

CASE STUDY:

Epyllion Group automates its fabric buying process with Coats Digital's IntelloBuy to reduce fabric buying cost by 2%

Using advanced technologies like artificial intelligence and big data analytics, IntelloBuy automated 70% of Epyllion's fabric booking processes, enabled informed decision making and provided business intelligence through accurate reporting.

THE CUSTOMER

Epyllion Group started its journey in 1994 as a house of Ready-Made Garments (RMG) specialising in manufacturing and exporting of knitted apparel. Today, Epyllion Group is considered as one of the biggest corporations in the Bangladesh RMG industry with production units in Dhaka and Gazipur.



Furthermore, Epyllion Group has its own testing lab, washing plant and design studio for exporting ready-made garments worldwide. Over the years, Epyllion has established itself as an important garment manufacturer for a number of renowned apparel brands in Europe, Asia, Africa, USA and Australia, including H&M, Next, M&S, S. Oliver and Marks & Spencer.



CHALLENGES AND THEIR SOLUTIONS

1. Inaccurate estimation of fabric consumption due to lack of time

With fast fashion and the growth of personalisation increasing the number of styles every season, it was very difficult for Epyllion to accurately calculate fabric consumption and book fabric for production to meet order deadlines.

The time-consuming, manual processes used to prepare cut plans, make patterns and markers,



(often without a size-wise breakdown at the time of booking fabric), and add buffers for wastage, meant accurate calculation of fabric consumption for the full order quantity was almost impossible. Consequently, as is common practice in the industry, cut plans, ratio planning and markers at the fabric buying stage of the process were estimated for the bulk of the order quantity (typically 90-98%), and this was used to estimate fabric consumption and place buys for the whole order.

KEY FACTS

CUSTOMER

Epyllion Group

LOCATION

Bangladesh

CHALLENGE

1. Inaccurate ratio planning due to lack of time
2. Manual booking process leading to delays
3. Consumption gaps between booking and cutting process
4. Order booking information held in excel with limited data insights intelligence
5. Incorrect inclusion of end loss in consumption
6. Overbooking due to incorrect estimation of material consumption

SOLUTION: AI-based ratios and cutplan with auto queue of markers to accurately plan 100% quantity

Coats Digital's IntelloBuy solution provides the team with automated cut plans which helps Epyllion plan 100% of its quantities with a single click, putting an end to time consuming manual work. The AI-based cut plan produced in IntelloBuy ensures product/customer based tailored cut plan to optimise fabric consumption.



2. Manual booking process leading to delays

Epyllion's fabric booking processes, including making a ratio, recording style details, marker making and consumption calculation, were entirely human dependent and performed manually. With the increase in number of styles the business was receiving each season, the fabric buying team found it difficult to manage huge amounts of data, monitor each process and provide accurate fabric booking consumption at the same time.

SOLUTION: Fabric booking automation through IntelloBuy

Once the process of marker making is complete, all the details are entered in the system. IntelloBuy delivers an automated fabric consumption report that displays a collated style and order information, along with fact-based booking consumption, which helps the team to book accurate amounts of fabric, to reduce waste and bring down costs. This further helps to increase profit and boost bottom-line in the long run. IntelloBuy helped to automate 70% of the total steps involved in Epyllion's fabric booking process. The Epyllion team has ensured 100% compliance to IntelloBuy and now records each style and order detail in the software to create an automated cutplan.



*Prior to IntelloBuy implementation in our factory, performing the fabric booking activities manually was a time-consuming task for our team which led to delays. IntelloBuy has helped us to **automate 70% of the total fabric booking activities** which has resulted in easier management of the booking data and delivery of accurate fabric booking consumption.*

Md. Rezaul Karim Raju,
Manager – Operations,
Epyllion Group



3. Consumption gap between booking and cutting processes

As the pressure on the fabric booking and cutting departments increased due to an increase in styles the business receives each season, it became difficult for both teams to co-ordinate effectively and keep the correct alignment of fabric booking and fabric usage data. For example, for certain orders of multiple size range, the booking team would provide separate consumptions for each size range, while the production floor would cut both the size ranges together. This gave rise to a significant gap between the fabric booked and its actual consumption on the floor, resulting in either deadstock or short shipment.

