

Project Management Tools for the Fashion and Apparel Industry

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Abstract

When managing any commercial, professional, scientific, or other project, it is necessary to plan all segments to integrate the various components and achieve the set plans. Nowadays, tasks such as drawing Gantt charts, network diagrams, and creating project reports are unthinkable without computer programs. The development of project management programs simplifies this work, allowing project team members to focus on project tasks, develop plans and strategies, and assess risk. In addition to project management computer programs that can be used for various projects, some programs have been developed specifically in the fashion and apparel industry. This paper focuses on the comparative analysis of programs developed specifically for project management in the fashion and textile industry and presents their specific features.

Keywords: project; management; fashion; apparel; software

JEL classification: C88, D83

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Introduction

Today, tasks such as drawing Gantt charts or network diagrams, then making changes to them and making project reports are unthinkable without computer programs. The development of project management programs simplifies this work so that project team members can focus on thinking about project tasks, making plans and strategies, and risk assessment. In this way, the computer is left to process all versions of plans and display tables, graphs, time plans, and resource allocation (Omazić et al., 2005). Typically, business companies work on several initiatives at the same time. A project management (planning) application is required for all projects to be completed well-organized and within the specified deadlines. It enables users to manage business projects on a shared platform and provides visibility into the progress of each project through a single integrated system. Before deciding on a project management software, the ideal project management program should do the following:

- allow team leaders to lead conversations via the application platform and send messages to members;
- be able to send SMS or email notifications to members, so they don't have to log in to check for all updates,
- make document storage easier in a single database that all members should have access to,
- provide remote work (mobile application) so that team members can access the system from anywhere,
- enable visualization of project implementation [Simplylearn, 2022].

Comparison of Programs

There is a wide range of programs for project managers that meet their specific requirements, whether it is teamwork, time tracking, charting, taking notes, or problem-solving. The most commonly used are described below.

MS Project is a widely known and used program for project management. The first version of the MS Project was developed in 1984 by Microsoft. The advantage of this program is that it has several functions that make project management tasks easier to perform. Among those functions are options for the easy meeting schedule, tracking workloads, and project progress. The program also allows easy track of planned finances, defined resources, setting goals, and making plans. The standard edition is usually appropriate for the basic use of the program. Still, the professional edition should be used for more demanding projects and a higher number of projects. Of course, the selection of the version is also related to the number of team members as well as the specific needs of the project team (Project Management, 2022). *Primavera P6 Professional Project Management* is also among the well-used programs for project management, especially in the engineering domain. It is specifically designed to manage large, demanding projects with a larger number of team members and therefore allows the simultaneous use of multiple users to perform project updates. According to the official description, this program can organize up to 100,000 activities that perfectly fit the needs of large projects (Wajid, 2019). For the purpose of demanding projects, its feature of conducting what-if analysis or alternative options may be considered quite helpful. *Gantter* is a free web-based project management program. The options that can be used within Gantter depend on whether you use Gantter through its official website or its version for Google applications. Gantter offers collaborative editing and chats with Google Drive Realtime integration. Users can collaborate on the project calendar and make

changes simultaneously. Users are given a colorful view of the project, and also each user can see which collaborator is online and what changes he is making. As Gantter is open source, all its programs are published on Github and are free to use (Plazanjić, 2016). *Kanbanchi* is a Google Suite online project management program. It is used for team collaboration and task management as it provides a platform all team members can access at once. Kanbanchi complements G Suite programs and is integrated into Google's infrastructure. Through the Google app, you can manipulate your project dashboards as files on Google Drive, give flexible access permissions, create events in your Google Calendar, attach Google documents, worksheets, and forms to your dashboards, and more. Kanban board is a powerful tool widely used for project management. Maps grouped into lists and placed on a single board can give a picture of your project. All you need to do is set up a board for your project, share it, and collaborate on real-time tasks (Kanbanchi, 2022). *Trello* is a collaboration program that organizes projects into boards. Trello immediately shows what is being worked on, who is working on what, and where something is in the process. A whiteboard is also available, filled with lists of sticky notes, with each note as a task for the leader and team. Each sticky note has photos, attachments from other data sources, documents, and a place to comment and collaborate with team members. The board can be taken anywhere on a smartphone and accessed from any computer via the web (Trello, 2021). *Wrike* is another program that makes project management much simpler and less demanding. It is easy to view the project status of all teams using real-time reports. Wrike allows one to maintain a balanced workload with tools that help plan and allocate resources before tasks are assigned. It then provides all the necessary information to the team to help them work on active projects and priorities. Interactive and customizable Gantt charts allow project managers to visualize deadlines and critical pathways. They can track project progress in real-time using advanced reporting tools. Free customizable project templates are easy to use and allow you to start projects quickly (Delos Santos, 2022a). *Asana* is a project management and teamwork program. It is a versatile tool that helps different teams plan and monitor work or build natural processes to reach customers, improve organizational efficiency, increase sales and build better products. It is a flexible program that can manage workflows with innovative features to increase efficiency and productivity. Asana allows teams to organize clear and visible work for all involved. Centralizes goals, plans, tasks, and files so teams can easily work and share from a single application. Team projects can be divided into practical tasks assigned to a single recipient and multiple collaborators. Tasks in a project can be viewed in several ways, either in the list view, in the form of a board, or a calendar. A new setting called Goals allows teams to set, track, and manage company goals on the same platform on which teams do business (Delos Santos, 2022b).

