Graduation Project

TECH NOVA 2009

A book of abstracts

Bachelor of Fashion Technology

(Apparel Production)

Department of Fashion Technology

National Institute of Fashion Technology
C.A. Site No. 21, 27th Main Road, Sector 1, H.S.R. Layout
Bengaluru-560102

FACULTY RESOURCE

Professor & Chairperson

Dr. A.K. Khare

Associate Professor

Ms. Jonalee D. Bajpai (Centre Co-ordinator - BFT)
Ms. Shipra Sharma (Centre Co-ordinator - MFT)
Ms. Sudha Singh
Ms. Rajni Jain

Assistant Professor

Mr. Abdul Salam Sait
Ms. Sweta Jain
Ms. Subhalakshmi Kropi
Mr. Vasant Kothari

Visiting Faculties

Mr. Piyush R. Vyas
Mr. Rohit Gugnani
Mr. Ravi Kishore

Research Assistant

Mr. G. Thirumalai Kumaran
Mr. Balvinder Paul (Senior Machine Mechanic)
Mr. Srinivasa M.R (Lab Assistant)
Mr. N. Chandrashekar (Attendant)

Class of 2005-09

Sanchit Aneja, Sunil Gahtori

Formal Clothing Company

Project Name : Cost cutting in a garment unit

Faculty Guide : Ms. Jonalee Bajpai (Associate Professor, NIFT)

Industry Guide : Mr. Abhinav Saxena

TECH NOVA 09

Abstract

Worldwide, the costs for energy and water are rising far quicker than ever thought of. At the same time, the costs of raw materials are exploding. That's why increasing prices for yarns and fabrics seem inevitable. On the other hand, retail buyers and consumers won't accept higher prices without getting more value. Squeezed in between these two immovable rocks are the apparel industries. The importance of cost cutting in today's scenario is immense. Cost cutting is not limited to manufacturing processes. Raw materials, manpower, procurement, energy and water costs comprise major chunk of costs in production.This project aimed at identifying and controlling the costs involved in day to day functioning of the garment unit which can be avoided completely or can be reduced to a particular extent.

Findings

This project was divided in two phases. In phase I Study of the costs was done in Factory A which had a lot of uncontrolled costs. System was developed to convert uncontrolled costs to controlled costs and then further reduction was planned. In phase II, developed system was implemented in Factory B which was being set at that time. Results were obtained and compared. It was found that unit can not only control costs but also almost double their revenue generated by using the model system for cost cutting.

This project not only provides deep insight into the Cost cutting aspect of the Industry, it also compares the feasibility of implantation of new model system in a new setup to that of, in an existing setup.

- Cost cutting by reduction in cost of poor quality.
- Cost cutting by reduction in machine idle time

Email : sanchit.aneja@gmail.com, sunil.gahtori@gmail.com

DIRECTOR GENERAL'S MESSAGE

It gives me immense pleasure & happiness to introduce to you the graduating batch of Bachelor of Fashion Technology (Apparel Production) 2005 – 09, NIFT, Bangalore. These young professionals are all set to take on the centre stage proving their mettle over the rest. I have no doubt that these students will make a mark in the coming years. They will not only be a valuable asset to the garment industry but also facilitate the Indian apparel industry to achieve newer heights.

Even in the recessionary phase of the economy there is no slowing them down. They are confident and ready to take on the world in their stride. "Technova 2009", provides an opportunity to take a look at their potential and see what they have in store for you. This platform explores new avenues & opportunities for industry as a whole. It also provides industry with fresh talent every year.

I would like to commend the efforts of Director, Registrar, Faculty & Staff of NIFT, Bangalore for the hard work they have put in to nurture, encourage and develop their latent potential.

I also wish the graduating students a bright, rewarding & a fulfilling career ahead.

Rajiv Takru
Director General
National Institute of Fashion Technology

DIRECTOR'S MESSAGE

The textile industry in India has always held a position of cardinal importance in our economy. Even in today's recession hit times, the industry continues to be a robust contributor to our foreign exchange earnings. Technological innovations in the garment industry assume greater importance in today's scenario. NIFT has always endeavored to underline this importance among our students.

Through "TECHNOVA", NIFT, Bengaluru presents to the industry, Bachelors of Fashion Technology (Apparel Production) (Batch of 2005 – 09) as a complete solution to the various challenges faced by the industry today. This batch of budding professionals is equipped with the relevant knowledge of different aspects of this business. "TECHNOVA" compiles their graduation project efforts towards addressing various problems in the industry. These projects have been able to touch upon the different business processes in the industry.

I would like to congratulate industry guides, faculty members, officers and staff of NIFT Bengaluru for providing the required guidance and support to the students in achieving their project goals. I would also like to express my gratitude to the sponsoring industries for providing the students with practical knowhow and experience of working in the industry.

Ms. Kakarla Usha, I.A.S
Director
National Institute of Fashion Technology
Bengaluru

Umesh Kumar

Technopak Advisors Pvt Ltd

Project Name : Setting up Flexible Sewing Lines based on Modular Manufacturing System and incorporating lean Concepts.

Faculty Guide : Ms Sweta Jain (Assistant Professor, NIFT)

Industry Guide : Mr. Rakesh Ranjan(Senior Consultant, Technopak)

TECH NOVA 09

Abstract

In today's scenario, the Indian garment industry is severely hit due to the ongoing recession in Global economy which is resulting in shrinking export order sizes. In this situation, there is a need of a system which can cater to the high end buyers by providing them value added products which will be in smaller order sizes with quick lead times. Modular manufacturing system is system in which there is a flexibility that allows the system to react in the case of changes, whether predicted or unpredicted. In this, team members accomplish a series of varied tasks on a single article of clothing which involves teamwork, increased responsibility, and greater interaction among coworkers than do traditional assembly lines. The majority of apparel-manufacturing firms still existing in developed countries like EU, Japan and US have adopted Teamwork to achieve quick turnaround of fashion products in a desperate bid to counter the onslaught of imports. Those firms also reported productivity gains of 15% to 60% along with improved quality and quick response or one of them.

