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HCC SPEND ANALYSIS ON TYCO'S PLANT1, PLANT2, AND PLANT3 FOR THE FISCAL YEAR FY07 – FY08 (Q1) AT TYCO INTERNATIONAL PROCUREMENT OFFICE [IPO], BENGALURU

by

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DEPARTMENT OF MANAGEMENT STUDIES

KUMARAGURU COLLEGE OF TECHNOLOGY

COIMBATORE

A Project Report

Submitted to the

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in partial fulfillment of the requirements

for the award of the degree of

MASTER OF BUSINESS ADMINISTRATION

MAY -2008

KCT Business School

Department of Management Studies

Kumaraguru College of Technology

Coimbatore

BONAFIDE CERTIFICATE

Certified that this project report titled **"HCC Spend Analysis On Tyco's Plant1, Plant2, and Plant3 for the Fiscal Year FY07 – FY08 (Q1) at Tyco International Procurement Office [IPO], Bengaluru"** is the bonafide work of Mr..S.Praveen Kumar (71206631042) who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Faculty Guide

[Lect.Ms.R.Hema Nalini]

Director

[Prof.S.V.Devanathan]

Evaluated and vice-voce conducted on .....03.07.2008.....

Examiner I

Examiner II

Declaration

I, **S.Praveen Kumar (Reg. No.71206631038),** final year MBA student of Department of Management Studies, Kumaraguru College of Technology, hereby declare that the project entitled **"HCC Spend Analysis On Tyco's Plant1, Plant2, and Plant3 for the Fiscal Year FY07 – FY08 (Q1) at Tyco International Procurement Office [IPO], Bengaluru"** has done by me under the guidance of Lecturer Ms. Hema, submitted in partial fulfillment for the award of the degree of Master of Business Administration of Anna University, during the academic year 2006-2008.

I, also declare hereby, that the information given in this report is correct to best of my knowledge and belief.

S. Praveen Kumar.

Place: Coimbatore

Signature of the Candidate

Date: 03/07/2008

(S.Praveen Kumar)

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Security

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. PRAVEEN KUMAR .S** Reg No. 71206631042), II MBA, Department of Management Studies, Kumaraguru College of Technology, Coimbatore, has done the project work on following topics:

- Impact of Currency Fluctuations on Supplier Billing.
- Analysis on High Cost Countries [HCC] Spend to Identify Sourceable Business in Low Cost Countries [LCC].
- Data Validation for Accurate Spend Analysis.

in **Supply Chain Finance, TYCO'S International Procurement Office [IPO]**, Bangalore, during the period from 2nd Jan 2008 to 31st March 2008.

During the above period, his performance, conduct and character were found to be **GOOD.**

We wish all success in his career.

For Tyco Fire & Security Pvt. Ltd.,

Jayakrishna Bodi
Director, Human Resources

Date: May 8, 2008

tyco Fire & Security

EXECUTIVE SUMMARY

Many multinational companies have developed international procurement offices (IPO) in strategic low-cost country regions in recent years. The majority have been located either in low labor-rate advantaged countries where the bulk of their low-cost products are purchased or in a geographically central location within a region to serve a broader supply base. In either case, IPOs typically start out as a satellite purchasing operation for the home country, providing localized supply management services with local language and cultural capabilities. Initially, IPOs provide basic services such as supplier searches, supplier audits, and local supplier negotiations support. Over time, their activities move up the value chain to include regional contract negotiations, benchmarking, and regionally leveraged contracts. Eventually, fully developed and mature IPOs will be entrusted to develop and negotiate long-term contracts for not only their region, but also for global operations.

The spend analysis made on Tyco international for Plant1, Plant2 and Plant3 are to determine the direct spend by these plants in HCC (High Cost Countries) and also identify the sourcable direct spend to LCC (Low Cost Countries).This helps company to end up in cost savings which reflects in their profit. The LCC (Low Cost Countries) generates saving nearly about 25% - 35%.

In the process of identifying direct spend on HCC by Plant1, Plant2 and Plant3 are as follows. The spend data of Plant1, Plant2 and Plant3 are collected for FY07 – FY08 (Q1) i.e. the Tyco fiscal year October – September as four Quarters. The data collection was done by having knowledge of Spend Data Warehouse (SDW) of the organization i.e. the Spend Data Warehouse (SDW) software which customized for the company.

The SDW has various fields in it according to Tyco taxonomy such as AccountingDate.FiscalYearNumber,AccountingDate.FiscalQuarter,AccountingDate.FiscalMonthNumber,Supplier.FlexField2,SourceSystem.SourceSystem,Account.AccountName,ERPCommodity.CommodityName,Part.PartName,Supplier.DESupplierParentName,Supplier.FlexField3,UNSPSC.CustomCategoryL1,UNSPSC.CustomCategoryL2,UNSPSC.CustomCategoryL3

,UNSPSC.CategoryL3,CompanySite.CompanyLevel0,CompanySite.CompanyLevel1,Compa nySite.CompanyLevel2,CompanySite.SiteName,sum(Amount).

The entire data was collected and validated i.e. tartan whether it is classified correctly under direct spent. The analysis done by using pivot table and many other functions in Microsoft excel. It was according to direct spend on Parts, Commodities, and Materials.

The spend analysis is becoming popular tool in many organizations for costing saving which reflects in profit of the organization. In this analysis Tyco has cost savings of nearly $16.28million - $22.81 million or.

ACKNOWLEDGEMENT

It is inevitable that thoughts and ideas of other people tend to drift into subconscious when one feels to acknowledge helping derived from others. I acknowledge to all those who helped me in the preparation of this project work.

I wish to express my deep gratitude to **Prof.Joseph V. Thanikal** principal, Kumaraguru College of technology for his guidance and encouragement to complete my project work.

I wish to express my sincere thanks to **Prof.S.V.Devanathan** – Director, KCT business school, for his continuous encouragement throughout my project.

I owe my heartfelt gratitude to **Lect.Ms.R.Hema Nanlini**, lecturer KCT business school, for his help and guidance given to me throughout my project.

I express my sincere thanks to **Mr. Sujith Bhowmick**, Financial Lead, Tyco's IPO, Bengaluru for granting permission to do my project work. I am deeply indebted to him, whose assistance and encouragement made this work possible towards the end.

I like to extend my heartfelt thanks to **Mr.D.Sukumar**, Analyst, Finance, Tyco's IPO, Bengaluru, who guided me throughout the project & to complete my project successfully. I cannot forget the sleepless nights he spent before completing the work and was helping me like a mentor.

And also to the staffs of Tyco's IPO, Bengaluru who furnished all the information related to my project work. I want to thank them for all their help, support, interest and valuable hints.

My special thanks to, **Mr. A.Shafiulla,** Associate Manager, **Mr.V.Vinay,** Senior Engineer, **Ms.Yogesh Mamatha,** SDW Analyst, **Mr.K.Hari Prasad**, Analyst, Finance for assisting & guiding me through out my project work.

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CHAPTER 1

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1. INTRODUCTION

1.1. Background of the study:

Spend analysis is the systematic review of historical purchase data. The output of a spend analysis is a summary of purchases by various variables, such as category, supplier, and/or business unit. The primary reason for conducting spend analysis is to identify opportunities for cost savings. When you look at the output of a spend analysis, there are at least four indicators that there are opportunities for cost savings:

Indicator 1: A large amount of spend in categories for which enterprise-wide contracts do not exist. Today's educated purchasing professionals can apply best practices (e.g., strategic sourcing) so that their companies minimize cost. However, when these best practices have not been utilized in a category or purchase decisions are left up to non-purchasing professionals, there is a likelihood that the company is overpaying for goods and services. So identifying areas where Purchasing should be more involved in getting contracts for those categories is a sound strategy for cost savings.

Indicator 2: A significant Purchase Price Variance (PPV) for a high-spend item or category. PPV is the difference between the average price paid and a standard cost. When there is a large PPV, this indicates one of two things: either your standard cost is not valid or you are paying too much. In the latter case, you should consider taking some type of action, such as negotiating or sourcing, to ensure that you are paying a fair price.

Indicator 3:Unusually large number suppliers for the money spent in that category: The more you buy from a single supplier, the better discount you'll qualify for. If you're buying from too many suppliers, you're not leveraging your volume and likely not maximizing your discounts. Seeing a large number of suppliers in a category can tip you off that supplier consolidation can deliver savings to your organization through price reduction and also through the more advanced benefits of an optimized supply base.

Indicator 4: Rising prices over time. If you're paying more year after year, you simply need to pay more attention to the purchases in that category. With no one "minding the store," price creep is likely to set in.

1.2. REVIEW OF LITERATURE:

1. Title: Enhancing yield management with customer profitability analysis

Author(s): Breffni Noone, Peter Griffin

Journal: International Journal of Contemporary Hospitality Management

Year: 1997, Volume: 9, Issue: 2, Page: 75 - 79

Publisher: MCB UP Ltd

Argue that in order to sustain the long-term profitability and growth of hotel organizations, yield management decisions must incorporate two critical constraints: the cost implications of the customer mix and guest ancillary spend. Proposes that customer profitability analysis (CPA), which reports revenues, costs and profit by customer group, will give management the ancillary spend and cost information that will enhance customer mix decisions over a long-term horizon. Identifies that the key to CPA lies in the application of an appropriate method of allocating costs to customers and proposes that activity-based costing is the optimal costing solution.

2. Title: Systematic Investment Analysis

Author(s): Michael M. Nkasu

Journal: Industrial Management & Data Systems

Year: 1992, Volume: 92, Issue: 7, Page: 17 - 21

Publisher: MCB UP Ltd

Explores approaches to the assessment of capital investment proposals, and proposes a systematic investment analysis model to classify projects, and to show the relationship between factors influencing an analysis as well as to indicate the range of information

necessary for a satisfactory assessment. Also it discusses criteria for acceptance of proposals to spend capital on productivity improvement methodologies presented in the form of decision trees.

3. Title: R&D efficiency: Global investment

Journal: Strategic Direction

Year: 2007, Volume: 23, Issue: 5, Page: 31 - 33

Publisher: Emerald Group Publishing Limited

Purpose – While, many companies are continuing to pour money into research and development, perhaps the more pertinent issue they should be looking at is not how much they spend on R&D, but how effectively they spend it. Design/methodology/approach – Analysis of Booz Allen Hamilton's second annual global innovation study – the Global Innovation 1000 – appears to confirm that money simply cannot buy effective innovation.
Findings – The study has identified 94 companies, out of the 1,000, that have consistently outperformed their peers over the entire five-year period, while spending less on R&D as a percentage of sales than their industry median. Originality/value – The study implies that methodically building capabilities along the innovation value chain could generate significant improvements in return on research and development spending.

4. Title: Representing the household: in and after national income accounting

Author(s): Julie Froud, Colin Haslam, Sukhdev Johal, Karel Williams

Journal: Accounting, Auditing & Accountability Journal

Year: 2000, Volume: 13, Issue: 4, Page: 535 - 560

Publisher: MCB UP Ltd

Explains how and why the household should, and could, be an object of analysis for a new social accounting. It shows that the household has been neglected in national

income accounting, which generally tends to represent it as a black box. It also shows how the data from national income accounting can be reworked to demonstrate the importance of the household at macro and meso levels. The reworking shows that 84 per cent of GDP passes through the household just as, at the meso level, there are important differences between households in how they pool, spend and save income.

5. Title: Let Me Count The Ways: Information Acquisition Accounting

Author(s): Sherman Hayes

Journal: The Bottom Line: Managing Library Finances

Year: 1990, Volume: 3, Issue: 3, Page: 29 - 31

Publisher: MCB UP Ltd

As I once again go through the end-of-year analysis of my acquisitions accounts, it strikes me how much time I (and many others on the library staff) spend on accounting related to the acquisition of information. The library profession, like most, has developed a specialized language to help its members talk to each other. The information acquisition staff has to be adept at translating library terms into terms used by the business community they deal with. There are a number of accounting contact points in the acquisition process which are critical for almost every level of staff in the library.

