

Collaborative PTS system in garment industry

Executive Summary

Usually in CM and CMT based garment manufacturing business every negotiation between the client and manufacturer revolves around the question of price, in fact it refers to the model's execution time.

Many small and medium sizes manufacturers may answer with estimation, based on historical data, others may rely on stop watch based time studies and sometimes the question is answered with a number based on a Predetermined Time Standards (PTS).

The ideal case is when the client's time fit with the manufacturer's time, the deal is ready.

timeSSD® is the software solution that's been purpose-built to reach the ideal case with minimum efforts.

Top of the iceberg

In garment manufacturing the labor cost is the higher cost factor, over than 70%. The labor force of operators with their skills and the quality of the manufacturing process management are the parameters what make the difference in the profit figures.

Many manufacturers suffer due to lack of understanding the work flow and bottlenecks during the time sensitive stages of the manufacturing process.

Saving money by saving time ...

... if somewhere is true then in the garment manufacturing line absolutely. The optimized workplace with defined right execution method and accurate time for a trained operator it means high efficiency for all three parties: operator, manufacturer and client.

Theory and practice

The "Introduction to Work Study" by George Kanawaty is a comprehensive book about "how to do" (<u>http://staging.ilo.org/public/libdoc/ilo/1992/92B09_329_engl.pdf</u>) but to make a work study and inside of it to have a time study it means possessing knowledge and using tools.

The fashion business is fast, more and more diversified with small orders and short delivery time.

No space for manual time studies and the historical data based execution time estimations could have as result a profit gap because of the fast-changing styles. The solution for the benchmark execution times consist in the use of the Predetermined Time Standards (PTS).

Predetermined Time Standards are based on Methods Time Measurement (MTM), whereby times established for basic human motions are used to build up the time for a job at a defined level of performance on the basis of empirically tested data – the time it takes to perform known human motions under defined conditions. This approach deconstructs a garment into its constituent parts, identifies the manual labor operations required to complete these components and uses this methods analysis to predetermine manufacturing standard times.



Source : "Introduction to Work Study" by George Kanawaty (1992)

Computerized PTS

A computerized PTS system calculate the manufacturing standard times from a computerized database of Standard Minute Values (SMV) empirically determined for a range of manual operations necessary to assembly a product.

Standard time: "the rate of output which qualified workers will naturally achieve without over exertion as an average over the working day or shift, provided that they know and adhere to the specified method and provided that they are motivated to apply themselves to their work". ("Introduction to Work Study" by George Kanawaty)

SSD – Standard Sewing Data

SSD it was between the first computerized PTS systems, its development started by AJ-Consultants / Finland in 1982 and the manual operations (elements) database is built on MTM-2 basis.

Many known computerized PTS systems has in their background the SSD elements database.

The SSD was acquired in 2016 by Astailor Shine S.R.L.

timeSSD® the unique collaborative platform in the industry

Today are available many computerized PTS systems dedicated for the garment industry. Part of them has complementary features near PTS, part of them are web based but from all of them are missing the integrated social manufacturing feature.

timeSSD® uses the SSD elements database but the whole software is redeveloped and built with focus on four strengths:

1. Time accuracy

- SSD database is developed on MTM-2 basis starting from 1982, in Finland.
- Confirmed by practice: SSD database it was / is in use in more than 800 manufacturing units and in few textile faculties, from South America to China.

2. Attainability

- Global access: as it's a web based software solution what can be used from a desktop or tablet or even a smart phone, from wherever exist a connection to the internet.
- Right price and less operation cost: pricing is on "pay per use" basis, no user license fee, no maintenance. Just register in and you can use the already developed and available example methods and workflows.

3. Data security

- timeSSD® is running in the Microsoft Azure Cloud with geo redundant data backup policy.
- The methods and workflows developed by the user are owned by the user.

4. Cooperation

- Common platform in the Cloud : Client and manufacturer use the same platform, same software, same elements database but with the full protection of the rights over the owned methods and workflows.
- Any party can decide **When**, **What** and **with Who** would like to share from its data (operation / method and/or workflow).
- The shared data from the source with language "A" are immediately available in the system for the destination party with the element descriptions on its own language "B".

timeSSD® the software solution for the ideal case

With its instant multi-language and share features the timeSSD® offer the solution for the ideal case of price / execution time discussions, both parties – client and manufacturer – having the same operation list, on their own languages.

In addition, the timeSSD®:

- provide the benchmark Standard Allowed Minutes (SAM) for the measurement of the right efficiency figures
- is ready for immediate use, no installation, no implementing, no hardware or another platform needs
- unlimited number of concurrent users
- it's easy to understand and it's intuitive in use
- has a team in behind with more than 26 years of experience in software solutions development for garment industry
- ensures the accurate data for incentive payrolls
- provide user activity analytics
- contribute to the manufacturing lines configuration and workplaces ergonomics
- it's as transparent as the user decide
- reduce to 12 20 minute the analysis of 1(one) working minute
- include a native connection with the GPD General Production Data realtime data based shop floor control software solution
- offers method engineers training by expert trainers, on request