ALGOERP™

Release P-2

Apparel Manufacturing Solutions For Small And Medium Enterprises.

4. Production Management

This module Is launches orders in cutting, sewing finishing & packing departments after assuring availibility of raw material. It is also authorizes Issuance of raw materials in control quantity to various work centers. Finally, the module monitors the work completed, the work in progress and the rejections during the manufacturing processes till arrival of the product into the finished goods stores.

5. Order Costing & Budgeting

This module automatically costs the product on the basis of consumption, material costs, process costs and overheads. It than creates the order's budget, which is a planned cost for order processing. It then takes the actual material issuance, labour and quality failures into account from the production management module. Finally, it calculates an end of the order costing with actual gross profit and variances from the budget.
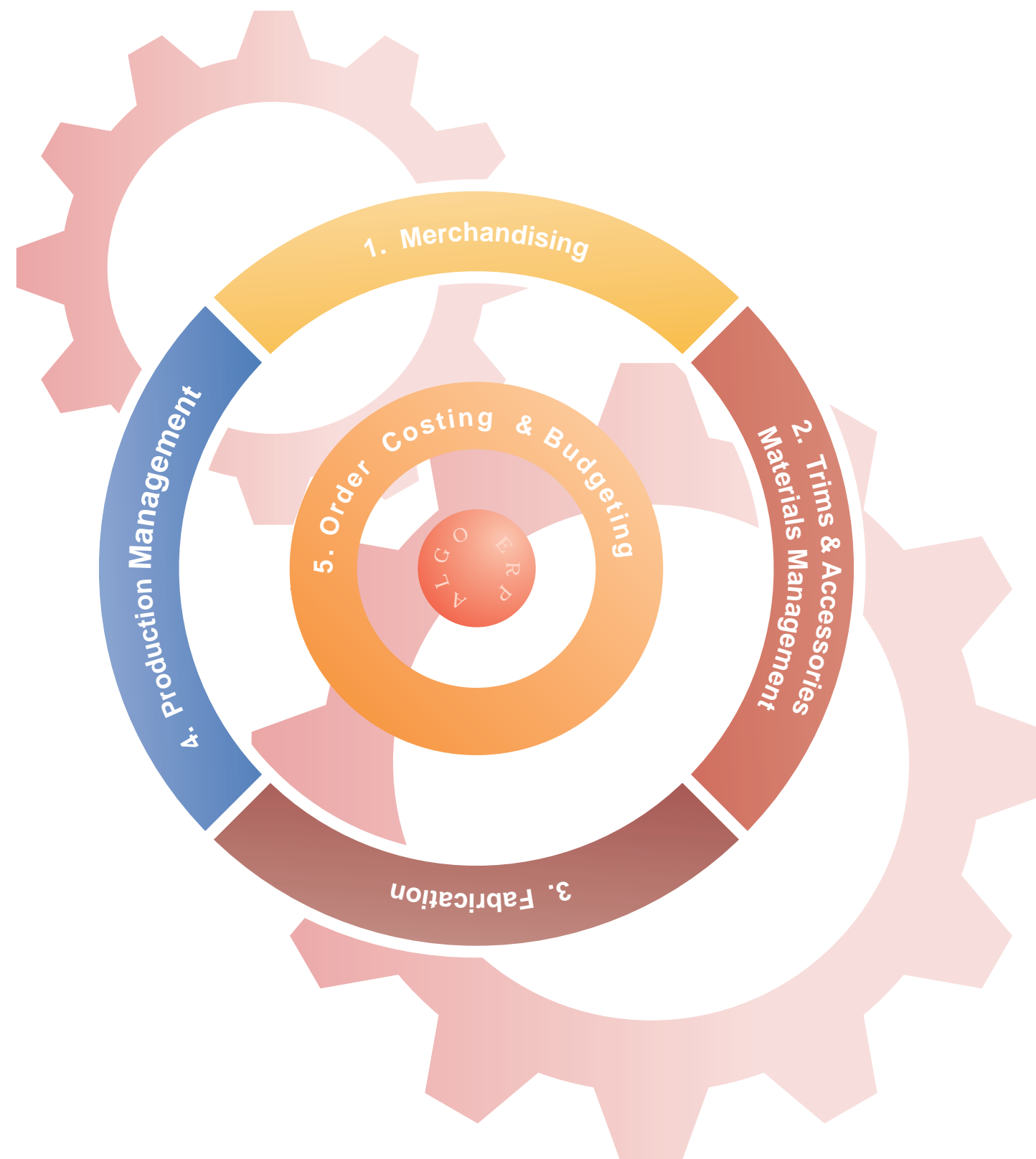
1. Merchandising

The module performs most merchandizing functions for knitwear apparel, woven apparel, sportswear, leather garments and home textile products. The functionality includes working on styles, working on orders, initial product costing and automatic generation of trims, accessories, fabrication and leather procurement requirements based on an order quantity. As a result, incidents of errors and misunderstandings in product specifications are minimized.