Findings

The most visible advantages of modular manufacturing are team integration, flexibility, reduction in absenteeism, significant improvement in quality & efficiency and reduction in the work in progress (WIP). Modular Manufacturing with its flexibility is ideal for small order sizes with quick lead times, it also improve labour productivity, and reduce throughput time and repair levels as operators are trained not to check quality but create it. Training raw operators for modular manufacturing have an advantage of molding them according to the needs of Team work environment. Modular System creates the platform for significant changes in overall attitude and work environment of the organization.

Email : aashu.umesh@gmail.com

Ekansh Tiwari

Silver Spark Apparel Ltd.

Project Name : Re-Engineering of the Cutting Department

Faculty Guide : Dr. A.K. Khare (Professor, DFT)

Industry Guide : Mr. P. K. Khot (Assistant Manager, Manufacturing)

TECH NOVA 09

Abstract

The word re-engineering refers to complete makeover of something which was functioning at its own traditional, orthodox style and work methodology. When a vehicle after long use starts making unusual noise, excess pollution and its performance level decreases then it requires a good servicing. Similarly in day to day working of apparel industry the process functioning tends to wear out. The methods and procedures are not taken into considerations due to lack of supervision, which ultimately results in a totally mismanaged way of running the factory.

The project provides a pathway towards systematic and well planned way of running the departments resulting in shorter lead times. The project also provides a methodology to utilize the manpower in the best possible way thus eliminating the extra workforce and resulting in cost reduction for the company.

Findings

The Cutting Department is usually a neglected field of research. Much of the research is involved in the Sewing Department. As a result, no standardised data is available for operations involved in the Cutting Department. The fabric constitutes 50-60% of the cost of the garment. As a result, big saving margins in this area can be done by careful and planned cutting procedures followed for the garment parts depending on the fabric type being handled and the machinery involved. A measure of the cutting capacity is needed to determine the input to be fed for the Sewing lines. So, it is important to determine the bottleneck in the Cutting Department which in turn gives the Overall Cutting Capacity. The Scope of this Project in the Garment Industry is far more than it seems, the only concern left in this prospect is to get the Management's focus in getting to know their ability better.

Email : ekanshtiwari@yahoo.com

CHAIRPERSON'S MESSAGE

The apparel Industry has always been a major contributor to Indian economy. However, it is yet to be fully rationalized & exploited so as to compete in the global arena. We at the Department of Fashion Technology, National Institute of Fashion Technology prepare such young talents to become the business master minds of the apparel industry. Not only they are equipped with the technical know-how of their domain but they also possess entrepreneurial abilities which make them a class apart. The need of the hour is innovative skillful thinking which gives an edge over the rest in the business. And that is what distinguishes a market leader form the rest. We at NIFT produce such leaders who with their pool of talents can serve in any area of the industry, be it at the shop floor or at the company headquarters.

Today most of the leading companies in India and abroad as well, have employed garment technologists from NIFT. This feat alone is a compliment to the success of this department. And we continue to bring this success to your company yet again through "Technova'09". This is a kaleidoscope depicting the potential of these young budding professionals, the challenges they have taken so far & efforts they have made to accomplish those challenges. The graduation projects that our students have taken up cover a wide range of research areas such as Supply Chain Management, Product Range Development, Process Improvisation, Software Solutions, Merchandising, Lean Manufacturing, Critical Path Management, Establishing Standard Operating Procedures, Plant Layout Design etc., the list is endless. Through this medium I would like to acknowledge & appreciate the efforts of the faculty & staff members who left no stone unturned for the successful completion of these projects. I also thank all the sponsoring companies for enriching the experience of these students.I also congratulate the passing out batch of 2005-09 of B. F. Tech (Apparel Production) for successful completion of their graduation projects & academic programme at NIFT. I wish them all the success in their future endeavours.

Dr. A. K. Khare
Professor and Chairperson
Department of Fashion Technology,
National Institute of Fashion Technology

CENTRE COORDINATOR'S MESSAGE

The 4 – year bachelor's program in Fashion technology is aimed to train people in varied aspects of the business of fashion & apparel. It imparts practical knowledge pertaining to application of technology in the apparel industry. The students of this course are a rare find as they serve many purposes for the industry such as production executives, industrial engineers, quality executives, merchandisers, consultants, retail planners, product managers, sourcing executives, and sales & marketing executives.

Technova '09 is an attempt to present an overview of the graduation projects undertaken by the final year students of Bachelor of Fashion Technology (Apparel Production) students, providing the readers an insight into the approaches taken by students to tackle issues and provide innovative solutions spearheading various spheres of the Indian Apparel industry. I would also like to express my gratitude to all the sponsoring organizations for their invaluable support at every stage.

Through this medium, I also acknowledge the efforts of all the faculties & staff members of this department for their valuable mentoring and assistance in the successful completion of these projects. I would like to congratulate the students on successful completion of their project. I wish the students all the best in all their future endeavors.

Jonalee D. Bajpai
Centre Coordinator
UG Programme
Department of Fashion Technology

Suroshri Paul

Pantaloons Retail India Ltd.

