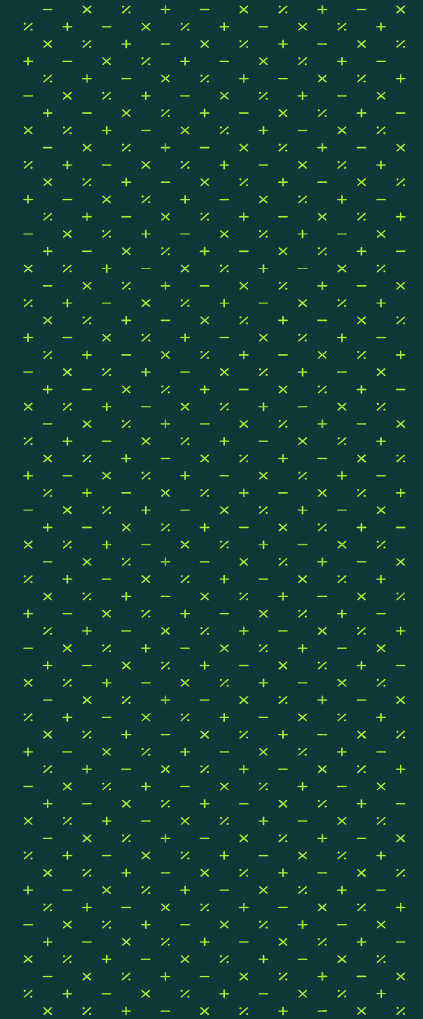




MOSSADAMS

Internal Audit Advancement

Aran Loftus, Parter



The Right Expertise to Serve You

For more than 35 years, our firm has built its credit union expertise through membership in credit union associations, continuing education, and involvement in industry events. Our firm currently serves over 150 credit unions ranging in size from less than \$100 million to more than \$20 billion in assets—with more than 90 clients with assets greater than \$500 million and with the average client size greater than \$1 billion in assets.



CREDIT UNION EXPERIENCE

#2

in the nation in credit union assets audited

#4

in the nation in the number of credit unions served



DEEP, CONSISTENT RESOURCES

175+

professionals dedicated to financial institutions



EXCEPTIONAL CLIENT SERVICE

committed to maintaining close and regular contact with you throughout the year and serving as a resource for questions and advice with a quick response time



BRIDGING THE DISTANCE GAP

work with clients seamlessly even when we're not on-site and we're well equipped for remote work





