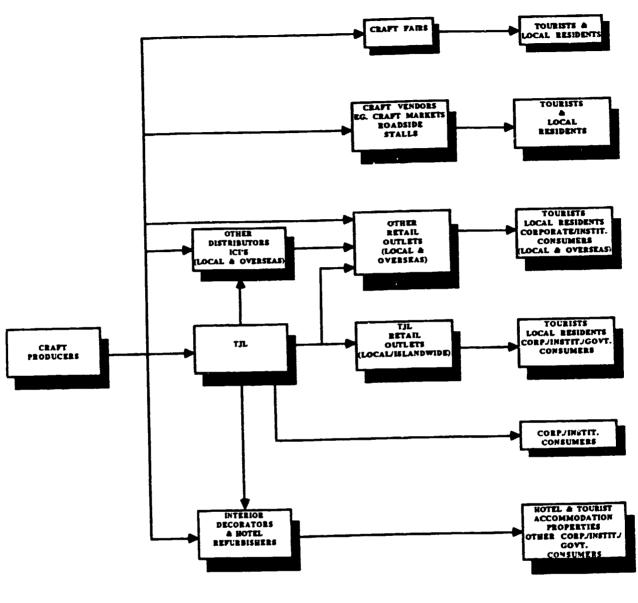
#### Mission

The Director, Marketing and Production defines the mission of the marketing function of TJL as being profitability:

To operate in a profitable manner and provide an example of successful merchandising and marketing strategies, techniques and bottom-line results in the craft industry.

The marketing function at TIL is the executive responsibility of the Director, Marketing and Production. Strategic direction is received from the Managing Director of TIL, the Board of Directors and the Minister with responsibility for Culture which includes responsibility for TIL. This latter responsibility resided with the Prime Minister's Office at the time of writing.

## THINGS JAMAICAN LIMITED CRAFT INDUSTRY DISTRIBUTION CHANNELS



PRODUCERS

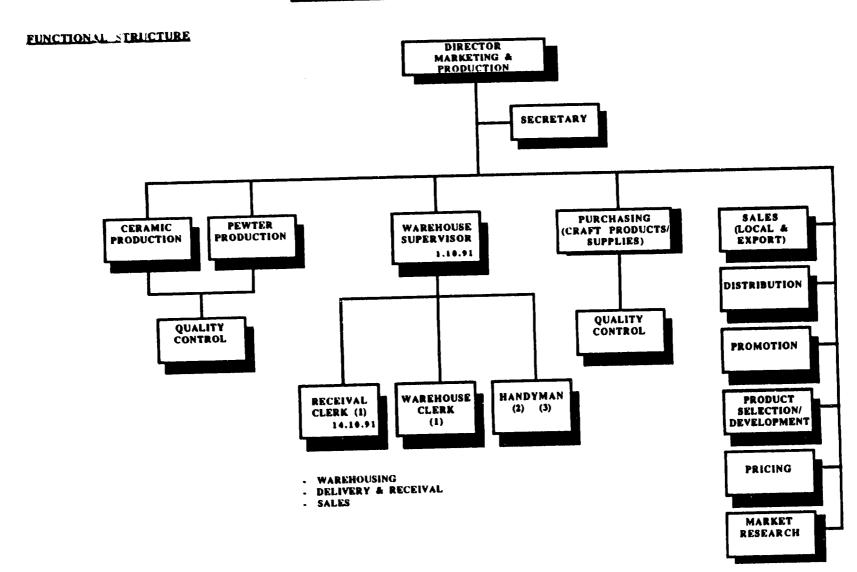
DISTRIBUTORS

RETAILERS

CONSUMERS

ندوك فعيليه

# THINGS JAMAICAN LIMITED EXISTING ORGANIZATION & STAFFING



The marketing function includes responsibility for marketing, planning, wholesale and retail sales (local and export), distribution, promotion, pricing and market research. Responsibility for product selection and development is shared with the Product Selection Committee and the Director, Business Development and Training, with executive direction from the Managing Director and the Board of Directors of TJL. (See charts opposite page).

The Director, Marketing and Production also has executive responsibility for purchasing, warehousing, delivery and receival, packaging and transport of craft products and supplies.

#### 1.3 FINDINGS AND OBSERVATIONS

#### 1.3.1 The Product

TJL produces and buys Jamaican craft products and native food products for distribution to the market. TJL product lines include the following:

- Ceramics and Pottery
- Pewter
- Woodcraft
- Straw Products
- Basketry
- Embroidery and Needlework
- Toys and Dolls
- Condiments and Spices
- Blue Mountain Coffee and Liqueurs
- Leathercraft
- Shellcraft and Jewellery
- Craft Supplies
- Packaging Containers

Generally these products have been of a high quality standard as measured by neatness, durability, aesthetics of design, utility and value for money. However, in recent years there has been an inconsistency in the quality particularly with regards to neatness and variety of design.

In addition to craft products and non-craft items, TJL buys and sells craft supplies such as straw, wicker, raffia, etc.

#### 1.3.2 The Market

Consumers of craft items are mainly persons purchasing gifts, items for household use, objects d'art/ornamental display, souvenirs of a visit to Jamaica/the Caribbean; corporate entities purchasing for gifts to clients and business associates, for interior decor, and for special packaging purposes.

One Hundred Percent (100%) of sales are to the local market. There are two small, but important export orders for the Eastern Caribbean. However, they represent less than 1% of total sales. It is estimated that at least 50% of sales are to the tourist market.

The customers in the market can be classified as:

Consumers

- Tourists including stop over visitors, cruise ship passengers and armed forces arrivals.
- Local residents.
- Corporate/institutional consumers including government and the diplomatic corps.
- Hoteliers, owners/managers of tourist accommodation properties.

Retailers

- TJL retail outlets islandwide.
- Pharmacies.
- Craft shops.
- Hotel gift shops, other gift shops (locally and overseas).
- Craft vendors including craft markets and roadside vendors (locally and overseas).
- Interior decorators and hotel refurbishers.

Distributors

- TIL.
- Other distributors (locally and overseas).
- ICI's.

The chart shows the distribution channels within the market.

The market is considered to be price-sensitive due to the wide variety of competing products locally and worldwide, the limited budget of visitors and local residents, and the fact that craft items are not a necessity. However, persons shopping for objects' d'art may be less price-sensitive. There is a seasonal pattern to demand which reflects the seasonality of the tourist arrivals, with peak buying at holiday times, especially in August and December.

#### 1.3.3 Customer Expectations

#### Export Market (USA, Canada, Europe)

Commercial buyers for retail stores and distributors are seeking large volumes, consistent quality, on-time delivery, competitive prices and unique designs.

#### Local Market

- Local residents and tourists are typic 'poking for attractive designs, competitive/low prices and good quality, i.e. good value for money.
- Corporate/institutional buyers are typically looking for high quality, attractive designs, durability and good value for money.
- Interior Decorators and Hotel Refurbishers are generally looking for moderately large volumes, reliable on-time delivery, unique designs, competitive/low prices and consistent quality.

#### 1.3.4 The Competition

The competition can be examined geographically as follows:

- local competition;
- regional competition;
- international competition.

#### **Local Competitors**

Local competition includes local retail stores and distributors who buy craft items from the same source as TJL eg. The Craft Cottage, Xaymaca Craft. These organisations sell directly to the consumer market through their own retail outlets or sell to other retail outlets. These organisations have standards of quality selection and merchandising which is comparable to, or better than, that of TJL.

Local Craft Markets (particularly in Kingston, Ocho Rios, Montego Bay) provide an outlet for the craft producers to retail their products directly to the consumer or to sell through craft vendors who operate stalls in the markets. However, the craft market vendors do not exercise the same degree of control over the quality of products sold, nor is the level of merchandising comparable to that of the TJL outlets. Consequently, TJL can compete effectively on quality, merchandising and competitive pricing with the local craft markets.

#### Regional Competition

Regional competition comes from Latin American countries and Eastern Caribbean islands which either export craft or are popular tourist destinations. Countries included are Mexico, Peru, El Salvador, Haiti, Bahamas, Cayman Islands, Virgin Islands, Puerto Rico, French and Dutch Caribbean Islands, Barbados, St. Lucia, Grenada, Antigua and Trinidad and Tobago. Another potential competitor is Cuba which is seeking to re-establish itself as a tourist destination.

Haiti and Mexico are amongst the major regional competitors offering high quality products at low prices to the same tourist and export market. Cuba also has the potential to be a major competitor.

#### International Competition

The international market for high quality/low cost craft products includes formidable competition from the Far East and Africa, notably from the Phillipines, India, West African Countries and Pacific Islands.

These countries have a proven capability of consistently producing large volumes of high quality, low priced craft products.

#### 1.3.5 Opportunities

- Over one million foreign visitors come to Jamaica annually from hard currency countries such as USA, Canada, UK, Germany and Japan. The Jamaica Tourist Board estimates that stop-over visitors on average spend US\$100 per person on gifts and shopping, including craft items and souvenirs. This provides a US\$100 million market "on our doorsteps".
- There has been an increasing number of cruise ship passenger arrivals, i.e 23.1% increase in the first 10 months of 1991 to 380,768 passengers to Ocho Rios and Montego Freeport. This provides a locally accessible foreign currency market for craft items and souvenirs.
- The large number of Jamaicans living abroad that visit Jamaica, annually or periodically, present another market opportunity.
- There has been an increasing number of tourist arrivals from Europe and Japan which provides a hedge against the declining arrivals from North America.
- The rate of exchange between the Jamaican dollar and the major hard currencies (US\$, CN\$, UK£, Japanese Yen, German Deutsch mark) provide a competitive edge over Eastern Caribbean competitors in the pricing of export products.
- The presence of major local and international hotel chains operating in Jamaica and the Caribbean provide a potential distribution channel for TJL products islandwide, regionally and internationally eg. Sandals Hotel Group, Super Clubs, Trammell Crow Hotels.
- Collaborative relationship between TJL and local craft producers.
- Parish Craft Associations facilitate access to craft producers on a geographical basis for marketing purposes particularly purchasing and estimation of supply capacity.
- There is a large pool of craft producers locally to provide a stable supply of products.
- The existence of the School of Arts, Garmex/HEART Academies to supplement TJL's efforts to develop craft skills and design talent particularly in the area of ceramics, sewing and needlework.
- There is a strong demand for craft products including repeat purchase for gifts supported by reported customer goodwill towards TJL products.
- The liberalisation of the foreign exchange systems provides a major incentive for potential export earners such as TJL.
- The international recognition and popularity of the Jamaican Reggae and Rastafari culture in hard currency markets such as Germany and Japan provide a major export market opportunity for indigenous Jamaican products.
- Access to development funding from Government and overseas agencies for research and market development.

#### 1.3.6 Threats

- The seasonality of Tourism results in fluctuating demand levels.
- The vulnerability of the tourist industry to economic recessions overseas and to social/political problems locally eg. crime, tourist harassment can result in a sudden drop in demand.
- The current decline in the number of arrivals from the traditional tourist markets of USA and Canada in 1991 over 1990 due to economic recession.
- The negative impact of the US economic recession on the export market.
- The strong, aggressive competition in the world market for craft products makes it more difficult for TJL to enter, and sustain a position, in the export market.
- The inconsistent quality of Jamaican craft items is a threat to local and foreign sales.
- The small size of craft production units makes it difficult to fill the large volume orders which are typically required for the export market.
- The unavailability of skilled craft technicians for ceramic and pewter production constrains the supply of these products.
- Low labour costs, high productivity, and rate of exchange of other competitors such as Mexico and Haiti, and potentially Cuba, allow for low pricing of high quality products on the export market.
- The reduced purchasing power of Jamaican consumers will reduce the demand from the local market.
- The competition from local craft retailers/wholesalers for products from the same craft producers threatens TJL's market share.
- The reported reluctance of local master craft-persons and the School of Arts to provide sustained support to TJL for improvement of designs and quality of workmanship is a critical obstacle to TJL's product development efforts and craft development mission.
- Problems sourcing raw materials, tools, working capital and transportation constrain supply and distribution of craft products.
- The dependence of pewter and ceramic production on imported raw materials will result in rising costs of production and pricing which will threaten sales.
- The withdrawal or reduction of development funding from the government and from overseas agencies would result in the immediate closure of TJL unless sales revenue and contribution are increased to make TJL economically viable.

#### 1.3.7 Strengths

- A dynamic Director of Marketing and Production with several years of experience in local and export marketing.
- An established system for vetting new craft products for quality and acceptability for marketing.
- A comprehensive product line.
- A documented five year business plan to focus direction and activities.
- The Field Officers in St. Elizabeth and Western Jamaica who liaise with craft producers and assist with sourcing of supplies; plans in place to expand the field officer service.
- The part-time assistance of a professional ceramist from Japan.