Project planning in Fashion and Textiles

In addition to the listed computer programs for project management, some programs are specifically designed for textile and apparel, i.e., the fashion industry. The fashion sector, which is always changing concerning seasonal demands, is known for its numerous standards, particular laws, and clients' varied tastes. Therefore, such a company (either devoted to textile or apparel) must be versatile, flexible, and able to maintain focus to prosper. Of course, it is easier doable with the correct technological instruments. Textile and apparel sector software may assist with anything from design, procurement, and production to inventory management, retail, and customer feedback analysis for fresh insights. The number of options

available is enormous and rising, as some integrate many roles while others are very specialized. Textile and apparel industry programs can be used for various tasks. Some programs can only help create outstanding designs and presentations, while others can deal with segments important for management, collection planning features, or fulfilling orders. In addition, some try to combine everything previously described (Rudenko, 2018). Within this paper, an in-depth analysis of different programs used for project management in textile and apparel was performed. Based on the comparison of features and specific options for use in the field, a selection of 8 different programs was made, Figure 1. These programs include AIMS360 Fashion, ApparelMagic, Program A2000, Fast React, YuniquePLM, Apparel Connect, Smartsheet, and ProjectLibre. All the listed are briefly described below, outlining the main features important for the textile and apparel industry.

AIMS360 Fashion was built to handle the fashion industry's complex system in a single program. It's a completely integrated cloud-based apparel production application for companies, importers, dealers, and distributors. It is also a platform for ordering, processing, and manufacturing. AIMS360 collects and organizes customer data, inventory monitoring, order management, delivery, and more using the newest Microsoft SQL and .NET platforms. Comprehensive apparel inventory management, style management, customer and order management, high-level visual reports, numerous windows, business intelligence, and reporting are additional important aspects (Software Advice, 2019).

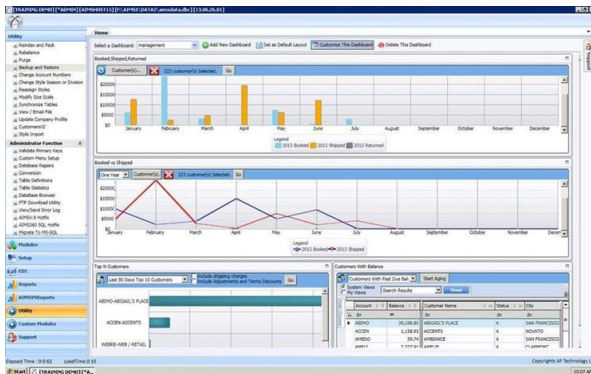
ApparelMagic is a comprehensive system that allows you to handle design, sales, customers, accounting, inventory, and purchasing all in one location. Design management allows you to keep track of costs while storing a detailed library of colors and items. There is no need to install the program on the computer because ApparelMagic cloud is a web-based application that can be used from any device and location. Technical assistance and training are also provided at no cost (ApparelMagic, 2022).

The A2000 program is an Oracle-based system tailored to the apparel industry's demands. It can be used by designers, distributors, manufacturers, traders, and everyone. This program includes vendor portals, comprehensive warehouse management features, order processing, financial reporting, inventory management, catalog, and telemarketing modules. It also has e-commerce capabilities and a map library that is ready to use. Like other programs, it has been featured in supply chain management, task calendars, and materials management. It is easy to use and can be installed on a local cloud development server (Capterra, 2018).