Project Name : Analysis of Kidswear Category in CENTRAL, Bangalore

Faculty Guide : Ms. Sudha Singh (Associate Professor, NIFT)

Industry Guide : Mr. Brajesh Sharma, Category Manager of Kidswear

TECH NOVA 09

Abstract

Children's clothing has always caught the attention of the manufacturer as well as the designer as it requires greater emphasis for both aesthetics as well as functional features. The paper here is thus focused on firstly, analyzing the range of categories and secondly, acquiring the knowledge of the demands of the consumer (parents/guardians in this case) and then development of a appropriate merchandise mix for the floor.
Through the Brand Survey and Category analysis the exact picture of the gaps or loopholes in the system is analyzed. The evaluation of the sales and the stock data is focused only to obtain an overall picture of the success rate of the brands. The second part deals with the Customer Survey which is done to get the feedback whether the hypothesis set by the analyses through the Brand Survey matches the customer expectations and demands.

Findings

This research gives an overall view of the variance between the potential of the system and its actual performance which can prove helpful in identifying with the set target and those presently being achieved. The project has been completed till the designing of the option plan, thus there is a scope to extend it further till the actual implementation.

Email : suroshri@gmail.com

Himanshu Sinha & Sarvendra Kumar Deo

Fashion Link Pvt. Ltd., Vapi

Project Name : SOP and Quality System Implementation

Faculty Guide : Ms. Subhalakshmi Kropi (Assistant Professor, NIFT)

Industry Guide : Mr. Pawan Bhartiya(Factory Owner / CEO)

TECH NOVA 09

Abstract

The project has been taken up realizing the needs of the domestic apparel manufacturing sector in India. The project emphasizes on synchronizing the hierarchy, processes, work instruction and establishment of proper information flow within a domestic Shirt Manufacturing Unit. To establish a synchronized and proper information flow various reports were generated in various departments of the organization. This ensures transparency among different departments. A proper hierarchy divides the responsibility among each department. A defined work instruction helps in establishing a standard operating procedure which can later be supported by a quality system.

Findings

The project also focuses on establishment of a Quality System in the same unit. This includes establishing of quality check points in each department. This helps in improving and standardizing the out going quality of product. A good quality system is very helpful for an organization catering the domestic market due to low order quantity and high competitiveness.

Further, improvisation of the work flow and information flow along with establishment of quality check points lead to increase in overall productivity of the organization.

The standard operating procedure needs to be revised in every two or three years, and changes should be made, depending on the organizational needs.

Email : himanshu10151@yahoo.co.in / sarvendrakumardeo@yahoo.com

Abhilasha Hoon

Integra Apparels & Textiles Ltd., Bangalore

Project Name : Study and Implementation of Critical Chain Approach

Faculty Guide : Ms.Subhalakshmi Kropi (Assistant Professor, NIFT)

Industry Guide : Mr. Rudrapratap Mukherjee

TECH NOVA 09

Abstract

For any export oriented manufacturing unit to succeed, three factors have to be taken care of. These are labor, quality & lead time. Most of export houses in India are good when it comes to first two, but they have come under severe criticism from foreign buyers for failing on the third front, lead time management. A case study was conducted at Integra Apparels & Textiles Pvt. Ltd. for Pre-Production Activities to find out reasons of its failure to deliver export orders on time. Some of the key findings are- Procuring good quality fabric for high fashion garment with in 45 days is an up hill task. Getting the samples made on time and taking the approval from the buyer is also a major issue, which needs attention. Poor monitoring of orders, lack of well defined critical paths for individual buyers and lack of time & action calendars aggravate the problems. The project helped to identify the constraint activity, based on the variation between the planned and actual lead time for critical activities and then exploit it, helping to reduce the lead time for the activity and hence the system as a whole.

Findings

Merchandising and Pre-Production activities take on an average 75% of total order execution time. Fabric Procurement and Size Set Sampling are two constraint activities that are causing major delay of Pre-production and merchandising activities. Fabric procurement takes the maximum time among all pre-production and merchandising activities, average 55 days.

Email: abhilasha.hoon@gmail.com

Gaurav Gupta

Madura Garments (Allen Solly), Bangalore

Project Name : To develop Standard Operating Procedures for order booking in trade for Allen Solly

Faculty Guide : Ms. Shipra Sharma (Associate Professor, NIFT)

Industry Guide : Ms. Rashmi Shukla, Product Head, Allen Solly

TECH NOVA 09

Abstract

The trade channel forms a substantial 50 – 60% of the annual turnover for the brand. For this channel, while competing with other brands in its league, the merchandise and its presentation to the retailer is a very decisive factor in selling the same. The important things to keep in mind while booking orders are most importantly the collection and the way in which it is presented, how well a product is marketed, how effectively competition is outdone and how well commitments are met. An effort was made to explore these areas for problems and provide solutions to improvise & optimize the procedures. Standards were developed & set for an improved presentation to go in the market, a more effective booking cycle time, at the same time meeting other brand requirements. The costs were reduced by approximately 30% & also provided better working procedures for the brand.

Findings

An improved & more flexible order booking cycle was implemented. The presentation of the collection was improved and the total costs incurred were reduced by approximately 30% while at the same time meeting the needs of the process better at both the ends of the brand as well as the retailer. Issues with vendors supplying materials for collection presentations were resolved, new costs were optimized and suggestions for an effective vendor management were made. Overall, the project aimed at benefitting the area of order booking by meeting the demands of the process owners and meeting the common corporate goals.