#### 1.3.8 Weaknesses

- An inadequate MIS to provide marketing and production information for planning and control purposes.
- The lack of a database on the Jamaican craft industry and its capacity to meet demand which is compounded by the lack of marketing statistics to help determine local and overseas demand.
- TJL has been operating at a loss since its inception despite the existence of a lucrative tourist market for craft products and souvenirs.
- Inadequate staffing for liaising with the market and with suppliers.
- Inadequate staffing to cope with the wide portfolio of the Marketing and Production Division which includes responsibility for warehousing, sales, purchasing, delivery and receival.
- Inadequate transport facilities to collect supplies from craft producers and to transport goods safely to the retail outlets.
- The turnover/lack of continuity at top management level; all the executive positions have been filled within the last three years. This often results in a change of policy, direction, practice or emphasis before the ideas of a previous administration can bear fruit. Money is, therefore, repeatedly invested in special studies, consultancy fees and new ventures, and implementation may not take place, thus the benefit of the recommendations are lost.

#### 1.4 **RECOMMENDATIONS**

#### 1.4.1 Market Share and Sales Revenue

1. Based on information from the Jamaica Tourist Board, the Jamaican tourist market for craft/TJL products is estimated to be J\$760 million annually. It is estimated that at least 50% of TJL sales revenue of J\$14 Million for 1991/92 comes from sales to tourists. Therefore, we estimate that TJL's current share of this market is approximately 1%. If TJL attempted to capture 5% of this market over the next five (5) years the targeted annual sales revenue for year 5 would be J\$55 Million including J\$40 Million from the tourist market, plus other local sales and export sales. Projections are stated below and the underlying assumptions are listed in the Appendix.

#### Annual Sales Revenue and Estimated Market Share (J\$ Million)

	Year	Q	1	2	3	4	5		
		<u>1991/92</u>	1992/93	1993/94	<u>1994/95</u>	<u>1995/96</u>	<u>1996/97</u>		
Total Sales Revenue*		14	22	30	38	47	55		
% Increase over previous year		N/A	+ 57%	+36%	+27%	+24%	+17%		
Estimated % Tourist Market Share		1%	1.9%	2.8%	3.6%	4.5%	5.3 %		
Breakdown of Annual Sales Revenue (J\$Million)									
	Year	Q	1	2	3	4	5		
		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97		
Tourist Market		8	14.5	21.0	27.5	34	40		
Other Local Sales		6	7.2	8.6	10.4	12.5	15		
Export Sales		_0.05	_0.07	0.09	_0.1	_0.13	_0.15		
Total Sales Revenue*		14	22	30	38	47	55		

<sup>\*</sup>Rounded to the nearest million.

- 2. During Year 1 (1992/93) and Year 2 (1993/94) of the proposed five year plan, TJL should focus on developing the local tourist market and on overhauling its productive capability, measuring the national supply capacity, establishing quality standards and implementing a quality control system. Among other things, this will entail:
  - employing the right people;
  - implementing an effective performance evaluation programme to assess employee performance;
  - implementing a classification system for rating the craft producers in terms of quality and output capacity;
  - overhauling and/or replacing existing equipment at the TJL Bumper Hall factory complex;
  - implementing an effective management information system to support planning and decision-making;

This year of "putting its house in order" is a vital prerequisite to TJL spearheading or facilitating the development of export sales of Jamaican craft and select non-craft products to overseas markets in the USA, Canada, EC and Japan. It is reported that attempts at exporting craft have been frustrated in the past by inadequate production/supply capacity and the inability to produce to a satisfactory standard on a consistent basis. These problems must be resolved. These two years should also be spent exploring the opportunities and the competition in the export market in order to develop an informed export marketing strategy for Year 3 and onwards.

#### 1.4.2 Product/Market Positioning Strategy

A two-pronged strategy:

- 1. TJL should position itself primarily as a company offering good value for money, i.e. good quality products at moderate prices.
- 2. However, TJL should also develop a premium line, i.e. an exclusive line of unique, high quality art and craft pieces for sale at higher prices to the upper income and corporate/institutional market.

#### Market Segmentation

There are five (5) identifiable segments requiring focused strategies for distribution, pricing, product line and promotion.

#### 1. Jamaica Tourist Market

TJL should focus its sales expansion efforts on the tourist market in Jamaica: over 1 million visitors per annum primarily from USA, Canada, UK, West Germany, Italy, Japan.

#### 2. Interior Decorators and Hotel Refurbishers

TJL should focus this group as an important gateway to the market for decorating the interiors of corporate offices, hotels and the homes/vacation villas of up-market homeowners.

#### 3. Corporate/Institutional Market

This market segment includes:

- a) Large firms operating in Jamaica, particularly those in the export business, which may need unique/high quality Jamaican gift items for overseas business associates; or which may require craft packaging for special export products. eg. straw baskets, ceramic containers, wooden containers.
- b) Government ministries, agencies and statutory bodies.
- c) The Diplomatic Corps.

#### 4. Ethnic Tourists/Overseas Jamaicans

TJL should also target Jamaicans living overseas in the UK, USA and Canada who visits Jamaica annually or periodically.

#### 5. Local Residents

TJL should target the middle and upper income residents in the Corporate Area and selected major towns such as Ocho Rios, Mandeville and Montego Bay.

#### **Product**

- 1. TJL should analyse the sales and profitability of each product line and of specific items in each line and determine which lines/items to maintain in regular production/stock which to discontinue; or alternatively which to maintain as a sample for special orders only.
- 2. Quality control standards must be documented for each product line; and standards defined to classify craft producers into different categories according to the quality, capacity and reliability of supply.

- 3. TJL should develop in conjunction with the Bureau of Standards a TJL seal of approval as a guarantee of quality to the consumer.
- 4. The supply capacity for each product item needs to be determined to identify which ones are available in feasible quantities for export.
- 5. Souvenirs and Special Attraction Products TIL should give priority to researching, developing and test-marketing a new line of souvenirs and special attraction products for the tourist market. For each major tourist attraction, eg. Rose Hall Great House, Devon House, Appleton Estate, Port Royal, there should be souvenir items such as building replicas, figurines, dolls, mugs, etc. depicting main features of the tourist attraction, eg. pirate dolls, sugar workers, figurines, miniature sugar coppers, miniature Devon House replicas, etc. A special line of souvenir should also be developed for special events such as Jamaica Carnival and Reggae Sunsplash.
- 6. Subject to the rationalising of existing lines, TJL product lines and designs could be enhanced by a "Designer Line". To develop the designer line, TJL would approach select Jamaican artists and designers including Fabric/Fashion designers eg. Judy McMillan, Angela Staples, Gerry Dunlop, Dawn Scott, Betti Campbell, Collin F., Colin Garland, A. Huie, Susan Shirley, Cecil Cooper, Janey, Ruth Francis, Virginia Burke etc. to create a signature design for use on mugs, plates, bowls, jugs, pencil holders, napkin rings, ewers and basins, ash trays, spoon holders. (See Appendix for Potential Resource Persons)
- 7. The ceramic and embroidery product lines could benefit from the reintroduction of former successful TIL designs based on Jamaican fruits and flowers, eg. breadfruit-shaped soup bowls with napkins and placemats embroidered in matching/complementary designs.
- 8. The development of a new line of embossed ceramic plates, mugs, bowls also using Jamaican flower and fruit designs along with matching or complementary embroidered napkins and placemats could be test-marketed.

- 9. Craft catalogues from North America and Europe are also a ready source of ideas for new product lines for the different market segments. These catalogues are also a source of information on what is selling in these markets.
- 10. <u>Pewter</u> Develop the export market potential particularly small niche markets overseas or on cruise ships. Develop new designs to include modern/contemporary items in flatware and beer tankards in addition to the Port Royal line.
- 11. With appropriate market segmentation, distribution, promotion and pricing, there is scope for the Jacaranda line of exclusive, unique, high quality, up-market products reserved for master craftsmen in all product types, for example:

Ceramics: Cecil Baugh, Norma Harrack, Marjorie Keith, David Dunn, et al

Woodwork: Evans Goldson, et al

Metalcraft: Kay Sullivan, Fitz Harrack, Earl Franklin, et al

This potentially lucrative line should not be abandoned without further exploration of niche marketing strategies.

#### **Price**

Essentially TIL must improve its information base on market demand, competitor pricing, and production costing in order to guide its pricing policy and increase its sales revenue and profitability.

- 1. If the tourist market is targeted with an assumption that most tourists will spend between US\$5 to \$25 per person then products that retail between J\$100 to J\$500 (at rate of exchange J\$20 to US\$1) becomes the critical price range for volume sales. TJL should carefully review products and costing to ensure the availability of products in this price range.
- 2. TJL must conduct an audit of their competitors' price structure and compare them to its own price structure.
- 3. TJL must review and improve its production costing system to ensure an accurate base for its pricing policy. The perception is that TJL continues to under-price its production due to an inadequate information database, and a failure to maintain the costing system.
- 4. In order to support the good value for money position, TJL must offer good quality products for competitive prices, i.e. a lower price than its competitors for items of similar quality, or a similar price as its competitors for higher quality products.
- 5. Current pricing is done on a cost plus basis. This appears to be effective and is simple and straight forward to implement. However, this approach may be responsible for the mixed feedback received about TJL's prices. Some report that TJL prices are high, others that they are reasonable or competitive. With increased information on competitor's pricing and on customer demand, TJL will be better able to structure their pricing for the various segments of the target market.

#### 1.4.3 Distribution

TJL must focus on and strengthen its role as the hub of the distribution channel for Jamaican made craft. This means that TJL must increase its effectiveness in sourcing and buying from craft producers islandwide and reselling to the retail outlets in the major tourist areas locally and regionally in the short to medium-term; and to the world market in the long-term.

- 1. TJL retail outlets should operate as profit centres to facilitate the analysis of sales and profit performance by location and market segment.
- 2. Continue the strategy of locating shops at airports and seaports where tourists and cruiseship passengers arrive and leave; and of arranging to shuttle tourists from ports to TJL outlets.
- 3. Continue to develop and expand arrangements with tour operators and hotel shuttle service operators to include TJL outlets on their route as a scheduled stop.
- 4. Continue to focus the gift shops at Devon House and major hotel chains on the North Coast and in Kingston to access the tourist trade.
- 5. Work with the Craft Development and Training Division and the Craft Producers Association, the craft vendors, the JTB and other relevant parties to improve the craft markets in Kingston, Montego Bay, Negril, Ocho Rios and to encourage additional locations to improve access to the tourist and local resident market.
- 6. The proposed TJL Ocho Rios shop should focus on the ceramic and pewter lines, the souvenir line and the Jacaranda line so as to avoid competing directly with the other craft/gift shops. By carrying different lines instead of selling the same items as other shops in Ocho Rios, TJL would improve the variety available in this market area and so increase sales revenue.
- 7. Fomalise distribution relationships with select craft shops in Jamaica and the Caribbean to increase market share and sales revenue to the tourist market and to the local resident market in Jamaica and the Caribbean.
- 8. Locate the Jacaranda shops in up-market hotels such as Sans Souci, Tryall, Round Hill, Plantation Inn, Sandals, Ciboney, Enchanted Gardens, or sell the Jacaranda line to these hotels/resorts.
- 9. Sell the Jacaranda line and other products to gift shops on the cruise lines that sail in the Caribbean and also to the airlines eg. Air Jamaica, BWIA, British Airways, American Airlines, etc.
- 10. Formalise distribution relationships with pharmacies and gift shops in Kingston, Montego Bay and major towns, Ocho Rios, Mandeville, Negril, May Pen, Brown's Town to place TJL in a preferred position with these important customers, and thereby expand market share and sales revenue from the local market.

- 11. Continue to develop the distribution channel through the ICI's who buy to sell abroad in Canada, UK and USA.
- 12. Explore the feasibility of developing a TJL franchise for operating craft shops in Discovery Bay, San San, Mandeville and other towns not targeted for TJL retail outlets.
- 13. Explore the boutique market overseas by approaching select stores which may order smaller, more manageable volumes of products for limited, exclusive sales, e.g. Macy's, Bloomingdales.
- 14. Obtain a suitable closed truck and/or vans for collection of products from craft producers and distribution to retail outlets and wholesalers.
- 15. The Marketing Division should liaison with the TJL field officers to strengthen the communication network with craft producers and TJL retail outlets islandwide.

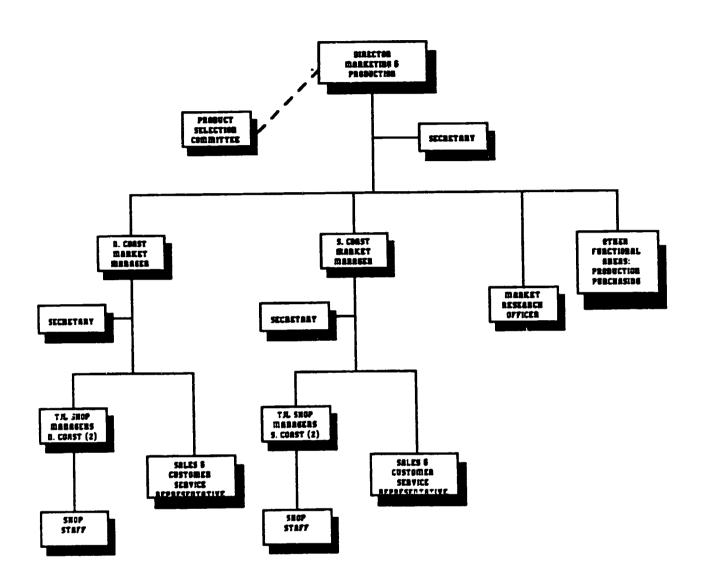
#### 1.4.4 Promotion

TJL must be promoted as a national trademark and as an organisation which guarantees high quality craft products at fair prices to purchasers; whilst guaranteeing reliable distribution, sound marketing opportunities and integrity of business conduct to craft producers.