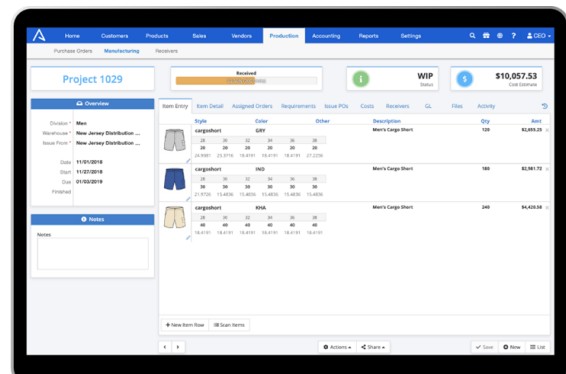
Fast React is a program designed for industry-specific applications in the fashion sector. It includes three specific segments – Vision, Evolve and Align. Vision is designed as an enhanced browser-based solution. The second one, Evolve, is directed toward a visual planning and capacity management tool. Finally, Align is a modeling software solution designed to increase inventory levels and order confirmation processes. All three allow a project member to oversee and coordinate operations at various levels from a single administrative platform. Modules for new product development, budget planning, forecasting, critical path, and user-defined reporting are also available in Fast React (Apparel Resources, 2012).

Figure 1

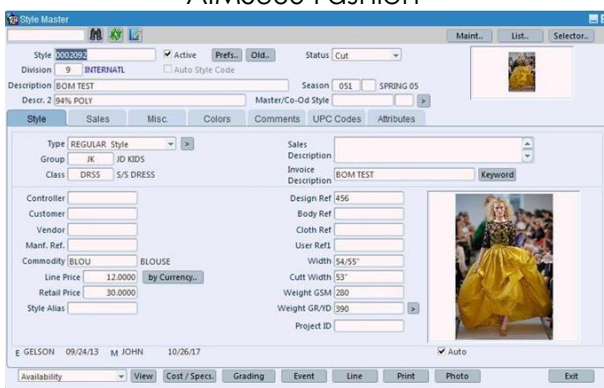
Project management programs specifically designed for the textile and clothing industry



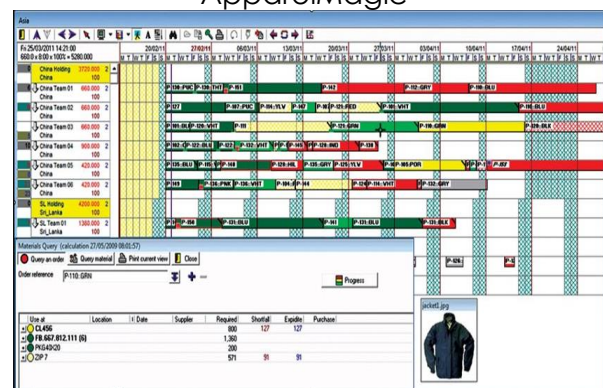
AIMS360 Fashion



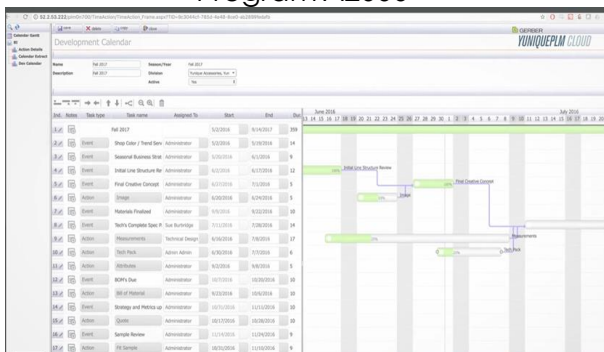
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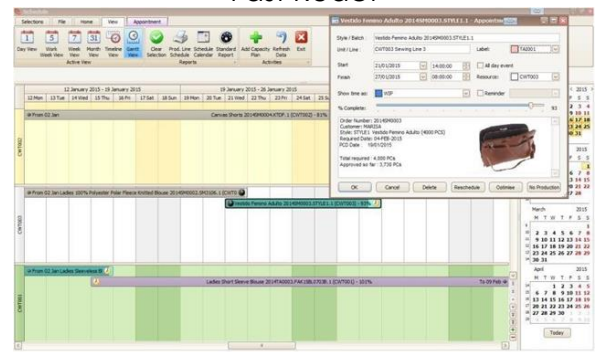
Program A2000



