



Advancing Global Higher Education

A Case for Electronic Transcript Exchange

San Francisco State University – A PeopleSoft institution

A conversation with - Tuan Anh Do, Director, ITS/Enterprise Applications, member of the AACRAO SPEEDE Committee and PESC Board.

In 2014, AACRAO conducted an updated study on the adoption rate and return on investment (ROI) for electronic transcript exchange. The results of that study indicated that even after almost two decades of availability, the adoption rate of electronic transcripts among U.S. institutions in the study sample (n=315) was still less than one-third (31.6%) even though the per-transcript cost for this technology is much less than paper transcripts.

In an effort to encourage our members who are thinking about electronic transcripts to make the transition, we wanted to speak with one of our members who has been using electronic transcripts since 1997 and learn from him how this technology has impacted his institution and share his implementation advice.

Tuan Anh Do currently serves as the Director of ITS/Enterprise Applications, member of the AACRAO SPEEDE Committee, and the AACRAO Liaison to the PESC Board. Tuan has been with SF State since 1997. He took the time to answer a series of questions about e-transcripts, and we hope his insights prove helpful to you.

How long have you been using e-transcripts?

We have been receiving e-transcripts since 1997.

How has the technology changed since then?

Technology has become more effective and efficient and, thus, the need for service to the student has become more paramount. More accurate review, with real (not self-reported) data and quicker turnaround on decisions, is crucial to enrollment management. Newer ways are being developed, but the crux of the process is still to get data from a sending institution to a receiving institution as efficiently as possible in an automated fashion. EDI is the workhorse of standards as other new ones develop to try to create more process efficiencies such as XML or JSON. In any case, the end goal is still the same, electronic data transfer as a methodology that supersedes “snail” mail.

Inbound Transcripts

Please describe how your institution receives e-transcripts.

We currently use PeopleSoft delivered development and OnBase. Our EDI process requires manual processing to stage and load the data. However, once this is loaded, the data is available for use without manual data entry. Manual entry of transcripts is cumbersome and has a high rate of inaccuracy.

How many staff people support this process and where are they located (unit/department)?

Inbound: 1 full time staff in EMT processing EDI data as part of her job duties about 2 hours a day.

How long did it take you to implement these processes and what resources were needed?

It took about 2-3 weeks, including testing. I was the only person assigned to the project. A crucial first intake process was rewritten in about 20 hours to allow for the handling of district transcripts as single institution transcripts.

What lessons did you learn along the way that would help others thinking about implementing these processes?

Collaboration is key and crucial. Sharing learned knowledge and getting support from others who understand the process makes for more effective and efficient development.

Have you seen any gains in efficiencies with these processes (e.g., time on process, human resource, fiscal?)

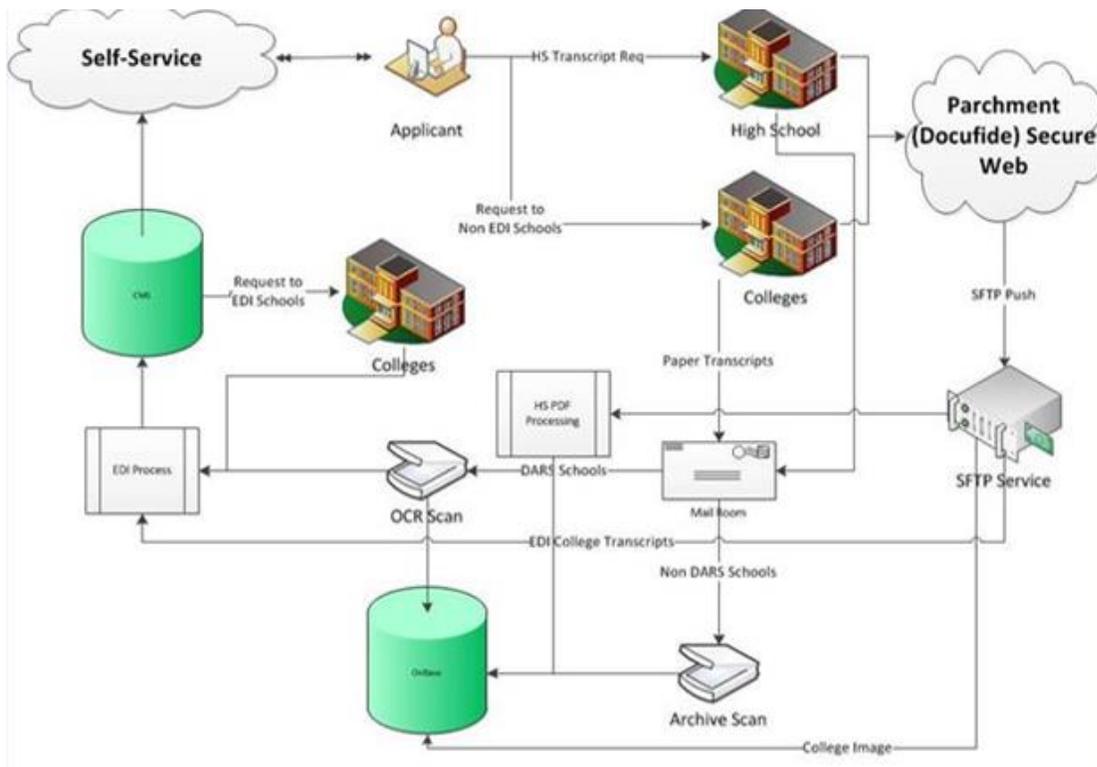
Yes. We process on average 120k transcripts per year with 65-68% being EDI. This saves a lot in terms of process efficiencies and the ability to retool/reallocate staff.

