



## CASE STUDY ON THE REKNOWN INDIAN SCHOOL BOARD

### Introduction

The Indian School Board has been constructed in such a way to secure suitable representation of: Government of India, State Governments/Union Territories in which there are Schools affiliated to the Council School Board.

#### - **Background**

In 1952, an All India Certificate Examinations Conference was held under the Chairmanship of Maulana Abul Kalam Azad, Minister for Education. The main purpose of the Conference was to consider the replacement of the overseas Cambridge School Certificate Examination by an All India Examination. This set the agenda for the establishment of the Council.

In October 1956 at the meeting of the Inter-State Board for Anglo-Indian Education, a proposal was adopted for the setting up of an Indian Council to administer the University of Cambridge, Local Examinations Syndicate's Examination in India and, to advise the Syndicate on the best way to adapt its examination to the needs of the country. The inaugural meeting of the Council was held on 3rd November, 1958.

In December 1967, the Council was registered as a Society under the Societies Registration Act, 1860.

In 1973, the Council was listed in the Delhi School Education Act 1973, as a body conducting "public" examinations.

#### - **The Councils School Board Mission**

The Council for the Indian School Board is committed to serving the nation's children, through high quality educational endeavors, empowering them to contribute towards a humane, just and pluralistic society, promoting introspective living, by creating exciting learning opportunities, with a commitment to excellence.

#### - **Purpose to Introduce Ginger Webs Services**

Council wanted to step further towards Information Technology savvy world to check the subjective papers of (X) and (XII) with help of OMR (Optical Mark Recognition) technology which could help them to get the results fast and accurate.



## Objective of the Project

The main idea of the concept was to hide the identity of the Student to the Examiner with primary goal to publish the transparent result. They followed the traditional methodology to check papers manually and on the other side they wanted to use the computer based technology to see the percentage of difference between manual and computer checking that can help them to understand the level of mistakes done by Examiner while checking and to find the necessary preventive measures.

## Project Overview

The complete project was about to scan and process of the scanned images to convert it into soft data for the analysis of student performance. The scanning and processing were into 2 different stages – 1) Student OMR and 2) Examiner OMR. Student and Examiner OMR processed in two different locations with different scanners.

- 1) Student OMR – Student OMR was the top sheet of the Subjective Answer Booklet and later it teared off from the Subjective Answer Booklet. Fujitsu fi6800 (2 units), Fujitsu fi6670 (1 unit) and Fujitsu fi7180 (1unit) were used to scan 21lakh Student OMR sheets and scanning job completed in 20 days.
- 2) Examiner OMR – Examiner OMR was the inner page of the Student OMR and that can't be separated which has to remain along with the Subjective Answer Booklet. Fujitsu SV600, 50 units, book scanners used to scan21 lakh Examiner OMR in 40 days of time frame.

The project was designed with such a smart technique and the concept was to attach two OMR sheets (i) Student OMR and; (ii) Examiner OMR with Booklet. Perforation was sandwiched between Student OMR, Examiner OMR and attached to the Booklet in such a manner, candidate can only fill registration details in Student OMR and can move to write exam on the booklet, once the writing part is over than Student OMR would be torn off and Booklet would left with Examiner OMR and there would be same triplicate barcode printed on Student OMR and Examiner OMR to relate them with each other, both of the sheets would be processed in separate places and later on would be correlated with each other by matching same barcodes.



## Challenges in Running Project and the Solutions

Scanning of the Student OMR was like a cake walk with ADF scanners such as Fujitsu (7180, 6670, 6800) but it was completely reverse in the case of Fujitsu SV 600.

1. Examiner OMR images showing waves in the scanned output so we imposed the transparent glass on the OMR sheet to get the output without waves.
2. There were many time we got the scanned images comes with shrinking image output with black color background due to reflection of light. To avoid this situation we covered the whole place where scanning job happened with thick black cloths.
3. SV 600 gives a rainbow in the scanned output if book scanner was shaking so we fixed the scanner properly.
4. Due to continuous scanning there were many time we didn't get complete image and it was very difficult to repeat the same exercise as we had huge volume to scan. We created our own in-house software application to smooth the process and application there itself gives the message to the operator to scan again if image is not perfect.
5. If we continuously scan with SV 600 for more than 3 hours a day than the output of the scanner gets slow. It scanned per image in 15 to 20 secs, with that speed we couldn't scan 21 lakh sheets in 40 days so we purchased 50 units and increased the work stations.

## Keys to Success

Basic and very primary challenge in this project was to scan the Examiner Answer Booklet as that can't be scanned with ADF scanner because most of the Answer Booklets were having extra Answer Sheet which is attached the thread so that can't passed through the ADF scanner. The Examiner Answer Booklet OMR scanning was projected with the flatbed scanner and on that time SV 600 was recently launched in India and had a very good scanning speed in comparison to Flatbed scanner. SV 600 played very crucial role to success this project as there were few road blocks came in running project which were subsided by 'Ginger Webs' team by their practical observations. We were able to scan between 2,000 to 2,500 scanned images with 1 unit of SV 600 in 7 hours work cycle.

## Conclusion

In May, 2013, we successfully completed the project and handed over the data. It took us 45 days to complete the project as our initial time was used to understand the running project problems and to find the appropriate solutions.