The following strategies should be continued or adopted:

- A comprehensive magazine/catalogue, and a brochure with quality colour photographs, and an up-to-date price list are imperative promotional and selling aids.
- An advertising campaign should mainly focus the print media eg. in-flight magazines, travel magazines and catalogues, promotional posters.
- Annual craft fairs in December when local consumer purchasing peaks; and in July/August to stimulate commercial buyers to place orders for Christmas and the tourist season, and also to attract overseas Jamaicans who visit for Independence and Reggae Sunsplash.
- A Triennial Expo designed to attract local and oversess commercial buyers should be introduced to exhibit new designs or new constructions. Collaborate with the Draft Development and training Division and training Division with prestigious TJL awards offered for best new design and best new product, etc. These competitions could be integrated into the annual Festival thereby sharing the effort and cost of development with the festival commission.

# THINGS JAMAICAN LIMITED PROPOSED ORGANIZATION & STAFFING: MARKETING FUNCTION



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 Product history cards should be developed for all unique or special products with information on the origin of the product or on the artist/craftsperson or craft technique.

#### Proposed Organisation and Staffing

The Director, Marketing and Production has a wide portfolio with a wide functional span of control. Such a portfolio cannot be managed effectively unless the respective areas are adequately staffed with competent, experienced persons. For the marketing function a geographic distribution of the sales, portfolio is recommended. This approach will also address the question of customer specialisation to some extent as the major tourist customers are located on the North Coast, whilst the major corporate customers and interior decorators are located on the South Coast. However, there will be some overlap. Adequate attention must be given to technical marketing support services such as market research and demand analysis. There must also be adequate staffing for after sales service and the handling of customer queries/complaints.

The positions and the delegation of responsibility recommended for the marketing function are contained in the proposed organisation chart (opposite page) and the job summaries in the Appendix.

#### 1.4.5 Other Support Required

- A PC based Management Information System and database with reliable up-to-date information on supply capacity and on consumer behaviour and competitor activities.
- Market information on purchasing patterns of local residents and overseas visitors. This might be aided by having the sales clerk note the country of residence on the file copy of all customer invoices which can be sent to marketing for analysis of type, amount, and dollar value of purchases by country of residence.
- Computerised cash register and inventory system.
- Covered trucks and vans for collections and delivery.
- Cash flow/weekly capital for COD payments to Craft Producers.

- TJL Seal of Approval and Quality Control System effective New Product Evaluation System (see section on quality control).
- Effective Pricing/Costing System.
- Effective team-work and communication between TJL management team and staff.
- Adequate production control system to ensure reliable scheduling and on-time delivery of ceramic and pewter products.
- Expanded production capacity and improved productivity of ceramic and pewter departments to satisfy more of the potential demand for these products.
- Adequate sourcing and replenishment of indigenous raw materials through emphasis on the raw materials replanting projects.
- Continuity of craft skills training programme.
- Adequate telephone and fax linkage in the short-term; and PC network for Electronic Data Interchange (EDI) facility between retail outlets and headquarters, in the medium to long-term.

#### APPENDIX 1

#### **JOB DESCRIPTIONS**

# 1. DIRECTOR MARKETING AND PRODUCTION

#### Responsibilities:

- Strategic marketing planning.
- Development of annual market plan.
- Development of marketing policy and procedures.
- Direct the development of the Jamaica tourist market for TJL products.
- Shared responsibility for product development and design.
- Market research.
- Export market development Caricom, North America, EC, Japan.
- Promotions.
- Executive direction of:
  - Sales, local and export
  - Merchandising
- Executive direction of:
  - Purchasing
  - Warehousing
  - Production

# Marketing Qualifications and Training:

- Bachelors Degree or College Diploma in Marketing and/or Business Administration.
- Minimum 10 years' working experience in sales and marketing, including export marketing with at least 3 years' at a senior manager level.
- Training in strategic marketing planning, market research and analysis, and computer literacy.

#### Reports To:

Managing Director

#### Location:

Bumper Hall

# 2. MARKET MANAGER, NORTH-WEST REGION

#### Responsibilities:

Sales, market development, merchandising, customer relations and after sales service, expediting orders for all clients in the North-West region i.e. St. Elizabeth, Westmoreland, Hanover, St. James, Trelawny, St. Ann, St. Mary.

#### Client Focus:

- Hotels and other tourist accommodation properties
- Tourists
- Cruise ships
- Hotel refurbishers
- Retailers in NW Region Pharmacies, Gift/Craft Shops
- Market Intelligence: Monitoring competitors activities and consumer behaviour.
- Participate in strategic and annual marketing planning exercise.
- Develop and implement approved annual sales plan for NW regional market.
- Supervise and monitor TJL retail shops in NW Region.
- Liaise with Field Officers in NW Region on matters relating to supply from craft producers, as necessary

#### Staff Reporting:

Direct:

TJL Retail Shop Managers - NW Region

Secretary

Sales and Customer Service Representative

Indirect:

TJL Retail Shop Staff

# **Qualification and Training:**

- Bachelors Degree or College Diploma in Marketing and/or Business Administration.
- Minimum 5 years' working experience in sales and marketing.
- Training in selling skills, customer relations, merchandising, computer literacy.

# Reports To:

Director, Marketing and Production

#### Location:

- Hotel area of Montego Bay in close proximity to hotel and tourist market and retail shops, and reasonable proximity to airport and cruise ship ports.
  - Must have adequate telephone and fax linkage to Bumper Hall and clients; and ultimately computer network linkage to Bumper Hall.

# 3. MARKET MANAGER - SOUTH-EAST REGION

#### Responsibilities:

Sales, market development, merchandising, customer relations and after sales service, expediting orders for all clients in the SE Region i.e. Manchester, Clarendon, St. Catherine, Kingston, St. Andrew, St. Thomas, Portland.

#### Client Focus:

- Interior Decorators
- Retailers in SE Region: Pharmacies, Gift/Craft Shops
- Distributors, including ICI's
- Corporate and Institutional clients
- Diplomatic Corps
- Government
- Monitor TJL retail shops in SE Region.
- Market intelligence: monitor computer activities and consumer behaviour.
- Participate in strategic and annual marketing planning exercise.
- Develop and implement approved annual sales plan for the SE regional market.
- Liaise with Field Officers in SE region on matters relating to supply from craft producers, as necesary.
- Liaise with sales customer service representative at Bumper Hall in expediting customer orders and after sales service.

#### Staff Reporting:

Direct:

TJL Retail Shop Managers, SE Region

Secretary

Sales and Customer Service Representative

Indirect:

TJL Retail Shop Staff

#### **Oualifications and Training:**

- Bachelors Degree or College Diploma in Marketing and/or Business Administration.
  - Minimum 5 years' working experience in sales and marketing.
- Training in selling skills, customer relations, merchandising, computer literacy.

#### Reports To:

Director, Marketing and Production

#### Location:

- Devon House Complex in proximity to TJL and non-TJL retail shops, interior decorators, corporate clients.
- Must have adequate telephone and fax linkage to Bumper Hall and clients; and ultimately computer network linkage to Bumper Hall.

#### TIL RETAIL SHOP MANAGERS

#### Responsibilities:

- Sales and customer service.
- Inventory management.
- Quality control.
- Merchandising.
- Staff training.
- Supervision of shop staff.
- Market Intelligence: Monitor consumer behaviour and provide information to Market Manager and Market Research Officer.
- Sales reports.

#### Client Focus:

- Walk-in customers
- **Tourists**
- Local residents

#### Staff Reporting:

**Shop Staff** 

#### **Oualification and Training:**

- College Certificate or Diploma in Business Administration, Retail Management or other related subjects.
- Minimum 3 years' working experience in retail selling with at least 1 year at a supervisory or junior management level.
- Training in selling skills, customer service, supervisory skills, merchandising, computer literacy.
- Must be capable of managing and acting on own initiative to improve sales and customer service.

#### Reports To:

Market Manager (NW or SE Region, as appropriate).

#### Locations:

- At site of each TJL retail outlet or group of outlets.
- 1 Devon House, Kingston
- 1 Norman Manley Airport, Kingston 1 Donald Sangster Airport, Kingston 1 Fort Street, Montego Bay

# 5. MARKET RESEARCH OFFICER

#### Responsibilities:

- Sales analysis.
- Market surveys and data collection.
- Statistical analysis of market data for local and export markets, especially the tourist market.
- Product testing.
- Maintenance of marketing database.
- Assist Director with:
  - Compiling Market Plan
  - Developing Pricing Policy
  - Promotions
  - Merchandising

#### **Qualifications and Training:**

- College Diploma or Bachelor's Degree in Business Administration and/or Marketing.
- Training in Market Research and/or statistical analysis.
- At least 1 year's experience in statistical analysis or research.

#### Reports To:

Director, Marketing and Production

#### Location:

Bumper Hall in proximity to Director's Office

# 6. SALES AND CUSTOMER SERVICE REPRESENTATIVES

# Responsibilities:

- Customer order processing.
- Customer service and sales.
- Expediting customer orders.
- Assists with liaison with suppliers/craft producers.
- Assists with merchandising display and layout of sample room, as required.

#### **Qualifications and Training:**

- GCE/CXC 'O' Level standard with at least 2 years' working experience preferably in customer service or sales.
- Training in customer service skills.
- Computer literacy.

#### Reports To:

Market Managers (NW or SE Region, as appropriate).

#### Locations:

- (1) Office of Market Manager, NW Region, Montego Bay
- (1) Bumper Hall, Sample Room/Warehouse, Kingston

#### APPENDIX 2

# ASSUMPTIONS UNDERLYING MARKET SHARE AND SALES PROJECTIONS

The above projections of Market Share and Sales are based on the following assumptions:

- 1. Rate of Exchange: J\$20 to US\$1.
- 2. Inflation Rate: 0; assume sales revenue is stated in constant dollars as at 1991.
- 3. Assume at least 1 million tourists visit Jamaica annually and stop-over tourists are willing to spend an average US\$50 (i.e. J\$1,000) per person on craft items/TJL products.
  - NB JTB statistics indicate that the stop-over tourists spend an average of US\$100 per person on shopping. We assume that at least 50% may be for art and craft and souvenir items.
- 4. Assume a breakdown of visitors as follows:

		Prob to To	US\$ Avg. Exp. Per Person	
30% Cruise Ship Passengers	300,000	100%	300,000 Visitors	10.00
70% Stop over Visitors	700.000	50%	350.000 Visitors	50.00
	1,000,000	65%	650,000 Visitors	

Therefore, the potential tourist market is estimated at US\$38,000,000 or J\$760,000,000.

5. TIL can access at least 60% of these visitors and will realise sales 50% of the time. (i.e. 600,000 visitors x J\$760 potential expenditure x 50% sales realised = J\$228 Million).

Therefore the potential sales revenue to TJL represents about 30% of the tourist market. A conservative, but challenging, market share target of 5% of the tourist market in 5 years is selected.

- 6. Non-tourist local sales maintain a stable 20% growth annually.
- 7. Export sales annually maintain a steady moderate growth and measure approximately 1% of non-tourist local sales.

# SECTION 3 CRAFT DEVELOPMENT AND TRAINING

# THINGS JAMAICAN LTD. MANAGEMENT AUDIT CRAFT DEVELOPMENT AND TRAINING

#### 1. CRAFT DEVELOPMENT AND TRAINING FUNCTION

#### 1.1 SCOPE AND OBJECTIVES

- 1. To review the organisation, strategies and activities of the Business Development and Training Division of TJL and assess its strengths, weaknesses and effectiveness in achieving the mission of TJL.
- 2. To recommend changes to the objectives, strategies and activities of the Division as appropariate to achieving the TJL mission.
- 3. To recommend changes to the organisation structure and staffing where appropriate to increase the effectiveness of the division.