Email : gaurav.amplified@gmail.com

Anshul Sikroria

Arrow (Arvind Brands)

Project Name : Demand Management"&"automation Of Replenishment Model

Faculty Guide : Ms Rajni Jain (Associate Professor, NIFT)

Industry Guide : Mr. Suhas U. (Retail Merchandiser) & Ms Shruti G. (Reatil Merchandiser)

TECH NOVA 09

Abstract

Success in today's competitive and dynamic business environment requires swift decision making based on reliable knowledge, entailed actions with minimal operational delays, and continuous measurements to keep organizational performance aligned with the strategic goals. Demand Management is essentially a linear process of translating input assumptions into a forecast of expected sales. Demand management, by contrast, is a highly iterative process that involves driving to a revenue and profit target through prioritization of customers, channels, products, geographies and the demand stimulation programs available to the enterprise. The project was aimed at development of a system which can help and facilitate a retail merchandiser in fulfilling customer demand.

Findings

Automatic Replenishment Model (Planogram) thus helps:-

- In reducing replenishment time.
- In reducing replenishment cost.
- Increasing sales.
- In fulfilling customer's demands more efficiently.
- In predicting inventory needs more accurately and adapt to changing demand patterns.
- Management to identify exceptional buying opportunities
- In facilitating enhanced collaboration with external suppliers and internal warehouse operations
- In enabling rapid response to changes in customer demand
- In reducing the negative impact of slow-moving products on profitability by categorizing them for special replenishment approaches
- Redistributing products when there are inventory imbalances

Email : anshulsikroria@gmail.com

Shivendra Sahai Verma & Hrishikesh Dayal

Douceur Sportswear, Vapi

Project Name : Designing Plant Layout for manufacturing 2000 Woolen Jackets per day.

Faculty Guide : Dr. A.K.Khare (Professor, DFT)

Industry Guide : Mr. Priyas Kurup (General Manager, Operations)

TECH NOVA 09

Abstract

The purposes of the objectives developed were to set up a manufacturing facility for manufacturing 2000 semi-formal, casual woolen jackets per day. The pre-constructed facility was being used for manufacturing shirts & trousers. Jackets were a seasonal product for the company. Piece rate system was a constraint in developing a line movement plans hence modular approach was used. The production flow was defined by developing sub-modules depending upon the rate system followed. Major problem in the factory was of a streamlined material flow. The flow was corrected and the handling of material was reduced considering the bulkier nature of the product. Reporting systems and checklists were also implemented to keep a check whether the flow is streamlined or not. Plant has a capacity of producing jackets at a productivity of 9 per operator.

Findings

Factory is currently working with a capacity of 1150 jackets per days. A different working scenario was a good learning experience. Different possible combinations of with streamlined material flow were generated along with their pros and cons related to material handling and productivity. Different constraints like space, capacity, monetary etc. were considered and the most feasible option was being successfully implemented

Email : hrishisamay@ gmail.com / shivendrasahai@gmail.com

Gunit Ahluwalia

Madura Garments (Peter England), Bangalore

Project Name : To improve the merchandise offerings in the winter wear category of the brand, Peter England

Faculty Guide : Ms. Shipra Sharma (Associate Professor, NIFT)

Industry Guide : Mr. P.R.Rathod (Head of Sales, Merchandise & Distribution) & Ms. Mathangi (Category manager)

TECH NOVA 09

Abstract

According to the Images F & R, Indian Apparel Report, 2008, there is a market of Rs. 7400 Cr. for men's wear at mid-priced segment alone; out of which, 5% of the market share is taken up by winter wear. That goes to say that in India, at mid-priced segment alone there is a market of Rs. 370 Cr. for men's winter wear.Peter England is a mid-priced, ready to wear men's wear brand which has three sub-brands namely Peter England (mainline), Elite and Elements. The sub-brand, Elements, being entirely into casual wear, offers merchandise in the winter wear category which includes sweaters, jackets, caps and mufflers. This category has been able to take up only 1% of the 370 Cr. market and contributes to only 2% of the total sales of Peter England. The research conducted catered to the need for better merchandise offering in this category to tap the market as well as to boost the sales of Peter England and hence its market share, resulting in proposal of a more acceptable winter wear collection.

Findings

The main deliverable of this research was a product grid proposed to provide a way forward for the design as well as the product team to work upon in terms of which price range to operate in; which price points are major revenue drivers and those to exit from; whether to increase or decrease the SKUs at any price point with respect to current grid; retail performance of the sweaters and jackets in terms of different parameters like MRP, design, colour, blend, style; the region specific demands in this category in terms of best selling MRPs, blends, rating on styles, feedback on core product, competition being faced; suggestions & complaints; product and margins being offered by competition; where gaps exit and recommendations for a more acceptable range of winter wear; highlighting areas of concern.

Email : ahluwalia.gunit@yahoo.com

Deepesh Chandra Tewari

Integra Apparels & Textiles Ltd., Bangalore

Project Name : Production Bullet Train (Performance Indicator) through fastreact

Faculty Guide : Ms. Sweta Jain (Assistant Professor, NIFT)

Industry Guide : Mr. Shubh Brota Raha (Asst. Manager Planning)

TECH NOVA 09

Abstract

Traditionally, Production efficiency, productivity, right first time & re-work/alteration level were used to measure performance of production executives/managers. Based on primary research, ontime deliveries were found to be a significant parameter for increased customer satisfaction and better order execution. Owing to significance of ontime deliveries in garment sector, ontime performance of events for executives was initiated as measurement criteria using fastreact as technical tool. The holistic idea of the project was to measure ontime performance of the production executive/managers based on target dates generated by Fastreact after order confirmation & planning of same over fastreact. The project was an extension of already implemented Merchants bullet train (Merchants Performance Indicator) that resulted in streamlining the entire chain, & standardizing performance measurement/evaluation criteria for the organization.