6. Title: Analyzing student satisfaction with instructional technology techniques

Author(s): Matthew H. Roy, Eliot Elfner

Journal: Industrial and Commercial Training

Year: 2002, Volume: 34, Issue: 7, Page: 272 – 277, Publisher: MCB UP Ltd

Corporate universities, higher educational institutions, and training professionals have been using instructional technology (IT) tools and techniques for years. Institutions spend heavily to constantly update their instructional resources, computer labs, and library holdings. Unfortunately, most institutions have not studied the effectiveness of these investments in terms of student satisfaction or learning outcomes. This empirical

analysis of 215 student responses provides some insights into the effectiveness of various IT tools and techniques. The findings show that some tools are more effective than others in achieving student satisfaction and positive behavioral outcomes. This study may be useful as a pedagogical tool for instructors planning learning ventures or to justify technological expenditures at the administrative level.

7. Title: In memoriam: Performance indicators and time analysis in the bibliographic records section of Aston University Library & Information Services

Author(s): Michael Gale

Journal: Library Review

Year: 1996, Volume: 45, Issue: 2, Page: 58 – 67, Publisher: MCB UP Ltd

Describes the development of performance indicators in the bibliographic records section since 1988. The timeliness of the section's output was perceived to be more relevant from the user's point of view than the number of books catalogued, so two key indicators were monitored: the length of time which books spend on the cataloguing shelves and the size of the backlog. The statistics in graphical form to assist planning the section's work. Time analysis was introduced more recently, both to provide a more meaningful context for the performance indicators and also to put a cost on the section's activities in the light of current trends towards greater financial accountability and the development of service-level agreements. Discusses some problems inherent in the use of performance indicators and suggests greater integration between sections.

1.3 STATEMENT OF PROBLEM:

Every percent counts when it comes to slashing production costs. Taking advantage of low cost countries of production helps companies to have a better control over cost of production and in turn, remain competitive in global market. This also helps the companies to explore new markets and also utilize human talent that is cheaper than that of developed countries.

1.4. OBJECTIVES OF THE STUDY:

Primary Objective:

* To analysis the direct spend of TYCO'S Plant1, Plant2 and Plant3, for the Fiscal year FY07 – FY08 (Q1) on HCC (high cost countries).

Secondary Objective:

* To determine whether spend is classified appropriately under direct.
* To identify the direct spend which can be sourced from LCC (low cost countries).
* To pinpoint the direct spend on specific commodities which is useful for souring team. .

1.5. SCOPE OF THE STUDY:

The scope of study is to analyze the direct spend by Tyco plants on HCC and identify the direct spend which can be sourced in LCC. The study will be useful for cost savings for organization by sourcing from LCC which will increase profit. The analysis covers the period of FY07 - FY08 (Q1) Tyco's fiscal year October to September. In Spend analysis the area of cost saving is of crucial importance. Spend Analysis indicates the area of spend which can be sourced in LCC. This kind of analysis is particularly applicable for Finance team and various commodity teams of Tyco Flow Control IPO.

1.6. METHODOLOGY:

Primary data and secondary data are used for the study. Primary data was collected by direct contact with officers and managers. Sources of secondary data were Spend Reports of Tyco Plants for the year FY07 – FY08 (Q1) which is collected from the Spend Data warehouse (SDW).Simple spend analysis is made to identify the direct spend which can be sourced from LCC.

1.6.1. TYPE OF STUDY:

The type of study used for this project is analytical research, researcher has to use the facts and information already available and analyses these to make critical evaluation of the material.

1.6.2. METHOD OF DATA COLLECTION:

Primary Data:

- Discussions held with employees of Tyco's IPO at various levels.

Secondary Data:

- From Spend Reports of Tyco Plants for the year FY07 – FY08 (Q1) which is collected from the Spend Data warehouse (SDW).

1.6.3. PERIOD OF STUDY

The period of study has been taken for FY07 – FY08 (Q1) Tyco Fiscal Years (October to September).

1.6.4. SOURCES OF DATA

Data used for the study are secondary in nature. The information was collected from the customized software SDW (Spend Data Warehouse) which is maintained by Tyco for their plants.

1.7. LIMITATIONS:

- The period of study is limited to one years from FY07 to FY08 (Q1).
- The percentage of savings may vary according to sourcing person, currency fluctuation.
- The reliability of the secondary data collected based on the details in Spend Data Warehouse (SDW) which may have misclassifications.
- Spend can be sourced only according to availability in LCC (Low Cost Countries).

1.8. CHAPTER SCHEME

Chapter 1: Introduction

The first chapter deals with the concepts, background, objectives, need for the study, methodology used in data collection, limitations of the study.

Chapter 2: Organization Profile

Organization profile includes details on the history of the organization, management and organization structure, product profile and market potential, competitive strength of the company and a brief description on various functional areas of the organization.

Chapter 3: Macro –Micro Economic Analysis

Macro-Micro analysis deals with international procurement strategies [IPO], valuation of an IPO, advantages of international procurement over local procurement and functions of Tyco's IPO in India.

Chapter 4: Data Analysis and Interpretation

The Chapter mainly deals with performing analysis of impact of currency fluctuations on supplier billing and compare billing in dollars with billing in Euro.

Chapter 5: Conclusion

Conclusion includes the results and the discussions to put forth the observations made in the analysis performed and the recommendations thereby to reduce the impact of currency fluctuation on billing.

CHAPTER 2

ORGANIZATION PROFILE

2. ORGANIZATION PROFILE

2.1. History of the Organization:

Tyco was founded in 1960 when Arthur J. Rosenburg, Ph.D., opened a research laboratory to do experimental work for the government. He incorporated the business as Tyco Laboratories in 1962, and changed its focus to high-tech materials science and energy conversion products for the commercial sector. In September 1964, the Company went public, and in 1965 it began to acquire other companies to fill gaps in its development and distribution network. As a result, Tyco's thrust changed to manufacturing industrial products.

Today, Tyco is a model of sophisticated and innovative manufacturing and service employing 250,000 employees worldwide. Each of Tyco's core businesses holds a leadership position in its specific market.

1960 - Tyco, Inc. is formed as an investment and holding company in Waltham, Massachusetts. The two primary holdings are Tyco Semiconductor and the Materials Research Laboratory, which studies materials and devices with applications in the fields of solid state sciences and energy conversion.

1962 - The Materials Research Laboratory and Tyco Semiconductor are merged. The business is supported by U.S. government research contracts. But soon, management recognizes the commercial applications of its work and Tyco begins to search for acquisitions to develop product, manufacturing and marketing capabilities.

1964 - Tyco becomes a publicly owned company.

1965 - Mule Battery Products is Tyco's first acquisition. Tyco Inc. changes its name to Tyco Laboratories.

1968 - By this time, Tyco has acquired sixteen companies, including North American Printed Circuits, one of six companies that would later form Tyco's Printed Circuit Group.

1973-1982: Growth through Acquisitions

In 1973, consolidated sales and stockholder equity reached $34 million and $15 million, respectively. The next year, Tyco's stock was listed on the New York Stock Exchange. By 1982, Tyco had become a much bigger and more diverse corporation with

sales topping $500 million and a net worth of nearly $140 million. Much of this growth was achieved through larger and more ambitious acquisitions including:

1974-Simplex Technologies, manufacturers of undersea fiber optic telecommunications cable

1976-Grinnell Fire Protection Systems, manufacturers of and contractors for fire sprinkler systems

1979-Armin Plastics, manufacturers of polyethylene film products

1981-Ludlow Corporation, manufacturers of packaging products.

1982-1986: Developing Market Leadership

It has always been Tyco's policy to acquire profitable companies and to operate them at continually increasing profitability for the benefit of its shareholders. For that reason, after Tyco's 1973-1982 period of rapid growth, management focused on strengthening the company from within. To do so, Tyco organized its subsidiaries into three business segments (Fire Protection, Electronics and Packaging), and created an operating plan that focused on strengthening market leadership and being the high-quality, low-cost producer within its markets. The plan's objectives were:

- To achieve significant market share in each of its principal product lines;
- To maintain, throughout all Tyco business segments and product lines, a reputation for product quality, reliability, and customer service.

Tyco accomplished this by:

- Decentralizing company operations into a more cost-effective, independent profit center operating system;
- Selling unprofitable units and existing business, and divesting itself of companies not fully owned by Tyco;
- Reducing subsidiary operating costs by providing them with opportunities to take advantage of Tyco's global corporate economies of scale through such activities like inter-company purchasing of raw materials.

1986 to 2005: Synergistic-Strategic, Highly-Disciplined Acquisitions/Strong Organic Growth. In 1986, Tyco returned its focus to sharply accelerating growth. During this

period, it reorganized its subsidiaries into what became the basis for the current business segments: Electrical and Electronic Components, Healthcare and Specialty Products, Fire and Security Services, and Flow Control. The Company's name was changed from Tyco Laboratories, Inc. to Tyco International Ltd. in 1993, to reflect Tyco's global presence. Furthermore, it became, and remains, Tyco's policy to add high-quality, cost-competitive, lower-tech industrial/commercial products to its product lines whenever possible.

The Company also adopted synergistic and strategic acquisition guidelines which established three base-line standards for potential acquisitions:

- An acquisition candidate must be in a business related to one of Tyco's four business segments;
- It must be able to expand the product line and/or improve product distribution for at least one of Tyco's business segments;
- It must have excellent long-term growth prospects.
- It must be using a manufacturing and/or processing technology already familiar to one of Tyco's business segments if it plans to introduce a new product or product line.

Using the synergistic/strategic guidelines and stringent financial requirements to guide acquisitions, Tyco succeeded in significantly improving the Company's positions in each of its four business segments. Major acquisitions included:

1986 - Grinnell Corporation, manufacturers and distributors of industrial/construction products

1988 - Allied Tube and Conduit, manufacturers of steel pipe and related tubular products.

1989 - Mueller Company, manufacturers of water and gas flow control products.

1991 - Wormald International Limited, manufacturers, contractors and suppliers of fire protection systems and products.

1992 - Neotecha, manufacturers of Teflon-lined butterfly/ball valves and sampling devices.

1993 - Hindle/Winn, manufacturers of high performance butterfly/ball valves.

1994 - Classic Medical, Uni-Patch and Promeon, three companies involved in providing a disposable medical product or supplementary products.

- Preferred Pipe, manufacturers of forged steel products.
- Kendall International Co., among the world's largest manufacturers

1995 - Tectron Tube, manufacturers of pipe and tubular products. Unistrut, manufacturers of metal framing products and services. Earth Technology Corporation, an engineering consulting firm specializing in the design, construction, and operation of water and wastewater treatment facilities.

1996 - Professional Medical Products, Inc., makers of adult incontinence products and other disposable medical products. Watts Waterworks Businesses, manufacturers of valves, hydrants, and fittings used primarily in water utility, wastewater treatment and power generation markets. Sempell, a manufacturing and servicer of specialty valves used in industrial and power generation applications. ElectroStar, a leading manufacturer of complex printed circuit boards.

1997 - American Pipe & Tube, a manufacturer of steel pipe, tubing for the fire protection, fence markets and steel studs/tresses for the residential and commercial construction markets. Submarine Systems Inc., the leader in the design, development, manufacture, installation, supply and maintenance of undersea fiber optic telecommunications cable systems.

1998 - Sherwood Davis & Geck, a manufacturer and distributor of disposable medical products. United States Surgical, maker of suture and auto suture medical devices. Wells Fargo Alarm, EntAlarmingmguard, and Holmes Protection Group, providers of electronic security services, including intrusion, fire detection and monitoring, and CCTV and access control.

1999 - AMP, a leading manufacturer of electrical, electronic, fiber-optic and wireless interconnection devices and systems. Raychem, a leading international designer, manufacturer and distributor of high-performance electronic products for OEM businesses and a broad range of specialized applications. Glynwed, producer of steel tubing, steel electrical conduit and other similar products. Temasa, provider of submarine cable maintenance and installation services.

2000 - General Surgical Innovations, a medical manufacturer and distributor of SPACEMAKER® balloon dissection-devices used in minimally invasive surgical procedures. Siemens In addition, during the period from 1986 to the present, a number of smaller acquisitions were made to strengthen specific product lines or enhance the Company's competitive position in the various segments.

As a result of these acquisitions, as well as strong growth of existing operations, Tyco today has a leading market share position in each of its business segments. It remains committed to being the low-cost, high value producer in each of its manufacturing divisions, as well as a world-class service provider to customers around the world.

2001 - Mallinckrodt Inc. (NYSE: MKG), a global healthcare company which manufactures and distributes specialty medical products designed to sustain breathing, diagnose disease and relieve pain. The CIT Group, Inc., a leading commercial and consumer finance company with over $50 billion in assets. Paragon Trade Brands, Inc.