Describe how your institution uses e-transcript for admissions, transfer articulation and other processes.

College transcript data is used to build transfer models to determine transfer units, course equivalencies, and transfer pattern. High school transcripts are used to fulfill admissions requirements. Since we do not currently load EDI data for high school transcripts, we use a paper process with a data grid for review. Our admissions specialists undertake this process and aggregate data that is then used in the determination for admission.

The diagram on the next page is our current working model. The process efficiency in this is the time savings of not having to log into a website daily and doing a download for indexing and processing into our electronic content management (ECM) solution. We can now retrieve all the documents from an SFTP store with an automated script and automate the loading of the data into our ECM. A future development is to pull the keyword index and have automated integrated scripts that will allow for updating external education data and checklist items within our SIS, PeopleSoft.

SFSU Transcript Process Overview



How many staff people support this process and where are they located (unit/department)?

Undergraduate admissions and graduate admissions staff, six transfer credit staff, 1 OCR transcript processor, and a small pool of student assistants

How long did it take you to implement these processes and what resources were needed?

It is ongoing and a work-in-progress, but a lot of these developments are parts of the Continuous Process Improvements (CPI) over the course of years.

Outbound Transcripts

Are you currently using any outbound e-transcript process?

Not at this time. We are currently in negotiation with Parchment to do PDF transcript as a Phase 2 project for us. Phase 3 will be full deployment of outbound EDI transcript from PeopleSoft via Parchment. This is in discussion, and we are in the planning phase to start sometime in spring 2016. The reason for the Phase 3 project is to allow us to streamline the process to coincide with the transcript ordering process and be as automated as possible. Given that most institutions would rather receive data than an image of data, we are providing this service as a means of expediting decisions downstream.

How do you anticipate how outbound transcripts in both PDF and EDI format will impact transcript services?

This process will be automated moving forward and supported by one registrar staff member. We anticipate approximately 85-90% transcripts annually processed as either PDF or EDI. The primary audience for each would be different. PDF would likely be targeted for employers or testing services that do not accept EDI. EDI would likely be targeted for other higher education institutions and application service centers.

What challenges, if any, have you had to overcome in planning for Phase 2 and Phase 3?

The biggest challenge is availability of labor resources. This seems to be the challenge most higher education institutions note. For us, technology support is not an issue as our technology, administration (sponsors) and business units are fully aware of the impact and savings this will provide. It is more the question of prioritization amongst all the other projects that may or may not scale to have a higher impact and savings to the university.

Outcomes and Advice

What lessons did you learn along the way that would help others thinking about implementing these processes?

Data integration and access are key and crucial to creating a better work environment/experience for the staff, which will, in turn, translate into better service to the applicants and students.

Have you seen any gains in efficiencies with these processes (e.g., time on process, human resource, fiscal?)

Yes. As staff resources decrease from attrition and retirement, institutional knowledge is diminished, but documented processes aid in retention of key and crucial ongoing business processes. We process on average 120k transcripts per year. Of those, 65-68% come through EDI. Without the automated process and the loading of data directly into our SIS, we would constantly be in a state of backlog, which, in turn, delays admissions decisions and awarding of transfer credit in a timely manner. The gains in being able to process 65-68% of our transcript data in a matter of hours translates to more time other decision processes to allow for service to the student.