Findings

The project enabled the organization to provide long term visibility to executives in terms of pending events, as well as events due for future completion. Furthermore, feeling of mutual dependence & coordination was inculcated due to dependency of events in the entire merchandising & production chain. Also competitiveness amongst employees, department & profit centre was evolved based on the monthly performance appraisal system that was developed & implemented by the organization for appreciating top performers. Adding to benefits, the project lead to greater utilization of fastreact, enabling fruition of a planning tool into human resource performance evaluation & appraisal.

Email : deepeshtewari@hotmail.com

Varun Salwan & Shivali Dhiman

Primus Retail Pvt. Ltd., Bangalore

Project Name : Improving Efficiency at Different Stages of a Supply Chain

Faculty Guide : Ms. Rajni Jain (Associate Professor, NIFT)

Industry Guide : Mr. Gaurav Sinha (General Manager, Operations)

TECH NOVA 09

Abstract

The purpose of the research was to improvise efficiency at different stages of a supply chain. The research started from the warehouse and ended in the front-end of the supply chain. Specifically, the research examined the influence of warehouse operations and merchandising procedures on the supply chain performance. By understanding the back end of the retailer's supply chain, the level of disconnect between the retail associates at the front end and the retail associates at the back end was identified and hence the business and operational problems occurring at the front-end of the organization were found. This study provides retailers knowledge of requirements to integrate the warehousing and merchandising procedures throughout the supply chain by providing products, services and information that add value for customers.

Findings

The objective of the study at first phase was to understand the basic warehousing operations, finding the shortcomings occurring in the procedures at warehouse level. This involved the improvisation of outward procedure of the goods for venue sale, managing the resources available in the warehouse through capacity planning. The second phase was aimed at understanding the merchandising procedures followed to allocate orders to various stores across the country. Phase III was focused on finding the level of disconnect between the retail associates at the front end and the retail merchandisers at the back end of the organization.

Email : shivali.dhiman@gmail.com / varunsalwan@aol.com

Binoy Munda &
Aditya Kumar

NIFT, Bangalore

Project Name : Skill and labor needs assessment of the apparel sector(Karnataka state)
Faculty Guide : Dr. A.K. Khare (Professor, DFT)

Industry Guide : -NA-

TECH NOVA 09

Abstract

The core objective of the project is to map the present human resource of the apparel sector in Karnataka and to forecast it at level and department wise by 2012.The skill and labor needs assessment research of apparel sector in Karnataka (2009) forecasts the changes in manpower needs within the industry w.r.t. to the changing circumstances. The study would help the industry to strategize and plan in the light of recent trends. A major advantage of analysis of this cadre is that the prediction of the size of the future labor force is based on present market conditions, and the future strategies of the companies. Such an analysis would also help to understand the dimensions of the problem and opportunity within the state. In this way, forecast done regarding human resource can be used for training needs and are more likely to match the demands of the future events and focus on training and retaining people for the next level of growth in the industry.

Findings

Forecast, thus done could be used as an useful information to map the demand-supply of human resource in the apparel sector. Analysis in trends of various performance parameters like turnover, total orders, plant capacity, demand of products, inventory level, investment in R&D and workforce provides a bird's eye view of the apparel industry. Skill level in operations & merchandising required at managerial level remains an area of concern for a considerable portion of the companies. And, shortage of manpower , higher attrition rate and lack of training facility are the issues at the operator level.

Email : adityanift2005@gmail.com / binoymunda@yahoo.com

Ritika Pahwa

Integra Apparels & Textiles Ltd., Bangalore

Project Name : Business Development for Integra Apparels and textiles Ltd.
Faculty Guide : Ms. Jonalee Das Bajpai (Associate Professor, NIFT)

Industry Guide : Mr. Tapan Rajvanshi (AGM-Marketing)

TECH NOVA 09

Abstract

The production of unit 3 of Integra Apparels comprises mainly of casual and semi formal shirts, of its chief brands- Ben Sherman, Esprit, Marco polo and Tom Tailor. The main objective of the project was to help Integra Apparels initiate its admission into the niche of the formal production suppliers and establish a system that can help it do so.

Findings

The brand conscious European population forms a very clearly segmented market. Their taste in formal shirts denotes perfection in design and quality. And therefore the UK suppliers leave no scope of displeasure of their customers. From the strict procedures that they expect to be followed by their suppliers in manufacturing to being particular about the minutest of details of design, they make sure that the shirts produced are of the best possible quality. The process, layout, manpower, and other requirements of producing a formal and a casual shirt are so different, that it is extremely challenging to produce both in the same line. It is very necessary to segment the resources of the two.

Email : ritika.pahwa@gmail.com

Richa Kindo & Ruth James

NIFT, Bangalore

Project Name : Cost & performance analysis of fusible interlinings for men's formal shirts.

Faculty Guide : Ms. Shipra Sharma (Associate Professor, NIFT)

Industry Guide :-NA-

TECH NOVA 09

Abstract

The project is concerned with cost and performance analysis of fusible interlinings used in men's formal shirt. There is a wide variety of fusible interlinings available in the market. Without considering the properties of fusible interlining in accordance to the properties of the facing fabric leads to a number of problems.

Market survey was conducted to collect information about various types of interlinings available in the market and the fusible interlinings suitable for men's formal shirts. Fusing quality tests for two types of fabrics characterized as light weight, medium weight and heavy weight used in men's formal shirts and three types of interlinings suitable for each type of fabric; were carried out. Based on these results, conclusion was drawn that which is the most suitable interlining among the chosen three for each type of fabric, what is the relationship between the properties of the most suitable fusible interlining and the properties of that particular fabric for which it is the most suitable.