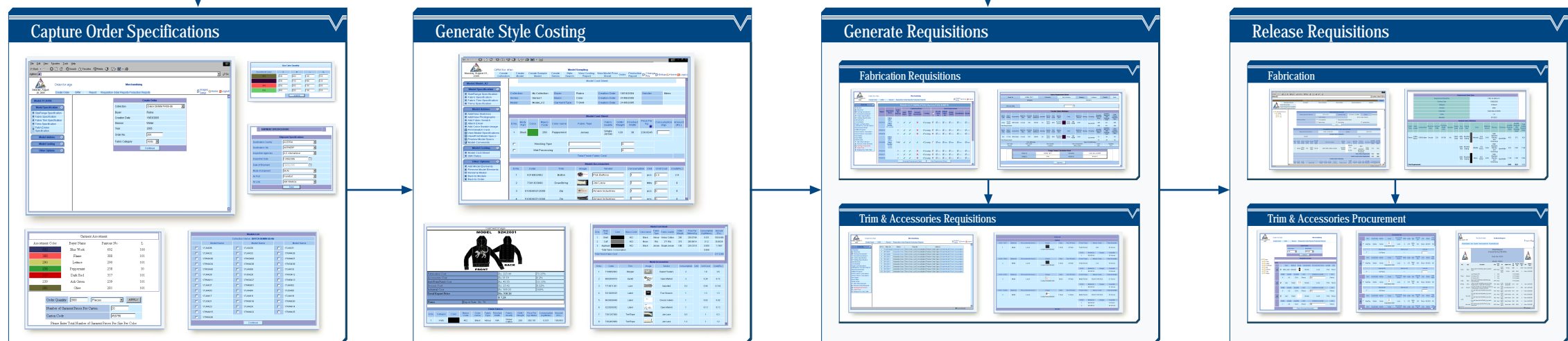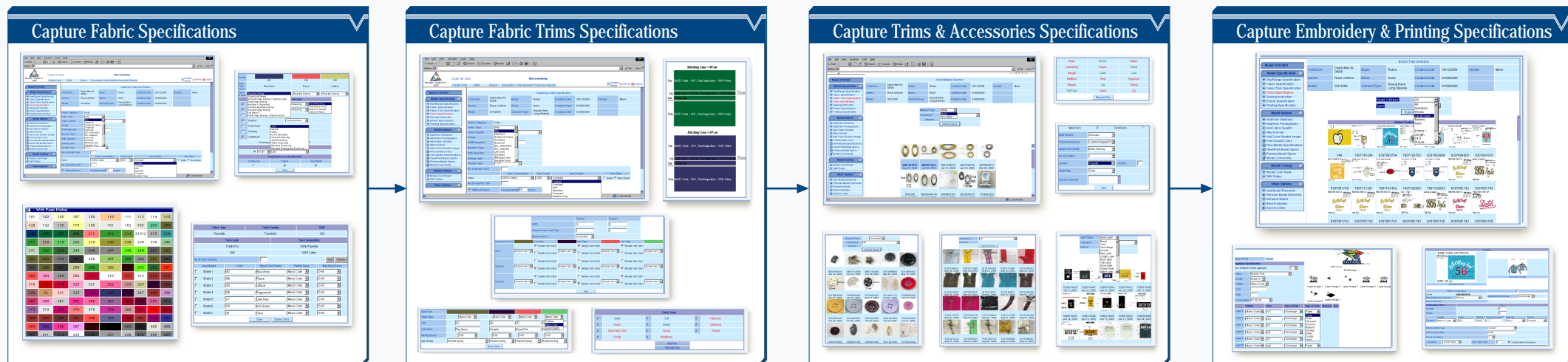## 2. Trims & Accesseries Materials Management

Trims and accessories requirements differ from order to order. As the first challenge, this module accurately calculates the requirements and maintains the integrity of specifications. Secondly, it helps locate the right procurement source, it processes, releases and tracks the PO's till goods receipt. Finally, on the inventory management side, it offers standard goods receipt, goods inspection, goods issuance, return to supplier and inventory valuation functionalities.
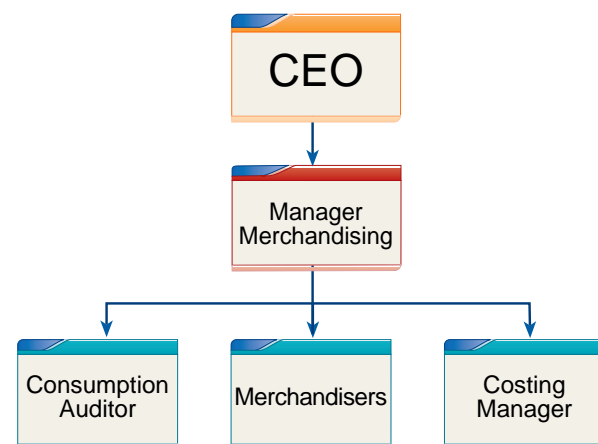
3. Fabrication

Fabric requirements and consumption differ for every product. The module calculates the requirements based on order assortment and consumption. Secondly, it translates the finished fabric requirements into Greige and yarn requirements. It then provides for the PO or work order processing for these requirements, depending the activities are in-house or sub-contracted or both. Finally, on the inventory management side, it offers receipts, inspection, issuance and perpetual inventory.
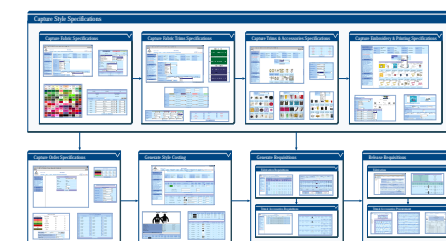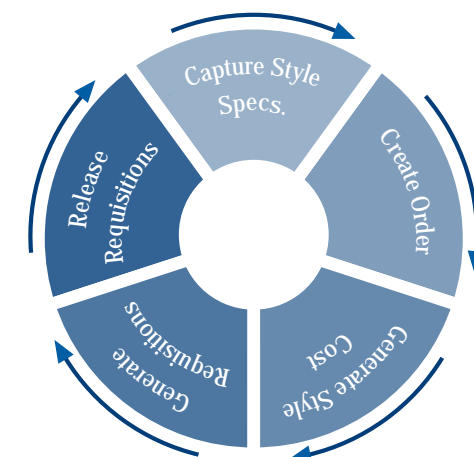
1. Merchandising
2. Trims & Accessories Materials Management
3. Fabrication
4. Production Management
5. Order Costing & Budgeting

