

# EEI-AGA Finance and Technology Fall 2019 Survey

## Executive Summary

In 2018, EEI and AGA formed a joint Technology and Finance Task Force to educate members and promote best practices related to emerging technologies and financial processes. The task force is comprised of functional and technical experts from several member companies, including Ameren, Sempra, ConEd, Alliant, Berkshire Hathaway Energy, Duke Energy, Entergy, First Energy, National Grid, NextEra and Southern California Edison. In the fall of 2019, the Task Force conducted a survey with twenty-five (25) EEI-AGA member-companies related to Continuous Close<sup>1</sup> and use of emerging technologies beyond Robotic Process Automation (RPA), including Optical Character Recognition (OCR), Chatbots, Blockchain, Natural Language Processing and Machine Learning.

**Continuous Close:** 68% of respondents have implemented processes and/or technology to smooth the close cycle throughout the month, including booking journal entries and accruals prior to month-end, with most companies closing in 6-8 business days (results including tax entries posted). In addition, a majority have automated manual, repetitive processes using RPA or other technologies including accruals, reconciliations, sub-ledger to general ledger transfers and intercompany transactions/allocations. 56% of respondents have used Continuous Improvement practices to streamline processes and have seen improvements in timeliness and accuracy as a result. Several specific use cases are described in the responses below for consideration by member companies.

**Emerging Technologies:** A majority of respondents have implemented RPA and have expanded into implementing OCR, with invoice processing as the most referenced OCR use case. In terms of other emerging technologies, 12-20% of respondents are implementing Chatbots, Natural Language Processing and Machine Learning; no respondents are currently implementing Blockchain. The most referenced Chatbot use cases include Customer: Call Center, Operations, Outages and Employee: Policies/Procedures, IT Service Desk, Self-Service areas. Natural Language Processing is being used for customer interactions including voice integration with Alexa, call center/email analysis and website questions. Between 20-32% of respondents are in the researching/piloting phase for all 5 technologies in the survey: OCR, Chatbots, Natural Language Processing, Machine Learning and Blockchain.

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<sup>1</sup> The concept of Continuous Close or Continuous Accounting embraces three main principles:

- a) The first is the need to automate mechanical, repetitive accounting processes in a continuous, end-to-end fashion. Managing processes in a controlled, end-to-end fashion improves efficiency and it ensures data integrity. Ensuring data integrity is crucial because the absence of data integrity is the root cause of a lot of time consuming work that departments perform that adds little value to the rest of the company.
- b) The second is optimizing the accounting calendar by distributing workloads continuously and evenly over the accounting period (the month, quarter or year) to eliminate bottlenecks and optimize when and in which order accounting tasks are performed.
- c) The third is establishing a culture of continuous improvement in managing the accounting cycle. A continuous improvement culture sets increasingly rigorous objectives, reviews performance to those objectives frequently and makes addressing performance shortcomings a departmental priority.

## Summary of Continuous Close Section

**1. Have you engaged 3rd party assistance (e.g. Consulting firm) to evaluate or implement Continuous Close?**

- 20% Yes
- 80% No

**2. Have you automated manual, repetitive processes in the following areas?**

- 56% Yes
- 44% No

**Use Cases:**

**3. Record - transactions from all systems and sub-systems**

- a. Accounts Payable accruals
- b. Cash account reconciliations
- c. Timeliness of placing assets in service
- d. Powerplan (Assets)
- e. Payroll
- f. Sub-ledger in SAP automatically update GL
- g. Intercompany Netting
- h. Equity Roll Up
- i. Transfers from Customer Subledgers
- j. Transfers of Customer Deposits from Service Company to Operating Companies
- k. Lost Vendor Discount Spread-back to Projects
- l. Excel upload journal capability for accountants
- m. Feeder/subledger to ledger reconciliation and auto-post
- n. Allocations
- o. Service company billings
- p. Automated workflows for journal entry approvals

**4. Reconcile - ledgers and accounts**

- a. Blackline using auto reconciliation feature (5 companies)
- b. Data gathering for account reconciliations has been automated using RPA
- c. RPA for certain cash and FA account reconciliations

**5. Revise – Post Journal Entries**

- a. GLSU for faster journal entry posting
- b. Auto post of Feeder/subledger, allocations, Service company billings
- c. Manual journal entries have been automated leveraging RPA technology
- d. Journals that pass monitoring rules are automatically posted without manual review
- e. Batch processing
- f. SAP functionality for certain direct postings and entries from external systems (Powerplan / PowerTax / Treasury Module)