Findings

Costing parameters for fusible interlining are the fiber composition, construction, finish of the base fabric and type of adhesive applied on the base fabric, method of adhesive application on to the base fabric. Performance parameters for a fused part are bond strength, shrinkage, surface appearance after washing. The finding of this project is that there is a directly proportional relationship between the weight of the facing fabric and the weight of the fusible interlining.

Email : richa.kindo@gmail.com / ruthjamesherenz@gmail.com

Ashwini Kumar & Anupam Gupta

Big-Bazaar

Project Name : Predicting Future Sales Trend & Prime Space Utilization

Faculty Guide : Ms. Rajni Jain (Associate Professor, NIFT)

Industry Guide : Mr Ashish Thapa (Senior Quality Assurance Manager)

TECH NOVA 09

Abstract

This initial idea of the project was to study the ongoing sales trend in the KIDS SECTION of BIG BAZAAR format of stores by observing the last financial year's sales that had happened and identifying the fast and the slow moving merchandise separately. After the detailed study of the sales trend of the previous season, it was required to predict the sales that were to happen according to the current financial year A.B.P.

For the same, it was required to predict the amount of merchandise and accessories which were to be stocked for the coming months in the most exact manner so as to avoid any loss of sales opportunity and maintain minimum possible inventory so that the merchandise is not excessively stocks without any scope of liquidation.

Findings

- A minimum of 8-week stock should be maintained in the warehouse.
- Those articles having less than that predicted amount should be replenished as soon as possible to avoid on the loss of sales.
- The planning of the reordering should be made well in advance for different M.C.
- The lead time should be taken into consideration to determine the reorder point of the various top selling M.C.
- Make the floor look more attractive and filled in an arranged way so as to optimize the sales of the fast moving merchandise and also liquidate the old stocks.

Email :

Eesha Chaturvedi

NIFT, Bangalore

Project Name : Blueprint of a woven shirt followed by comprehensive database development

Faculty Guide : Ms. Shipra Sharma (Associate Professor, NIFT)

Industry Guide : -NA-

TECH NOVA 09

Abstract

The project involves collecting and compiling all available information existing about woven shirts, and making a comprehensive study of the same. This is followed by enabling a search mechanism such that the whole document can be searched for any particular piece of information, based on a keyword based search. The project also involves making of a SMV calculator based on GSD data, in the form of a software mechanism developed in combination of VB.NET and Javascript

Findings

The information regarding a shirt that is available transcends many spheres, which may appear unrelated or generalized, but only the combinations of such information make it possible to piece together a good shirt.

Email : eeshachtr@yahoo.com

Inder Kumar Gahlot & Navjeet Raj Huskotia

Wonderblues, Bangalore

Project Name : Lean Implementation- Cell Layout and 5S.

Faculty Guide : Ms. Sweta Jain (Assistant. Professor, NIFT)

Industry Guide : Mr. Bibhuti Pradhan (I.E. Head)

TECH NOVA 09

Abstract

Wonderblues is the manufacturing unit of Levi's jeans. Apart from that, it manufactures Pepe, Baredenim, Spykar and other jeans brands. The factory is going lean. The production of a company never stops. It is the interest of few companies to go lean. Lean Implementation has lots of benefits like waste reduction, increased productivity, clean and visually sound workplace, etc. The importance of 5S and cell layout is very significant in lean manufacturing. Our project deals with the two tools of lean- 5S and Cell Layout. These are the two most basic tools of lean which sets the base for going lean. It is a time taking process for implementing lean. And it is the interest and support of the top level management, mixed with the enthusiasm and interest of the labor class which makes the implementation of lean successful.

Findings

The project was quite successful in achieving its objectives. The layout of the finishing section was successfully changed keeping in mind the streamline movement of material and space constraint. The layout was designed in accordance with Line layout. The new layout was successfully implemented and the productivity was gradually increased. 5S was successfully implemented in the Maintenance department and in the cutting section. Audit result showed remarkable improvement in two weeks. The layout of the sewing line was changed to maintain a single piece flow and the current scene is that the line is maintaining a 3 piece WIP and work is being done to make it an ideal single piece flow.

Email : huskotia@gmail.com / inderus@gmail.com

Ashima Arora

Norwest Industries Private Limited,
House of Pearl

Project Name : Vendor Evaluation & Selection for Sourcing Office

Faculty Guide : Ms. Shipra Sharma, (Associate Professor, NIFT)

Industry Guide : Mr. Rajesh Marwaha, General Manager

TECH NOVA 09

Abstract

Vendor management is the discipline of establishing service, quality, cost, and satisfaction goals and selecting and managing third party companies to consistently meet these goals. This paper explores supplier optimization as a strategic tool that can be applied to Norwest Industries, for the sourcing of womenswear and kidswear garments for its fashion merchandise. The overall objective of the research has been to reduce purchase risks by identifying appropriate suppliers. Hence the study was focused on sourcing operations (internal factor) and supplier capabilities (external factor) towards achieving effective buying. The methodology followed for the above study includes The study of various existing functional procurement strategies, defining sourcing and performance evaluation criterions and their weights and scores based on the significance of each, evaluating vendors (quantitatively) on basis of a format and last but not least developing model for sourcing as a strategic tool (by combining Weighted total Method and Minimum cut-off Method).

Findings

The empirical findings of project demonstrates that using suggested vendor evaluation technique (weighted total and minimum cut-off method) will support the organizations continuous supply base management efforts by helping to identifying the best-in-class suppliers and weeding off the non performing suppliers. Wherever shortcomings are noticed, counter measures emerging from mutual learning need to be put in place; so making vendor an extended part of the family, and serving the customers better in a collaborative way.

Email : ashimaarora.nift@gmail.com

Arshiya Singh Shah
Raj Agneeswaran T.G.