SOLUTION: Identifying and reducing the gap between booking and cutting consumptions

As a result of Coats Digital's expertise in optimising and automating key processes in the fashion supply chain and a successful implementation of IntelloBuy, the significant gap between the fabric booked and fabric consumed on the floor was reduced. IntelloBuy provides Epyllion with a production grade cut plan, which is also used at the time of production, making the booking process more realistic and reducing the gap between booking and production consumption.

4. Manual booking data repository leading to lack of data intelligence

The Epyllion team had a manual repository of the booking data for the styles of all the customers and products with a standardised terminology, but only the merchandisers could access the data at short notice. With the fragmented nature of data storage across the factory it became increasingly difficult to make fact based decisions in the fabric buying process. The Epyllion team needed a digital tool which could help them in effective fabric booking data management and support them to make informed decisions for their business.

SOLUTION: Aggregated reporting structure to facilitate Trend Analysis

IntelloBuy analyses data behaviour and patterns to enhance productivity through qualitative and quantitative technique.

It offers Epyllion an aggregate reporting structure that provides the information they need to complete a trend analysis of orders booked based on customer and product categories. The style level data provided by IntelloBuy has enabled Epyllion Group to make informed costing decision based on several data points and historical analysis. Furthermore, the visibility of the booking data across the factory has helped Epyllion to make informed and data-backed decisions to support the business profitability.

5. Incorrect inclusion of end loss in consumption

End loss is the allowance left at both the ends of a fabric ply to facilitate the cutting process. This allowance is added while calculating the fabric booking consumption for an order. Prior to the implementation of IntelloBuy, the Epyllion team added an approximate value of end loss over the booking consumption based on guesswork and experience, resulting in inaccurate booking consumption.

SOLUTION: Verification of end loss value with IntelloBuy

All the booking parameters are now added into the IntelloBuy system, and the end loss is calculated and verified by the production team, which eliminates guesswork and assumptions, resulting in a more accurate booking consumption. While processing the orders in IntelloBuy, an accurate end loss is now automatically added per ply that follows the production floor parameters.

6. Overbooking due to incorrect estimation of material consumption

In order to eliminate the chances of under-booking, for each garment piece the Epyllion team added an estimated value over the final booking consumption. This value was entirely based on assumption and had no fact-based derivation. The inclusion of subjectivity and guesswork in calculating the booking consumption resulted in over-booking of fabric, consequently resulting in dead stock and a decline in bottom-line for the company.

SOLUTION: A 2% reduction in the fabric buying cost

IntelloBuy has helped Epyllion to eliminate manual estimations and calculations and provided accurate fabric consumption of thousands of orders in a single go, in addition to accurate estimations which are close to real-production scenarios. This accurate estimation of fabric has helped the Epyllion Group to avoid over-booking of fabric and reduce the fabric buying cost by 2%.



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*IntelloBuy's process automation and accuracy has allowed us to become more dynamic and competitive in the readymade garment industry. Using production-grade cut plan and floor parameters to derive booking consumption, we have been able to replicate the actual production scenario at the time of booking and **reduce 2% of our fabric buying expense**. We are happy to see the continuous improvement in our fabric booking process.*

Shajedur Rahman (Mithu)
CEO, Epyllion Group

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IntelloBuy uses advanced technologies like Artificial Intelligence and Big Data Analytics to solve the problems generated by complex new styles, shrinking lead times, and planning with manual tools. The intelligent solution also solves the restrictions in accurate fabric booking due to incomplete information.

An advanced approach to fabric buying, IntelloBuy looks-up the best fabric buying consumption from historical booking data to avoid any dead stock or short shipment, saving fabric cost at the fabric estimation stage.

KEY BENEFITS AND ROI



AI-based cut plan to plan 100% order quantity



Accurate, fact-based estimation of booking consumption



Automation of 70% of fabric booking processes



2% reduction in the fabric buying cost



Aggregated reporting structure to facilitate trend analysis

For more information about IntelloBuy's features and benefits, or any of Coats Digital's supply chain solutions, visit: www.coatsdigital.com or email: marketing.coatsdigital@coats.com