2002 - CII Technologies, a provider of advanced control electronic solutions in high-performance relays, general-purpose relays, transformers and EMI/RFI filters was integrated within Tyco Electronics In January 2002 Tyco announced a plan to separate the company into four independent, publicly traded companies. The Board of Directors launched an internal investigation, under the direction of independent outside counsel, to review past use of Company funds by Tyco's former chief executive officer.

The CIT IPO was completed by Tyco in July 2002 and raised $4.6 billion. In July, Edward D. Breen was appointed the new Chairman and CEO of Tyco International. Mr. Breen immediately took actions to help stabilize the company and restore shareholder confidence. The new CEO brought a world-class leadership team to Tyco with appointments of David FitzPatrick as Executive Vice President and CFO, William Lytton, Executive Vice President and General Counsel, and Eric Pillmore, Senior Vice President of Corporate Governance.

2003 - Phase 1 of the internal investigation was concluded in September 2002 and in-depth review of the company's accounting practices was conducted in a Phase 2 investigation. Having successfully completed the internal investigations in Q1 of 2003 and determining that there was no significant fraud affecting the company's prior

financial statements, Tyco now focused on profitability and organic growth of its businesses.

2004 - Tyco International's multitude of products and services play a vital role in satisfying the needs of people and companies around the world, every minute of the day, but company research showed that customers didn't understand the breadth and depth of Tyco's offerings. Aiming to significantly improve customer awareness and understanding and revive its corporate image, Tyco launched a new global print advertising campaign under the theme line "A vital part of your world," in June 2004.

2006 - Tyco announced that its Board of Directors approved a plan to separate the company's current portfolio of diverse businesses into three separate, publicly traded companies – Tyco Healthcare, one of the world's leading diversified healthcare companies; Tyco Electronics, the world's largest passive electronic components manufacturer, and the combination of Tyco Fire & Security and Engineered Products & Services (TFS/TEPS), a global business with leading positions in residential and commercial security, fire protection and industrial products and services.

U.S. Surgical, a division in Tyco's Healthcare segment, acquired Confluent Surgical, Inc., a leading developer and supplier of polymer-based technology used in sprayable surgical sealants and anti-adhesion products. Tyco Healthcare agreed to acquire a controlling interest in Airox, S.A., a leading European company in home respiratory ventilation systems.

Industry Experience:

Tyco Flow Control is the world's largest manufacturer of industrial valving and related controls. Tyco Flow Control Pacific and its various business units have a long established history in being involved in projects from the design phase to construction and ongoing operations and maintenance of such.

This history and experience has enabled Tyco to build a vast support structure, which includes technologies, human and physical resources and most importantly to have an intimate knowledge of various industry processes.

Tyco International Limited is the world leader in each of it's four major business segments, namely –

- Engineered Products & Services

- Healthcare and Disposable Products
- Fire and Security Services
- Electronics and Electronic Components

Tyco International operates in more than 82 countries around the world and has over 240,000 employees. The Company is an integrated designer, manufacturer, distributor, installer and services of products and systems for a broad spectrum of markets including disposable medical products, plastics and adhesives, fire protection, electronic security, telecommunications, water and environmental management and process control.

Tyco Flow Control services the worldwide water, industrial process and infrastructure markets with the most comprehensive range of proprietary flow control products and services available from a single source. Products include valves, actuators, controls, process measurement and pipeline equipment, piping systems, pumps, cable and pipe supports and an integrated package of maintenance and monitoring services. Tyco is committed to global leadership in all market segments through a new dimension of innovation, quality, efficiency and service.

Tyco Flow Control Pacific is the region's largest integrated flow control company with eighteen manufacturing plants certified to ISO 9001 and twenty five strategically located sales, distribution and service centres and over 1850 employees. Tyco Flow Control Pacific is a major provider of products and services to most of the regions water, industrial process and infrastructure projects. The company works in close relationships, partnerships and alliances with the majority of the regions major companies to create ongoing value to the customers process. The breadth and scope of our resources enables us to offer our customers a complete choice of solutions to all their flow control requirements - from individual products to our Total Solution Package - everything it takes to make flow control simpler, easier and more cost-effective.

Tyco's dynamic nature can be seen through our growth - growing organically and by acquisition to offer complimentary products and services that will allow us to satisfy our customer's needs. They are committed to providing a level of service acknowledged as the best of any industry. With strategically located facilities and local knowledge, they have the resources and expertise to meet the flow control requirements of a wide range of

industries, including; mining and minerals processing, power, oil and gas, water distribution, food and beverage and process industries.

Tyco Flow Control Pacific – Groups:

Tyco Flow Control Pacific is split into five specific groups to cater for the varying requirements of our customer base, these groups being:

- Environmental Systems.
- Industrial.
- Pumping & Irrigation.
- TFC Building Products.
- Water.

Each of the five groups is made up of a number of resource units, which will be detailed in the following catalogue, under their respective sections.

'Whole of Life – Total Cost'

Tyco's experience and resources have resulted in a business platform that enables the company to provide its customers with a multi-dimensional offering of: -

- Product
- Services
- Systems
- Solutions

This multi-dimensional offering is designed to 'add value' to its customer's processes and operations with the end result of reducing downtime, increasing efficiency, reducing investment in consumable inventories, reducing transaction costs etc.

2.2. TYCO FLOW CONTROL: OVERVIEW

Tyco International:

- 250,000 Employees.
- 80 Countries.
- 4 International Business Units.

Tyco Flow Control Worldwide:

- 25,000 Employees.
- 60 Countries.

Tyco Flow Control Pacific:

- 4,000 Employees.
- 20 Countries.
- 100 Locations.
- 25 factories.

Tyco International Procurement Office:

- China.
- India.

Five Regional Business Groups:

- Environmental Systems.
- Industrial.
- Pumping & Irrigation.
- TFC Building Products.
- Water.

Market Leaders in:

- Industrial Valves and Controls Technologies.
- Water Transmission and Distribution Systems.
- Rural Water Management – Irrigation and Pumping Systems.
- Cable and Pipe Support Systems.
- Environmental Management Technologies, Systems and Services.

2.3. MANAGEMENT:

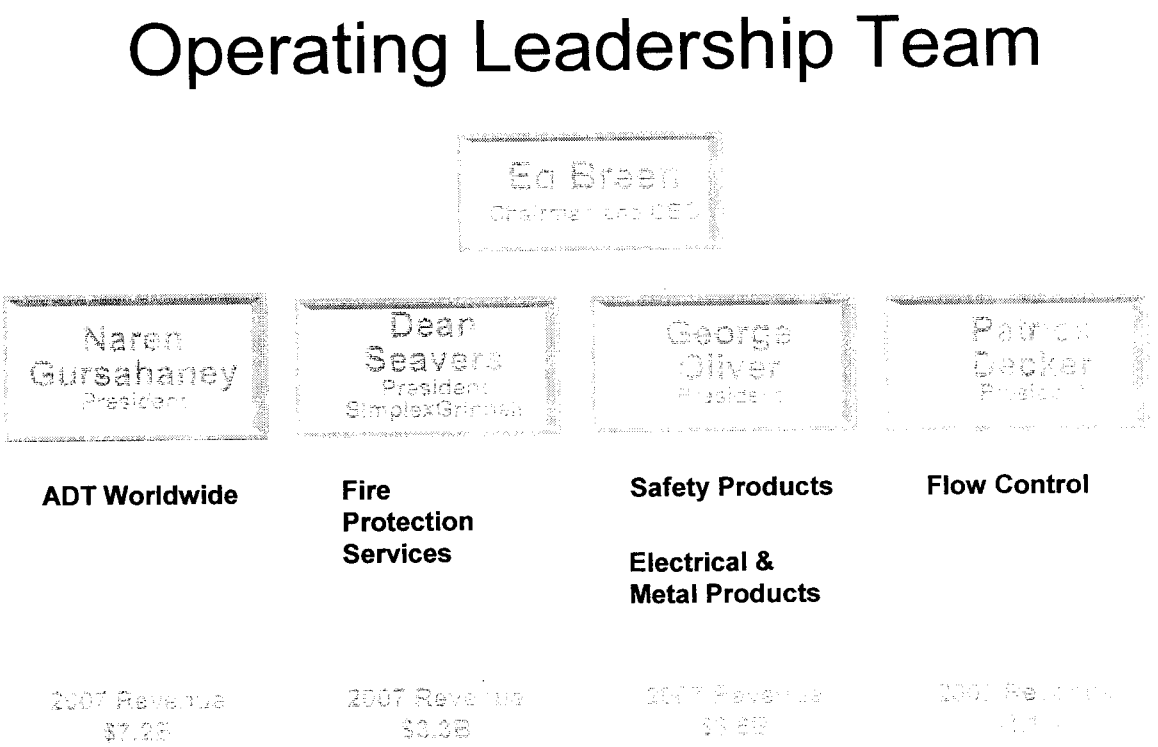


Figure2.1 – Operating Leadership

BOARD OF DIRECTORS

• Dennis C. Blair	Director
• Edward D. Breen	Chairman and Chief Executive Officer
• Christopher J. Coughlin	Executive Vice President
• Carol Anthony Davidson	Senior Vice President,
• John E. Evard	Senior Vice President, Tax
• Bruce S. Gordon	Director
• Rajiv L. Gupta	Director
• Naren K. Gursahaney	President, ADT Worldwide
• John A. Krol	Lead Director
• William S. Stavropoulos	Director
• Sandra S. Wijnberg	Director
• Jerome B. York	Director