ALGO ERP

Capture Style Specifications

Capture Fabric Specifications

Capture Fabric Trims Specifications

Capture Trims & Accessories Specifications

Capture Embroidery & Printing Specifications

Capture Order Specifications

Generate Style Costing

Generate Requisitions

Fabrication Requisitions

Trim & Accessories Requisitions

Release Requisitions

Fabrication

Trim & Accessories Procurement

Merchandising Organization

```
            CEO
             |
    Manager Merchandising
             |
   ┌─────────┼──────────┐
Consumption  Merchandisers  Costing
 Auditor                    Manager
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Core Work Flow

Capture Style Specs. → Create Order → Generate Style Cost → Generate Requisitions → Release Requisitions

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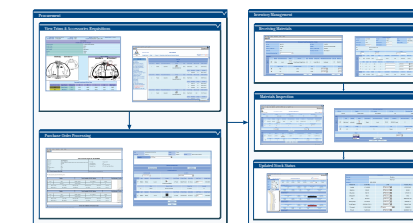
Fabrication, Trims & Accessories, Production Management

Value Statement

The module handles knitwear apparel, woven apparel, sportswear, leather garments and home textile products. Users can work on styles, orders, and automatic generation of trims, accessories, fabric procurement requirements based on order quantity. There are 3 components of Merchandising, each with their specific roles:

Styles Capturing:
This component captures product specifications of woven apparel, knitwear apparel, home textile, sweaters, sportswear or leather garments. By making use of images, sketches, international colour standards, size charts, placement instructions, database of trims, accessories and fabrics including embroidery and print designs. The end result is creation of a new style into the library.

Order Capturing:
This component imports styles from style database and bunches them together into a single order. An order may contain a single or several styles. Additional order specifications such as shipment, garment assortments, packing assortments, carton and poly-bags, tickets and hangtags are also captured at this stage. Changes in colour-set, size-set, measurements, fabrics, embellishments or trims etc. May also be done in an order.

Gross Generation & Order Release:
To avoid costly procurement mistakes and production errors, this component of merchandising enables version control and review of order specifications including consumptions. A power user performs this review. After assurance of desired accuracy, the order specifications are released for procurement and production functions. The system also automatically generates fabric, trims and accessories requirements.

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Merchandising

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Production Management

Procurement

View Trims & Accessories Requisitions

Purchase Order Processing

Inventory Management

Receiving Materials

Materials Inspection

Updated Stock Status

Materials Management Organization

- CEO
- GM Inventory
- Manager Trim Procurement
