

# Quick Response Quality Management (QRQM)

## 快速應對質量管理

QRQM platform for apparel supply chain is a cloud-based computing platform with the use of network connected tablet devices to capture, highlight, and upload product defects information by gesture control. The product defects information (e.g. photo and diagram) will be stored in the cloud-based quality analysis server for data analysis and quality management. Charts and tables on quality analysis will be generated. This platform takes a proactive approach of quality monitoring and alert, which could help garment manufacturers face the short lead time in fast fashion supply chain.

用於製衣業供應鏈的快速應對質量管理是一個雲端質量管理平台，利用平板電腦去收集產品疵點的資訊（例如相片及圖像），透過手指觸控的方式為產品疵點提供註解，進行分類及分析。這些資料包括分析品質水平的圖表及報告，方便製衣業管理人員進行品質管理。該平台促進積極主動的質量監測和預警，有助成衣製造商面對今日快速時尚供應鏈的交貨速度。



### Application 應用

This platform is highly scalable and applicable to garment manufacturers with one to hundreds of production lines. The quality management audit function is also suitable for the industrial engineering department to conduct workplace quality and safety audit.

此平台可擴展性強，適用於擁有一條至數百條生產線的成衣製造商。質量管理評核功能也適用於工業工程部門，以進行工作環境的質素和安全評估。

### Industry Benefits 業界效益

The platform provides real time quality monitoring and alerts for garment factories. It is particularly suitable for SME garment manufacturers because the setup cost and hardware investment are low (e.g. monthly subscription from IT service provider), and the system is highly customisable for various garment production configurations. The proactive approach of quality management enables the factory to visualise quality problem in real time.

For larger scale garment manufacturers with multiple off-shore locations, this platform can help their headquarters to monitor the quality performance of all production lines in real time. Systematic quality problem can be resolved immediately and the platform avoids any shipment delay.

此平台為製衣廠提供實時質量監察和通知的功能。平台的設立成本較低，硬件投資較少（例如資訊科技服務供應商的月費）；此外，系統可以因應不同的成衣生產架構而有所調整，尤其適合中小型企業使用。品質管理以主動的模式即時呈現產品的質素問題。

對於設有多個海外廠房的大型成衣製造商，此平台可以讓公司總部即時監察所有生產線的品質狀況，如發現系統性的品質問題，可以即時解決，並避免出貨延誤。

## ||| Technological Breakthrough 技術突破 |||

By making use of the latest mobile computing, cloud-based computing and telecommunication technologies, this platform provides real-time quality analysis and alert system for quality managers to proactively resolve quality problems. Quality manager can receive email or SMS alerts when systematic quality issues are captured by the QRQM platform. The quality prediction function also helps garment factory forecast potential quality defects, so that they can have a better production planning to minimise quality problem.

The user interface of the apps on the tablet devices is customised for garment factory quality control process. The user-friendly interface (e.g. gesture control for product defects categorisation) enables the front-line quality control staff to digitise product defects records in a few seconds.

此平台運用最新的流動資訊處理、雲端資訊處理及電訊技術，讓質量檢驗主管可以就產品品質作出實時分析，獲取提示，以便主動解決產品品質問題。若快速應對質量管理平台發現有系統性的品質問題，便會透過電郵或手機簡訊通知質量檢驗主管。此品質預知功能可以讓製衣工廠預測潛在的品質問題，從而釐定更有效的生產計劃，以減少品質問題。

這項平板電腦應用程式的頁面設計專為製衣廠的品質監控過程而設，讓前線員工使用時更容易掌握，例如以手指觸控方式把產品瑕疵分類，幾秒間便能把瑕疵紀錄數據化。

## ||| Licensing Details 專利授權 |||

A non-exclusive license covers the system source code as well as the right to apply and develop a Quick Response Quality Management System for the apparel supply chain based on the filed patent.

非獨家專利授權許可包括系統的原始碼，並根據專利內容為製衣供應鏈開發及應用快速應對質量系統。

Funding  
Organisation  
撥款機構



Research  
Institution  
科研機構



The Hong Kong Research Institute of Textiles and Apparel 香港紡織及成衣研發中心

R906, Shirley Chan Building, The Hong Kong Polytechnic University, Kowloon, Hong Kong 香港九龍香港理工大學陳鮑雪瑩樓R906室  
T [852] 2627 0180 F [852] 2364 2727 E info@hkrita.com www.hkrita.com