**6. Review: Flux analysis as well as compliance review**

- a. Scheduled reports to allow personnel to perform analysis and provide insights as opposed to time spent gathering the data
- b. Using QlikView to perform management reviews and fluctuation analysis
- c. Intra-month cost tracker for operational costs
- d. Data compilation for performance of fluctuation analysis

**7. Report: Fast and automated availability of information**

- a. Real-time data available on 3rd party tools
- b. Working to develop standard automated reporting and dashboarding solutions
- c. Ledger based info near real time (as transacted/posted) at summary vs transactional level. DataMart reporting 1 or 2 days
- d. Customized reports that provide information for data analytics and analysis
- e. Select consolidated reports are run during closing for accounting and reporting staff to use; reporting database exists with BI tool access
- f. Report scheduling; batch updates of reporting Hub; RPA's to refresh reports
- g. Spreadsheet Server to automatically pull data from SAP into excel to prepare financial statements
- h. Real time dashboards; Month end report and batch job scheduler

**8. Please describe the technology and vendor used to automate the process(es)**

- a. Oracle delivered integrations
- b. RPA (Ui Path), RPA (Blue Prism), RPA (Automation Anywhere), RPA (Kofax)
- c. Spreadsheet Server or Win shuttle to communicates with SAP to receive live data
- d. GLSU is an excel add-in that is used for uploads into SAP
- e. Blackline
- f. Workflow Automation (Computer Associates)
- g. Power BI
- h. Hyperion Reporting, Hyperion SmartView
- i. Interface platform to load/sweep data. Vendor - pka MQ.
- j. SAP / ABAP Coding & UNIX
- k. RPM, TRIRIGA, Powerplan
- l. Data wrangler/Alteryx
- m. SAP Scheduler/Control-M

**9. Have you implemented processes and/or technology to smooth the close cycle throughout the month (e.g., recording journal entries before period end)?**

- a. 68% Yes
- b. 32% No

**10. Describe the process and Technology changes you have implemented**

Process Change	Technology Change
Improved timing of JE bookings, use of accruals to speed close, use of auto reversing for accrual JRs	Auto posting of revenues from FICO to FICA, auto posting of depreciation from Powerplan to SAP, auto posting of tax provisions from PowerTax to SAP

Process Change	Technology Change
Recording journal entries before period end	Utilized OBIEE (reporting software) to assist in generating journal entries
Daily Transfer from customer care system (subledgers) to SAP FI Module	
Settling costs with certain cost collectors periodically during the month to allow for proper unitization of costs in the Plant Accounting System	SAP; PowerPlan / PowerTax; Journal Upload -- ABAP and Web Methods
Close lease accounting module on day -2 to prevent delay day 1 closing activities	
Run Powerplan processes (Retirement Transactions and Auto Unitization) on day-2 or day-1 and not during close, to allow the full Powerplan close to be finished on day 1	We implemented a version of Powerplan with server-side processing that reduces time to run certain close process
Accelerated the accrual submission process	
Recurring JE's, System integration with general ledger	Allegro posting transactions to SAP, automated opening and closing account procedures
Labor corrections after each labor close instead of end of month	
Integrated systems send in data throughout the month	Nightly integration processes to send and receive data
	New system interfaces to eliminate certain journal entries; implementing technology to assist with daily cash reconciliation and automating the recording of specific cash transactions.
Optimizing the calendar by recording JE's that aren't EOM reliant	Purchased Alteryx licenses and are in the beginning stages of implementing workflows to create efficient data manipulation currently done in Excel and Access
Post some JE's before period end; using Oracle to post recurring entries	Using RPA to automate some journal entries and account reconciliations
Changed from a time based close to an event based close	Financial Closing Cockpit, RPA and job scheduling technology
Timing of Journal Entries	Spreadsheet Server, GLSU
Manual accruals recorded prior to month end	RPA, Hardware/Software Improvements
Record some journals before month-end begins. Overheads and settlements start on workday - 5.	Blackline: 1) journal entries (workflow approvals); 2) account reconciliation (workflow approvals and automated matching); 3) Smart Close

**11. Have you used Continuous Improvement in the close process?**

- a. 56% Yes
- b. 44% No

**12. Please list or describe the areas within the close process that have been improved because of the CI efforts.**

- a. Timing and accuracy of closing process
- b. Timing and accuracy of monthly financial reporting
- c. Timeliness (eliminated one day from close cycle) Standardized close timeline and reporting for all segments
- d. Error reduction through pre-closeout forecasting meetings
- e. Mapping end-to-end processes around Record to Report, Acquire to Retire, and Plan to Perform
- f. Re-evaluating and revising the accrual policy and thresholds leveraged
- g. Reduce wait time in closing by increasing frequency of real-time feeds for asset accounting transactions
- h. Elimination of manual journal entries by correcting upstream errors in source data
- i. Automation of journal reviews through exception monitoring; internally developed close monitoring dashboard
- j. Decentralization of accounting to the business sectors allowing transactions to be recorded during the month rather than at month end
- k. Approval of journal entries (after posting); performance and approval of account reconciliations, close coordinator task efficiencies, greater communication across teams