2.4. ORGANIZATION STRUCTURE:

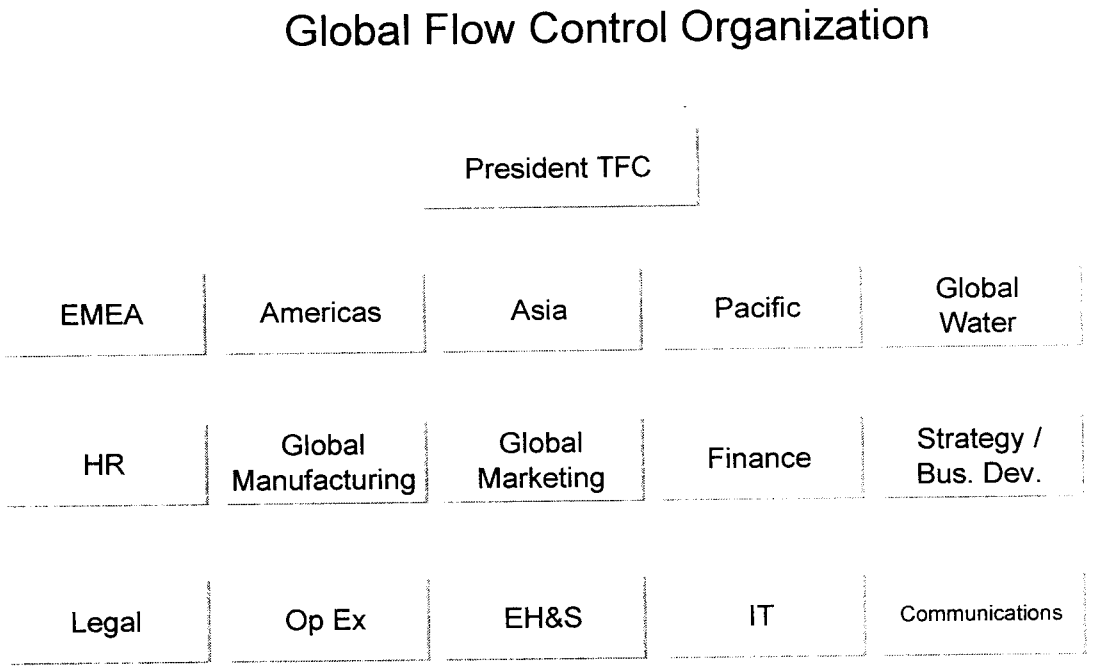


Figure 2.2 – Global Flow Control Organization

INDIA IPO ORGANIZATION STRUCTURE

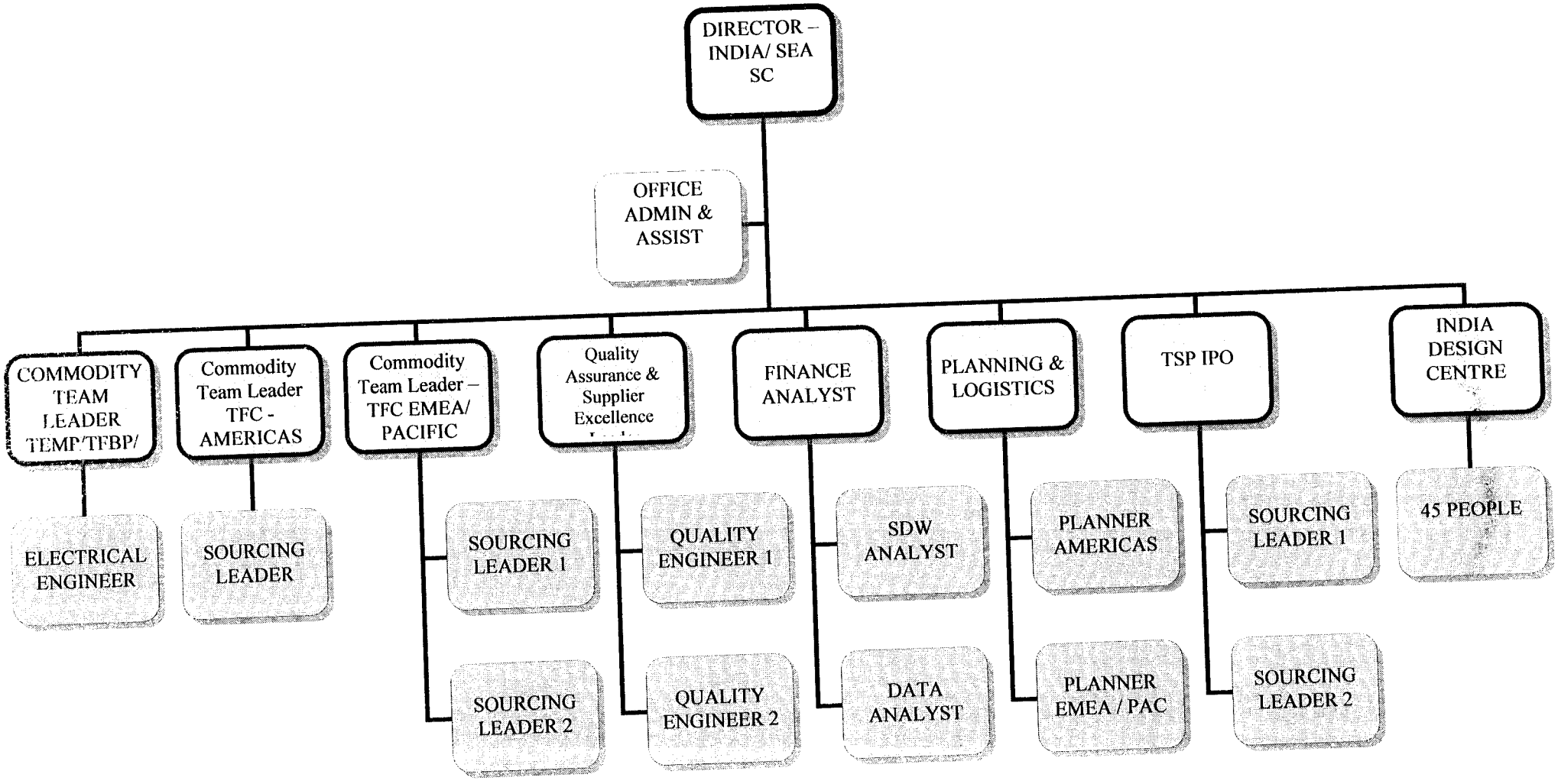


Figure 2.3 – Indian IPO Organization Structure

2.5. PRODUCT PROFILE & MARKET POTENTIAL:

Tyco Flow Control Pacific distributes a range of products to meet our customers expecting standards, please make your selection from the following links. For further information on any of these products, please contact the groups directly. The full Tyco Flow Control ranges available internationally are as follows.

Tyco Flow Control Products:

Access Floors	Actuators
Air Preparation Equipment	Analyzers
Backflow	Clamps
Hydro Turbines	Hygienic Process Equipment
Irrigators Pumping	Racking
Reinforcing Systems	SCADA Systems
Sensors	Shelving
Skirting Ducts	Sprinklers
Couplings	Covers
Disinfection	Environmental Monitoring
Expansion Joints	Flow Maintenance
Fire Rated Wiring Systems	Fittings – Pipeline
Fittings – Flanged	Laboratory Benches
Leak Detection / Locating Systems	Level Measurement
Metal Framing	Meters (Flow/Water)
Pipe	Pipeline Renovation
Pumps Support	Tanks
Tappings under Pressure	Telemetry Systems
Turbines	Tyco Flow Maintenance
Valves	Walk Ways

Table 2.1 – Product Profile of Tyco Flow Control

Tyco brands distributed by Tyco flow control pacific:

Abdip	MeyersEngineeringServices
ACJ	MicroControlEngineering
Ancon	MorinActuators
AndersonGreenwood	PierceAustralia
AustralianCableSupports	PrometValves
Biffi	Pyrotenax
CKD	Rainman
Clarkson	Ramondi
CombinedInstruments	Raychem
CompleteTappingService	Richards
Crosby	Sempell
Descote	Sintacote
Duraflo	SouthernCrossPumps
Emflux	StarSprinklersIncorporated
EnconModularTanks	TamarDesign
Eurapipe	Technaflow
EverflowPumps	TerryFluidControls
FCT	TurbomasterPumps
Flexonics	TycoPivot
Freeflo	TycoWater
GemSprinklers	TycoValvesandControls
Goyen	Tyton
GreenspanTechnologies	Unistrut
Gruvlok	Valvtron
HindleValves	Vanessa
Keystone	WANG
Klein	Waval
KTM	Wilkerson
Lindapter	WinnValves
Lunkenheimer	Yarway

Table 2.2 – Various Brands of Tyco Flow Control

All the above mentioned brands are world standard brands. They are the top class manufacturer of flow control products.

2.6. DESCRIPTION OF VARIOUS FUNCTIONAL AREAS

Secretarial department:

The Secretarial division is the main store house of activity. The company secretary heads the Secretarial department. The department does all secretarial functions and also all the legal matters connected to the day-to-day administration of the company.

Functions:

- Issue of shares and share certificates.
- Transfer and transmission of share.
- Conducting of meeting.
- Maintenance of book and registers.
- Filing of returns.
- Legal transactions.

Finance department:

Financial Department is concerned with procurement and use of funds; its main aim is to do business funds in such a way that the earnings are maximized. The General Manager – Finance heads the Finance department.

Functions:

- To asses the funds requirements.
- To plan the source of funds.
- To make-up timely arrangements of funds.
- To monitor utilization of funds.
- To prepare the tax planning and computation of tax.
- To submit financial statement and report to member of stock exchange and other board members.
- To finalize the financial performance and provide necessary information.
- To make stock valuation.
- To make periodic project analysis for all divisions.

Accounts department:

The Accounts Department is responsible for written statement of financial position. They do internal auditing in an exhaustive manner as well as assist themselves to the external auditor. It is headed by The General Manager – Finance and handled by Deputy General Manager.

Functions:

- Overseeing the accounting functions and periodical compilation of unit wise, division wise and Head office accounts.
- Preparation of profit & loss and balance sheet.
- Preparation of capital revenue budget of the company.
- Preparation of financial budget for individual units and corporate office.

Personnel and administration department:

Personnel department of the company is administering all employees in the organization and it covers the relationship between the employees and employers. This department precedes the procedures and practices through which HR is managed towards the attainment of individual social and organizational goals.

Functions:

- Man power planning.
- Recruitment, selection and induction.
- Performance appraisal and human resource system
- Training and development.
- Compensation and salary administration.
- Compliance of statutory obligation and returns relating to shops and establishments act, factories act, minimum wages act, etc.

Administration department:

The administration department is mainly concerned with maintenance of organization and the service rendered staff, transport facilities for senior executives, maintenance of the guesthouse for visitors from abroad and provide them with required facilities.

Functions:

- To make the plan and administer the organizational program.
- To prepare the records for the wage and salary administration.
- To calculate receipts and payment of the department.
- To prepare budgets for the programs by the department.

Purchase department:

The purchase department plans to supply raw materials, required machinery and spares time to stores department of every division and its units. It is headed by GM and handled by Assistant GM (material) and GM (purchase).

Functions:

- To minimize the lead times in purchase.
- To introduce vendor rating.
- To identify new vendors.
- To minimize inventory.
- To minimize purchase cost.
- To supply raw material based on timely placement of purchase requisition.
- To purchase quality materials at minimum cost for genuine vendors.

Stores department:

The investments in materials constitute a major portion of current assets so there is a separate stores department to exercise stores control. The store keeper store manager is in charge of stores department and is responsible for stores control.

CHAPTER 3

MACRO-MICRO ANALYSIS

3. MACRO ANALYSIS

Procurement:

Many multinational companies have developed international procurement offices (IPO) in strategic low-cost country regions in recent years. The majority have been located either in low labor-rate advantaged countries where the bulk of their low-cost products are purchased or in a geographically central location within a region to serve a broader supply base. In either case, IPOs typically start out as a satellite purchasing operation for the home country, providing localized supply management services with local language and cultural capabilities. Initially, IPOs provide basic services such as supplier searches, supplier audits, and local supplier negotiations support. Over time, their activities move up the value chain to include regional contract negotiations, benchmarking, and regionally leveraged contracts. Eventually, fully developed and mature IPOs will be entrusted to develop and negotiate long-term contracts for not only their region, but also for global operations.

It is at this critical point of development that special care must be taken by the home office in regards to management oversight of the IPO staff in foreign countries. Without considering how actions by home office staff can be interpreted, much damage can be done to the morale and productivity of the IPO. One very important factor to consider is saving face, typically considered an Asian cultural norm, and meaning that a person has lost the respect of another due to a public embarrassment or loss of stature. It is extremely important to respect this principle whether the IPO is in Asia, Europe or Latin America. The issue is one that could empower the organization during the negotiation process, as opposed to potentially diminishing the IPO staff credibility in the eyes of the supplier.

For example, if during a global negotiation with an international supplier, the home country corporate team arrives to take over the final closure after the local staff has negotiated the contract to date, the local team could lose face depending on how it was played out. The international supplier could interpret the change in leadership to the corporate office staff as the apparent decision maker, and from that point forward all negotiations, issue resolution, etc. will be channeled to the corporate office. In contrast, if the corporate office staff arrive in a support function, involve the local staff leadership

during the final negotiations, and assume the signature authority position with respect to the local negotiating team, not only will it result in a more favorable outcome, but the local staff will still be recognized as empowered to act on the company's behalf and remain as the point of contact for future issues or negotiations.

Similarly, respect for the local IPO team needs to be extended to other business courtesies. For example, home-office staff meetings which are attended by the IPO representatives via phone or teleconferencing should be scheduled, respecting the time zone difference in that country. Rather than requiring IPO staff to continuously attend meetings that take place late at night or early in the morning local time, rescheduling periodically to accommodate the foreign-based staff is always appreciated. If managed correctly, time-zone differences can be used as an asset instead of a challenge. Communicating issues or data requests prior to their work day means that work can be accomplished while the home office sleeps. Additionally, inviting foreign-based staff back to the home office for training or major decisions on departmental initiatives creates even stronger, more empowered, global commodity teams.

Finally, sharing globally managed negotiations can be a tremendous team builder if recognition is given to all parties involved, and it is championed as a collective effort by supply management professionals around the globe. Development of internationally based commodity teams brings additional benefits in broader learning and understanding for the entire team. Working together as peers will bring fresh best practices and respect for international business environments. Keeping an open mind and using keen listening skills during the negotiation process can bring a greater appreciation for the talents, experiences and cultural norms for both the home office, and the IPO staff.

Pros & cons of International Procurement Office:

	Local Procurement	International Procurement
Advantages	Creates income for the national economy. Contributes to developing the local businesses and employment Resources granted to a country remain in the country. Creates visibility for the project After sales service immediately available	Wider range of products and services (various quality) Latest technology available More competitive prices
Disadvantages	Less choice of goods and services Technology can be obsolete Cost of the products and services are less competitive (higher prices)	After sales service not always available Delivery delays could be longer Creates income for a foreign economy Payment of customs duty may be required to clear goods. This increases costs.