Agenda

01 **WORKFORCE TRENDS**

02 **OUTSOURCING AND
CO-SOURCING**

03 **AUTOMATION**



Workforce Trends

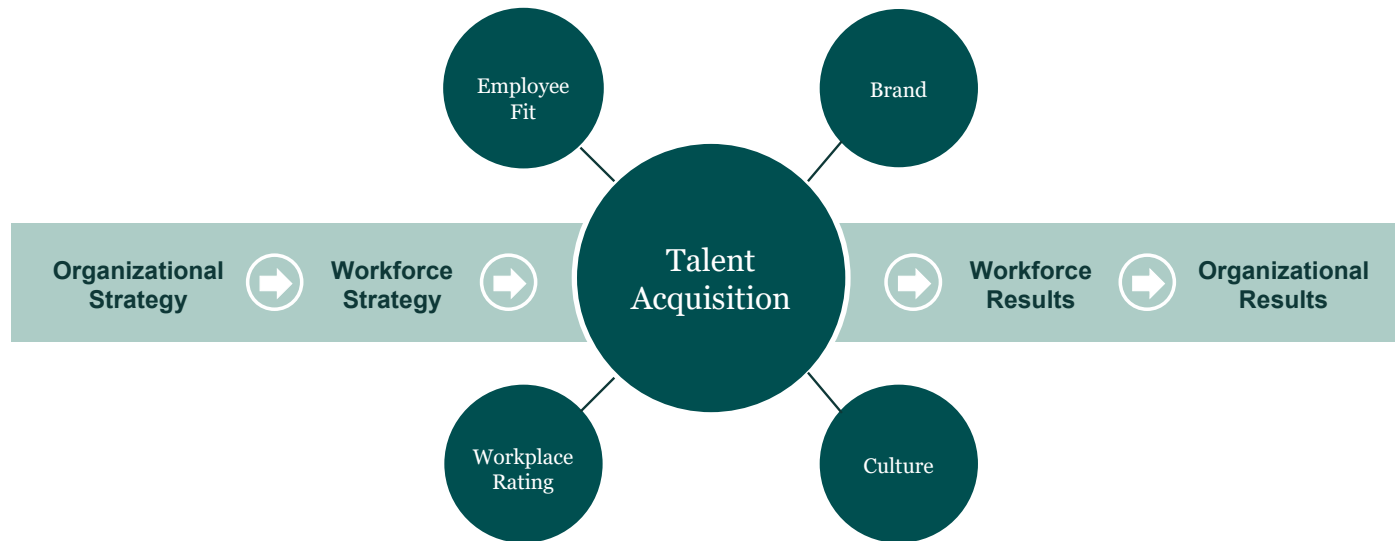
POLLING QUESTION

What's the most challenging workforce trend you anticipate for your department?

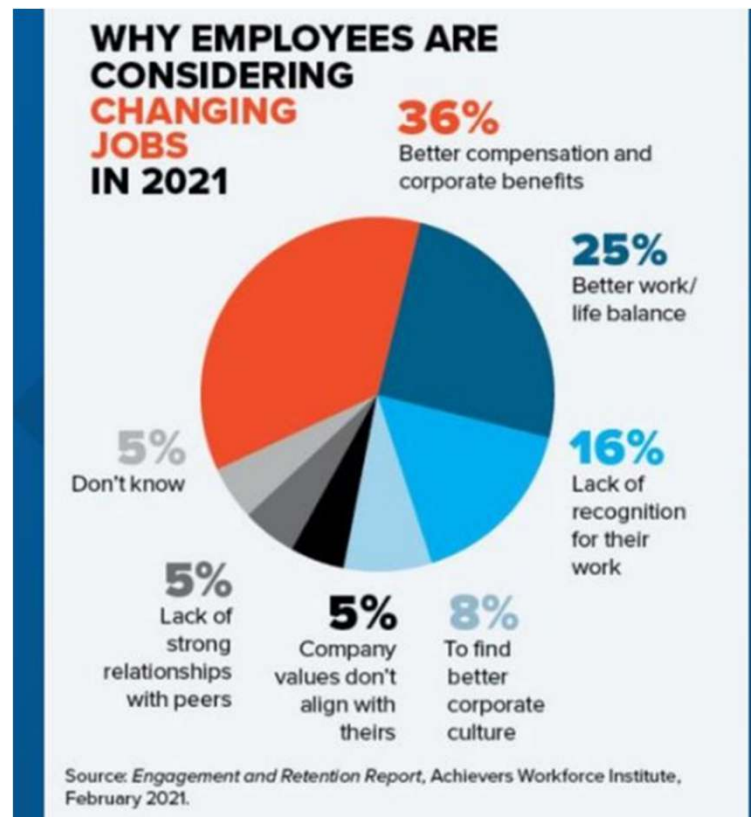
- A. Talent acquisition
- B. Talent engagement
- C. Talent retention
- D. Changing work environment



Acquisition of Talent



Engagement, Collaboration, and Inclusivity



Engagement, Collaboration, and Inclusivity



Retention of Talent



Future of Work

When and Where Is The Work Done?

- Flexible schedules
- 4-day work week
- Remote
- Hybrid
- Return to work

Who Does The Work?

- Human → technology
- Connected workforce
- Temporary assignment
- Workgroups
- Gig workers
- Outsourced
- Crowdsourced

How Is Work Done?