**13. What metrics do you monitor on a monthly/quarterly basis to determine if the close process is successful/improving?**

Metric	# of Companies
Mistakes from a prior period (adjusting entry), or a system interface error	12
All correction entries made during the close	12
Number of post-close adjustments	12
Specific entries missing their expected post date	12
System job runtimes	9
Ratio of manual/automated journal entries	5
Number of days in the close cycle, Personnel hours required for close	1
Overtime Hours	1
On time delivery of consolidated financial statements to executives	1
Established a close window of 5 days and monitor that	1
Tracking of IT-driven delays	1
Timing of subledger and subsidiary ledger closes	1

**14. What are your target days to close?**

Days to Close	Non-quarter	Quarter	Year-end
3 Days	1	1	1
4 Days	1	1	1
5 Days	5	2	1
6 Days	3	4	3

Days to Close	Non-quarter	Quarter	Year-end
7 Days	9	9	6
8 Days	4	5	1
9 Days	1	2	4
10 Days	1	1	4
12 Days			1
13 Days			1
15 and More			2

**15. What percentage of time do you achieve this target?**

Close Target Achieved	Non-quarter	Quarter	Year-end
100%	14	12	15
90% - 99%	6	8	7
80% - 89%	1	1	0
70% - 79%	2	1	0
Less than 70%	2	2	2

## Summary for Emerging Technology Section

**16. What is your company's experience with the following technologies?**

- 1. OCR –**
  - a. 56% Implementing
  - b. 28% Researching/Piloting
  - c. 16% Not active
- 2. Chatbots –**
  - a. 52% Not Active
  - b. 28% Researching/Piloting
  - c. 20% Implementing
- 3. Blockchain –**
  - a. 72% Not Active
  - b. 28% Researching/Piloting
- 4. NLP –**
  - a. 64% Not Active
  - b. 20% Researching/Piloting
  - c. 16% Implementing
- 5. Machine Learning –**
  - a. 56% Not Active
  - b. 32% Researching/Piloting

c. 12% Implementing

**17. Please list use cases implemented by your company for OCR:**

- Invoices (12/18 respondents)
- Various Others Including:
  - Bank deposits
  - Billing
  - RPA

**18. Please list use cases implemented by your company for Chatbots:**

- Only 9 responses total
  - Customer (Call Center, Operations, Outages)
  - Employee (Policies/Procedures, IT Service Desk, Self-Service)

**19. Please list use cases implemented by your company for Blockchain:**

- Only 2 responses
  - Mostly involving buying and selling with trading partners

**20. Please list use cases implemented by your company for Natural Language Processing:**

- Mostly Customer Interactions such as:
  - Voice Integration w/ Alexa
  - Call Center/Email Analysis
  - Website Questions

**21. Please list use cases implemented by your company for Machine Learning:**

- No real trends. Some examples submitted include:
  - Predictive Analytics for Customer Usage
  - OCR
  - Predictive Asset Health/Maintenance

**22. If you have quantified the value of implementing the above use cases, please indicate the range of hours of labor savings expected:**

- **OCR** –
  - Majority of respondents that reported hours saved indicated 0-5000 hours
- **Chatbots** –
  - 4 of 25 respondents reported expected hours saved. All indicated 0-5000 hours
- **Blockchain** –
  - No expected hours saved were reported
- **NLP** –
  - 3 of 25 companies reported expected hours saved. All indicated 0-5000 hours
- **Machine Learning** –
  - 2 of 25 companies reported expected hours saved. One indicated 0-5000 hours and the other indicated 5001-10,000 hours

**23. What technologies are you piloting or implementing for (e.g., ABBYY,**

**Salesforce, etc.):**

**1) OCR**

- Kofax – 5 of 15 respondents
- Remaining respondents listed a variety of technologies

**2) Chatbots**

- No trend – variety of technologies

**3) Blockchain**

- No trend – 2 responses (Custom Code & Open Text)

**4) NLP**

- No trend – variety of technologies

**5) Machine Learning**

- No trend – variety of technologies

**24. What other Emerging technologies not mentioned above is your company evaluating or implementing?**

- RPA
- Other various technologies listed

**25. What sources do you use to hear about emerging finance technologies?**

- Consultants
- Conferences
- Gartner

**26. What are the barriers of entry surrounding your adoption of emerging technology?**

- Lack of Resources
- Skills needed are not