Arvind Limited, Mysore Road

Project Name : Re-engineering of quality systems to increase cut to ship quantity

Faculty Guide : Mr. Vasant Kothari (Assistant Professor, NIFT)

Industry Guide : Mr Ashish Thapa (Senior Quality Assurance Manager)

TECH NOVA 09

Abstract

When wearing any apparel on the body, physical comfort, aesthetic superiority, quality and fit must be considered. Poor construction and ill fit thereby resulting in decreased comfort level can counteract the intended functionality, thus a garment is always designed in such a way as to give superior comfort, look for the wearer and measurements of every size of the garment are decided by keeping fit and comfort of the wearer in mind. So, while producing the garments it is essential to replicate exactly, the design with exact given measurements that is being specified by the buyer. Any change in the actual product in comparison to the buyer's specification may thus result in the rejection of the garment, resulting in loss of the cost incurred in producing the garment. It is very important for any manufacturing unit to keep the rejection level of the produced garment to the least.

Findings

The basic reason for measurement defects in denim is wrong shrinkage calculation equipments which by minor re-engineering can be corrected and zero percentage of calculation error can be achieved.
Other factor contributing majorly to it is no check points for pattern checking after every set of new pattern is released. After incorporation of any changes as per buyer requirements or developing final production pattern there need to be a checkpoint and various parameters like seam allowance and shape needs to be checked.

Email : arshiya.shah@gmail.com / agni.firer@gmail.com

Ravi Asthana

Integra Apparels and Textiles Ltd.

Project Name : Utilization of M.B.T for process Improvements in the Company

Faculty Guide : Ms. Sweta Jain (Assistant Professor, NIFT)

Industry Guide : Mr. Santosh Bhushetty

TECH NOVA 09

Abstract

MBT stands for Merchant Bullet Train. It was launched in Integra in late December so as to track the performance of the merchants. The MBT tracks the performance of the merchants and maintains a record of the merchants events completed. Then after this, the merchants are awarded at a weekly, monthly and six monthly basis. The MBT data is taken from Fast React and then the calculation is done to find out the winning merchandiser form amongst the three units. This MBT data is utilized for analysing the event wise, buyer wise and unit wise failure of events so that the strategies of best unit can be translated to other units. Further, the merchandising events were monitored to find out the main bottleneck in the on time completion of orders.

Findings

The refining of the MBT was also done. Various scoring models were prepared for the calculation of MBT in the company. Questionnaires were prepared for feedback, weightages of the TNA events and further improvements. Suggestions were taken and incorporated in the MBT .From the analysis it was derived that the file handovers and the fabric in house were a major problem. So various causes were analysed and suggestions were incorporated in the company so as to improve the processes. Check list was prepared for the file handovers. Proper monitoring of the MBT and PBT (Production Bullet train) as IBT (Integra Bullet Train) in Unit 5 was also an integral part of the project.

Email : raviasthana08@gmail.com

Ashish Rai &
Prashant Diwakar

NIFT, Bangalore

Project Name :Stitch shirt by folders

Faculty Guide : Ms. Jonalee Das Bajpai (Associate Professor, NIFT)

Industry Guide : Mr. Bibhuti Pradhan (I.E. Head)

TECH NOVA 09

Abstract

Use of attachments in sewing caters to the mass production which is very sensitive to the products, their quality as well as their price.
This project on Application of folders in Woven Garments presents how adequate knowledge, market survey and competitor analysis can be combined to assure correct use of attachments and the benefits derived.
It also focuses on how correct combination of attachments should be planned for an order based on the percentage contribution of each attachment relating to the various operations in making a formal shirt. The project also discusses the comparative study of branded and local made attachments briefing about the variations in productivity, quality and cost using and without using attachments

Findings

Findings indicate that the adequate knowledge of using the attachments can be very beneficial in terms of skill optimization, costs, quality and productivity.
This study also gives the brief about the return on investment of using the attachments.

Email :rai.ashish@hotmail.com

Avishek

Arvind Brands - 'Arrow'

Project Name : To understand the consumer Psychographics of target audience in favor of developing a niche in the brand 'ARROW'

Faculty Guide : Ms. Jonalee Das Bajpai (Associate Professor, NIFT)

Industry Guide : Mr. Rakesh Ranjan(Product Merchandiser - Arrow)

TECH NOVA 09

Abstract

The project was a very bright prospect for an overall learning in fields of Market and the organizational issues. Dealing majority wise in knowing the market and the probable improvement that can be suggest to the brand in section of its product offering. Knowing the market and getting into direct touch with the end consumers was one of the prime objectives to get an insight fair enough on the forward action that could be a possibility for the brand for a better market capture and positioning. The transition that was been looked into by the brand seemingly was a concept that satisfied on a superficial base along the lines of the current market. Perceptions were a little on the stagnant side of the mind of the end player i.e. the customers. The market seemed very specific and vibrantly not accepting a change in the attitude, all being helped by the recent excuse of recession along the financial lines and the Brand was looking to expand costumer base wise.

Findings

The study also included a look along the lines of the present and probable competition which gave an idea of the market as a whole. Collection and integration of all the relative data's finally started to weave an understanding of a probable result and in respect to assumptions and limitations of the study on lines of demographical and psycho graphical issues the conclusion was drawn. This serves as a possible way of going about the brand sited long term goal as stated above. On grounds of observing and inferring to the observations was also an experience that in sighted me about the flexibility and failure of any inference on various specifications.