- Agile and digital
- Digital human equivalent
- Artificial intelligence
- Chat GPT
- Automation
- Machine learning
- Robotics



POLLING QUESTION

What strategies is your organization employing to overcome workforce challenges?

- A. Targeted recruitment
- B. DEI program investment
- C. Workforce development
- D. Innovation
- E. All of the above
- F. Unsure



Outsourcing and Co-sourcing

What is co-sourcing or outsourcing?

- Engaging a third-party firm to perform the function of internal audit, on its behalf
- Outsourcing - as a whole
 - Entire internal audit function
- Co-sourcing- specific critical areas
 - Supplemental to existing internal audit function



Question

How many of you outsource or co-source your internal audit function?



Factors that influence the need to outsource or co-source

- Limited qualified talent
- Time
- Turnover
- Budgeting pressures in the current rate environment
- Higher regulatory pressures
- Growth



Pros

- Effectively manage utilization of internal resources
- Leverage industry expertise
- Tap into skillsets unique to certain areas
- Stronger independence
- Cost effective
- Allows budget to adjust over time as relative risk priorities shift



Cons

- Absence of responsibility
- Lack of coordination / communication
- Lack of cultural “fit”
- Higher initial costs



Execution



Assessment of internal audit
needs



Establishment of governance
structure



Identification of external
providers and due diligence



Monitoring of performance



Formulation of scope of work



Evaluation of results



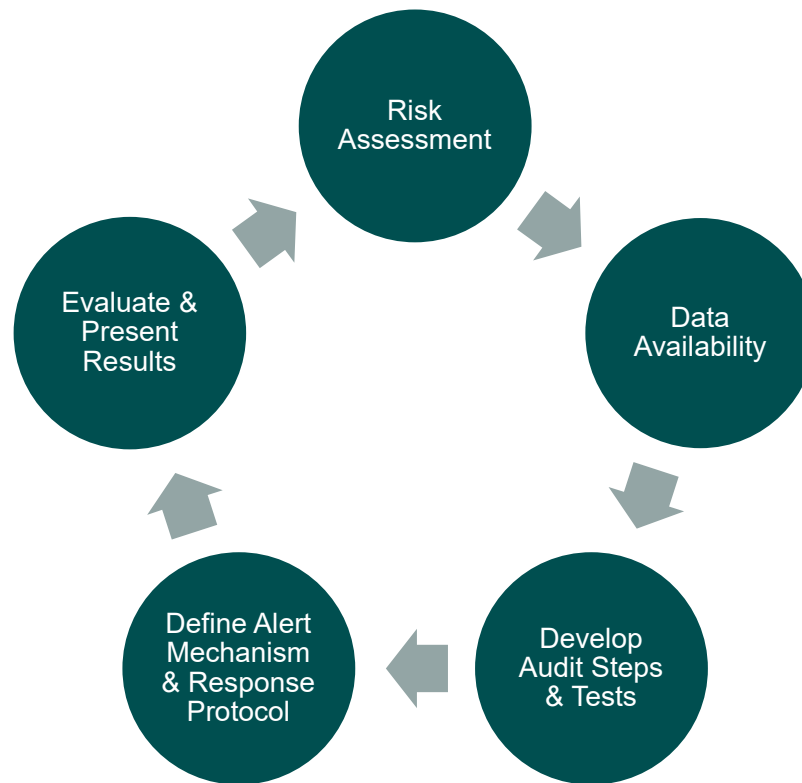
Automation

Question

Are you using advanced technology to assist with audits?



Continuous Audit Framework



Setting the Stage: Continuous Auditing

Why Continuous Auditing is gaining traction:

- Data everywhere—with a way to capture it
- Increased development of analytics tools—more functionality, lower cost
- Being asked to “do more with fewer resources”

Benefits of an effective Continuous Auditing program:

- Execute faster and more cost-effective audit programs
- Achieve 100% coverage versus a sample-based audit
- Be notified of exceptions or issues as they happen versus when you perform an audit
- Bring clarity to an otherwise complex business environment



Analytic Process Automation (APA)

APA is software that allows users to automate data and analytic centric business processes.