- Manager Trim Stores

Core Work Flow

- View Materials Requirement
- Purchase Order Processing
- Purchase Order Monitoring
- Receiving Materials
- Inspect Materials
- Update Stock

Value Statement

The module offers very quick and disciplined procurement for trims and accessories. The quantity is determined automatically through order-based multiplications involving the garment assortment, item consumption and user defined wastage allowances. The end-user has no discretion in changing any of these three. Manual effort, human errors or corrupt practices in procurement can thus be averted. In fact, the MM module alone ensures a payback period of P-2 with in a year.

Another feature is P-2's ability to accurately aggregate an item quantity across styles. Thus a single purchase order can cover the procurement requirements of an item in all the current styles. This has an effect of dramatically reducing the number of purchase orders required. Apart from speedy procurement, another major advantage is the enhanced bargaining power with vendors through a large PO.

While receiving, the system disaggregates the item quantity style wise, ensuring that the items are only received style wise. The arrival status of all materials required in a style is also maintained. The controlled issuance functionality ensures that only the authorized quantity net of wastage allowance can be issued to the departments. This creates a tight discipline in consumption.

Other inventory management activities such as goods transfer, goods inspection, return-to-supplier and inventory valuation functionalities are also available. The entire inventory management sub-module is fully integrated with the G/L available in P-3. The module also comes with several inventory reports.

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Merchandising

Production Management

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Value Statement

The module offers quick and disciplined procurement or fabrication for denims, finished shell fabrics, linings, leather, flat-knit fabric trims, greige fabrics and dyed yarns and simple yarns. The requirement calculation process is completely automatic. Manual effort, costly human errors or corrupt practices in fabrication can thus be averted. In fact, the fabrication module alone ensures a payback period of P-2 in less than1 year.

Another feature is P-2's ability to accurately aggregate the fabrication requirements across styles. Thus finished fabric is aggregated colour-wise with dyed to match lots, Greige is aggregated fabric type wise, and yarn requirements are aggregated count wise. Thus a single finished fabric purchase order, dyeing work order, fabric processing order, knitting work order or yarn Purchase order can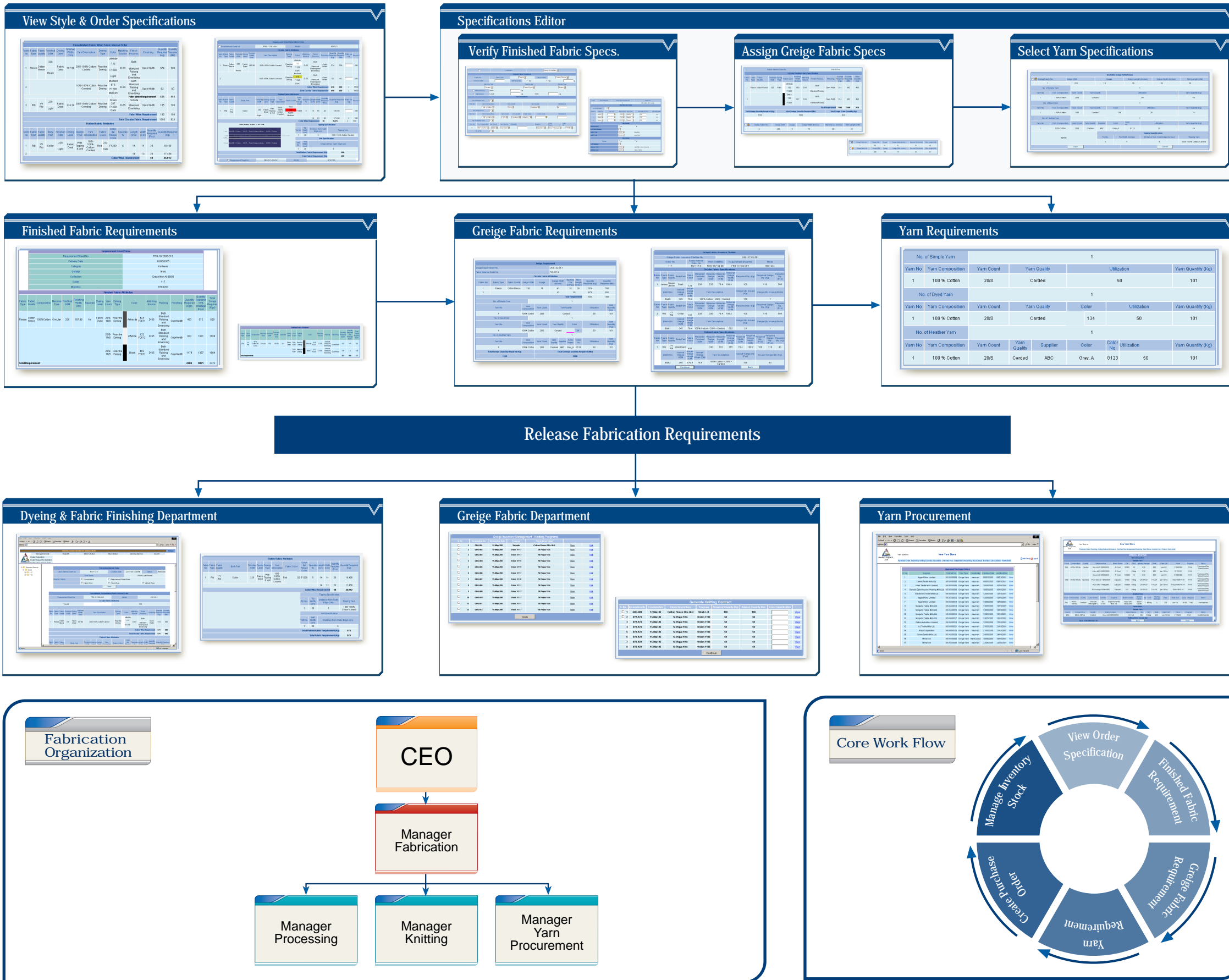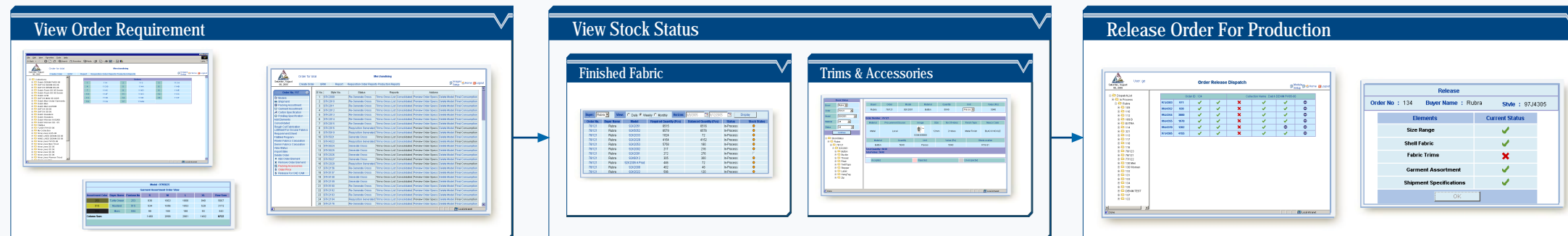 cover the entire fabrication requirements of one or several styles. This reduces the losses inherent in small lot sizes and enhances efficiency and quality.

