HTC Helps the Dept. of Social and Health Services Fast-Track Claims Processing

With the IDEAS OCR Solution, the client achieved more than 300% productivity gain in claim forms management, leaving no daily backlogs.

Client

The Department of Social and Health Services (DSHS) that administers two government health insurance programs (Medicare and Medicaid) for different states in the U.S. The government pays for the healthcare expenses of eligible candidates. Medicare is for people aged 65 and over, some people under the age of 65 with disabilities, and those of any age living with permanent kidney failure. Medicaid is another similar program.

Challenges

Recognizing that speed is the essence when it comes to claims processing, the client found it difficult to process complex, structured data that block efforts to automate, resulting in daily backlogs and failure to meet SLAs for processing each claim form. This resulted in a daily backlog of around 800 forms as the client had 24 users processing 1650 forms on an average per day when the average incoming daily volume was around 2500.

The client was extremely dissatisfied with their existing claims management system that posed a challenge to information extraction since the accuracy of the extracted data was extremely low, and the system was plagued by technical and process inefficiencies. The issues were so acute that the client was even considering going back to a manual data entry system for better efficiency. This is when the client saw an opportunity to partner with HTC. We agreed to take care of the imaging and data capture of their medical claim forms with our Optical Character Recognition (OCR) solution – IDEAS.

The client's existing system faced the following challenges:

- Only data from the first page of the claim form were captured automatically.
- Only one field was visible to the user for editing.
- Captured data were highly inaccurate.
- Captured data were not in line with business rules.
- Time consumed for processing each form was so high that there was carryover into the next day.

Scope of the Project

Redesign the client's existing system to achieve at least 35% efficiency gain.

Solution

HTC developed and implemented IDEAS to help the client automate the imaging and data capture from the medical claim forms. For better data capture mechanism at all stages of the claims, our team of experts carried out the following measures:

- Changed the way data were captured
- Modified OCR Form templates
- Introduced a pre-data capture layer that guided the OCR system about the expected data
- Introduced offset zoning
- Effortlessly captured data from multiple pages
- Introduced a post-data capture layer
- Automated skipping of fields where the system determined that the captured data were accurate, resulting in huge efficiency gains.

Technology

- .Net Stack
- ABBY OCR FlexiCapture
- Barcode Technology
- SQL Server

Key Benefits Realized by the Client

After implementation of IDEAS, the client realized the following key benefits:

Data capture accuracy increased multifold.

No more backlogs

Before the implementation of IDEAS, the daily volume was handled by an average of 24 users per day. Within two months of IDEAS implementation, the number of users dropped to 13 to handle the same volume of incoming forms, and it dropped down further in the next four months to stabilize at eight users per day to process the same volume that was handled by 24 users. Thus, eight users were processing the daily load without backlogs, achieving more than 300% increase in the daily productivity of each worker.

Free up users for other core tasks

The client moved the bulk of users to other areas and saved immensely by trimming resource overhead and achieving multifold efficiency gain with the new system now working at three times the efficiency of the previous system where we actually had projected only 35% gain.

The graphical data presented below were derived from the production data.

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