You have large data sets that require a lot of manual data prep and manipulation that is being done in a 'big spreadsheet'



You need to collect and combine data from multiple systems or transfer data into a database



You need to prepare data for insights and use this data to power reports and dashboards



You want to 'free up' time for employees who are wrangling excel sheets



You want to complete time-intensive analysis more frequently and efficiently without having to adjust head count



Slide 23

- NS1** What work are you doing in excel spreadsheets thats manual and error prone. Use of APA (e.g., Alteryx)
Noory Song, 6/8/2022
- NS2** Use APA to pool data from ERP and combine with another random excel spreadsheet, you can pool that data using APA.
Noory Song, 6/8/2022
- NS3** APA is Automating your data preparation
Noory Song, 6/8/2022

Robotic Process Automation (RPA)

An RPA bot is a software program that automates processes completed on a computer. It interacts with the user interface by using clicks, inputting information, etc. in the same way a human would. Processes that have the following characteristics can benefit from the use of RPA.

HIGH VOLUME

REPETITIVE

INVOLVES MULTIPLE
SYSTEMS

HIGH PROBABILITY
OF HUMAN ERROR

RULES-BASED

DATA INPUT

DATA CAPTURE

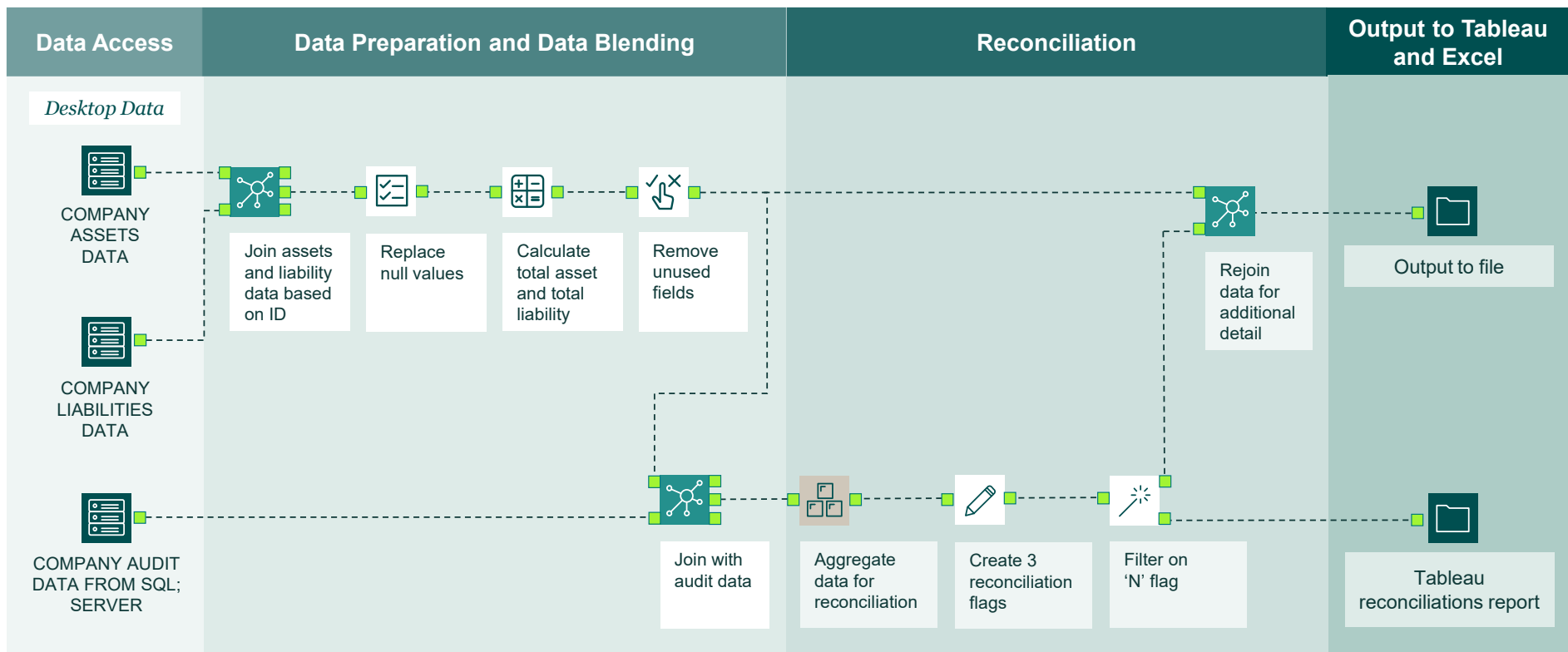
DATA MOVEMENT



Slide 24

- NS4** Task based automation.
Noory Song, 6/8/2022
- NS5** bot - RPA software that is running on your computer (market leader currently is UI PATH)
Noory Song, 6/8/2022
- NS6** Bank recons could be performed by a bot
Noory Song, 6/8/2022
- NS7** entering invoices into AP/AR software
Noory Song, 6/8/2022
- NS8** bot can read PDF
Noory Song, 6/8/2022
- NS9** updating HMDA LARs or Fair lending items from loan files. scanning quality and handwriting are limiting factors.
Noory Song, 6/8/2022
- NS10** continues to advance. Significant improvement even over the past year. Large players continue to invest.
Noory Song, 6/8/2022

Alteryx Automated Workflow



CASE STUDY #1

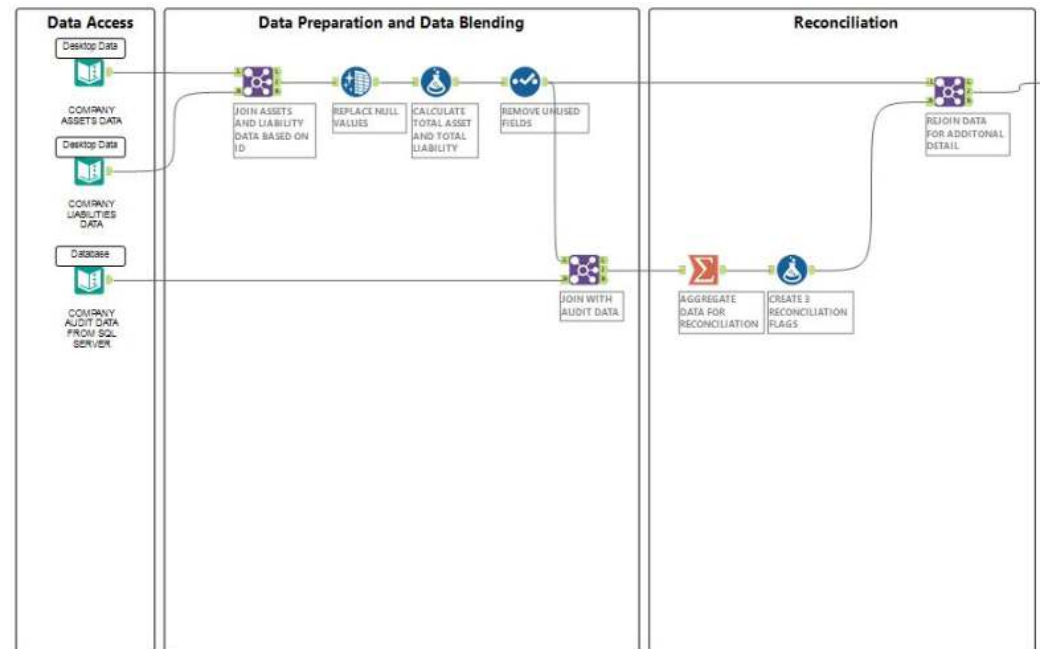
Payroll Reconciliations

Risk Assessment:

High amount of manual effort goes into performing payroll reconciliations.

