India's APREI Society Successfully Utilizes ABBYY FormReader™ in Entrance Exam Form Processing

One of India's largest and oldest educational establishments relies on ABBYY to handle 500,000 entrance examination forms annually.

"ABBYY FormReader turned the nightmare of processing examination forms into a dream. NETSPIDER INDIA introduced us to ABBYY software, which is not only cost effective but also technically superior to the other available products in the market," comments Mr. Veera Reddy, EPD Incharge, APREIS.

Background:

Andhra Pradesh is one of the front-runner states in the country. Every year, Andhra Pradesh Residential Educational Institution Society (APREIS) hosts **500,000 candidates** who take entrance examinations to the VIII grade. The entrance paperwork consists of 2 parts: an application form with student's personal information and a check-box answer sheet. Previously, the answer sheets and the application forms were handled manually at APREIS or outsourced to small vendors. Obviously, it was a long and costly process leading to undue pressure on the school authorities to declare the results on time before the academic session.

Solution:

The solution provider that APREIS was seeking had to meet stringent requirements. First, it had to have the capacity to design 2 types of forms (student application and exam sheet) in accordance with well-defined specifics. Second, it had to provide the solution to process both types of forms once they have been filled by students. Third, the solution had to have the flexibility to integrate with existing image viewing software and answer-matching software.

After researching a number of solutions and running a tender, APREIS' choice fell on ABBYY for it presented the most complete, yet cost effective and technically superior option. NETSPIDER INDIA (NIIL), ABBYY's partner in India, who, in fact, had proposed ABBYY to APREIS, introduced **ABBYY FormReader 6.0 Enterprise Edition**, paired with ABBYY FormDesigner module and 4 verification workstations. After a number of successful projects with implementation of ABBYY in the education industry NIIL were certain that ABBYY FormReader was the perfect match for APREIS. FormReader features powerful capabilities for design, creation, validation, and verification of any type of forms. It provides the highest accuracy with minimal human involvement. All of the above had made the decision for APREIS clear: ABBYY will help with its complex task.

About NETSPIDER INDIA (NIIL)

NETSPIDER INDIA specializes in ABBYY channel distribution and giving end-to-end solutions in various fields like imaging, networking, scanning, connectivity, Project consultancy, and doing developments around ABBYY technology. NETSPIDER INDIA has experienced technical skills in implementing ABBYY FineReader OCR, FormReader Enterprise, Desktop, FlexiCapture Studio and other ABBYY line of products. More information is available at **http://www.niil.in**

NIIL's solution was furnished by Fujitsu high-capacity scanners and an IBM server. It took NIIL 15 days for implementing, troubleshooting and training the APREIS officials.

The Process:

1. **Form Design:**

   Samir Dhingra, NETSPIDER INDIA, responsible for the project commented: *"Designing the Answer Sheet for the entrance examination using ABBYY FormDesigner was a real challenge as the customer had some very specific requirements, but ABBYY's powerful solution and our experts successfully fulfilled the requirements."*

2. **Form Processing:**

   ABBYY FormReader's OMR reading capability is a very important practical application in multiple-choice exam scenarios, such as those at APREIS. Even when a check box is marked by mistake and later blotted off while another box is checked, the software can detect and consider the blotted out as unchecked. ABBYY's intelligent recognition system easily finds the necessary fields, and once located, the data is extracted using ICR / OMR functionalities.
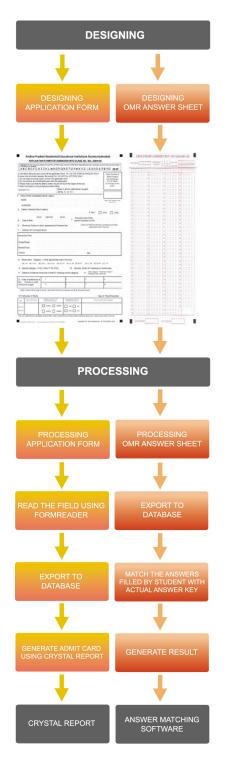
3. **Post–processing / integration with other software:**

   Data from the application forms is exported to database by ABBYY FormReader; then, a student admission card is generated using Crystal Report software, which is seamlessly integrated with ABBYY FormReader. Data from the answer sheets is checked across the answer-matching software[1], with which ABBYY FormReader seamlessly integrated as well. The cycle is completed by printing the admit card of the student in a pre-printed stationary format by using exported data of FormReader.

Conclusion:

For the past 2 years APREIS has been running ABBYY FormReader system successfully with continuing support from NIIL. *"NIIL believes in not just selling a product but making an association for lifetime,"* concluded Samir Dhingra, NIIL. As for this complex project at APREIS, ABBYY solution has proven to be easy to deploy, cost effective and unparalleled; benefiting APREIS from the cost, time and human resource savings.

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[1] Visual Basic-based program which receives the data from the FormReader-exported file and compares it with the right answer.