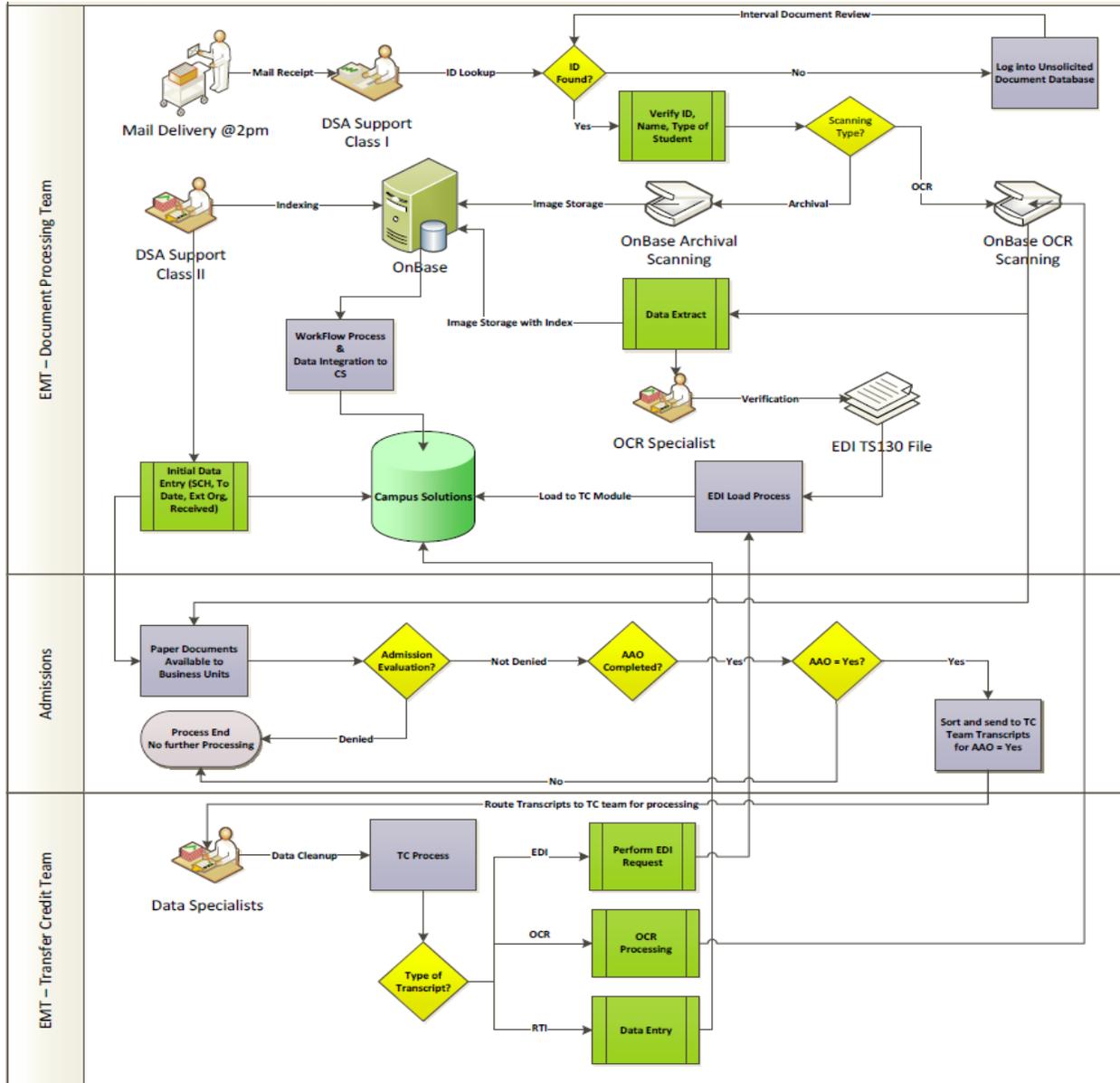
Would you recommend that other institutions implement the e-transcript services you have and are in the process of implementing? If so, in what order and why?

I would recommend that other institutions review the processes I have with a "grain of salt" and consider the best process for them. There are several vendors that can facilitate some or all of these services, and in the end it is about creating process efficiencies for your staff and students. Retooled staff can focus on student service rather than cumbersome manual entry processes. The only thing I would advise is to have an open mind and be willing to look at your institution holistically from an Enterprise view. Plan out how your architecture can be integrated with each other to create a smoother process for your customers. There is a

constant debate on whether to use EDI or XML, and I would say consider using both if you have the resources.. If not, consider the ROI that each provides. As critical mass forms for new methodologies, there may be consideration to adopt, but the biggest factor to your decision should be asking and answering the following basic question: "What are your trading partners doing, and how do you leverage that to your gain?"