Data Availability:

Data comes from our payroll provider and then is reconciled against the previous month's data automatically.

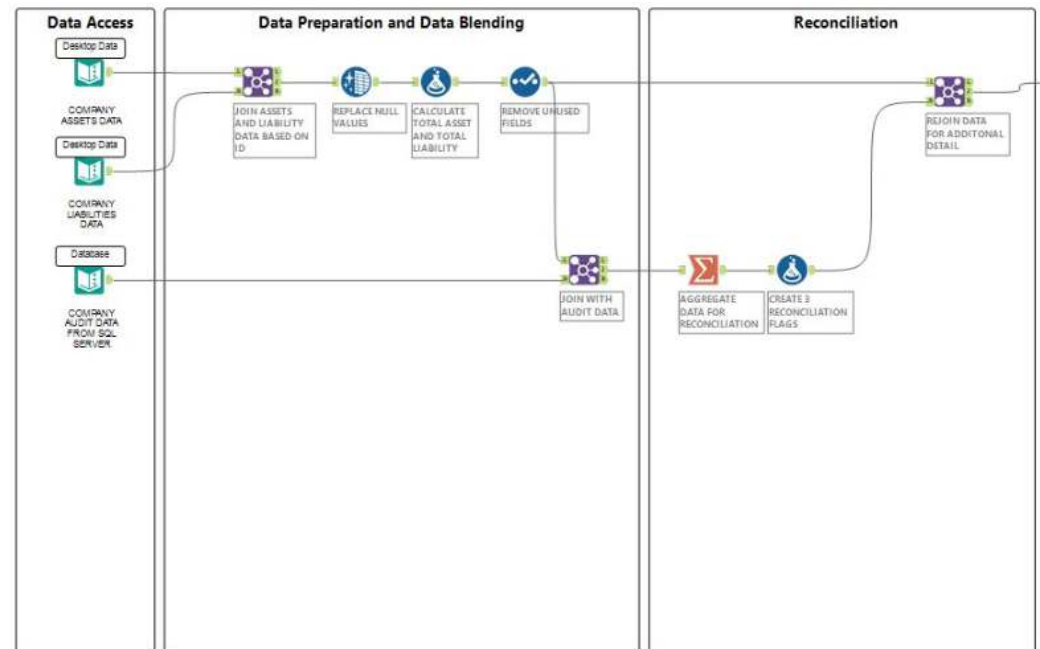


CASE STUDY #1

Payroll Reconciliations

Develop Audit Steps & Tests:

Leverage automation software to reconcile our current month's month end payroll information against terminated employees and previous month's payroll.