However, while receiving fabrics the module disaggregate's the requirements to a single style level, ensuring that the items are only received and stored and issued style wise only. The arrival status of all finished fabrics, greige fabrics and yarns within a style is also maintained continuously for the production planners.

Other inventory management activities such as goods transfer, goods inspection, return-to-supplier and inventory valuation functionalities are also available. The entire inventory management sub-module is fully integrated with the G/L available in P-3. The module also comes with several inventory reports.

View Style & Order Specifications

Specifications Editor

Verify Finished Fabric Specs.

Assign Greige Fabric Specs

Select Yarn Specifications

Finished Fabric Requirements

Greige Fabric Requirements

Yarn Requirements

Release Fabrication Requirements

Dyeing & Fabric Finishing Department

Greige Fabric Department

Yarn Procurement

Fabrication Organization

CEO

Manager Fabrication

Manager Processing

Manager Knitting

Manager Yarn Procurement

Core Work Flow

View Order Specification
Finished Fabric Requirement
Greige Fabric Requirement
Yarn Requirement
Create Purchase Order
Manage Inventory Stock

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Algo ERP Release P-2

Apparel Manufacturing
Production Management

Order Launching | Cutting PAC | Garment Assembly PAC | Sewing PAC
Finishing PAC | Packing PAC | Finished Good Inventory

Merchandising, Fabrication,
Trims & Accessories

Order Launching

View Order Requirement

View Stock Status

Finished Fabric

Trims & Accessories

Release Order For Production

Production Activity Control

Cutting PAC

Garment Assembly PAC

Sewing PAC

Finishing PAC

Packing PAC

Finished Goods Inventory
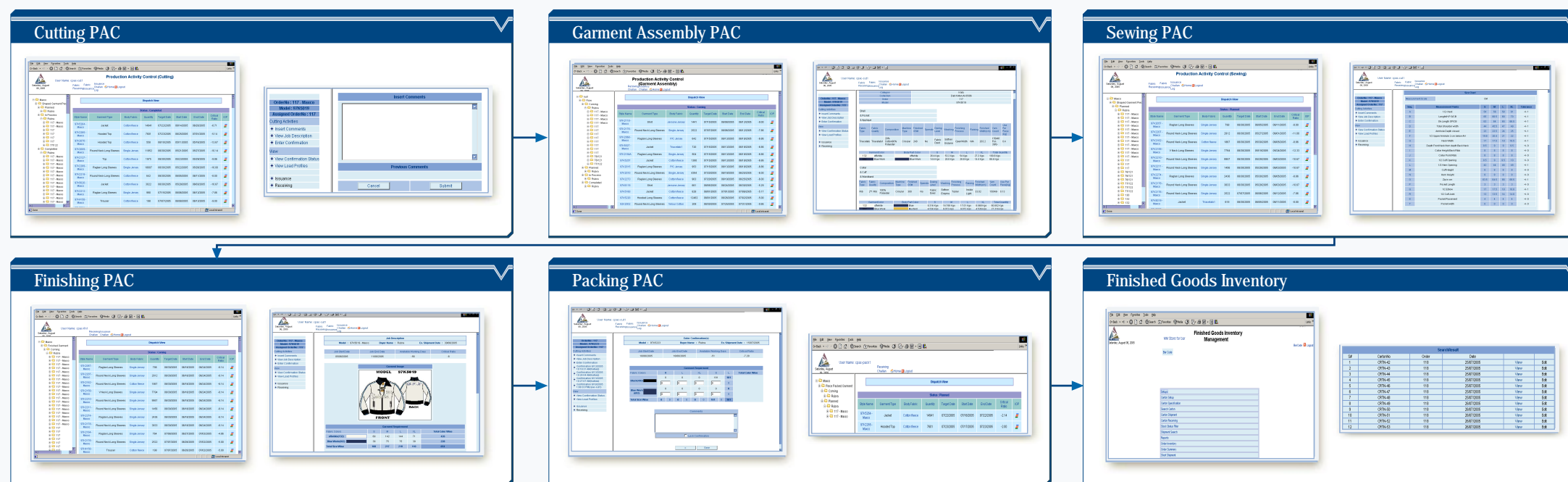
Capturing, Costing & Verification Organization

CEO

Manager Production

Manager Merchandising

Asst. Manager Production

Asst. Manager Merchandising

Core Work Flow

View Order Requirements

Received Production Order

Cutting & Assembly Activities

Sewing & Finishing Activities

Garment packing Activities

Stock Update

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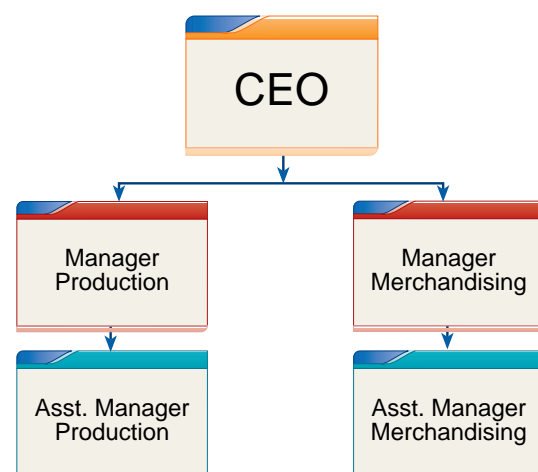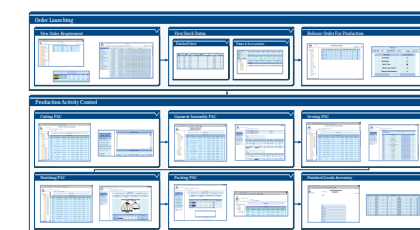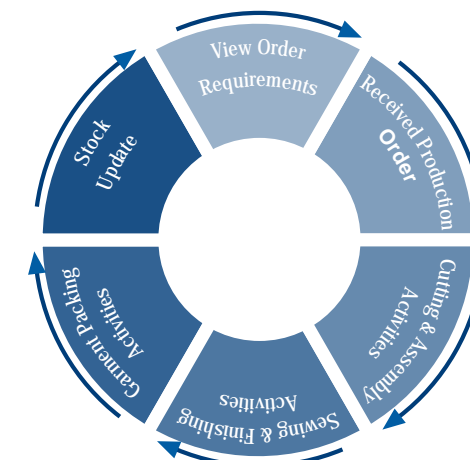
Value Statement

With this module, production managers can launch orders in cutting, sewing, finishing and packing departments after assuring themselves with the availability of style wise materials. It also authorizes issuance of raw materials in controlled quantity to work centers. It also monitors the work completed, the work in progress and the rejections during the manufacturing processes till arrival of the product into the finished goods stores. A perpetual inventory view of finished goods is also maintained in the system.
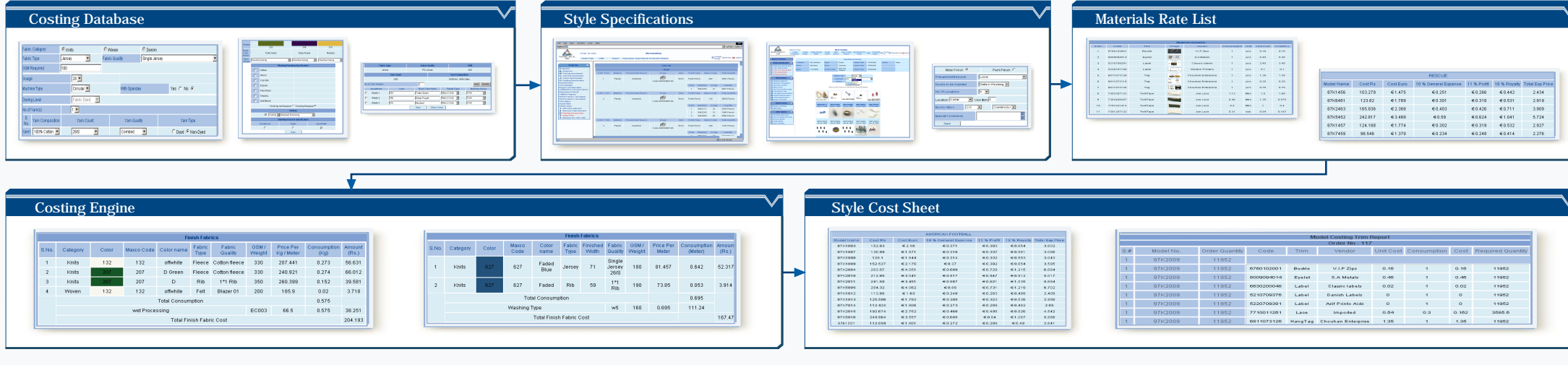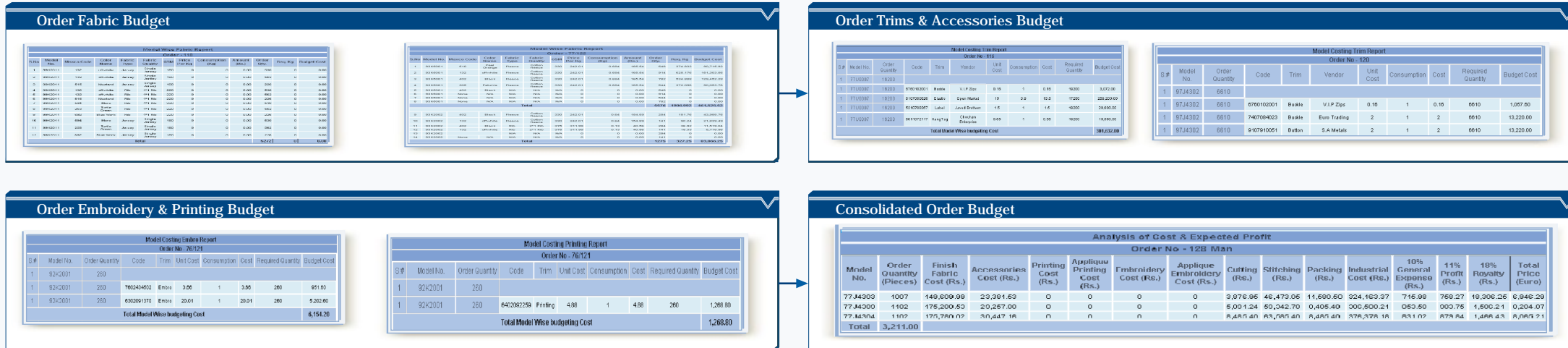