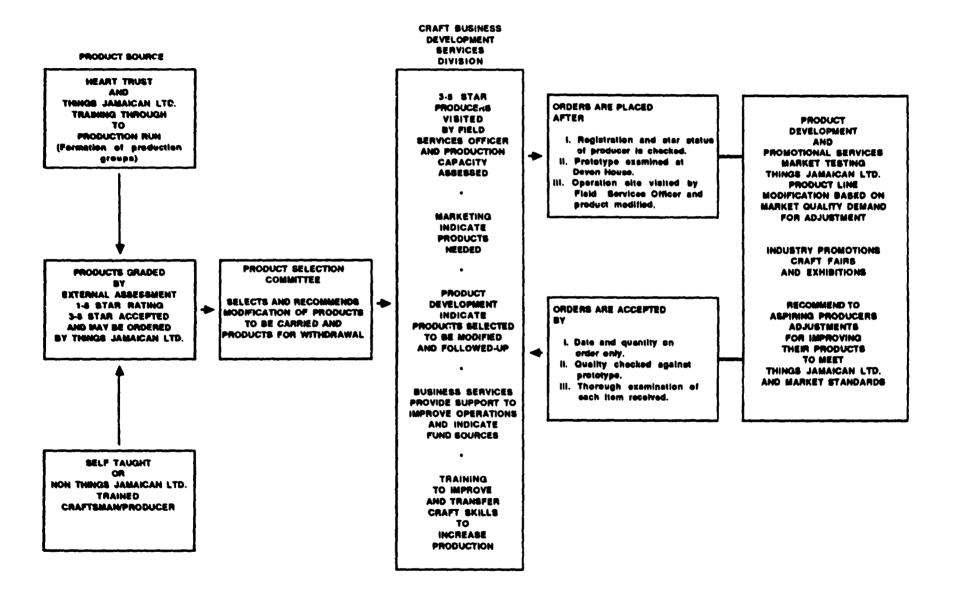
#### 1.2 OUR UNDERSTANDING OF THE FUNCTION

#### 1.2.1 The Mission of the Business Development and Training Division

To increase the variety and the quantity of high quality, marketable Jamaican craft items by introduction of relevant support programmes aimed at encouraging productivity, employment and improvement in foreign exchange earnings within the sector.

This division of the TJL is responsible for the activities which most directly carries out the mission of TJL to facilitate the overall development of the craft industry in Jamaica. This division organises craft skills training workshops and generally assist craftpersons to become economically viable business persons. In fulfilment of this mission the activities of this division are as follows:

#### **CRAFT BUSINESS DEVELOPMENT SERVICES**



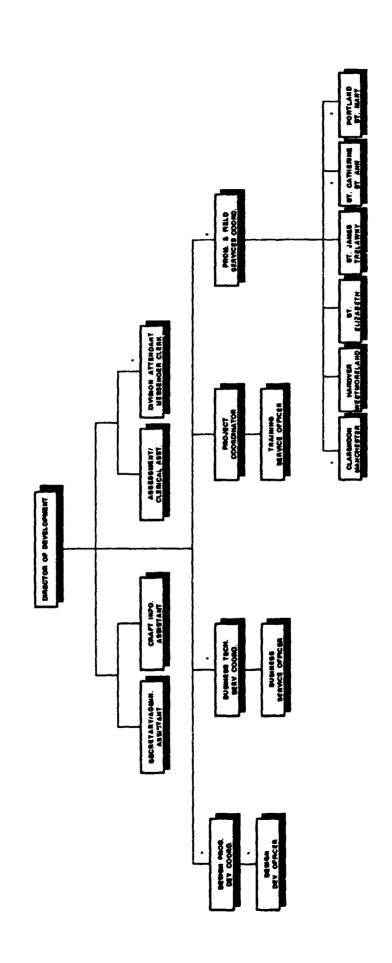
#### 1.2.2 Summary of Activities

- Skills Training Craft Skills Upgrading and Production
- Production Efficiency and Technical Services
- Business Counselling, Research and Evaluation
- Group Production Workshops
- Raw Material Planting Projects
- General Apprenticeships and Scarce and Dying Skills Programme
- Design and Product Development
- Prototype Assessment, Certification, Samples and Test Orders
- Business/Entrepreneurial Training
- Industry Promotions Regional and Local Fairs/Overseas Promotions
  - Marketing Craft Month Activities
  - Craft Producers Association Development and Producer Promotion

The chart entitled Craft Development Services illustrates the interrelationship of activities within the Division. (See page facing).

The Business Development and Training Division is headed by a Director who is supported by a team of training specialists, small business advisers and field officers as depicted in the organisation chart over page. This chart shows 18 positions, however, the existing staff complement is ten persons including the Director and two Peace Corps Volunteers who are acting as field officers in Western Jamaica.

THINGS JAMAICAN LIMITED
EXISTING ORGANIZATION STRUCTURE: BUSMERS DEVELOPMENT A TRAINING DIVISION



. WACART

#### 1.3 FINDINGS AND OBSERVATIONS

#### 1. Strengths

- The existence of documented divisional plans.
- The continuity and commitment of the current Director, Business Development and Training.
- The services of a part-time professional ceramist from Japan is available to the ceramic department.
- Field Officer in St. Elizabeth.
- Two Peace Corps Volunteer Field Officers for St. James/Trelawny and Hanover/Westmoreland.
- Successful training and placement of craftpersons.
- Plans for installing a Management Information System.
- The availability of the knowledge and experience of a craft adviser with some 20 years of involvement in the Jamaican craft industry.

#### 2. Weaknesses

- Dependence on government and aid financing.
- Inadequate funding for development activities.
- Inadequate Management Information System.
- Absence of an up-to-date register of craft producers and inadequate information on supply capacity for planning purposes.
- Inadequate number of field officers for the remaining parishes.
- Reported breakdown in the effectiveness of the Product Assessment committee which may result in the acceptance of products of unsatisfactory quality or design.

#### 3. Opportunities

- The existence of Parish Craft Associations which facilitates communication with craft producers islandwide for craft development activities.
- Access to overseas volunteers, eg. from Japan and China who are willing to aid craft skills development in ceramics, straw work, bamboo craft.

- Strong demand locally for craft products particularly from the tourist market which makes self employment as a craft producer or as a craft vendor a viable economic activity. The tourist market for craft souvenir items is conservatively estimated at J\$1,000 million.
- International and local funding agencies for craft development projects and for small business development and self-employment programmes.
- The availability of technical support and business counselling services from local agencies such as JAMPRO, JETCO, NDF, SBA, CAST Entrepreneurial Development Centre.
- The large pool of talented Jamaican master crafts persons and artists to be tapped as resource persons for product design and development, and skills training. (See Appendix Item of Potential Resource Persons).
- The existence of the Jamaica Bureau of Standards to assist with the development of a quality control programme.
- Large numbers of willing participants for craft skills training programmes.
- Existence of community colleges in Montego Bay, Ocho Rios, Mandeville, Portmore and Kingston which could possibly conduct special basic business skills training programmes for craftspersons, especially during the summer holidays.

#### 4. Threats

- The potential withdrawal or reduction of funding from government and aid agencies.
- Inconsistent quality and lack of variety in craft products and designs.
- Problems sourcing raw materials, tools and equipment.
- The dependence on foreign exchange for imported raw materials such as pewter and ceramic glazes.
- The potential depletion of local raw material resources.
- The poor image of TJL amongst master craftspersons resulting in some reluctance to become involved in TJL workshops and craft development activities.
- The impact of inflation on the costs of the craft development and training programme.

#### 1.4 RECOMMENDATIONS

#### Mission and Objectives

- 1. We recommend that the Business Development and Training Division should focus its activities on:
  - Craft Skills Training
  - Business Skills Training
  - Quality Control Standards
  - Raw Material Replanting Projects
  - Market Networking between Craft Producers and Buyers
  - Encouraging Craft Producers to be self-sufficient business persons
  - Maintaining an up-to-date register of craft producers islandwide, recording their supply capacity, and their classification using a five star rating system.

#### Role of the Field Development Officers

2. By providing the main liaison between TJL and craft producers islandwide, the field development officers play a critical role in ensuring the effective accomplishment of the TJL mission. Priority must be given to developing and staffing this service. We agree that six or seven Field Development Officers are required to effectively cover the island. Although under the direction of the Craft Development Division, the field service plays a vital role in the distribution and quality control of craft products islandwide.

The recommended activities and role of the Field Development Officers are summarised below:

#### Responsibilities:

- Quality control and feedback to craft producers.
- Expediting orders and coordinating collections from craft producers i.e. ensuring delivery to TIL.
- Contact and sourcing of craftpersons.
- Sourcing of raw materials.
- Monitoring the raw material replanting projects.
- Liaison between craft producers and craft buyers.
- Liaison between craft producers and TJL head office.

- Liaison between craft producers and TJL retail outlets.
- Liaison with Craft Producers Association on matters of training, quality, design, business advise.
- Assist with Business Counselling to Craft Producers and Vendors.

#### **Qualification and Training:**

- College Diploma graduates in any one of the following disciplines: Business Administration, Technical and Craft Skills, Education, Agriculture, Socio-Economic Studies with at least two years' working experience at a supervisory level or equivalent.
- Specialised training in Marketing, Craft Production Techniques, Quality Control, Human Relations Skills, Communications Skills and Business Counselling Skills.
- Holders of a valid drivers license.

#### Reports To:

Field Services Coordinator

#### Locations:

- Essentially a travelling job within the designated regions, as follows:
  - Manchester and Clarendon
  - St. Elizabeth
  - Hanover and Westmoreland
  - St. James and Trelawny
  - St. Ann and St. Catherine
  - St. Mary and Portland
  - Kingston, St. Andrew and St. Thomas

#### Business Development

TJL should make greater use of external facilities for on-going business development of the craft producers rather than attempting to duplicate such services. For example, Small Business Association, JAMPRO, JETCO NDF, CAST Entrepreneural Services, Self-Start Fund.

TJL should use its business skills workshops and its relationship with these institutions to facilitate the introduction of the craft producers to these business development agencies and their services. However, TJL should seek to wean the craft producers from an on-going dependence on TJL for free business development services. Consequently, we do not support the request for a Business and Technical Services Coordinator.

- 4. When not conducting training workshops, the Business Skills Training Officer could also provide assistance to craft producers to complete applications to these agencies for assistance. However, business training workshops should devote time to teaching craft producers how to select and approach the various agencies for assistance. Field Officers should also be trained in Business Counselling and assist in providing this service to craft products.
- 5. There is need for collaboration between the marketing and Production Division and the Craft Development and Training Division on design and product development projects so as to pool resources efforts and initiatives.

#### Design and Product Development

6. We recommend that TJL strengthens the necessary linkages and makes greater use of external talent to generate ideas for design and new product development.

Jamaica abounds with talented artists and crafts persons who could be resource persons to TJL in the following areas which focus on new product development and design, quality standards and skills training:

- New Product Development and Assessment
- Conducting Design Workshops
- Development of Designer Lines
- Craft Skills Training
- Quality Control (Standards and Assessment)

The list of potential resource persons in the Appendix seeks to be illustrative rather than exhaustive. TJL Board and Executives should determine a group of resource persons and establish contact and rapport to facilitate craft development on a national basis.

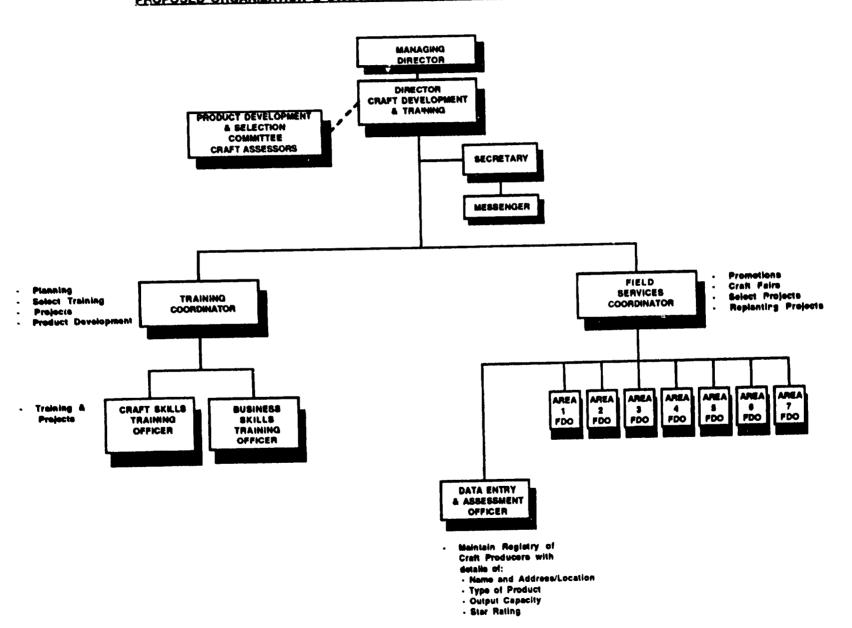
- 7. Revitalise the Product Selection Committee and rename the Product Development and Assessment Committee with responsibility for directing the new product development process. This committee could include external members drawn from the list of potential resource persons.
- 8. A series of design workshops could be held periodically (eg. twice per annuam) in select locations islandwide (eg. Montego Bay, Ocho Rios, Morant Bay, Mandeville and Kingston) for new and established craft persons. TJL would coordinate the development and administration of these workshops and contract the services of established designers, artists and master craft persons to conduct the workshops. The purpose of these workshops should be to stimulate the creativity of the craft producers and teach design techniques so that they can create their own unique designs on an ongoing basis.
- 9. Annual design and new product competitions could be promoted in conjunction with the National Festival Commission and special TJL awards conferred in addition to the Festival Competition medals.

- 10. Through the Parish Craft Producers Associations, each parish should be encouraged to develop its own unique theme of designs and products so as to ensure variety.
- 11. TJL should periodically commission the services of artists, master crafts persons and name designers to develop designer lines as well as standard TJL lines for products made in the ceramic and pewter departments. This would eliminate the need to employ on a full-time or ongoing contract basis the services of design and product development officers. These designs would be submitted to the Product Development and Assessment Committee for assessment and approval.
- 12. The Craft Development and Training Division should organise a series of workshops to facilitate the development of the attractions souvenir line described in the marketing section of this report.