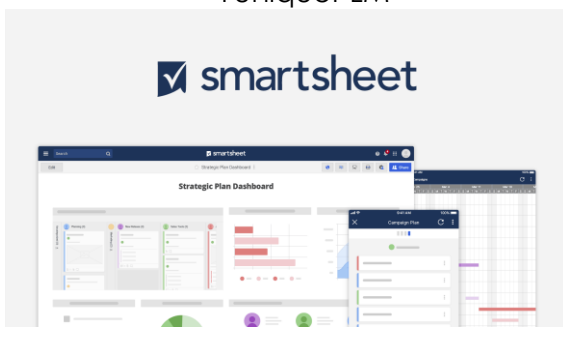
Fast React



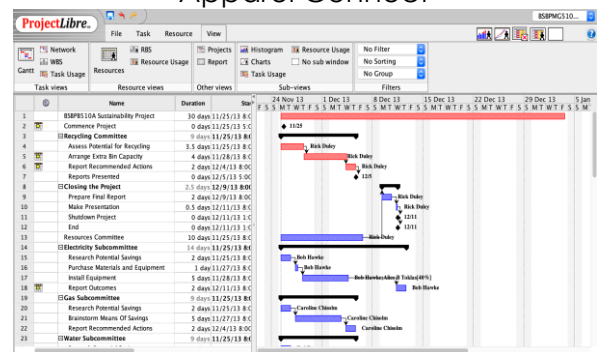
YuniquePLM



Apparel Connect



Smartsheet



ProjectLibre

Source: Authors' work

Apparel Connect is a program that covers the complete garment manufacturing system. It was specifically developed for the apparel industry, focusing on the options that allowed the complete management of the entire company. In addition, the program is a customizable solution tailored to manufacturers according to their special demands. Key features: collaboration tools, multidimensional pricing and quotation options, product finding and development modules, material labeling and tailoring, order management, demand-based material proposal processing, inventory control, reporting, and more (Apparel Connect, 2021).

YuniquePLM is a retail lifecycle management application widely utilized in other industries besides textile and apparel, such as packaging, furniture, aerospace, technical textiles, etc. It was primarily created to assist businesses in properly managing creative teams and supply chains and delivering products on time and within budget. It's a very efficient cloud-based program with built-in design tools. The pre-positioning step, which allows for precise preliminary cost assessment, is its most distinguishing characteristic. YuniquePLM has design, product development, discovery, tracking, and reporting modules (Gerber Technology, 2019).

Smartsheet is a leading business management platform with real-time work management, collaboration, and automated tools. Users are presented with an easy-to-use spreadsheet-like interface. Good project management features allow teams to use a variety of real-time data views and easily switch from Gantt charts, maps, calendars, and networks. Smartsheet automatically updates waterfall and agile projects, sprint planning, product launches, and more. The resource management feature allows users to see who is busy or who is not in real time. Users can also attach files, receive notifications, share sheets, view activity logs, export files, send emails, and print (Delos Santos, 2022c).

ProjectLibre is the best alternative to Microsoft Project; the main goal of ProjectLibre is to provide free and open-source project management software worldwide. It is available in over 200 countries and contains 29 languages. This alternative software includes network diagrams, job or resource structure charts, costing, and similar features. Users can also set up a project baseline and use multiple planning calendars. It also has a reporting function, such as displaying resource information, project details, and task information. ProjectLibre is currently working on a cloud version that will allow access to data anytime, anywhere (Delos Santos, 2022d).

Conclusion

Effective project management is very important for industrial production. Production planning, management, transportation, and much more are crucial for manufacturers. Programs that enable the collection of all data in one place and their mutual exchange greatly facilitate the work. The textile and clothing industries require a wide range of operations for each product. From the raw material to the finished product, the whole process should be planned, and then the process of placing the product on the market and customer feedback. Of course, many people are involved in many processes, and project management programs allow all project participants to communicate directly and share data. Each program has its advantages and disadvantages, but they all have the same purpose: facilitating the production process. Programs like MS Project or Primavera P6 are general programs that help with project planning, graphing, tracking production and costs, setting goals, and more. Anyone can use such programs because they are easy to use. Specially designed programs for the textile industry, such as ApparelMagic and Fast React, may require more difficult skills. In the production of clothing, many norms

must be met, as well as a lot of numerical data that are very important for the product. Even with small deviations in product dimensions, it is not usable, and there is no possibility for its processing. Therefore, it is very important to plan everything well before starting production. It is also important to know where the product goes on the market, how much is needed, etc. The clothing industry is changing fast; fast fashion is forcing manufacturers to produce fast. New fashion trends emerge daily, and manufacturers must keep up with them. Computer programs allow them to do that, making work easier and speeding up. Since the data can be saved to the database, sometimes a little change must be made for the new collection, and it is ready. Computing in programs also helps a lot. Many tools make planning easier, and they are evolving more and more every day. As computer technology evolves, so do computer programs. Computers used to be the future of business, but now that future is already here and continues to evolve. Business and planning are much easier, and with further development, it will be simpler and customized so that each person knows how to use the programs.

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