The system provides routing choices to the production managers in which they select and assign the production jobs to appropriate in-house departments or sub-contractors on the basis of their capabilities. The system also preserves the integrity of customer supplied product specifications by providing version controlled and up to date product specifications to all the work centers in need to know basis. This avoids errors and mistakes during processing.

The system also serves as the only reporting tool for production. It replaces dozens of, often conflicting, Excel or FoxPro or other manually compiled reports by user-friendly on-demand reporting interfaces. These reports with their drill down capabilities offer the management the necessary flexibility to view whatever level of detail they wish for. Exceptions such as delays, material failures, excessive rejections etc are also available for viewing. Finally, the module provides key costing inputs to by sending the actual style wise fabrics and trims consumption data to the costing module.
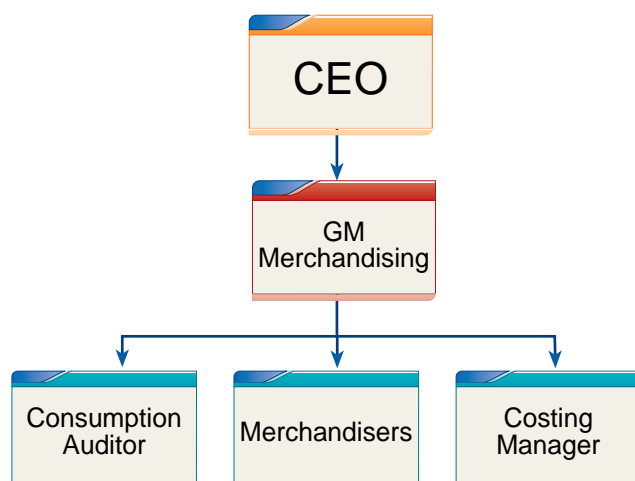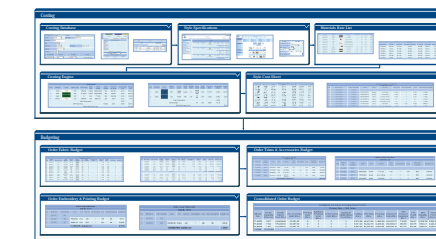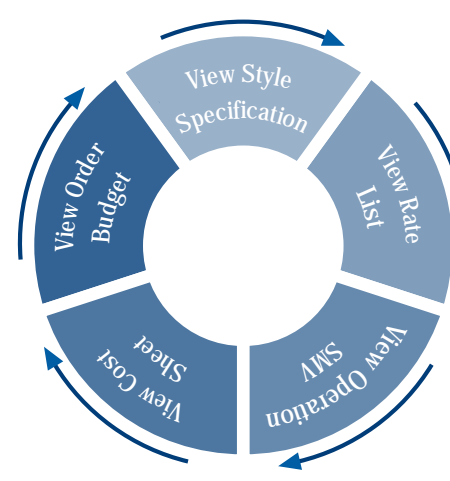
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Costing

Costing Database

Style Specifications

Materials Rate List

Costing Engine

Style Cost Sheet

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Budgeting

Order Fabric Budget

Order Trims & Accessories Budget

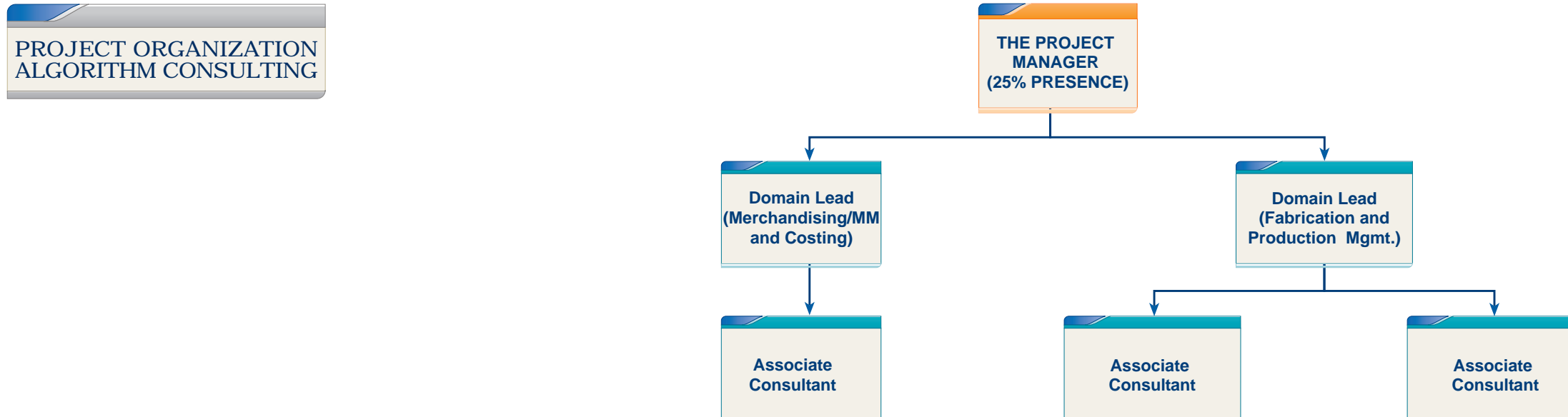### Order Embroidery & Printing Budget

Consolidated Order Budget

Value Statement

The costing module provides a very quick and an accurate way to calculate the initial cost of a single style. Standard margins can then be added to arrive at the bid price for the buyers. The margins can be altered to arrive at a negotiated price in multiple currencies.

Typical links for calculating automated costing include trims and accessories costs from Materials Management module, finished, yarn and Greige fabric costs from the Fabrication module, direct labour from production management module, and overheads estimates from the setups.

There are several setup data available for building up the costing elements of a style. Access to establish costing parameters in the master data is limited to concerned persons only. These persons keep updating their part of the costing parameters continuously. This database is than accessed by the system to quickly create the cost of a single style.

Upon creation of an order and as a sequel to initial costing, the module creates an order budget; which is the total expected expense in terms of fabrics, trims and accessories, embroidery, printing and washing as well as the direct labour and over heads components along with the gross profit margin expected in the order. This budget is approved by the management and serves as the basis for financing activities.

Costing & Budgeting Organization