#### Organisation and Staffing

13. The recommended organisation structure and staffing are indicated in the chart over page. We recommend that the Division be called the Craft Development and Training Division as this reflects the Division mission and activities more closely than Business Development which tends to be misleading.

# THINGS JAMAICAN LIMITED PROPOSED ORGANIZATION & STAFFING: CRAFT DEVELOPMENT & TRAINING DIVISION



#### APPENDIX 1

# POTENTIAL RESOURCE PERSONS

#### **Ceramists**

- 1. Norma Harrack
- 2. Marjorie Keith
- 3. Walford Camrbell
- 4. David Dunn
- 5. Cecil Baugh
- 6. Jean Bushay Taylor

#### Crafts Persons

- 1. Janey (Montego Bay) (Hand Painted Craft and Garments)
- 2. Earl Franklin (Copper and Brass/Leather-Craft)
- 3. Evans Goldson (Cabinetmaker)

# Fabric and Fashion Designers

- 1. Betti Campbell
- 2. Ruth Francis
- 3. Dawn Scott
- 4. Colin F
- 5. Ivy Ralph
- 6. Virginia Burke

#### **Artists**

- 1. Judy McMillan
- 2. Angela Staples
- 3. Fitz Harrack
- 4. Cecil Cooper
- 5. Albert Huie

- 6. Van Pitterson
- 7. Rodney
- 8. Susan Shirley
- 9. Susan Alexander

#### School of Art

1. Gerry Craig

#### Interior Designers

- 1. Beverly Rousseau
- 2. Hester Rousseau
- 3. Sharon Thomas
- 4. Donna Stephens
- 5. Dianne Fennell
- 6. Wanda Stephens

#### **APPENDIX 2**

#### JOB DESCRIPTIONS

#### 1. DIRECTOR, CRAFT DEVELOPMENT AND TRAINING

#### Responsibilities:

- Direct the strategic and annual planning and budgeting exercise for the division.
- Coordinate the overall activities of the division to ensure effective implementation of programmes.
- Liaise with the Product Development and Assessment Committee and the Director, Marketing and Production on the development of new products and designs.
- Collaborate with the Director, Marketing and Production on the promotion of craft the Jamaican craft industry to ensure the pooling of resources and ideas into an effective focused campaign.
- Ensure that effective relations are established and maintained with the Craft Producers.
- Liaise with funding agencies and consultants on craft development projects, eg. UNDP, NDF.
- Liaise with technical support agencies as required to ensure effective implementation of craft development programmes, eg. JAMPRO, HEART, IICA.
- Conduct/coordinate special studies and projects as required; and delegate select projects to reporting staff, as appropriate.

#### Reporting To:

Managing Director

#### Qualifications, Experience and Training:

- Bachelors Degree in Education/Educational Administration, Human Resource Development or Business Administration.
- Training in project management, strategic planning, human relations management, curriculum development.
- Sound knowledge and exposure to craft and the Jamaican craft industry.
- Strong oral and written communications skills.

At least 10 years' working experience in related areas such as human resource development (including training or teaching) project management, to include at least 5 years at management level.

#### Location:

Bumper Hall

## 2. TRANNG COORDINATOR

#### Responibilities:

- Co-ordinate the planning of the annual craft skills training programme and business skills training programme.
- Co-ordinate/conduct training needs assessment exercises as necessary, and coordinate the development of new training programmes and evaluate the dectiveness of existing programmes.
- Ensure that the teaching of established quality standards and quality control achniques are incorporated into the craft and business skills training programmes.
- Co-ordinate the implementation and administration of all skills training programmes.
- Ensure the availability of adequate staffing, equipment suppliers, venues, somotion etc. to facilitate the implementation of training programmes.
- Conduct select training programmes, as necessary.
- Conduct or coordinate select projects as required by the Director, Craft Development and Training.
- Monitor the Apprenticeship Programme and the Scarce and Dying Skills Programme.
- Liaise with the Product Development and Assessment Committee, as aguired.

#### Qualification and Training:

- Diploma in Education/Business Education or Human Resource Development or Business Administration with training in craft skills.
- At least seven years' working experience to include teaching/training and administration and at least two years' at a managerial level.

#### Reports To:

- Director, Craft Development and Training

#### Location:

- Pumper Hall/Head Office

#### 3. CRAFT SKILLS TRAINING OFFICER

#### Responsibilities:

- In conjunction with the Training Coordinator, develop the annual schedule for the craft skills training programme.
- Conduct training needs assessment exercises in communities islandwide as directed by the Training Coordinator.
- Assist with the design and development of craft training workshops and programmes.
- Keep abreast of quality standards and quality control techniques and improved craft techniques and incorporate into the syllabus for the craft training courses.
- Ensure the effective delivery of all craft training:
  - identify and acquire/contract the necessary resources, eg. craft materials and teaching aids, venue and equipment, craft teachers.
  - source and register participants for training programmes.
  - evaluate the performance of craft teachers and craft trainees and prepare reports for submission to the Training Coordinator and Director, Craft Development and Training.
  - teach select craft training courses.
- Conduct or assist with the conduct of select projects as required by the Training Coordinator and/or the Director, Craft Development and Training.

#### Reports To:

Training Coordinator

#### **Qualification and Training:**

- Technical High School Graduate and training in craft skills, teaching and curriculum development. At least two years' working experience in related areas
- Sound communication and human relations skills.

#### Locations:

- Bumper Hall, but travels islandwide, as required.

#### 4. BUSINESS SKILLS TRAINING OFFICER

#### Responsibilities:

- In conjunction with the Training Coordinator, develop the annual schedule for the business skills training programme.
- Conduct training needs assessment exercises in communities islandwide as direcal by the Training Coordinator.
- Assist with the design and development of business training workshops and programmes.
- Liaise with Community Colleges and other business training institutions on the development and delivery of ongoing business skills training programmes suitable for the craft producers needs.
- Assist craft producers with applications/introduction to funding institutions and small business support agencies, as required.
- Keep abreast of quality standards and quality control techniques and improved business techniques and incorporate into the syllabus for the business training courses.
- Ensure the effective delivery of all business training:
  - identify and acquire/contract the necessary resources, eg. course materials and teaching aids, venue and equipment, business teachers.
  - source and register participants for training programmes.
  - evaluate the performance of business teachers and course participants and prepare reports for submission to the Training Coordinator and Director, Craft Development and Training.
  - teach select business training courses.
- Conduct or assist with the conduct of special projects as required by the Training Coordinator and/or the Director, Craft Development and Training.

#### Reports To:

Training Coordinator

## **Qualification and Training:**

- Certificate in Business Studies or Business Education from a recognised tertiary institution plus training in teaching/training skills.
- At least two years' experience in teaching, training or development of training programmes.
- Practical business experience would be an important asset.
- Sound communication and human relations skills.

#### Location:

- Bumper Hall, but travels islandwide, as required.

#### 5. FIELD SERVICES COORDINATOR

#### Responsibilities:

- Develop the annual plan and budget for the field officers programme.
- Direct the implementation of the field officer programme, monitor the performance of the officers and evaluate the effectiveness of the programme.
- Direct the development and implementation of the Raw Material Replanting Programme.
- Liaise with the Director, Marketing and Production as necessary to facilitate craft buying and order expediting through the field officer/craft producer network.
- Ensure the development and maintenance of a registry/database of craft producers islandwide.
- Participate in the planning and organisation of the Annual Craft Fairs/Triennial Craft Expositions and ensure the effective communication and follow-up with the craft producers and coordinate the input of the craft producers.
- Liaise with the Craft Producers Associations (i.e. umbreila body and at parish levei) and maintain harmonious relations between the craft producers and TIL.
- Participate in the planning and implementation of promotional activities as required by the Director, Craft Development.
- Coordinate or conduct select projects as requested by Director, Craft Development and Training.

#### Reports To:

- Director, Craft Development and Training.

#### **Qualification and Training:**

- Diploma in Social Studies, Business Administration or Education.
- Training in management and supervisory skills, project management, communications and human relations skills.
- At least seven years' working experience in social work, teaching to include at least two years' at a managerial level or a senior administrative level.

#### Location:

- Bumper Hall, but travels islandwide as required.

#### 6. DATA ENTRY AND ASSESSMENT CLERK

#### Responsibilities:

- Maintain the Registry of Craft Producers with details, name and address/ location, type of product, output capacity and star rating.
- Prepare reports, as required.
- Provide clerical and secretarial support for assessment activities.
- Assist Field Services Coordinator as required on special projects.

#### Reporting To:

Field Services Coordinator

#### **Oualifications and Training:**

- High School Graduate (4 GCE/CXC 'O' Level subjects) with computer/PC operating skills, basic analytical skills, and sound written communication skills.
- At least one year's working experience at a clerical level would be an asset.

SECTION 4
PRODUCTION

# THINGS JAMAICAN LIMITED MANAGEMENT AUDIT PRODUCTION

#### 1. PRODUCTION

#### 1.1 SCOPE AND OBJECTIVES

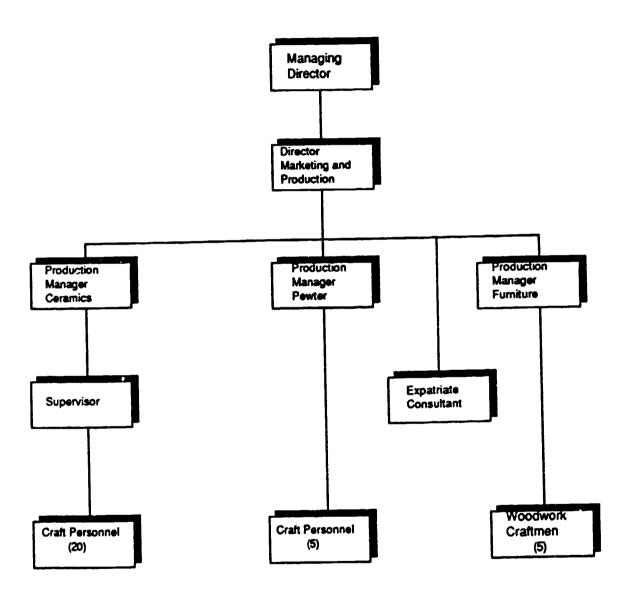
We have reviewed and assessed the production department and its facilities for their effectiveness to maximise production and profitability while expanding craft training. This was to determine if there were potential issues which impede production and training in terms of the following criteria.

- Appropriateness of the organisational framework to effectively provide the technical and managerial skills and techniques to improve product quality while reducing operating cost.
- Appropriateness of policies, information and production systems and procedures for effective production planning and control.
- Adequacy of machinery/equipment, layout and raw material to effectively maximise production and improve product quality.

#### 1.2 UNDERSTANDING OF FUNCTION

Things Jamaican Limited (TJL) operates a production department that is headed by a Marketing and Production Director who is responsible for the planning and co-ordinating activities of the ceramics, pewter, and furniture product lines. The organisation chart on opposite page 80 shows the existing staff complement which include a Production Manager and five (5) craft personnel for the Pewter Section and Production Manager and twenty (20) craft personnel for the ceramic section and Production Manager and five (5) craft personnel for the furniture section.

#### THINGS JAMAICAN LIMITED EXISTING PRODUCTION CHART



#### Ceramic Product Lines

The Ceramic Product Lines range from small ash trays to large vases and figurines in the casting process and other hand-made products in the throwing process. The casting process involves the production of moulds from plaster of paris in which liquid clay is poured to produce the various ceramic products. The throwing process involves the manufacturing of ceramic products by shaping the slip clay by hand and throwing wheels. The five main stages of the manufacturing process of both the casting and throwing process are:

#### Clay Stage

This stage involves the preparation of the raw material to required standard, design of new models and mould making.

#### - Casting Stage

This stages involves the pouring of the liquid clay for the manufacturing of the product castings.

#### - Bisque Stage

This stage involves the heat treatment of product castings by kiln baking to achieved desired standard.

#### - Glazing Stage

This stage involves the surfacing preparation and painting, designs and decoration.

#### Finished Good Stage

This stage involves the final quality control inspection which is conducted by a committee made up of in-house and external ceramic specialists. At this stage the first class products are separated from the second class for despatching to finished goods warehouse.

#### Pewter

Pewter operation involves the manufacturing of various product lines from pewter, an alloy of tin, copper and angimony. Some pewter products are tablewares, ash trays and collectors items. The manufacturing process involves product design, mould making, and the manufacturing of product from molten pewter and pewter sheets. These products are manually and mechanically trimmed to finishing standards before polished into finished products.

#### 1.3 FINDINGS AND OBSERVATION

TIL has a twofold objective for its production department. This objective is:

- To conduct craft training for young Jamaicans as a means of expanding the island's craft industry, and
- To attain financial viability for all its ceramic, pewter and furniture product lines.

TJL markets its products from thirteen (13) local outlets, six (6) of which are owned and operated by TJL while the other seven (7) are leased to private interests. Although there are high demands for these products TJL has been operating at a loss since its inception in 1964.