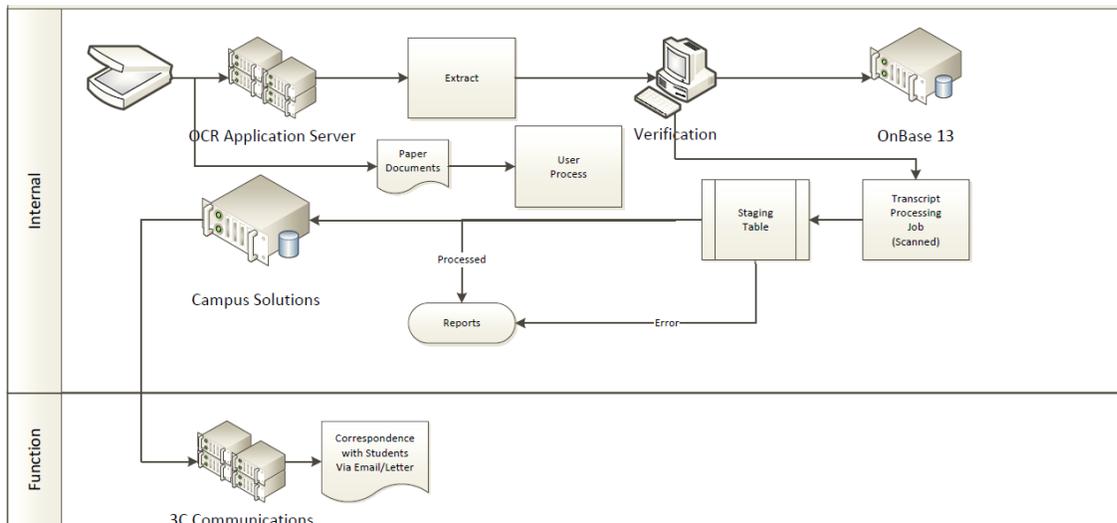
Overall Transcript Processing diagram:

The diagram illustrates the process of management of hardcopy transcripts and the evolution required to process transcripts into data for consumption within our SIS.

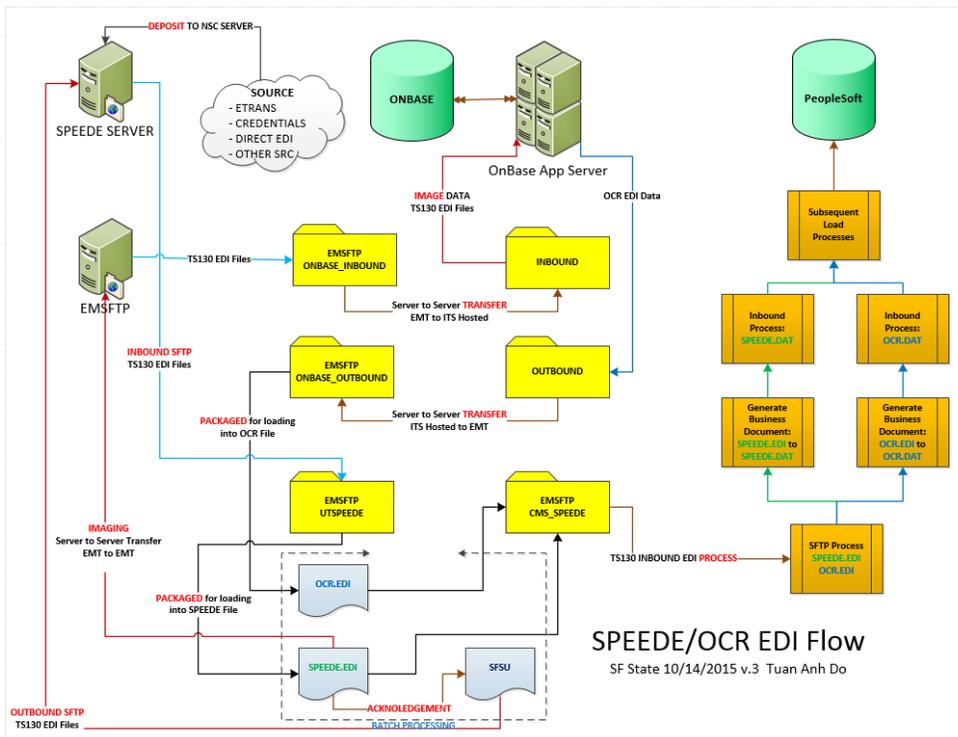


OCR to EDI process diagram:

When processing hardcopy (paper) transcripts, the goal is to make the data available within the SIS for use. Since we work to get as much EDI data as possible, the paper transcripts we receive have to be manually processed in a cumbersome key-entry fashion into the SIS. The workaround to create some process efficiency is to scan the paper and use optical character recognition (OCR) to extract the data and match to prebuilt templates. This allows for evaluation and creation of the EDI file that can then be loaded into the SIS. OCR has an average 85% accuracy rate in comparison to manual key entry, which can have a lower accuracy rate.



EDI Process Flow



PeopleSoft EDI process diagram:

The diagram below illustrates the entire process for processing an EDI file once received on premise into PeopleSoft. It is a daunting challenge from first glance, but after some repetition in the process it will take a matter of minutes to successfully complete the entire process.