```
          CEO
           |
    GM Merchandising
     /     |     \
Consumption  Merchandisers  Costing
  Auditor                   Manager
```

Core Work Flow

View Style Specification → View Rate List → View Operation SMV → View Cost Sheet → View Order Budget

Algo ERP Release P-2

PROJECT ORGANIZATION
ALGORITHM CONSULTING

THE PROJECT
MANAGER
(25% PRESENCE)

Domain Lead
(Merchandising/MM
and Costing)

Domain Lead
(Fabrication and
Production Mgmt.)

Associate
Consultant

Associate
Consultant

Associate
Consultant

Dedicated Project Resources

1. **The Project Manager.**   He shall be a veteran with at least two large successful implementations under his belt. He shall be directly responsible to the Client Project sponsor (senior Management) for the overall performance of the project. His detailed duties and responsibilities are contained in Project Life Cycle section of the CD. Algorithm consulting shall make the project manager's services available for the entire duration of the project. However, he shall provide only 25% of his time to the implementation project. He shall not be transferred away to any other assignment without the written approval of the client project sponsor.

2. **The Domain Leads.**   They shall be a veteran of at least one successful implementation and shall remain directly responsible to the project manager as well as Client's respective functional managers. Their duties and responsibilities are also given in Project Life Cycle section of the CD. Algorithm consulting shall make the consultant's services available for the entire duration of the project at the client's premises. They shall not be transferred away to any other assignment without the written approval of the concerned functional managers.

4. **The Associate Consultants.**   They shall be Certified AlgoERP® Domain Consultants. They shall work under the overall directions of the consultants accept that due to their lesser work experience and skills, they are considered associates. Their duties and responsibilities are given in the Project Life Cycle section of the CD.

5. **The Internees and management trainees.**   These are handy assistants to the consultants, especially in doing repetitive and low value adding jobs such as running various test scenarios on the system, documenting bugs and CR's, writing minutes of various meetings and filing work. Their hiring criteria is similar to the consultants except that they are not certified consultants. In their future path, the brighter ones amongst them can be sent to the Algo training academy for certified training courses. They are usually only given a stipend. Their work is not invoiced to the client.

    Part-time Project Resources

6. **The Networking Consultant**.   An AlgoERP® implementation requires between 20-30% time of a networking consultant. They are usually shared across multiple projects. Their primary responsibilities include creation of an optimum network design, which adequately addresses concerns of access, security, scalability, service availability, disaster recovery and speed across multiple sites and locations. They are also responsible to advice the client's management on all hardware and bandwidth requirements including supervision and quality assurance of vendors and networking professionals on behalf of the client. Their work is invoiced only for the duration for which they work at client premises.

7. **Software Developers engaged in product Customizations.**   These resources are temporary project resources that are engaged to address the product customization requirements. Each customization requirement is first requested by a particular client, it is documented, work estimates and expected costs are communicated to the client. These resources are engaged only after the client approval. The invoice is only raised once the customization work is verified by client to have been done. The rates of these resources are given in the Resource Rate section.

ALGORITHM CONSULTING

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PROJECT ORGANIZATION CLIENT

The Project Steering Committee