Issues evolving from our findings and observations that impede the financial viability of its operations and the growth of the islands craft development relative to the following areas are:

#### 1.3.1 Ceramic Section

The following issues have been identified as factors which prohibit the financial viability and ceramic craft development in this area.

1. The unavailability of qualified staff to design new products, carry out effective management and quality control during processing cycle of all the products.

This is evidenced by:

- high percentage of second class products with minor defects that could have been corrected during the processing cycle if qualified personnel was available to carry out the necessary quality control;
- lack of proper production records and procedures;
- lack of short and long term production planning,
- inability to develop new products and designs.

#### 2. Lack of proper supervision

This is evidenced by:

- under-utilization of craft personnel
- early stoppage of work. For example, production comes to a halt at approximately 2 p.m. on each pay day, an estimated loss in production time of 2 hours/person or 50 hours per week based on present craft workforce.
- poor work attitude displayed by some workers.

## 3. Inadequate equipment maintenance and replacement of old and inefficient machines.

This is evidenced by:

- approximately 60% downtime that is being experienced from the six kilns within the Ceramic Department. The high percentage downtime is due to:
  - -- iack of proper maintenance to kiln burners
  - -- heavy firing of kilns, which seems to indicate a lack of knowledge in using kilns,
  - -- wrong type of kiln for mass production
  - -- kilns are old and require major interior overhaul.
- at the time of this study only one (1) out of the four (4) throwing wheels was in operation. As stated in a previous report conducted by Ceramic Lecturers from the Edna Manley School for the Visual Arts, these wheels are not suited for industrial operations and should be replaced;
- the ball mill is inadequate for present production level;
- other essential machines are either down for repairs or inadequate for industry operation. For example, the mixers, filter press and jigger and jolly machines.
- 4. Short mould life of moulds that are made from 30 grade plaster of paris.

This is evidenced in the average mould life of thirty-five (35) castings that are produced when compared to an average of 70 castings if 100 grade plaster paris is used at the same preparation cost. This information was taken from a technical report prepared for TIL by Geoff Crispin, Ceramics Consultant.

#### 5. Low weekly wages and lack of incentive programme

This is evidenced by:

- high turnover of craft personnel;
- low qualification level of existing craft personnel;
- difficulty for training to be effective in any reasonable period of time;
- craft employees who remain for any length of time are generally from the surrounding, depressed areas hence the display of poor work attitude;
- lack of incentive programmes to encourage productivity.
- 6. Lack of documented policies and procedures to effectively administer and control routine and long term maintenance and production programmes.

This is evidenced by:

- lack of structured approach to production planning and scheduling;
- high percentage downtime of equipment/machinery;
- difficulty in acquiring information on production and maintenance activities;
- lack of production order form.
- 7. Lack of structured approach to product cost development for ceramic products

This is evidenced by:

- difficulty in isolating cost elements input to the manufacturing of products;
- difficulty in identifying and establishing standard cost and the conduct of cost variances analysis;
- inadequate documentation of cost data.

#### 1.3.2 Pewter Section

The following issues have been identified as factors which prohibit the financial viability of pewter products and their development.

#### 1. Lack of effective supervision and technical knowledge

This is evidenced by:

- poor product quality;
- inadequate and old designs;
- poor worker attitudes and high percentage absenteeism.

#### 2. Lack of effective production planning and scheduling.

This is evidenced by:

- lack of production order forms an indication that production orders are verbally planned and scheduled;
- Production Manager indicated that most of the product designs and production volumes are based on his own initiative;
- no evidence of long term planning in that orders are spontaneously given to Production Manager based on current market needs.

#### 3. Low Worker Morale

This is evidenced by:

- lack of strategic direction from top management over the years;
- low wages;
- lack of counselling and external training programmes;
- high percentage of staff turnover.

#### 4. High Percentage of Equipment Downtime

This is evidenced by:

- lack of spare parts inventory;
- outdated casting machines;
- lack of preventative maintenance programme.

#### THINGS JAMAICA LIMITED

#### **CERAMIC SECTION**

#### EXISTING FACILITIES LAYOUT AND PROCESS FLOW

#### **LEGEND**

#### Layout

WP - Wash Pond

G - Liquid Clay Piping System to Casting Stations

ST - Liquid Clay Storage Tanks

M - Mould Racks

1-5 - Mould Casting Stations

6-7 - Figuring Casting Stations

CR - Mould Casting Racks

PCR - Portable Casting Racks

14-18 - Fetteling and Spounging Stations

PR - Paint Room
WB - Wash Bench

**Process** 

SC - Solid Clay

PP - Plaster of Paris

A - Mould Castings

B - Figurine Castings

C - Throwing Castings

D - Throwing a Mould Castings from Bisque Kiln

E - Figurine Castings

F - Throwing and Mould Castings from Glade Room to Glaze Kiln

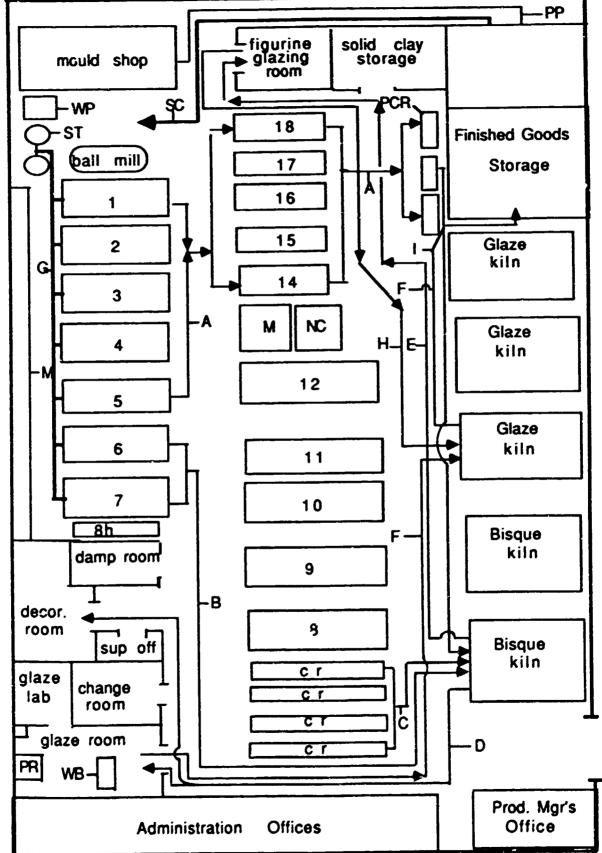
H - Figurine castings to glaze kiln.

I - All Castings from Glaze Kiln to Finished Goods for Quality Control

Inspection and Sorting for Delivery to the Marketing Department

#### THINGS JAMAICAN LIMITED

**Existing Ceramic Layout and Process** solid clay



OPPOSITE PAGE 85A

#### 5. Reduction in Mould Shelf Life

This is evidenced by:

- the high percentage rejects in rubber moulds caused by improper storage and handling;
- the poor quality of castings manufactured with the rubber moulds after a short mould life.

#### 1.3.3 Layout and Ergonomics

The following issues have been identified as factors which reduce productivity and efficiency in both the Ceramic and Pewter operations. However, the layout issues identified are directly related to the Ceramic Section and as such will be addressed only for that section. Opposite pages 85A and 85B shows the layout and process flow and their corresponding symbols respectively of this section.

#### 1. Inefficient handling of raw and in-process material

This is evidenced by:

- manual handling of liquid clay for the casting stations.
- double handling of in-process materials at the fettling and spunging stations.
- disorganization in the storage of raw material. For example, the clay material is stored in three different locations which increases the travelling time of raw material.

#### 2. Disorganized and unmarked moulds

This is evidenced by:

- mould racks are stocked with all different types and size moulds which makes it difficult to easily identify a specific mould(s).
- reduction in mould life due to poor handling.

## 3. Inadequate identification of the main manufacturing stages and production stations

This is evidenced by:

- lack of floor boundaries to differentiate production area and an isles space in the ceramic section.
- lack of identification signs to identify the different production stations.

#### 4. Faulty electrical fixtures and inadequate lighting

This is evidenced by:

- at least 30% of the lighting fixtures are not working or without bulbs.
- dangling electrical wires in some areas.

## 5. Lack of safety signs, fire extinguishers and fire hoses in the production department

This is evidenced by:

- Lack of structured safety, security and fire prevention programmes.

#### 6. Poorly designed work benches and chairs

This is evidenced by:

- some chairs are too low for the height of the work benches while some are too high.
- the seats of the benches are made from iron or wood without any cushion to reduce the stress on employees over a prolonged period.
- some storage racks are without wheels which make them difficult to move manually.

#### 7. High percentage of manual operation

This is evidenced by:

- 75% of the pewter craft is manually performed.
- Liquid clay is transported manually in drums from the storage to various work stations.
- Washing of castings are done by using buckets to catch water which makes the washing operation inefficient.

#### 1.3.4 Furniture

Furniture manufacturing operations at TJL started in 1964 and stopped in 1986 due to a combination of factors which impacted negatively on the company's profit. The new board of directors after analysing the various factors contributing to its closure were faced with the following three (3) options:

- 1. Sale of the furniture assets including factory, machinery and equipment.
- 2. Lease the furniture assets including factory, machinery and equipment.
- 3. Refurbish all assets and operate as a joint venture with a private sector interest.

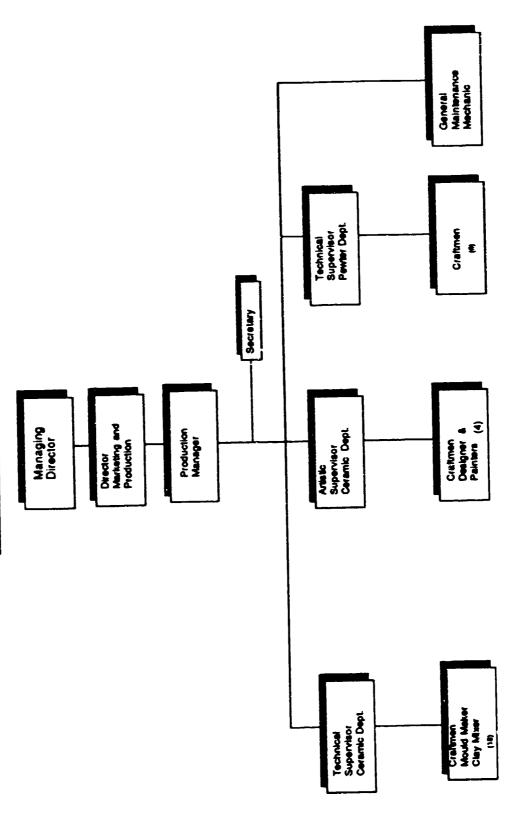
The option to refurbish all the assets and operate as a joint venture has been approved and implementation started in September 1991. It is our understanding that the manufacturing of furniture will operate as a subsidiary of TJL with TJL as the major shareholder.

#### 1.4 RECOMMENDATIONS

The following recommendations have been developed to address our findings and observations. Their purpose is to:

- 1. Improve manpower planning and career development.
- 2. Improve management control in order to reduce operating expenses.
- 3. Improve equipment/machinery utilization and efficiency.
- 4. Improve quality control.
- 5. Improve layout and working conditions.

THINGS JAMAICAN LIMITED PRODUCTION DEPARTMENT PROPOSED ORGANISATION CHART



1992-97 PROJECTED CRAFT WORK FORCE Penner

Ceramica

1992 - 22 1993/94 - 24 1995/97 - 27

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#### Short and Medium Term

#### 1. Improve manpower requirements and career development.

In order to effectively achieve the goals and objectives of the Production Department we recommend (on opposite page) the organization structure. The position roles are presented at this stage to give a functional picture of the structure and the position requirements.

#### Position Roies and Requirements

#### Production Manager

This position will be a technical managerial position with core function of:

- Management responsibility for the human resources, machinery/equipment and manufacturing of products in the Ceramic and Pewter sections of the Production Department. This includes:
  - Planning and co-ordinating the production volumes of each product line within the two sections.
  - Maintaining all machinery/equipment.
  - Acquiring new machinery.
  - Ensuring that effective control measures are develop for raw material and products being manufactured.
  - Developing realistic costing of products.
  - Ensuring that effective training programmes are developed to expand the growth of ceramic and pewter craft in Jamaica.

#### Recommended Requirements

- First Degree in Industrial Arts Education/Industrial Management.
- Formal management training including human relations and management skills.
- Minimum of seven (7) years working experience in a production environment with at least three (3) years at a senior management level or equivalent experience.
- Hands on skills with micro-computer applications for production and cost control documentation and control.

TJL does not have any employee on staff who meets the above requirements, therefore our recommendation is to recruit from out side. Salary package for this position ranges from \$128,000 to \$148,000 plus, a fully maintained car.

#### Technical Supervisor - Ceramic Section

This position will be a technical supervisory position with core function of:

- Supervisory and technical responsibility for the quality control and production of ceramic products. This includes:
  - assisting in the production planning and scheduling of the various ceramic product lines.
  - assisting in product cost development.
  - conducting quality control inspection of raw material and inprocess goods.
  - monitoring of the production activities of the Ceramic Section.
  - assisting in training and the development of training programmes.
  - monitoring personnel utilization and productivity.