Email : wayne_c@yahoo.com

Mansi Gupta

Arvind Brands, Flying Machine

Project Name : Dynamic Assortment Allocation

Faculty Guide : Ms. Rajni Jain (Associate Professor, NIFT)

Industry Guide : Mr. Bharath Kumar A.K

TECH NOVA 09

Abstract

As the apparel retail industry in India undergoes transition to mark its presence beyond metros, they come across profound opportunities to grow. To cater to the requirements of a diversified market there is a greater need for – competency in planning, communicating, influencing and managing demand. The retailers cannot afford to loose sales because of unavailability of the products that its customers demand for. Understanding the market and innovations in inventory management will help retailers to serve them in a better way. The store shelves must be stocked according to what is selling and moving and not what is produced and waiting in the inventory.

Findings

1. The sales are directly proportional to stock variants.
2. The historical sales data give a very close picture of current demand.
3. Retailers can make profits even in current economic slowdown by planning their merchandise mix in accordance with the changing market dynamics.

Email : mansi.nift@gmail.com

Abhijeet Biswas &
Vinit Choudhary

NIFT, Bangalore

Project Name : Quality Analysis of Packaging Materials

Faculty Guide : Ms.Subhalakshmi Kropi (Assistant Professor, NIFT)

Industry Guide : Mr. Girish

TECH NOVA 09

Abstract

Packaging is the science, art and technology of enclosing or protecting products for distribution, storage, sale, and use. The need for packaging and the development of packaging was caused by the fact that the production and the consumption took place at separate places and times. The division of labor meant that the produced goods had to be distributed and transported. This way the package became a connecting link between production and consumption. In this Project one can find all the information regarding Apparel Packaging and a detail report on Packaging materials like corrugated boxes. To study the existing system various industry visits were made especially in INTEGRA APPARELS, TEXPORT OVERSEAS, ARVIND MILLS and WONDER BLUES. Current practices used for packaging was analyzed. Some flaws were observed in the existing system. As soon the buyer confirms the order, the merchandising department gives its requirement to the purchase and store department.

Findings

Various aspects of packaging, Quality parameters, Packaging for Domestic and export, Packaging standards, Environmental aspects, Manufacturing of cartons, Carton manufacturing machines

Email : abhijeetniftblr@yahoo.com / vinitnift@gmail.com

Reshma Rajendran

Pantaloons Retail India Ltd.Bangalore

Project Name : Optimal Merchandise Mix for Youthwear Category

Faculty Guide : Ms. Jonalee Das Bajpai (Associate Professor, NIFT)

Industry Guide : Mr. Manish Das, Brand Relationship Manager, Bangalore Central & Brand Factory

TECH NOVA 09

Abstract

Analysing existing Merchandise Mix, Sales Trend & Customer Preferences to develop Optimal Merchandise Mix for the Youthwear category (for the brands Lee cooper, Levis, Pepe Jeans and Spykar) along with other qualitative inputs.

Findings

The most selling category, growth and contribution of each category of the particular brands have been found. The customer preferences have been summarised and analysed.The Optimal Merchandise Mix for the Youthwear category has been developed.

Email : reshma1009@gmail.com

Ankur Makhija &
Nikhil Kumar

Aquarelle India

Project Name : Production process evaluation and its standardization for a parent company and its subcontractor

Faculty Guide : Ms. Jonalee Das Bajpai (Associate Professor, NIFT)

Industry Guide : Mr Srinivas Kurra (I.E. & Project Manager, Aquarelle India)

TECH NOVA 09

Abstract

The basic part of process standardization starts from methods documentation and workplace reengineering. Introduction of small work aids at cheaper cost can increase the productivity at higher rate. Controlling subcontractor industry quality should not only limit to endline quality. The processes of production starting from cutting till finishing need to be evaluated and standardized. There is also option of opening up own setup if the performance of subcontractor is not satisfactory. Various options comparable to subcontractor costs can be analyzed and decision can be made based on cost-benefit analysis.

Findings

The basic part of process standardization starts from methods documentation and workplace reengineering. Introduction of small work aids at cheaper cost can increase the productivity at higher rate.

Controlling subcontractor industry quality should not only limit to end line quality.

The processes of production starting from cutting till finishing need to be evaluated and standardized.

There is also option of opening up own setup if the performance of subcontractor is not satisfactory. Various options comparable to subcontractor costs can be analyzed and decision can be made based on cost-benefit analysis.

Email : ankur04in@gmail.com / nikhilniftbang@gmail.com

Saurabh Verma &
Vikash Bharti

Arvind Mills Ltd. Yeswantpur

Project Name : Implementation Of Total Productive Maintenance. (Autonomous Maintenance)

Faculty Guide : Ms. Rajni Jain (Associate Professor, NIFT)

Industry Guide : Mr. Girish

TECH NOVA 09

Abstract

This Project highlights one of the powerful approaches to improve productivity in a Production floor viz, Autonomous Maintenance (AM), a pillar of Total Productive Maintenance (TPM) with a focus on garment industry (Arvind Mills Ltd.). The goal of the project is to investigate how Total Productive Maintenance (TPM) tool Autonomous Maintenance can be profitable for garment manufacturing sector. TPM is a method for continuously improving the effectiveness of production equipment and processes. The key difference between TPM and other maintenance programs is that TPM requires the involvement of all people in the organization. Autonomous Maintenance is geared towards developing operators to be able to take care of small maintenance tasks, thus freeing up the skilled maintenance people to spend time on more value added activity and technical repairs. This project explains the underlying concepts, issues, and benefits of AM implementation through graphs.

Findings

From the study, it is found that the concept of Total Productive Maintenance can be applied to an Indian garments factories successfully. Decrease in the unplanned downtime of the machines which in turns reduces cost and time factor in the industry. Operators skills and knowledge for machine maintenance increases and involve them to take care of their equipment.

Email : saurabhverma.nift@gmail.com / vikashbharti129@gmail.com