CASE STUDY #1

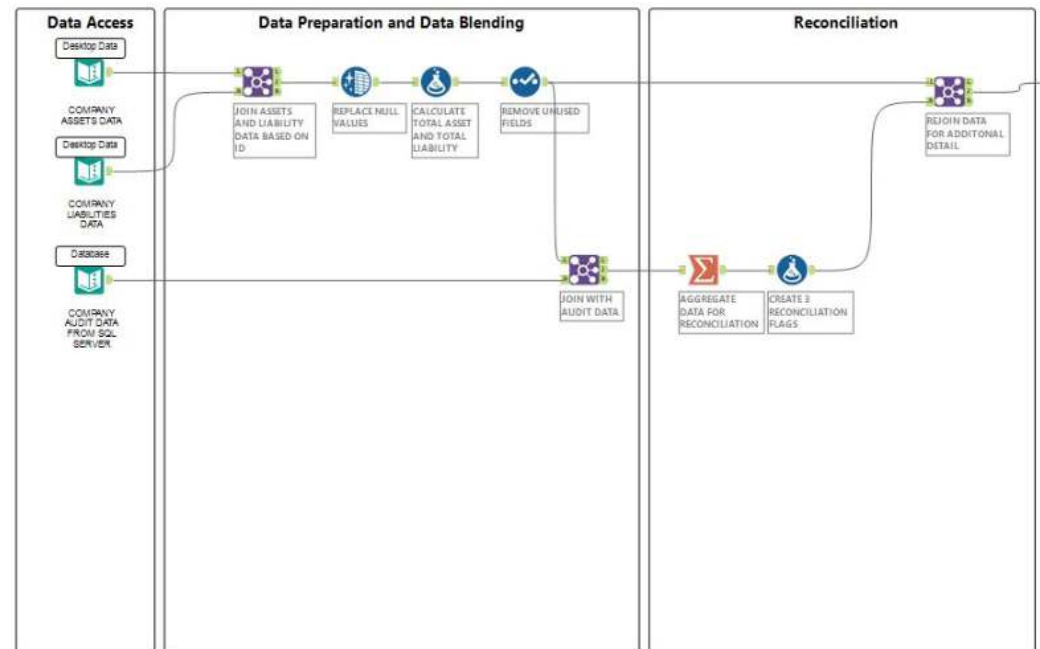
Payroll Reconciliations

Define Alert Mechanism

& Response Protocol: Automatic analysis of employee payroll records versus pre-defined tests.

Evaluate & Present Findings:

Analysis of cash exiting the organization and to ensure accurate employee compensation (for example, accurate W-2 reporting).



CASE STUDY #2

File System Maintenance

Risk Assessment:

How can we be more proactive with being alerted to risky file changes?

Data Availability:

Data would come from our banking software.

Month	Account	Branch Name	User ID	Name	FM Date	Description	Changed From	Changed To	Review
September	574951	Contact Center	38	FIRST, LAST	9/20/2023	Interest Rate	5.25%	5.24%	Normal back office activity
September	814951	Business Services	90	FIRST, LAST	9/29/2023	Payment Amount	962.71	962.74	Normal back office activity
September	306983	Administration	63	FIRST, LAST	9/8/2023	Statement Mail Code	0	1	Normal back office activity
September	178814	Account Solutions	31	FIRST, LAST	9/16/2023	Statement Mail Code	0	1	Normal back office activity
September	624043	Business Services	99	FIRST, LAST	9/27/2023	Due Date	9/29/2023	9/30/2023	Normal back office activity
September	704077	Fraud	80	FIRST, LAST	9/3/2023	Payment	699.81	650.23	Normal back office activity
September	709441	Contact Center	82	FIRST, LAST	9/24/2023	Statement Mail Code	1	0	Normal back office activity
September	832501	Business Services	98	FIRST, LAST	9/11/2023	Statement Mail Code	0	1	Normal back office activity
September	421387	Administration	77	FIRST, LAST	9/23/2023	Statement Mail Code	1	0	Normal back office activity
September	915857	Account Solutions	53	FIRST, LAST	9/14/2023	Statement Mail Code	1	0	Normal back office activity
September	591311	Business Services	89	FIRST, LAST	9/29/2023	E-Statement Enable	0	1	Normal back office activity
September	845151	Fraud	45	FIRST, LAST	9/1/2023	Payment	45.34	66.23	Normal back office activity
September	752999	Business Services	23	FIRST, LAST	9/16/2023	Statement Mail Code	1	0	Normal back office activity
September	207953	Administration	43	FIRST, LAST	9/29/2023	Statement Mail Code	1	0	Normal back office activity
September	223522	Business Services	29	FIRST, LAST	9/8/2023	Due Date	9/15/2023	9/28/2023	Normal back office activity



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CASE STUDY #2

File System Maintenance (Cont.)

Develop Audit Steps & Tests:

Inventory of what we consider higher risk file changes and develop tests within automation software to pull data against those tests. Through automation, restrict access to tests steps.

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CASE STUDY #2

File System Maintenance (Cont.)

Define Alert Mechanism & Response Protocol:

Automated email of daily report to key stakeholders for their review.

Evaluate & Present

Findings: Output analysis to PDF to decrease likelihood changes to test files.

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➤ QUESTIONS



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