#### Recommended Requirements

- Diploma in Industrial Arts Education from a tertiary institution with specialization in ceramics.
- Formal supervisory training to include personnel and industrial relations skills.
- Minimum five (5) years working experience in mass production of ceramic products with at least two (2) years at the supervisory level.
- Ability to conduct quality control checks during the production process of all the products.

The incumbent who presently performs this function is not qualified both in technical and supervisory skills that are required to meet the objectives of the ceramic section. Further, the present TJL's staff does not have anyone who meets the above requirements, therefore our recommendation is to recruit from outside. Salary package for this position ranges from \$70,000 to \$85,000.

#### Artistic Supervisor - Ceramic Section

This position will be a technical supervisory position with core function of:

- Supervisory and technical responsibility for designs and implementation and glazing activities. This includes:
  - assisting in the development of new designs
  - mixing of colours
  - assisting in training and the development of training programmes.
  - monitoring of the painting and design activities for the ceramic product lines.
  - monitoring personnel utilization and productivity.

#### Recommended Requirements.

- Diploma in Industrial Arts Education with specialization in ceramics design and glazing from a tertiary institution.
- Minimum of five (5) years working experience in the artistic field with some supervisory exposure.
- Ability to conduct quality control inspections.

The incumbent who performs this function is an expatriate consultant and, therefore, recruitment would have to be from the outside. Salary package for this position ranges from \$70,000 to \$85,000.

#### Technical Supervisor - Pewter Section

This position will be a technical supervisory position with core function of:

- Supervisory and technical responsibility for designs and production of pewter products. This includes:
  - assisting in the development of new mould designs
  - assisting in training and the development of training programmes.
  - assisting in the care and maintenance of pewter machines and facilities.
  - monitoring personnel utilization and productivity.

#### Recommended Requirements

- Diploma in Industrial Arts Education with specialization in the area pewter design and product manufacturing.
- Minimum of five (5) years working experience in pewter product design and manufacturing.
- Formal supervisory training.
- Ability to conduct quality control inspections.

The incumbent who presently performs this function has fair technical knowledge, however, he would require additional technical and supervisory training to meet the long term objectives of the pewter section.

#### General Maintenance Mechanic

- Multi-skills in mechanical and electrical repairs.
- Ability to quickly diagnose mechanical and electrical problems.
- Minimum of five years' experience with at least two years as a multi-skills mechanic. Salary package for this position ranges from \$35,000 to \$40,000.

These salary packages are presented as an indication of the worth of the above positions and we further recommend that a job evaluation exercise is conducted to facilitate effective salary administration.

#### Performance Appraisal System

An official performance appraisal system should be developed and implemented, based on the department/sectional objectives and performance standards. The purpose should be to provide feedback to staff on a regular periodic basis - annually or semiannually and to support recommendations for training and development, promotions and salary increments.

#### Training Needs

The management and supervisory staff of the Production Department should seek refresher management and supervisory courses to improve their technical and management skills. Local institutions which offer such training are Jampro, Institute of Management and Production and Jamaica Institute of Management. Craft training outside of the on-the-job training are obtainable from the Edna Manley School for the Visual Arts. In addition, the management of TJL could negotiate to bring in Craft Specialist from English speaking countries to put on training seminars.

#### Incentive Programmes

In order to improve production and the earning power of production staff we recommend an appropriate incentive system be developed and implemented. Based on the existing product lines this would not be difficult if production data were available. However, we recommend that estimated production standards by product lines are developed and the system implemented until adequate data are available to 'fine tune' the system.

#### 2. Improve Management Control

In order to improve management control we recommend that the following management control tools are developed and implemented.

- Develop annual production plans to ensure proper communication relationship between market forecasts, customer's orders, manufacturing capacity and rates of production.
- Formalise the development of product costing so that expense variables can be easily monitored and accurate cost control and product pricing can be maintained.
- Develop a machinery/equipment preventative maintenance programme to ensure adequate servicing of machines/equipment and high availability.
- Identify structured quality control programmes to ensure quality checks throughout the manufacturing process from raw material preparation to finished goods.
- Develop production policies and procedures to guide the operations of the Production Department and its linkage to the other departments of TJL.
- Conduct weekly production planning meetings to include the Production Manager as Chairman, the three supervisors and where necessary the Director of Production and Marketing. These meetings should focus on short term production plans, any necessary modification to the annual production plan and should not last more than half an hour.
- Computerization of all relevant production data to ensure easy information retrieval and reporting. For example production plan to include raw material inventory, monthly production targets and monthly production reporting.
- Annual production chart with monthly production targets to visually guide actual production and highlight any variation from planned targets.

#### 3. Improve Equipment/Machinery Utilization and Efficiency

- Develop and implement a preventative maintenance programme to ensure high machinery/equipment availability.
- Establish a system whereby spare parts can be easily obtained.
- Refurbish all repairable machines/equipment and make immediate plans to replace those that have become old and obsolete. For example, at least three (3) of the kilns need immediate repairs and replacement of four (4) potters wheel, one (1) ball mill to achieve approximately 90% in availability in 1992.
- Assign machinery/equipment maintenance repairs and servicing activities to specially appointed person(s).
- Maintain a cardex/computerised maintenance system to ensure accurate maintenance history data on machine/equipment are kept and easily retrieved. A computerised system is only recommended if one is available because the small number of machines/equipment could not economically justify the acquisition of a micro-computer.

#### 4. Improve Quality Control

• Conduct detail analysis of the manufacturing process (raw material to finished goods) and establish strategic quality check points to ensure that any deviation from expected quality standard can be corrected.

In addition, we recommend that TJL fully implement the recommendation made by Mr. Geoff Crispin, Ceramic Specialist to use the #100 grade plaster of paris that will improve mould life from an existing average of 35 castings to an average of 70 castings while maintaining the same mould production cost. The effect of a good quality programme will produce the following results:

- less time will be needed to resolve manufacturing and purchasing problems.
- reduction in lead time and improvement in customer service.
- reduction in inventory levels since percentage scrap rate will be reduced hence efficient utilization of material.
- the overall effect in productivity gain is direct financial benefit to the production department.

Further, we recommend one of the following quality techniques to be developed and implemented by TJL for its Production Department and a Quality Control Programme as one of the core functions of TJL.

#### **Quality Audits**

The quality audit is a systematic review of operating procedures, process charts and parameters on a timely and informal basis.

#### **Ouality Circles**

Quality circles technique involves shop floor personnel as well as production supervisors in the review of quality parameters and production methodologies. By formally reviewing craft personnel's suggestions through the quality circle forum, many improvements can be realised and readily implemented to improve efficiency of the operation.

#### Ouality Control Programme

Quality Control has to be one of the core functions of TJL. This will require an organisation wide team effort with the Managing Director and the Director, Marketing and Production and the Director Craft Development sharing overall accountability.

The purpose of this note is to summarise the approach and identify the different team-players and their role in the Quality Control system.

A TJL Stamp of Approval System must be developed and implemented as referred to in other sections of this report. The project team responsible for developing this programme will determine all necessary details about the system and ensure a process that is economically feasible and which avoids bureaucratic rigidity.

All craft and non-craft products purchased or made by TJL for resale must satisfy the standards established to qualify for the TJL Stamp of Approval.

#### **New Products**

New products should be assessed by the Product Development and Assessment Committee.

#### **Purchased Products**

Existing products or newly approved products must be inspected in the field by Field Development Officers and/or TJL craft buyers before reaching the TJL warehouses. On receival at TJL warehouse or TJL retail outlets, products should also be examined and rejected if sub-standard.

#### TJL Manufactured Products

Products manufactured by TJL should satisfy quality control standards before being released to the FG warehouse. A Quality Control inspection procedure should be built into the production process and should involve the production staff, supervisors and managers who should all be held accountable for quality output. This accountability should be reflected in and reinforced by a productivity incentive scheme which does not pay out unless spoilage and re-work is contained within specified limits.

#### National Quality Assurance Programme

In the mid-term or long-term TJL may offer its services for a fee to inspect and stamp locally produced craft items which are sold by other craft distributors and retailers particularly for the export market. In fact by Year 3, TJL should seek to establish a Quality Control Department which offers an inspection service to craft exporters such that the TJL Stamp of Approval will be a guarantee of quality to the overseas market.

The TJL Quality Control Department would offer the following services:

- Inspection of craft producers facilities and raw materials and recommend changes to equipment and maintenance practices, production process, raw materials source and storage, packaging, etc. to ensure that satisfactory quality is achieved.
- Inspect finished goods for the local market and affix the TJL Stamp of Approval, or reject.
- Inspect finished goods for the export market, reject or approve; and prepare any documentation or certification related to quality inspection as may be required to meet export market specifications.

The team-players are summarised as follows:

- <u>Ouality Control Project Team:</u> must research and establish feasible quality standards and quality control procedures to guide the teamplayers in the quality control programme.
- <u>Craft Skills Instructors</u>: must teach techniques which ensures quality output and minimise material wastage.
- <u>Business Skills Instructors</u>: must teach the importance of quality output as a fundamental part of successful marketing and profitability.
- Product Development and Assessment Committee: must assess new products for acceptance on various criteria including quality standards.

- TIL Craft Buyers: (this group may include the Director, Marketing and Production, Regional Market Managers, TJL Retail Shop Managers, Field Development Officers) should inspect products at source to minimise the number of sub-standard products reaching the TJL warehouses and retail outlets.
- Field Development Officers: must communicate TJL quality standards to craft producers in the field and monitor and advise to ensure that only quality output is dispatched to TJL.
- TIL Retail Shop Managers: must identify and return any substandard items received.
  - <u>Craft Adviser to the Managing Director:</u> should advise the Managing Director as required and coordinate, or assist in the coordination of, the quality control project.

#### TJL Production Team:

- Production Manager: must ensure that a satisfactory Quality Control System and incentive system is implemented to minimise spoilage and maximise quality output.
- Production Supervisor: must ensure adequate staff training and monitor production techniques on a daily basis to ensure quality output and minimal spoilage.
- Production Staff: must accept training and take pride in quality output; must conscientiously practice approved production/craft techniques to ensure quality output and minimise individual and departmental spoilage rate.

#### External Agents:

- Jamaica Bureau of Standards: should provide technical assistance in the development of the TJL Stamp of Approval programme.
- The Craft Producers Association: the umbrella association and the parish associations should adopt the TJL quality assurance policy and ensure that members learn, and adhere to, the quality standards established.

## THINGS JAMAICA LIMITED

#### **CERAMIC SECTION**

## RECOMMENDED FACILITIES LAYOUT AND PROCESS FLOW

#### LEGEND

#### Lavout

WP - Wash Pond

ST - Liquid Clay Storage Tanks

G - Liquid Clay Piping System to Casting Stations

M - Mould Racks

1-5 - Mould Casting Stations

6-7 - Figurine Casting Stations

8-12 - Throwing Clay Stations

CR - Mould Casting Racks

PCR - Portable Mould Casting Racks

WB - Wash Bench

PR - Paint Room

14-18 - Fettling and Spounging Stations

#### **Process**

SC - Solid Clay

PP - Plaster of Paris

A - Mould Castings to Fetteling and Spounging Stations and then to Bisque

Kiln

B - Figurine Castings to Bisque Kiln

C - Throwing Castings to Bisque Kiln

D - All Three Product Lines to Glaze Room, Figurine Room and Selected

Casting Decoration Room

E - All Three Product Lines from Glaze Room, Figurine and Decoration Room

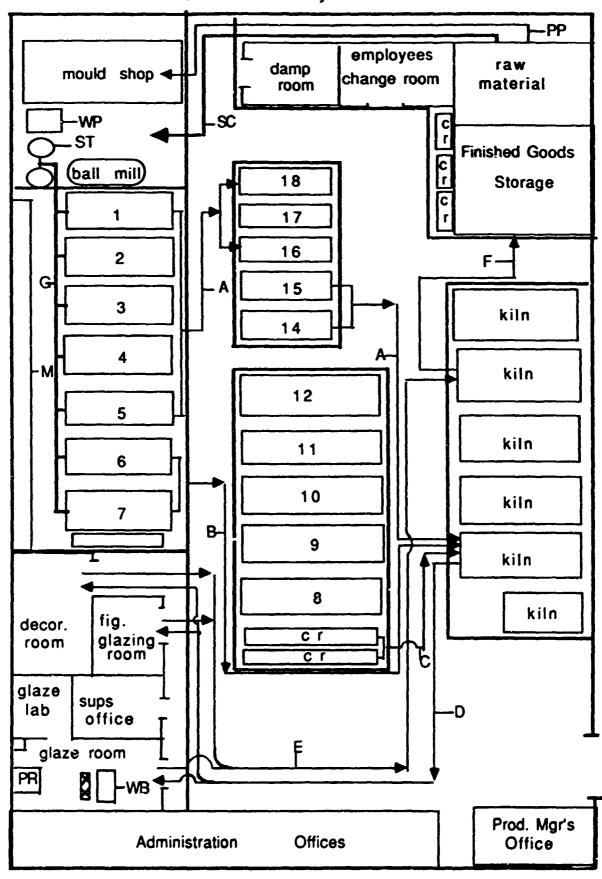
to Glaze Kiln

F - All Three Product Lines from Glaze Kiln to Finished Goods Storage for

Quality Control Inspection and Sorting for Delivery to the Marketing

Department

## THINGS JAMAICAN LIMITED Recommended Ceramic Layout and Process



OPPOSITE PAGE 97A

## 1.4.1 LAYOUT AND ERGONOMICS - RECOMMENDATIONS

The following recommendations have been developed to address our findings and observations. Their purpose is to:

- I. Improve activity relationship and space utilization.
- II. Improve ergonomics.

Opposite pages 97A and 97B shows our recommended process flow and layout chart and their corresponding symbols for the Ceramic Section.

#### I. Activity Relationships and Space Utilization

- The relocation of the slip clay temporary storage and the damp room storage
  is to centralise the storage of all clay raw material in order to reduce travel
  time to process and to keep all material in one location.
- The relocation of the change room is to create adequate office space for the Ceramic's Artistic and Technical Supervisors. In addition, it will be closer to the entrance of the shop to facilitate quicker change of working attire.
- The relocation of the glazing room is to centralise the glazing and decorative activities of the manufacturing process for easier quality control inspection and more effective supervision.
- Establishing boundaries, identification signs and the process flow of the manufacturing operation would improve process co-ordination and easier identification of the process.
- Identification numbers inscribed on moulds and storage of similar moulds relative to their workstation will reduce time spent searching for moulds, improve communication and minimise the errors in using the wrong moulds.

#### II. Working Conditions

- Acquisition of work benches and chairs design to improve ergonomics and reduce fatigue caused through prolonged sitting.
- Improve lighting and faulty electrical wiring.

- Install wheels on storage racks for easier transporting of casting during the
  operation of fettling, spunging and kiln treatment activities. This will
  reduce existing double handling and fatigue. In addition, the time spent on
  fettling and spunging activities could be reduced if two persons do the
  fettling while the other two do the spunging of castings.
- Reactivate the piping system that transport liquid clay to the various casting stations. This system will reduce the time for manually transporting liquid clay from the storage tanks to the work station. Further spillage and any contamination caused by atmospheric exposure of the clay will be reduced.
- Construct a wash pond at the drying rack to adequately accommodate at least three persons working simultaneously. This system will increase the washing rate of product castings and reduce the stress to manually transport water in bucket. A recommended location is indicated by xxxxs' in the recommended layout.
- Develop and implement as a matter of priority fire, security and safety programmes in order to reduce pilferage and prevent loss to life and property.

#### Long Term

- Develop a machinery/equipment replacement programme which will identify obsolete and high operating cost equipment/machinery. For example the programme should schedule one (1) Kiln replacement in 1995 and another in 1996 in order to increase efficiency and Kiln capacity.
- Develop 5-year production plan by incorporating market potentials and production machinery/equipment availability and efficiency.
- Establish small factories at strategic locations in Western and Eastern Jamaica in order to increase production volumes, expand craft development and create additional employment.
- Establish display booths at strategic locations in the overseas market place in order to increase foreign exchange earnings.

The implementation of the above activities in the short and medium term will increase machinery/equipment availability from its estimated 30% to approximately 90% which will have a direct impact on production volume, increasing from its existing 2250 units/month to approximately 8340 units/month with an estimated unit cost of \$24.30. In the long term production volume will increase to 11250 units/month with an estimated unit cost of \$26.23. Appendices I and II show a 5-year estimate of production and unit cost for the Ceramic & Pewter Sections, respectively.

#### Furniture Section

- Based on the joint venture agreement between TJL and National Insurance Fund in the manufacturing of furniture we recommend that the factory operates as a subsidiary of TJL with TJL holding majority shares.
- Management should focus on establishing competitive pricing and quality standards.

## THINGS JAMAICAN LIMITED CERAMIC 5-YEAR COST PROJECTION

	1991/92 EXISTING	SHORT TERM		MEDIUM TERM	LONG TERM	
		1992/93 AVG. MTH.	1993/94 AVG. MTH.	1994/95 AYG. MTH.	1995/99 AYQ. MTH.	1996/97 Avg. Mth.
PRODUCTION VOLUME (UNITS/8 HOUR SHIFT)	2250	4500	8430	8430	11250	11250
DIRECT OPERATING EXPENSE						
Raw Material Used Labour Electricity Water	\$8,978.00 \$35,321.00 \$7,000.00 \$1,600.00 \$3,000.00	\$18,316.00 \$50,509.00 \$8,750.00 \$4,000.00 \$7,500.00	\$34,312.00 \$63,365.00 \$10,938.00 \$7,494.00 \$14,050.00	\$41,174.00 \$72,870.00 \$13,672.00 \$9,368.00 \$17,563.00	\$49,409.00 \$92,075.00 \$17,090.00 \$9,992.00 \$21,954.00	\$59,290.00 \$105,886.00 \$21,362.00 \$12,490.00 \$27,442.00
Fuel (Propane Gas)     Protective Gear	\$2,800.00	\$3,080.00	\$322.00	\$4,073.00	\$1,065.00	\$5,389.00
SUBTOTAL DIRECT COST	\$58,699.00	\$92,155.00	\$130,481.00	\$158,720.00	\$191,585.00	\$231,859.00
INDIRECT OPERATING COST						
Salaries (1 person) (60% Prod. Mgr.)     Maintenance Cost     Interest 10%	\$6,000.00 \$2,500.00	\$24,817.00 \$68,736.00 \$1,392.00	\$30,400.00 \$7,500.00 \$1,392.00	\$37,241.00 \$7,500.00 \$1,392.00	\$45,620.00 \$2,500.00 \$3,892.00	\$55,885.00 \$1,000.00 \$6,392.00
SUBTOTAL INDIRECT COST	\$8,500.00	\$94,945.00	\$39,292.00	\$46,133.00	\$52,012.00	\$63,277.00
TOTAL PRODUCTION COST	\$67,199.00	\$187,100.00	\$169,773.00	\$204,853.00	\$243,597.00	\$295,136.00
ESTIMATED UNIT COST	\$29.87	\$41.58	\$20.14	\$24.30	\$21.93	\$26.23

#### NOTE:

- 1. Basis for cost projection development is shown in Appendix III.
- 2. Estimated repair cost for all 5 kilns submitted by Thermal Consultants Limited. This cost is subject to price change.

APPENDIX II

## THINGS JAMAICAN LIMITED PEWTER 5-YEAR COST PROJECTION

		SHORT TERM		MEDIUM TERM	LONG TERM	
	<u>1991/92</u> EXISTING	1992/93 AVG. MTH.	1993/94 AVG. MTH.	1994/95 AVG. MTH.	1995/99 AYG. MTH.	1996/97 AYG. MTH.
PRODUCTION VOLUME (UNITS/8 HOUR SHIFT)	1300	2600	5200	6500	6500	6500
DIRECT OPERATING EXPENSE						
Raw Material Used Labour Electricity Water Fuel Protective Gear	\$12,000.00 \$6,288.00 \$6,000.00 \$600.00 \$2,000.00	\$28,800.00 \$9,984.00 \$8,000.00 \$750.00 \$5,000.00 \$966.00	\$57,600.00 \$22,420.00 \$10,000.00 \$938.00 \$10,000.00 \$740.00	\$72,000.00 \$31,850.00 \$12,500.00 \$1,172.00 \$12,500.00 \$2,012.00	\$86,400.00 \$41,405.00 \$15,625.00 \$1,465.00 \$15,625.00	\$103,680.00 \$53,826.00 \$19,531.00 \$1,831.00 \$19,531.00 \$2,313.00 \$200,712.00
SUBTOTAL DIRECT COST	\$27,588.00	\$53,500.00	\$101,686.00	<b>(100,100</b>		
INDIRECT OPERATING COST					\$26,454.00	\$32,407.00
Salaries (40% Production Manager)     Maintenance Cost	\$5,000.00 \$1,000.00	\$14,391.00 \$1,000.00 \$415.00	\$17,628.00 \$1,200.00 \$1,248.00	\$21,595.00 \$2,500.00 \$1,498,00	\$3,500.00 \$1,498.00	\$4,200.00 \$1,498.00
- Interest SUSTOTAL INDIRECT COST	\$8,000.00	\$15,806.00	\$20,076.00	\$25,593.00	\$31,452.00	\$38,105.00
TOTAL PRODUCTION COST	\$33,588.00	\$69,306.00	\$121,774.00	\$157,627.00	\$191,972.00	\$238,817.00
ESTIMATED UNIT COST	\$25.84	\$26.66	\$23.42	\$24.25	\$29.53	\$36.74

#### THINGS JAMAICAN LIMITED

#### **CERAMIC PRODUCTION**

#### CONSIDERATIONS FOR PRODUCTION COST PROJECTION

#### PRODUCTION VOLUME

- Existing production volume is based on the average production for the months of September through November 1991 and kiln availability of 1.
- 1992 estimates is based on 6-months production at existing rate and 1 kiln availability and 6-months production at existing rate and availability of 3 kilns and 2 glazers.
- 1993 94 availability of 3 kilns and addition of 2 ceramic casters.
- 1995 Improve 1993 94 conditions by addition of 2 ceramic casters and the replacement of 1 kiln with twice the production rate.
- 1996 Improve 1995 conditions with the replacement of another kiln with same capacity as the one replaced in 1995 and keep one of the old ones as standby and sell the other 4 kilns.

#### **RAW MATERIAL**

- Existing raw material usage is based on average raw material cost for September through November 1991.
- Usage for the other projected years are directly related to volume increases based on increase in workforces and availability of kilns plus an estimated 20% per year for material increase price and volume change.

#### **DIRECT LABOUR**

• Existing production crew plus 2 glazers in 1992 and 2 ceramic casters in 1993 and 1994 based on the refurbishing of kilns and replacement of 1 kiln. Thirty percent (30%) is estimated for 1992 and 15% for the following years. Two (2) additional casters and one (1) glazer.

#### ELECTRICITY

Based on 23% of total electricity bill, usage remain constant because electricity does not increase directly with volume increase, also the refurbishing and replacement of kilns will make them efficient users. Twenty-five percent (25%) is added as constant increase for the 5-year projection.

#### WATER

Based on 23% of total water bill. Usage is directly related to production volume increase and 25% is added per year as estimated price increase.

#### **FUEL**

Based on average actual usage for the months of September through November. Fuel consumption increases based on the loading capacity of the kilns. Fuel cost is projected at 25% increase and remain constant.

#### PROTECTIVE GEAR

1991 Estimate Cost - Increase is due to addition to work force and 15% price increase. Assume that gear will be changed every two years.

#### **SALARIES**

Recruitment of Production Manager, 2 Supervisors and reduction of existing Production Supervisor plus \$100,000 for car for Production Manager, 60% of Production Manager's package to Ceramics and 40% to Pewter plus 22 1/2% salary increase per year beginning in 1993.

#### MAINTENANCE COST

Estimated monthly routine maintenance cost for all the projected years except 1932 when major overhaul is projected for the first 6 months. Overhaul cost was acquired from Thermal Consultants Limited.

#### **INTEREST**

Interest rate at 10% for loans on 4 potter wheels, 3 kilns and 1 ball mill. Potter wheels and ball mill in 1992, one (1) kiln in 1995 and two (2) in 1996.

#### ADMIN. COST

\$3.5M/yr break 60% Marketing, 30% Ceramics and 10% Pewter. Not included in the Direct Production Unit Cost.

#### THINGS JAMAICAN LIMITED

#### **PEWTER PRODUCTION**

#### CONSIDERATIONS FOR PRODUCTION COST PROJECTION

#### **PRODUCTION VOLUME**

- Existing production volume is based on average month production.
- 1992 93 Addition of a fully qualified pewter craft employee to provide supervision plus buffing machine, finishing machine to reduce manual effort.
- 1993 94 Double production volume by the addition of:
  - One (1) furnace, one (1) casting machine air compressor and four (4) apprentices now become qualified and the recruitment of four (4) apprentices.
- 1994 95 Increase production volume five time 1992/93 volume based on the addition of anothe. casting machine.
- 1995/96/97 Maintain 1994/95 production level.

#### RAW MATERIAL

Based on average month's cost and direct increase with availability of one (1) furnace, two (2) casting machines, and increase with manpower, 20% is applied/year as price change.

#### LABOUR

Existing 1991 - Based on 1 qualified pewter craft worker and 4 apprentices.

1992/93 - Based on 2 qualified pewter craft workers and 4 apprentices.

1993/94 - Based on 6 qualified pewter craft workers and 4 apprentices.

1994/97 - Based on 10 qualified pewter craft workers and 4 apprentices.

#### **ELECTRICITY**

1991 average actual and increase for projected average month by 33% to compensate for electricity used by additional machines plus price increase of 25% every year.

#### WATER

Estimated based on the nature of the operation and 25% increase every year for price.

#### FUEL

Based on direct increase with volume and 25% increase for price.

## PROTECTIVE GEAR

Based on increase in manpower and 15% price increase for every two years.

## MAINTENANCE COST

Assume \$1,000/mth to maintain existing equipment.