Table 3.1 – Pros & Cons of International Procurement Office

Considerations in an international procurement office (IPO)

1. Basics: Searches and qualification long before facilities are operational. Best-in-class companies place legions of buyers and quality engineer's in-country to develop qualified sources before ground-breaking ceremonies on manufacturing facilities.
2. Geographical scope: Is the IPO to have regional or only in-country responsibility? This too, will depend upon the extent of existing and planned general operations. As with the company's operations in general, identification of the geographic scope of the IPO will have a significant impact on the staffing requirements and skill mix of the IPO organization.
3. Performance metrics: What are the targeted cost reduction, quality performance, and delivery performance goals for the organization? In addition, performance criteria for other metrics such as budget, acquisition overhead, training, and employee turnover should be established up front.
4. Commercial benefits: Having a presence in foreign markets can provide tremendous benefits to the company. Engagement in governmental affairs, local trade fairs, and knowledge of local retail or commercial markets can provide valuable business knowledge to the organization.

An international procurement office (IPO):

Quantifying the Value of an IPO:

During the evaluation and decision process of opening an International Procurement Office (IPO), predicting the anticipated cost savings and associated costs of the IPO can be difficult. Initiating the evaluation process with a clearly defined mission and scope as discussed in the first article of this series is a logical first start, but clearly additional information is required to create an accurate projection of both IPO savings and operating costs.

In addition, there are various schemes for funding the IPO, from corporate budgeted overhead costs, charging a shared service assessment, or applying a user fee that is added on to all divisional purchases of materials or products managed by the IPO.

The user fee can be a percentage of total costs based on the previous year's dollar value, or as an IPO service fee expressed as a percentage of each requisition or order.

Naturally, the objective of an IPO is to reduce overall material purchase price. But cost reductions need to be evaluated on a landed cost basis. Landed costs must consider at a minimum: freight, customs duties, extraordinary supplier management costs, freight expedites, and currency hedging costs or exposures. Typical results have shown that the costs of creating the IPO will be paid back several times over in material cost savings by the second or third year of operation. But consideration must also be given to the greater quality control, scheduling, and expediting activity that will be facilitated by regional supply management staff, providing additional savings and justification for the IPO investment.

IPO operating costs:

In order to conduct a fair cost evaluation, expected operating costs must be tallied. Depending on the country of choice there can be considerable hidden costs. Companies must conduct their own due diligence on the cost factors as described in the second article of this series; however I strongly recommend meeting with the American Chamber of Commerce (AmCham) in the potential IPO location cities to survey members on their experiences. Chamber members will have the latest details on office costs and risks and are generally very willing to share their wealth of experience with noncompeting companies. As long as the company plans to join the organization once the IPO is opened, most Chamber directors will provide local intelligence services on initial fact-finding missions.

IPO risk abatement:

As with any international venture, there are always greater risks (and potential rewards) when conducting business across international borders. Companies must plan on varying cost/risk/performance fluctuations and swings over the life of an IPO, so assigning risk factors to each major evaluation criteria will lead to a superior decision process. Careful consideration must be given to: exchange rate fluctuations,

transportation costs, transportation lead times, customs duties, local labor rate inflation, raw materials availability, employee retention factors and political stability.

Quantifying the value added of an IPO can be a difficult task as there are quite often many unknowns in the initial planning phase. It is recommended to maintain the IPO budget and cost reduction plan as a living document during the planning phase to reflect current business environments and findings. It is also advised to determine early on in the process how the IPO will be funded throughout the life of the organization.

MICRO ANALYSIS:

Indian, IPOs provide basic services such as supplier searches, supplier audits, and local supplier negotiations support. Over time, their activities move up the value chain to include regional contract negotiations, benchmarking, and regionally leveraged contracts. Indian IPO will entrust to develop and negotiate long-term contracts for not only their region, but also for global operations.

Bangaluru IPO - The function of Procurement Office:

- To assist staff involved in purchasing to achieve value for money in respect of all goods and services, without diminishing the quality and service levels.

This support includes:

- The establishment of IPO groups is to put in place world-wide contracts while ensuring compliance with Tyco's procedures and regulations.
- Negotiations with suppliers.
- Ongoing supplier and contract management.

For large expenditures, they will involve the Procurement Office at an early stage. Advice and assistance can be provided at any time on any purchase regardless of value. The Procurement Office should be seen primarily as a support to the suppliers. Purchasing activities will continue to be devolved.

Objectives of Indian IPO:

- To ensure that value for money is achieved in all purchasing activity.
- To ensure that Tyco's procurement policies and procedures along with public procurement regulations are known and observed by all staff involved in purchasing goods and services.
- To streamline, consolidate and, where possible improve on purchasing practices.
- To provide support to suppliers and improve their training and skills in the purchasing area.
- To develop co-operative relationships between the Procurement Office and Tyco's plant.
- To compare pricing and methodologies with other IPO's to ensure value for money is being obtained.
- To assist suppliers in ensuring that stocks are kept to a workable minimum
- To encourage suppliers to utilize the running contracts put in place by the Tyco's plant to obtain value for money and better quality and service. This should also lead to a reduction in the number of suppliers, thereby making savings in administrative time and costs.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4. DATA ANALYSIS & INTERPRETATION

Spend analysis is the systematic review of historical purchase data. The output of a spend analysis is a summary of purchases by various variables, such as category, supplier, and/or business unit. The primary reason for conducting spend analysis is to identify opportunities for cost savings. When HCC spend is directed towards LCC it end up in cost savings nearly about 25% - 35% which reflects in their profit.

List of Low Cost Countries:

Table 4.1

Tyco International - List of Low Cost Countries

3/27/2007 Rev. 4

Africa	Asia Pacific	Eastern Europe	South / Latin America
Algeria	Bangla Desh	Albania	Argentina
Angola	Bhutan	Armenia	Barbados
Cameroon	Brunei Darussal	Azerbaijan	Belize
Egypt	China	Belarus	Brazil
Equatorial Guinea	French Polynesia	Bosnia/Herzegov	Cayman Islands
Eritrea	Guam	Bulgaria	Chile
Ethiopia	Hongkong	Croatia	Colombia
Gabon	India	Cyprus	Costa Rica
Gambia	Indonesia	Czech Republic	Dominican Republic
Ghana	Malaysia	Estonia	Ecuador
Kenya	Nepal	Georgia	El Salvador
Mali	North Korea	Greece	Granada
Mauritius	Pakistan	Hungary	Guatemala
Morocco	Papua New Guinea	Kazakhstan	Honduras
Nigeria	Philippines	Lativa	Jamaica
Sengal	Seychelles	Lithuania	Mexico
Sierra Leone	Singapore	Maldova	Netherlands ANT
Swaziland	South Korea	Malta	Nicaragua
Tanzania	Sri Lanka	Poland	Panama
Tunisia	Taiwan	Romania	Paraguay
Zimbabwe	Thailand	Russia	Peru
	Vietnam	Serbia & Montenegro	Saint Lucia
Middle East		Slovakia	Trinidad & Tobago
Afghanistan		Slovenia	Uruguay
Bahrain		Turkey	Venezuela
Iran		Turkmenistan	
Iraq		Ukraine	
Jordan		Uzbekistan	
Kuwait		Yugoslavia	
Lebanon			
Oman			
Qatar			
Saudi Arabia			
Syrian Arab			
United Arab Emirates			
Yemen			

4.1. SPEND ANALYSIS OF TYCO'S PLANT1:

The table below shows the total spend made by Tyco's Plant for the fiscal year FY07 – FY08 (Q1).

The Total Spend by Plant1 = $20.98 million

The Total Spend on HCC (High Cost Countries) = $17.82 million

Table 4.2

Spend in Four Quarters of the Fiscal Year

	FYQ1	FYQ2	FYQ3	FYQ4	Grand Total
FY07	$ 3,959,859	$ 3,500,993	$ 3,407,669	$ 3,794,940	$ 14,663,460
FY08	$ 3,157,889	-	-	-	$ 3,157,889

From the above spend on HCC (High Cost Countries) the total direct spend which can be sourced in LCC (Low Cost Countries) according to various commodities are as follows

Table4.3

TOTAL DIRECT SPEND SOURCEABLE

Casting & Forging			Fabrication & Machining Commodities		
Parts	**Spend**	**Contribution**	**Parts**	**Spend**	**Contribution**
Body	$ 1,449,461	24%	Nut	$ 852,657	35%
Flange	$ 1,423,656	24%	Stem	$ 329,443	13%
Casting Parts	$ 1,309,341	22%	U-Bolt	$ 328,237	13%
Cover	$ 900,904	15%	Gasket	$ 266,311	11%
Forging parts	$ 682,686	11%	Screw	$ 235,314	10%
Body - Nozzle	$ 107,023	2%	Stud	$ 147,023	6%
Others	$ 92,318	2%	Washer	$ 65,070	3%
Grand Total	$ 5,965,389	100%	Bracket	$ 59,983	2%
			Others	$ 156,632	6%
			Grand Total	$ 2,440,669	100%

Raw Material	**Spend**	**Contribution**	**Raw Material**	**Spend**	**Contribution**
SS	$ 4,313,226	72%	SS	$ 1,993,797	82%
BRZ	$ 702,956	12%	BRS	$ 134,530	6%
IRN	$ 488,923	8%	BRZ	$ 46,031	2%
Others	$ 460,284	8%	Others	$ 266,311	11%
Grand Total	$ 5,965,389	100%	Grand Total	$ 2,440,669	100%

Spend analysis shows that nearly $8.40 million can be sourced in LCC (Low Cost Countries) which is 47.16% of total spend by plant1.the above table shows Casting and Forging commodities can be sourced up to $5.96 million and Fabrication & Machining Commodities can be sourced up to $2.44 million. This will contribute to cost savings of around $2.94 million.

Distribution of Commodities

Total Direct Spend which can be Sourced in LCC = $ 8.40 M [47.16%]

Table4.4

Total Spend on Commodities

Commodities	Spend
Casting & Forging	$ 5,965,389
Fabrication & Machining	$ 2,440,669
Grand Total	**$ 8,406,058**

Figure 4.1

Distribution of Commodities

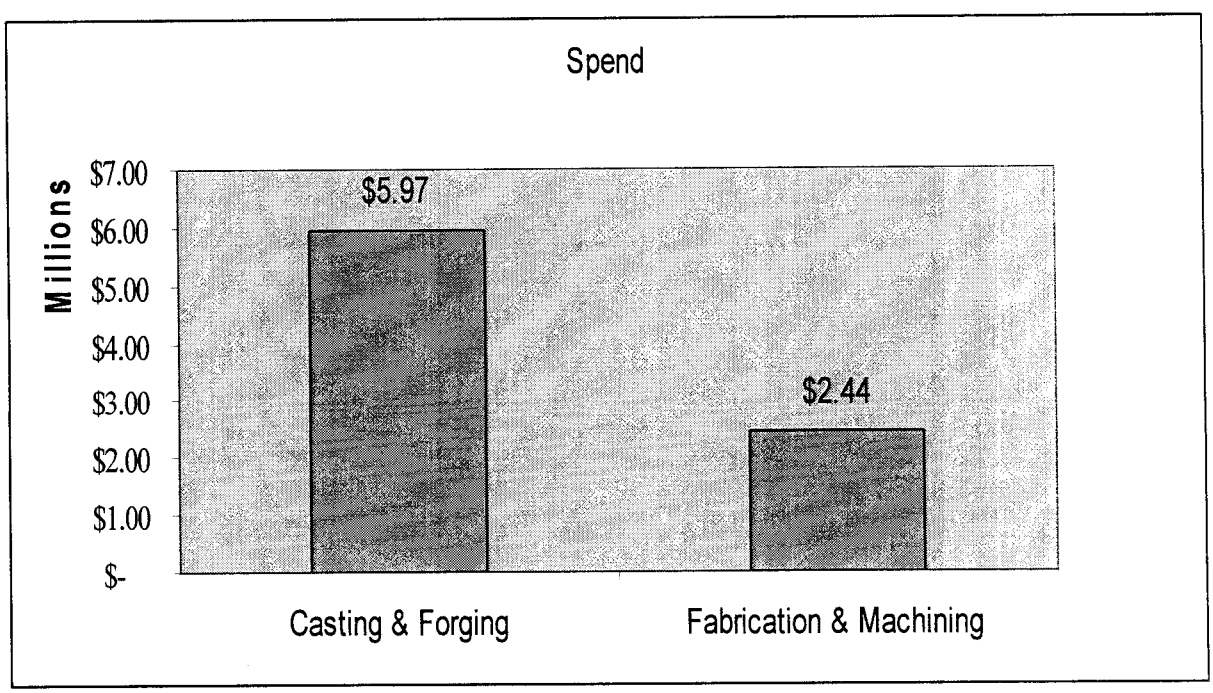


Figure 4.2

The Pie Chart showing Distribution of Casting & Forging Commodities

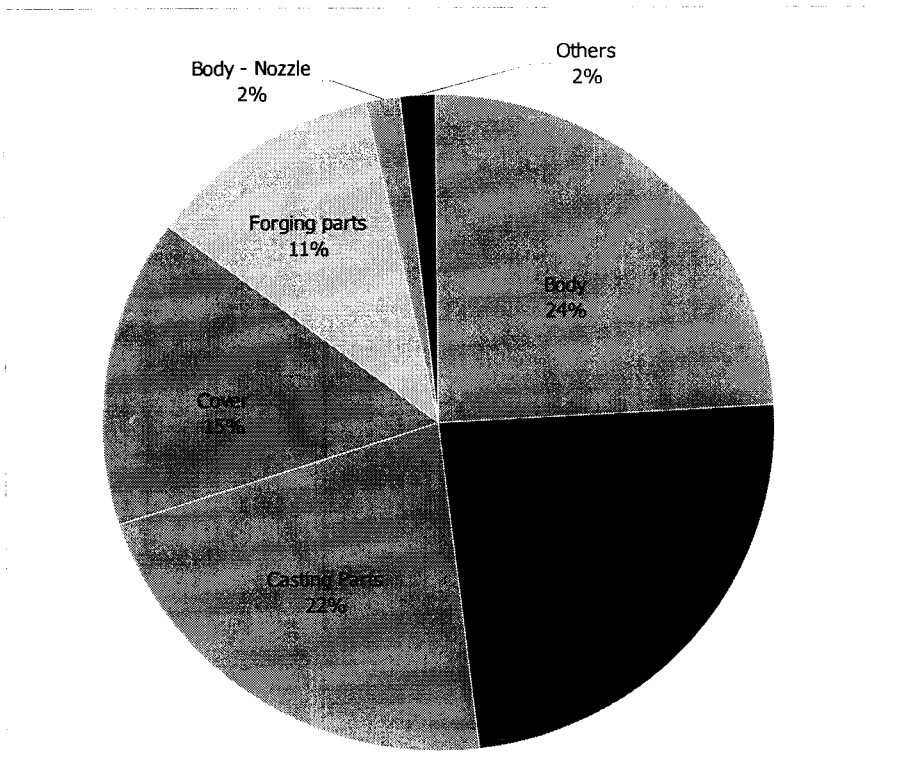


Figure 4.3

The Pie Chart showing Distribution of Casting & Forging Material

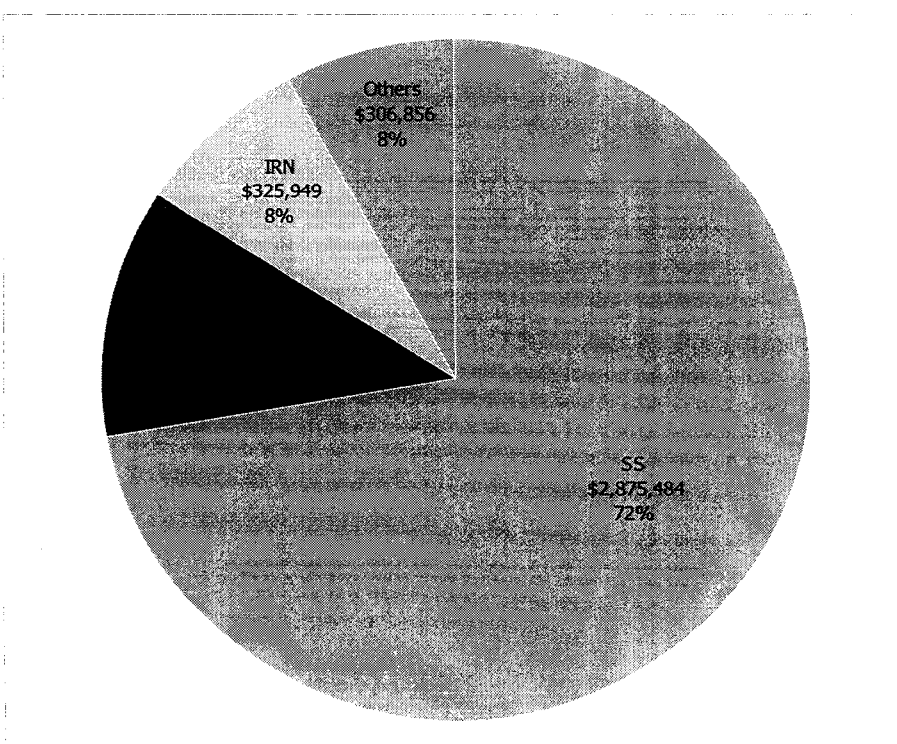


Figure 4.4

The Pie Chart showing Distribution of Machining Commodities

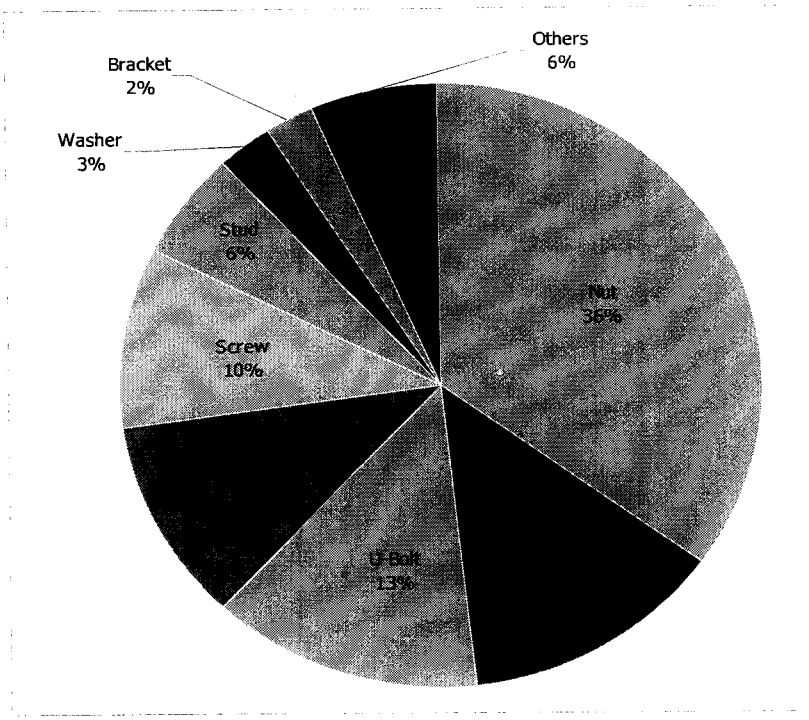
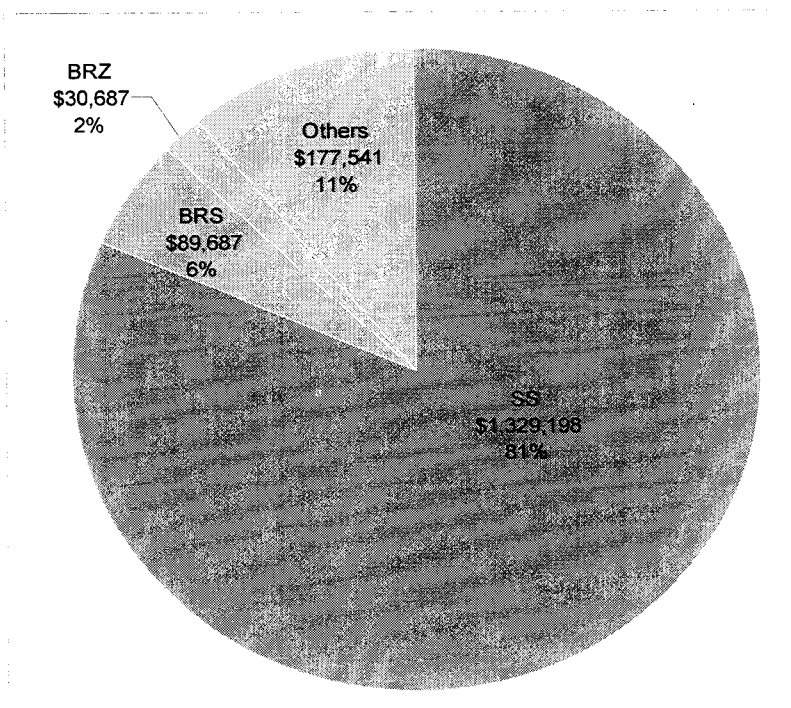


Figure 4.5

The Pie Chart showing Distribution of Machining Commodities Material



4.2. SPEND ANALYSIS OF TYCO'S PLANT2:

The table below shows the total spend made by Tyco's Plant for the fiscal year FY07 – FY08 (Q1).

The Total Spend by Plant1 = $49.19 million

The Total Spend on HCC (High Cost Countries) = $34.78 million

Table 4.5

Spend in Four Quarters of the Fiscal Year

	FYQ1	FYQ2	FYQ3	FYQ4	GrandTotal
FY2007	$ 10,793,929	$ 9,422,839	$ 9,546,285	$ 10,363,732	$ 40,126,785
FY2008	$ 9,072,625	-	-	-	$ 9,072,625

From the above spend on HCC (High Cost Countries) the total direct spend which can be sourced in LCC (Low Cost Countries) according to various commodities are as follows

Table 4.6

TOTAL DIRECT SPEND SOURCEABLE

Casting & Forging			Fabrication, Machining & Others		
Parts	**Total**	**Contribution**	**Parts**	**Total**	**Contribution**
Valve Body	$ 3,978,506	64%	Spring	$ 4,305,782	42%
Casting-Nozzle	$ 454,964	7%	Bar	$ 2,300,280	22%
Casting-Guide	$ 394,153	6%	Seat	$ 865,084	8%
Casting-Disc	$ 293,438	5%	Screw	$ 785,625	8%
Valve Cap	$ 255,338	4%	Piston	$ 733,347	7%
Casting-Body	$ 210,054	3%	Disc	$ 508,566	5%
Bonnet	$ 176,908	3%	Stem	$ 508,049	5%
Casting-Control	$ 112,905	2%	Others	$ 233,909	2%
Others	$ 361,669	6%	Grand Total	$ 10,240,642	100%
Grand Total	$ 6,237,934	100%			

Finished Goods		
Parts	**Total**	**Contribution**
Valve	$ 12,278	26%
Check Valve	$ 11,683	24%
Ball Valve	$ 11,381	24%
Vent Valve	$ 10,558	22%
Relief Valve	$ 1,877	4%
Grand Total	$ 47,777	100%

Spend analysis shows that nearly $16.47 million can be sourced in LCC (Low Cost Countries) which is 33.49% of total spend by plant2.the above table shows Casting and Forging commodities can be sourced up to $6.23 million and Fabrication & Machining Commodities can be sourced up to $10.24 million. which will contribute to cost savings of $5.76 million.

Distribution of Commodities

Total Direct Spend which can be Sourced in LCC = $ 16.47 M [33.49%]

Table 4.7

Total Spend on Commodities

Commodities	Spend
Casting & Forging	$ 6,237,934
Fabrication, Machining & Others	$ 10,240,642
Grand Total	**$ 16,478,576**

Figure 4.6

Distribution of Commodities

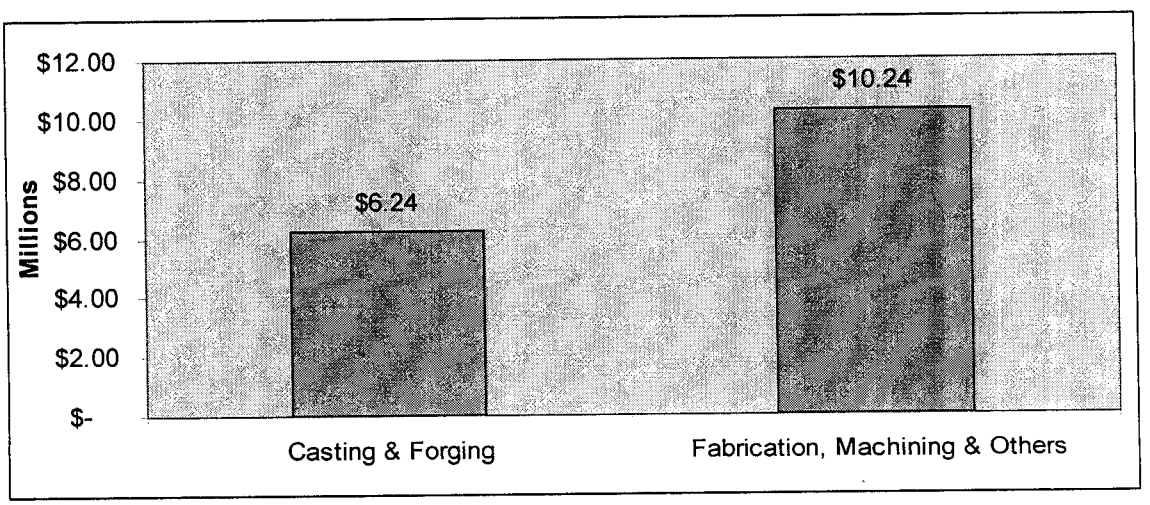


Figure 4.7

The Pie Chart showing Distribution of Casting & Forging Commodities

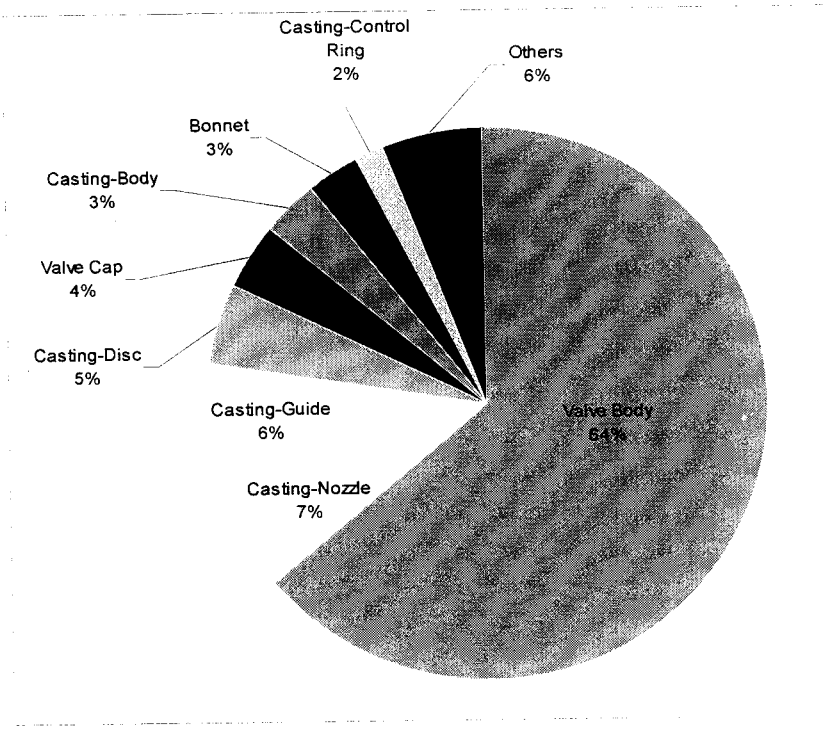


Figure 4.8

The Pie Chart showing Distribution of Machining Commodities

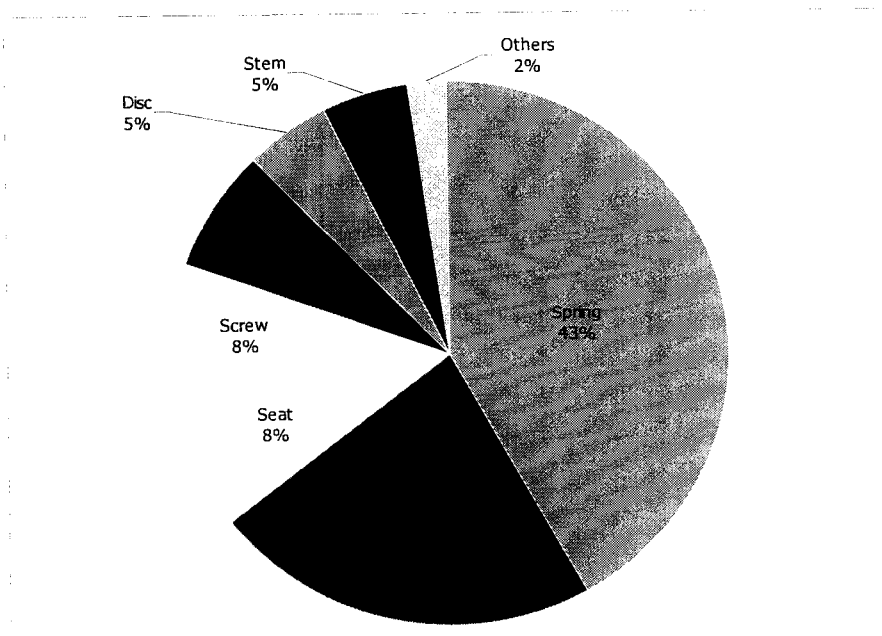
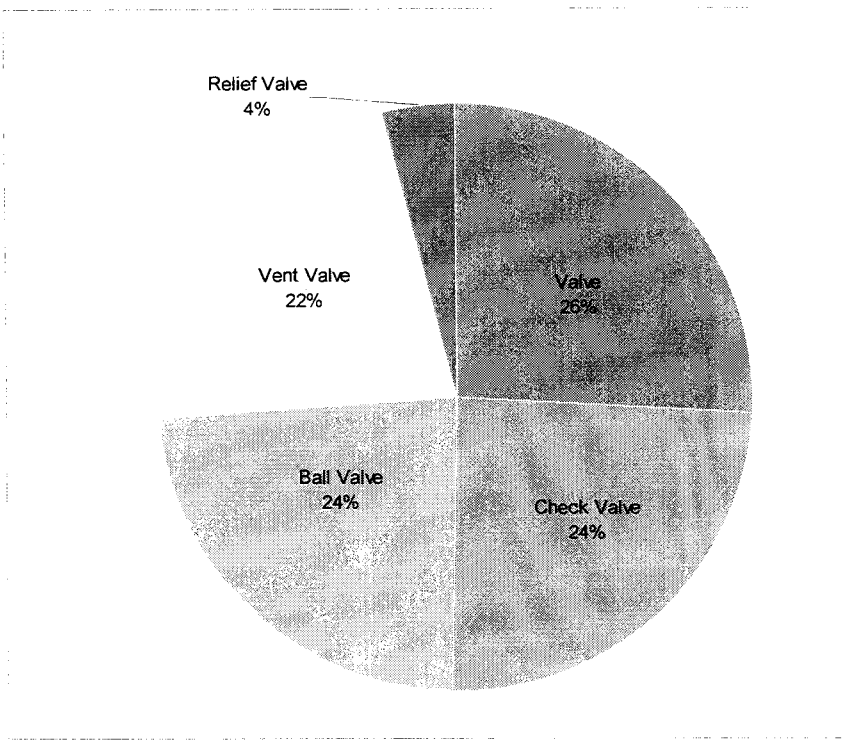


Figure 4.9

The Pie Chart showing Distribution of Finished Goods



4.3. SPEND ANALYSIS OF TYCO'S PLANT3:

The table below shows the total spend made by Tyco's Plant for the fiscal year FY07 – FY08 (Q1).

The Total Spend by Plant1 = $64.99 million

The Total Spend on HCC (High Cost Countries) = $61.49 million

Table 4.8

Spend in Four Quarters of the Fiscal Year

	FYQ1	FYQ2	FYQ3	FYQ4	Grand Total
FY2007	##########	##########	##########	##########	##########
FY2008	$ 4,958,754	-	-	-	$ 4,958,754

From the above spend on HCC (High Cost Countries) the total direct spend which can be sourced in LCC (Low Cost Countries) according to various commodities are as follows

Table 4.9

TOTAL DIRECT SPEND SOURCEABLE

Casting		
Parts	Spend	Contribution
Housing	$ 1,433,651	71%
Body	$ 298,463	15%
Yoke	$ 96,163	5%
Gland	$ 85,727	4%
Flange	$ 43,742	2%
Others	$ 49,995	2%
Grand Total	$ 2,007,741	100%

Raw Material		
Parts	Spend	Contribution
Plate	$ 2,478,258	71%
Flat bar	$ 363,382	10%
Round bar	$ 257,809	7%
Angle bar	$ 185,818	5%
Sheet	$ 98,578	3%
Angle bar	$ 57,149	2%
Others	$ 28,394	1%
Grand Total	$ 3,469,388	100%

Fabrication & Machining		
Parts	Spend	Contribution
Gate	$ 7,363,797	40%
Body	$ 1,972,584	11%
Housing	$ 1,620,957	9%
Retainer	$ 1,537,000	8%
Frame	$ 1,025,003	6%
Air Cylinder	$ 893,636	5%
Seat	$ 557,019	3%
Stems & Nuts	$ 494,094	3%
Arm	$ 318,637	2%
Ring	$ 299,116	2%
Others	$ 2,326,715	13%
Grand Total	$ 18,408,558	100%

Finished Goods		
Parts	Spend	Contribution
Knife Gate	$ 13,499,794	82%
Solenoid Valve	$ 987,689	6%
Actuator	$ 873,078	5%
Valves	$ 632,496	4%
Gate Valve	$ 439,230	3%
Grand Total	$ 16,432,288	100%

Spend analysis shows that nearly $40.31 million can be sourced in LCC (Low Cost Countries) which is 62.03% of total spend by plant3.the above table shows Casting commodities can be sourced up to $2 million, Fabrication & Machining Commodities can be sourced up to $18.40 million, Finished Goods up to $16.43 million and Raw material $3.46 million. This will contribute to cost savings of around $14.11 million.

Distribution of Commodities

Total Direct Spend which can be Sourced in LCC = $ 40.31 M [62.03%]

Table 4.10

Total Spend on Commodities

Commodities	Spend
Casting	$ 2,007,741
Fabrication & Machining	$ 18,408,558
Raw Material	$ 3,469,388
Finished Goods	$ 16,432,288
Grand Total	**$ 40,317,974**

Figure 4.10

Distribution of Commodities

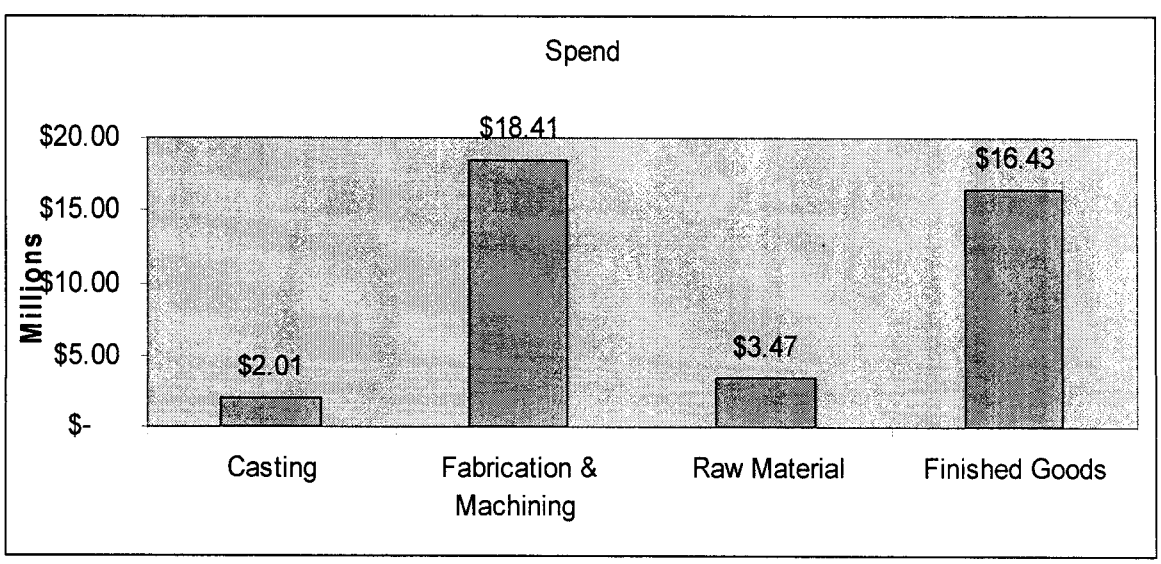


Figure 4.11

The Pie Chart showing Distribution of Casting Commodities

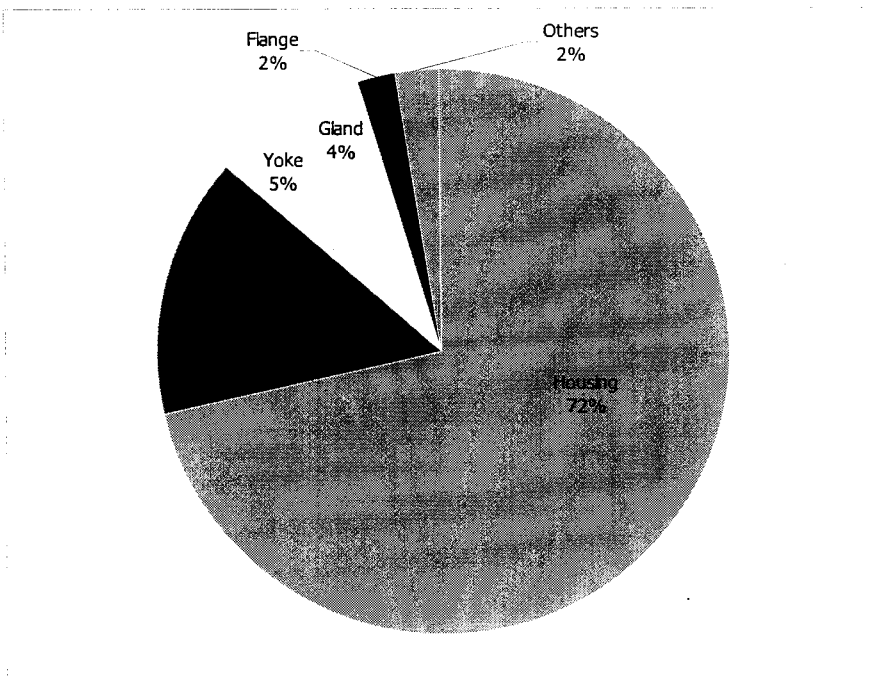


Figure 4.12

The Pie Chart showing Distribution of Machining Commodities

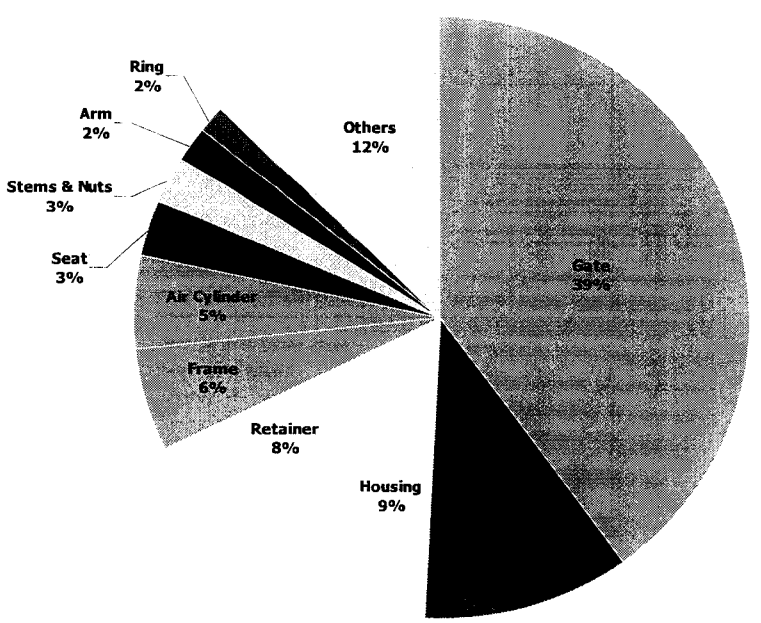


Figure 4.13

The Pie Chart showing Distribution of Finished Goods

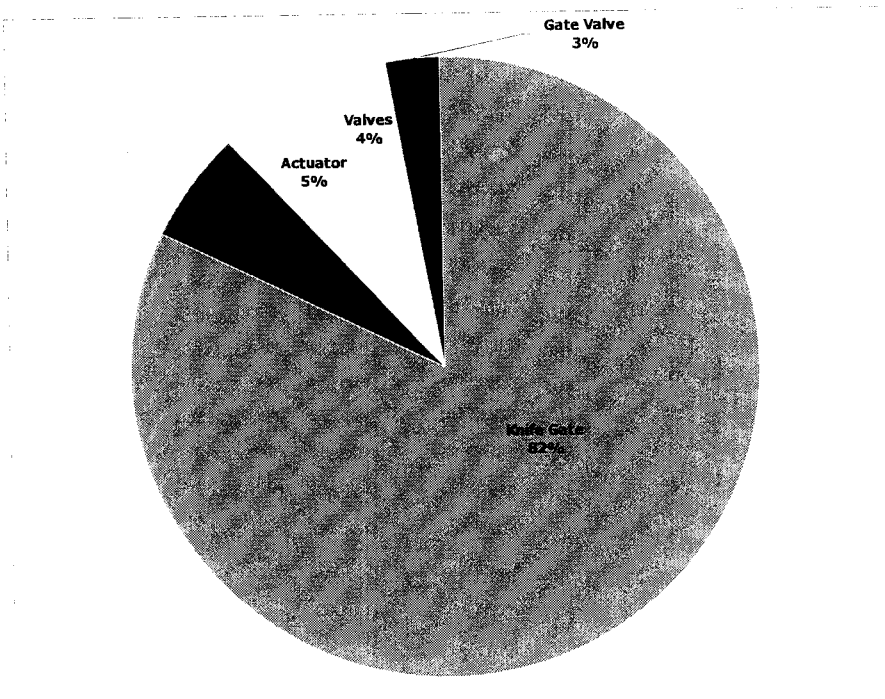
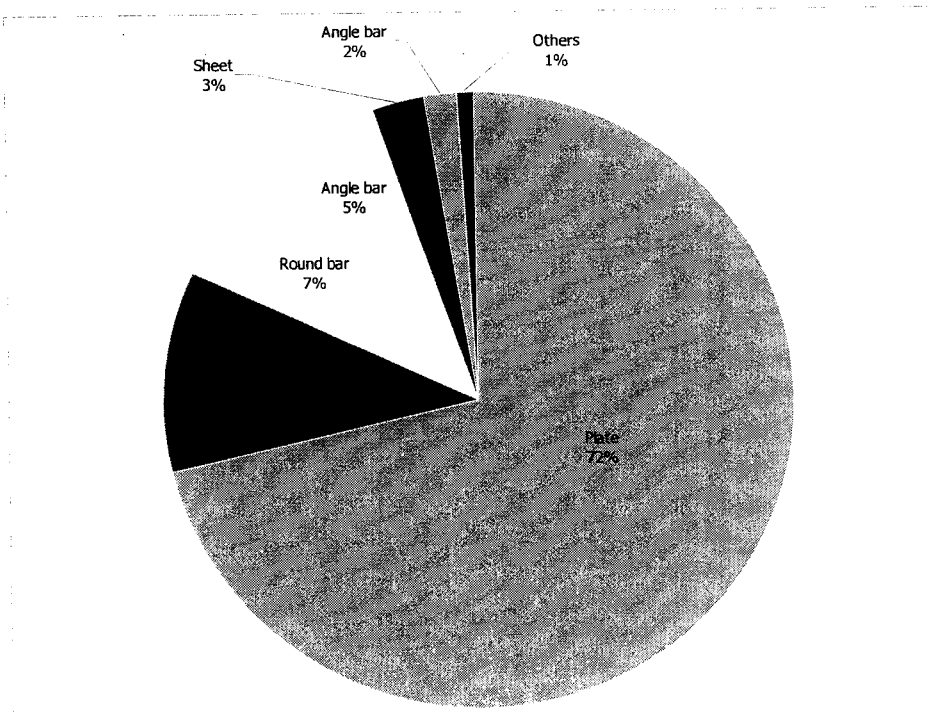


Figure 4.14

The Pie Chart showing Distribution of Raw Materials



Total HCC (High Cost Countries) Spend by Tyco's Plant

Plant1 on HCC (High Cost Countries) = $17.82 million

Plant2 on HCC (High Cost Countries) = $34.78 million

Plant3 on HCC (High Cost Countries) = $61.49 million

Total Direct Spend which can be sourced in LCC (Low Cost Countries) by

Plant1 in LCC (Low Cost Countries) = $ 8.40 million [47.16%]

Plant2 in LCC (Low Cost Countries) = $ 16.47 million [33.49%]

Plant3 in LCC (Low Cost Countries) = $ 40.31 million [62.03%]

Calculation for cost savings by plants

The sourcing team in LCC (Low Cost Countries) sources only when the costs of commodities less than cost in HCC (High Cost Countries) up to 25% - 35%.Sourcing team always look for maximum reduction.

Minimum cost savings

By Plant1 $ 8.40 million * .25 = $ 2.1 million

By Plant2 $ 16.47 million * .25 = $ 4.11 million

By Plant2 $ 40.31 million * .25 = $10.07 million

Maximum cost savings

By Plant1 $ 8.40 million * .35 = $ 2.94 million

By Plant2 $ 16.47 million * .35 = $ 5.76 million

By Plant2 $ 40.31 million * .35 = $14.11 million

Cost Savings by each Plant by sourcing in LCC (Low Cost Countries)

Cost savings by Plant1 = $2.1million-$ 2.94 million

Cost savings by Plant 2 = $ 4.11 million-$ 5.76 million

Cost savings by Plant 3 = $10.07 million -$ 14.11 million

Total savings for Tyco's Plants

Minimum cost savings

By Plant1 $ 8.40 million * .25	=	$ 2.1 million
By Plant2 $ 16.47 million * .25	=	$ 4.11 million
By Plant2 $ 40.31 million * .25	=	$10.07 million
Grand total	=	**$16.28 million**

Maximum cost savings

By Plant1 $ 8.40 million * .35	=	$ 2.94 million
By Plant2 $ 16.47 million * .35	=	$ 5.76 million
By Plant2 $ 40.31 million * .35	=	$14.11 million
Grand total	=	**$22.81 million**

Spend analysis calculations shows that Tyco International can save a minimum of $16.28 million and a maximum of $22.81 million by sourcing the direct spend to LCC (Low Cost Countries).

CHAPTER 5

FINDINGS AND CONCLUSION

5. CONCLUSIONS

5.1. Results & Discussions:

- This validation in spend data warehouse helps to classify the data accurately under their family, which gives the organization a clear view about their spent. It helps the organization in many ways.

  Following are few examples

  - Accurate Tyco taxonomy classifications.
  - Identify HCC and LCC spend.
  - Identify commodity- wise spend.
  - Helps in identify key suppliers. Etc

- Spend analysis helped in identifying the source able spent from HCC to LCC, which bring in the organization savings, expand supplier base, have strategic suppliers etc. The spent identified in various plant can save a minimum of $16.28 million and a maximum of $22.81 million by sourcing the direct spend to LCC (Low Cost Countries).

- Spend analysis on various commodities separately helps the sourcing teams to proceed on sourcing with the accurate information reduces their time in the process.

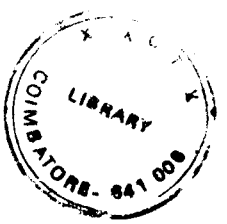
5.2. Considered Recommendations:

- Spend analysis should be carried out for other International Plants of Tyco for cost savings which will make them more competitive in the world market.
- Spend analysis on other plants should be carried accurately by commodity- wise which help souring team members to achieve their targets easily and brings in more business through Indian IPO team.
- Spend analysis should be carried out year by year to know their spend accurately and necessary cost reduction in required area
- The sourcing team should identify the suppliers in their region to meet the plant requirements in time.
- The supplier should be trained to meet the international quality requirements of the Tyco Plants to satisfy the customers.

REFERENCE

REFERENCES:

- **www.unspsc.org**
- **www.tyco.com**
- **www.sdw.tyco.com**



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