```
                                          Client Project
                                             Sponsor
                                          (Director/CEO)

                                    Client ERP          Project
                                   Project Leader        Manager

      Manager          Manager          Manager          Manager          Manager
      Finance        Merchandising     Production       Fabrication      Procurement

     Nominated        Nominated        Nominated        Nominated        Nominated
    Client Team      Client Team      Client Team      Client Team      Client Team

    Algo Domain      Algo Domain      Algo Domain      Algo Domain      Algo Domain
    Consultants      Consultants      Consultants      Consultants      Consultants

    Modular Team     Modular Team     Modular Team     Modular Team     Modular Team
```

Client Project Organization Roles

It is important that for the successful implementation of the ERP, the client project team should dedicate a sizable amount of their time for implementation effort. They are required to act in the following roles and capacity:

1. **Client Project Sponsor.** He is the Chairman, CEO or the director of the organization. The decision to implement an ERP is his and he is also the one who funds the effort in terms of license fee, consulting fee, hardware purchases, hiring of new resources, appointing an ERP project team and freeing up his most competent and trusted deputy to act full time, as the ERP Project Leader. The project sponsor must at least spend 5-10% of his time in ERP Implementation effort.

2. **Client ERP Project Leader.** He has similar responsibilities as the Algo Project Manager, in which he has the overall responsibility of a successful implementation of the ERP within the time and budget allocated by the "Project Sponsor" with whom he maintains a direct reporting relationship. The ERP project leader is a completely dedicated resource, any ERP implementation effort will fail if he spends less than 80% of his time in ERP Implementation effort. He has the following specific responsibilities vis-à-vis the ERP implementation:

   a. To understand the overall working of the ERP system and its alignment with the vision of the project sponsor. And to keep the project sponsor fully informed on the progress of the implementation both in terms of time and value added to the business.
   b. To execute the ERP Implementation agreement on behalf of the project sponsor.
   c. To monitor all milestone plans of all modules for their satisfactory progress and to take up any inconsistencies in result with the Algo Project Manager and the Project Sponsor.
   d. To raise resource allocation requirements along with their justifications to the project sponsor and obtain his accord.
   e. To give ruling decisions on the customization and scope enhancement requirements identified in different domains by different managers. His rulings shall be based on judging the requirements relevance to the overall business vision of the project sponsor.
   f. To lead his managers as well as the Algo consultants in ensuring that all objectives with in all ERP modules are being achieved and to take all measures necessary to ensure that the project runs its course.
   g. To sign-off on various project deliverables.
   h. To ensure that the ERP system is put into operational use.

3. **Client Domain Managers.** They represent the expertise within their respective modules that ensures the "fit" and "match" between the ERP and their business needs. As domain leaders they must dedicate up to 30% of their time in the ERP Implementation effort They have the following ongoing responsibilities vis-à-vis the ERP implementation:

   a. To understand the working of the ERP system concerning their respective areas of responsibility.
   b. To express customization requirements to the consultants during the requirements phase.
   c. To participate and lead their staff during the training sessions.
   d. To conduct System Acceptance Testing of the ERP system.
   e. To identify bugs in the system and work towards their resolution with the consultants.
   f. To sign-off on various milestones within their respective domains.
   g. To ensure that the ERP system is put into operational use by taking charge of their own staff.

4. **The Nominated team members and end users.** Within the module teams, there may be a requirement of specific future end-users to give expert advice on requirements of the ERP system. Experienced and well seasoned resources are also included within the sub-modules as their respective power users. Time and again these nominated end-users will be required to play their role in the implementation efforts as per the instructions of their managers. Their responsibilities include: