



AUGUST 20, 2020

ePic Usability Study Findings & Recommendations



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The background is a solid blue color. In the corners, there are several overlapping, rounded square shapes outlined in a lighter blue color. These shapes are arranged in a way that they appear to be floating or layered, with some partially cut off by the edges of the frame.

The Study

Research Objectives

Data Trust

How to better trust that my data is correct?

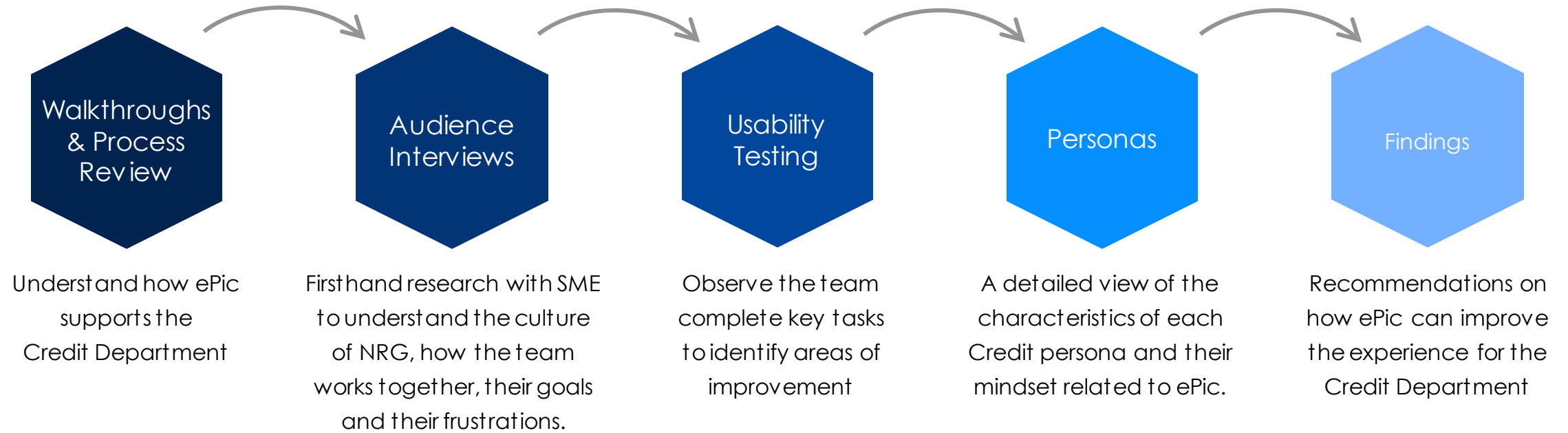
Relevant Information

How much of this interface needs to be hidden to only display as needed?

App Navigation

How can I better digest all the relevant information at a glance without needing to roam around the application

Research Approach



Who We Spoke To

Name	Role	Company Tenure (Years)	Avg. Time Spent in ePic (Hours/Day)
Ray	Senior Director of Credit & Risk Analytics	7	1.5
Matt	Senior Credit Risk Manager	9	2
Phuong	Credit Manager	13	6.5
Brian	Senior Credit Analyst	1.7	1.5
Ibrahim	Credit Analyst	1	4
Ningning	Credit Analyst	7	4.5
Lindsey	Credit Analyst	4	4.5

INTERVIEW FORMAT

Held remotely by phone and web-conference

Sessions were ~ 1-1.5 hours

Guided discussion about

- Participant's background
- Working at NRG
- Their goals and frustrations
- Working within ePic

Who We Observed

Name	Role
Ray	Senior Director of Credit & Risk Analytics
Phuong	Credit Manager
Ibrahim	Credit Analyst
Ningning	Credit Analyst
Lindsey	Credit Analyst

USABILITY TESTING FORMAT

Held remotely by phone and web-conference

Sessions were ~ 1 – 1.5 hours

Task Areas of Focus

- Path to common screens
- Evaluate the credit quality of a customer / counterparty to achieve a credit approval
- Add new entity
- Monthly Reports

Findings & Personas

What We Heard

"ePic is very sluggish. When trying to go through various aspects of the application it takes me 10-30 minutes to rediscover workarounds to do a function."

Credit Analyst

"Onboarding a customer, onboarding a contract, initiating a review – are all poor experiences. Adding information to an established contract is not bad."

Credit Leadership

"Workflow breaks sometimes, I can't trust the rating for the company. I must do additional manual checks to make sure the company name matches what is brought in."

Credit Analyst

"Naming conventions for categories and tags are inconsistent. These inconsistencies waste time thinking through them."

Credit Leadership

"Do we really need all the clutter? – it's overwhelming. Sections are constantly changing location in ePic. Remembering where to find what I need is a challenge."

Credit Risk Manager

"The approval process takes too long. Additional processes to get it done can take 5 - 30 minutes. Too many buttons. The flow is too long"

Credit Analyst

"When entering information, glitches are frequent, and we need to log off and log in again 3 or 4 times to move forward. This happens maybe 3 times a day."

Credit Analyst

"I can get data and information in Siebel fast. Once I moved to Ppic it felt like turtle speed."

Credit Risk Manager

Key Findings

1. Application Speed

The current speed of the application hinders the ability of the team to complete their tasks quickly and efficiently. At times the loading icon does not immediately appear causing people to feel unsure if the page is ready for them to begin their work.

2. System Trust

At times, the data in ePic does not match what is found in siebel. This has caused users to lose trust in ePic's data, resulting in the team doing multiple cross system checks before they are comfortable.

3. Terminology

Labels used in the application are sometimes inconsistent between screens or industry terminology causing confusion around a field's purpose.

4. Navigation

Participants were uncertain and hesitant as to the purpose and value of the ePic navigation sections outside of the Credit & Collateral Management under Apps.

5. Page Structure

The system does not guide the participants through their tasks. Content is structured in a way that the information is overwhelming and contains details not relevant to their specific tasks.

6. Call to actions

The amount of detail on a screen makes it challenging for the participant to quickly scan the information find what is relevant to them and act upon it quickly. Also, extra unnecessary steps after the CTA slow down the user in completing a function.



Credit Analyst



We assign a credit rating to customers / counterparties, we evaluate a potential future exposure for a new contract, and we make a decision based on those pieces of information on whether or not to approve or deny a credit request.



User Information

% OF USER BASE	57% (4 of 7)
AVERAGE TIME SPENT IN EPIC	3.6 Hours per day
AVERAGE TENURE	3.4 Years
DEVICE	PC Laptop
DETAILS	Front line users of ePic. C&I and Wholesale. More familiar with C&I.

Goals

- Efficiently review credit requests for approval or recommendations.
- Data displayed on the application screen must be 100% factual and consistent since important credit decisions depend on its integrity.
- Work with an application that is responsive in a timely manner to compliment the teams' efforts to maintain the highest levels of efficiency.
- Quickly look at each relationship between NRG and an outside entity to review and create a report.

SKILLS

Tech Savvy	● ● ● ●
Desktop/Laptop	● ● ● ●
Excel	● ● ● ●
Financial	● ● ● ●

TRAITS

Adaptable	● ● ● ●
Detail Oriented	● ● ● ●
Problem Solver	● ● ● ●
Teachable	● ● ● ●

Frustrations

- Loading times in ePic are very slow.
- Data quality is unreliable and requires extra steps of verification against external platforms (Siebel).
- Entity name duplicates require extra time to verify as well.
- Too much information on the screen that isn't related contextually to the task at hand.
- It can take 4 times longer to approve than to review (20 minutes vs 5 minutes).
- UI feedback isn't reliable and leaves the user guessing as to what the system is doing. i.e. the UI feedback for loading takes abnormally long to appear.



Credit Risk Manager

User Information

% OF USER BASE	14% (1 of 7)
AVERAGE TIME SPENT IN EPIC	6.5 Hours per day
AVERAGE TENURE	13 Years
DEVICE	PC Laptop
DETAILS	Front line user of ePic. Mainly works on C&I and some residential.

Goals

- Deal approval
- Check customer rating, evaluate financial state, and decide whether to escalate. Evaluate and assess for acceptable/unacceptable risk.
- Exposure – “Sometimes I go in and initiate bonds for other groups”.
- Looking for opportunities to onboard more and renewals of agreements.
- Evaluate contract agreements (language) to mitigate risk.

SKILLS

Tech Savvy	● ● ● ●
Desktop/Laptop	● ● ● ●
Excel	● ● ● ●
Financial	● ● ● ●

TRAITS

Adaptable	● ● ● ●
Detail Oriented	● ● ● ●
Problem Solver	● ● ● ●
Teachable	● ● ● ●

Frustrations

- Loading times in ePic are very slow compared to Siebel. “Speed – I like to work efficiently and quick. I think it lacks that at the moment.”
- There’s too much information on the screen. Feels cluttered and overwhelming.
- Finds ePic slow to navigate
- Difficult to remember where information lives because sections tend to move frequently.
- Expects accurate information right away.

“
In our role we don’t turn away a customer, we either approve outright or seek collateral.
”



Credit Leadership

User Information

% OF USER BASE	29% (2 of 7)
AVERAGE TIME SPENT IN EPIC	1.8 Hours per day
AVERAGE TENURE	8 Years
DEVICE	PC Laptop
DETAILS	Oversee business objectives and the work flows and relationships to achieve them. Handle escalations.

Goals

- Centralize the credit function in the company
- Cost consolidation of our data vendors through a confirmed single master agreement.
- View information in a single place to better understand who the customer/counterpart is. This along with the accuracy of the data allows for informed decision making and quick turnaround times.
- Ensure that we don't miss a request and we respond in a timely fashion with accurate information.
- Data quality is incredibly key and needs to be trusted. Automate the pull of data and present it to the user for decision making.

SKILLS

Tech Savvy	● ● ● ●
Desktop/Laptop	● ● ● ●
Excel	● ● ● ●
Financial	● ● ● ●

TRAITS

Adaptable	● ● ● ●
Detail Oriented	● ● ● ●
Problem Solver	● ● ● ●
Teachable	● ● ● ●

Frustrations

- Onboarding a customer, onboarding a contract, and initiating a review are all poor experiences in ePic.
- Naming conventions are inconsistent from screen to screen and from screen to industry terminology.
- Response times are very slow
- There's too much information on the screen that isn't related contextually to the task at hand.
- Difficult to navigate to find information.
- "UI is not good. UI isn't as responsive as I would need to do most of my functions. I just use sql to access the database tables I need and 1 -2 other applications."

“We create a lot of value in reporting, discussions, helping people make financially sound decisions.”

Recommendations

Summary of High-Level Recommendations

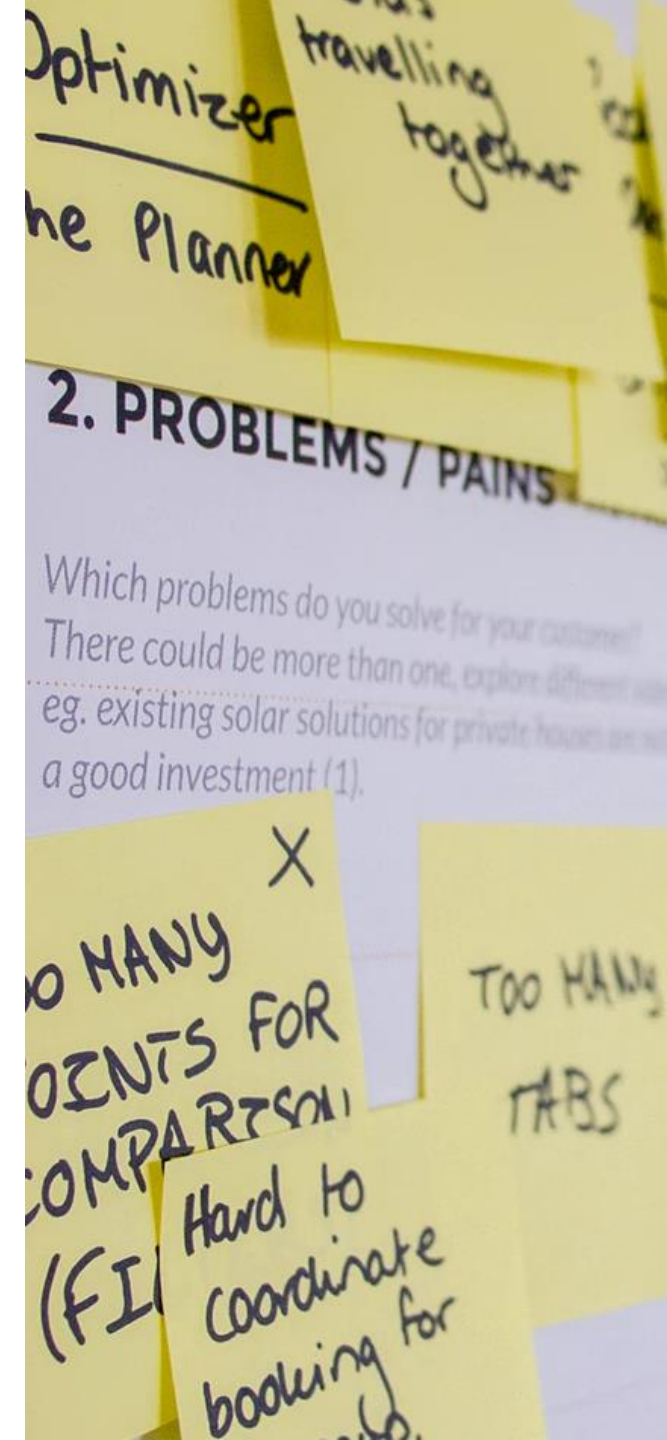
Listening to what the participants had to say in the stakeholder interviews, and watching them interact with ePic through the Usability Tasks, we've distilled our analysis into two categories:



Recommendations that require design time and will be addressed in the next phase.

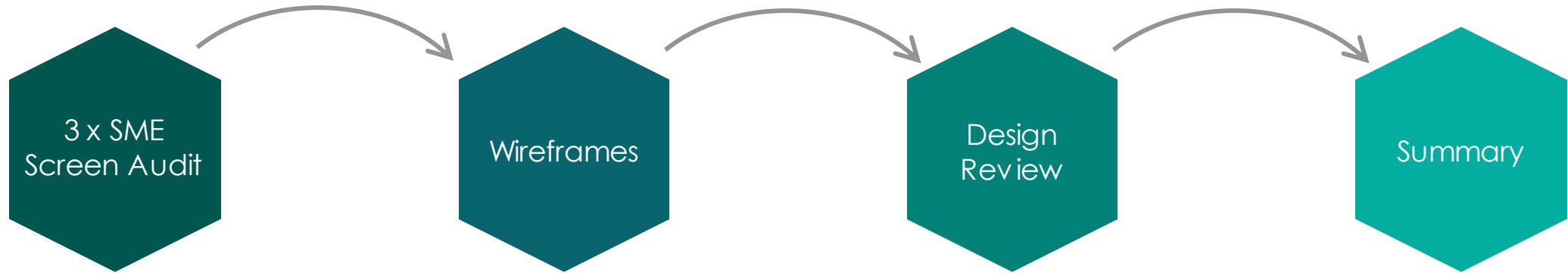


Recommendations that can immediately be acted upon based on our research.



Design Phase Focus

- 1. **C&I Review process:** Redesign the screens through the lens of each persona
- 2. **Dashboard:** Design an experience that reflects what is important and provides quick access to key information
- 3. **Initiation Screen:** Group content in a manner that is more easily digestible
- 4. **Entity Summary Screen:** Lay out page content so people have the information they need immediately



In-depth review of key screens to confirm sections, columns and fields that are required for each persona

Create wireframes for the Dashboard, Initiation and Entity Screens

Validate and revise the design based on reviews with representative people

Our final report that will summarize our design recommendations

Information Architecture



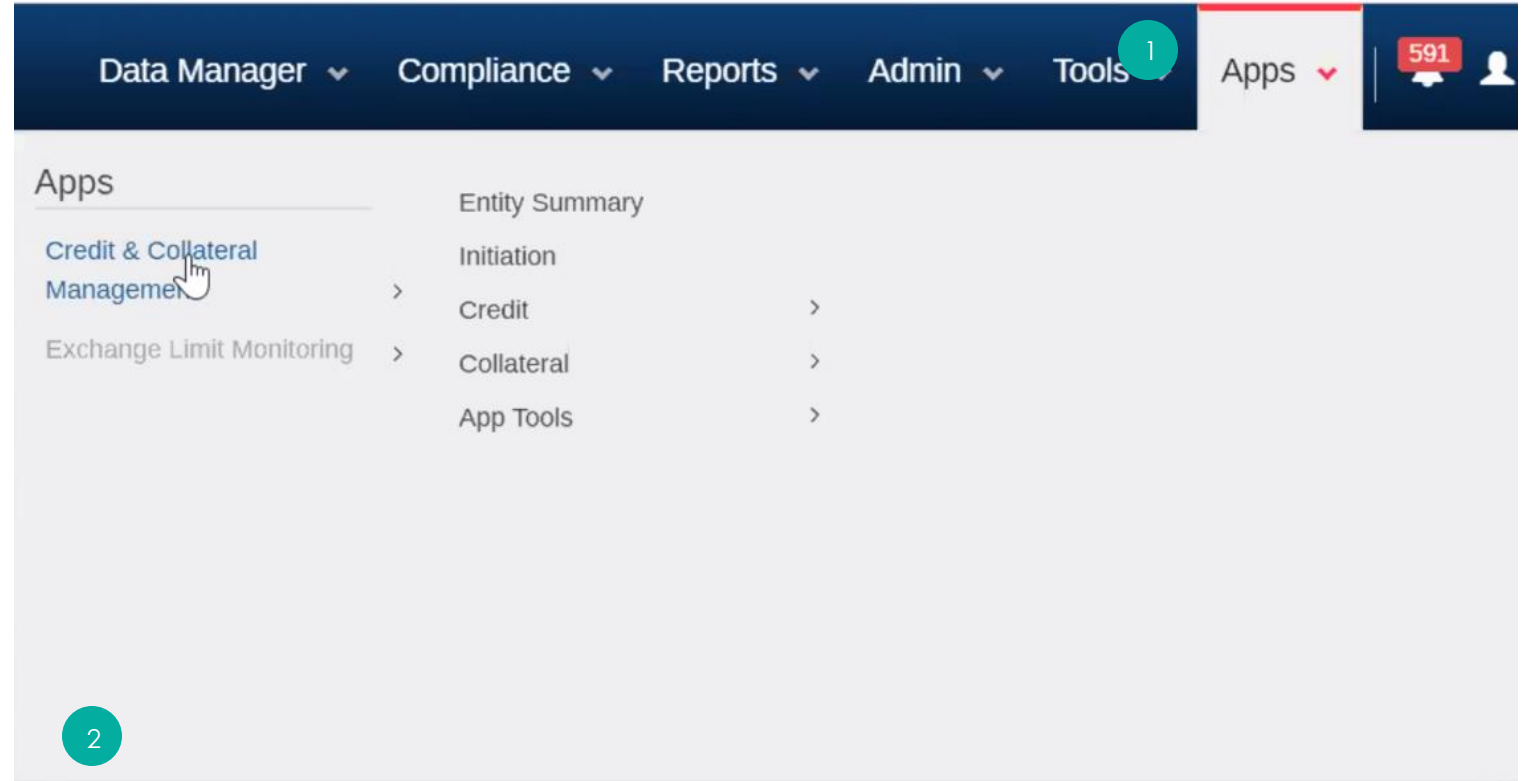
1 NAVIGATION

Create a navigation that is role based instead of function based. A "Credit & Collateral Mgmt" area containing the Dashboards, Apps, Reports and Tools related to the team will ensure they have everything needed to complete their work.

This structure will set a mental model for their users by ensuring everything that is needed to support a core function is grouped, reducing the need to roam the system.

2 MEGA MENU CONTEXT

Leverage the space available in the Mega Menu area by providing context as to the purpose of each section.



Dashboard



3 OPEN APP TAB

Tab on the left-hand side allows for easy multi-tasking between active screens but it is not easily discoverable, and most users don't know what it does. Create a meaningful icon that is related to its function and move it to the top right area, within the top navigation. This follows a consistent mental model of where to navigate the application.

4 UPCOMING ACTION ITEMS

Repetitive headers names make it challenging to scan content and identify what is important. Create meaningful headers by placing the emphasis on the Company name and not the action type.

Reliant C&I/SMB – Central Kentucky Transition

New Contract Request

Include the ability to filter these action items, for example filter by item type.

The screenshot shows the EPIC Credit Dashboard. At the top, there's a navigation bar with 'Data Manager', 'Reports', 'Admin', 'Tools', and 'Apps'. The main content area is divided into several panels:

- CPM System Status:** Shows 'Today's CDI Runs' with a table of run dates, report dates, exposure updates, and entity impacts. Below this are 'Data Updates' and 'Exceptions' sections.
- Notifications:** Lists various alerts such as 'CDI Alert' and 'New External Entity Found'.
- Upcoming Action Items:** A list of 'NEW CONTRACT REQUEST' items with company names like 'Astra W...', 'AE Power Broker, Inc', etc.
- Top 10 Exposures:** A bar chart showing exposure levels for various entities like PSE, SCE, COWC, etc.
- Exposure Per Rating:** A donut chart showing 'NR 469.94M' and a table of ratings (A, AA, B, BB, BBB, CCC) with corresponding exposure amounts.
- Margin Summary:** A table with 'Outgoing' and 'Incoming' margin flows, listing internal entities, margin flows, and amounts.
- Top 10 Day-Over-Day changes:** A bar chart showing changes for entities like SENA, ARON, CENY, etc.

Dashboard



5 NOTIFICATIONS

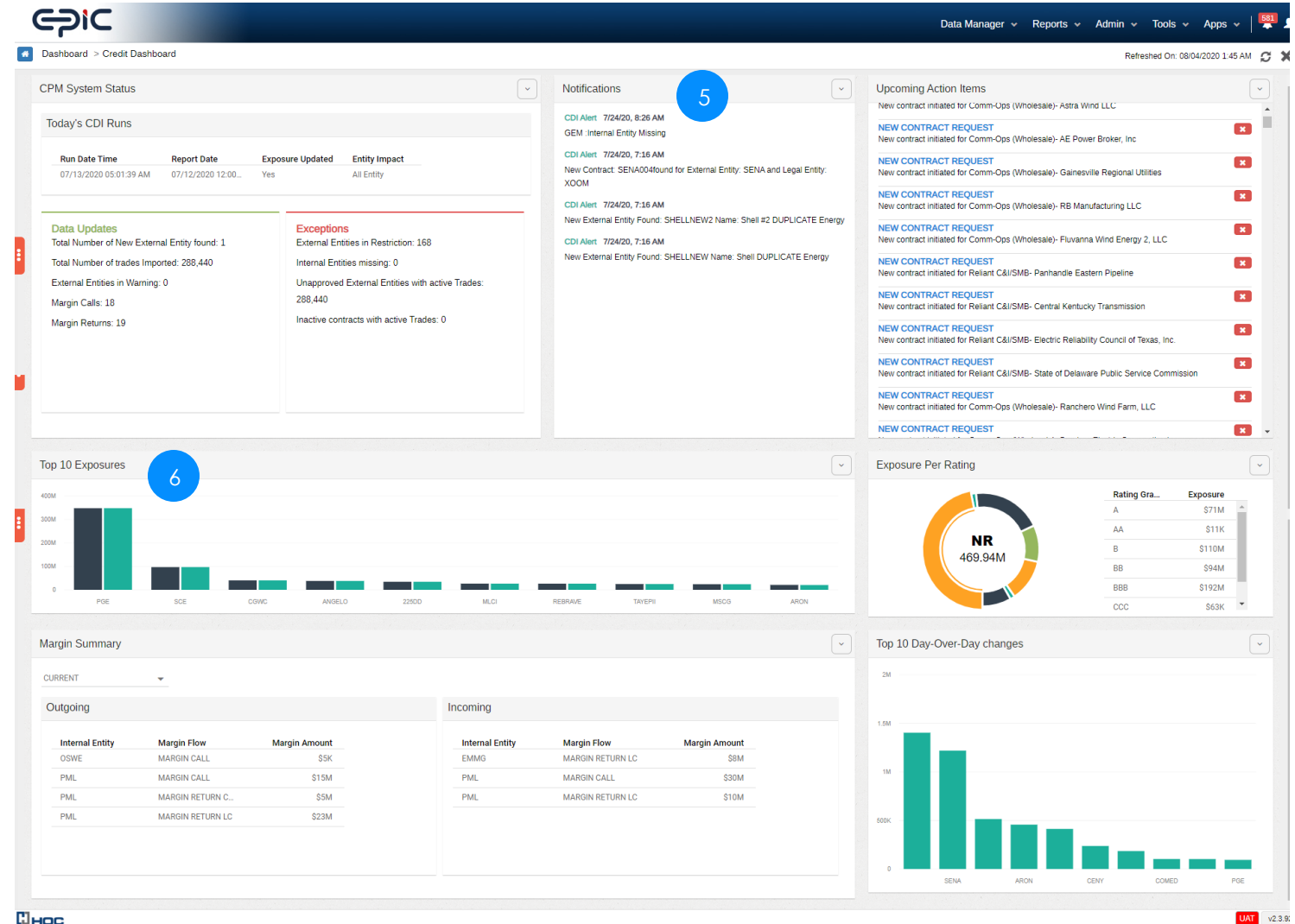
Like the "Upcoming Action Items", restructuring the layout of the notification will place more emphasis on the content that is important. A color icon can indicate alert type with a visual queue.

● **GEM Internal Entity Meeting**
 CDI Alert 7/24/2020, 8:26 AM

Include the ability to filter these action items, for example filter by item type.

6 GRAPHS

Enhance graphs on the dashboard to contain more contextual information. One specific mention was to enhance the exposure trend to include comparison over the last 3 months, 6 months, etc.



Initiation Screen



7 BUSINESS SEGMENT
Place visual emphasis on business segment selection as it is an important 1st step and easily overlooked in the current design.

8 DETAILS & APPROVALS LINKS
Repetitive link names lose their meaning. Replace text with icons to save space and break up the text heavy columns.

9 APPROVAL STATUS
Move this column to the left so that all actionable columns are grouped together.

10 SIEBEL MATCH ENTITY NAME
Add a column to contain an icon that will indicate if the Legal entity column name matches Siebel. This will allow the ability to filter out matches and quickly identify what requires further investigation.

*** LAYOUT CONTROL**
Ability for people to customize the Initiation screen with the ability to remove columns and save multiple column layouts.

Business Segment	Status	Requested By	Duration	Details	Approvals	Current Rating	Legal Entity Name	Internal Entity Name	Address	City	State	Country	Zip Code	Phone No.	Approval Status	
Comm-Ops (Whole...)	All	*All	Today	1	DETAILS	APPROVALS	1588	HBT FINANCIAL, INC.	NRG Power Marketing LLC	401 NORTH HERSHEY RD	BLOOMINGTON	Illinois (IL)	USA	61704	+1 3095274400	APPROVED
				2	DETAILS	APPROVALS	NR*	Mississippi Power Company	NRG Power Marketing LLC	600 North 18th Street #14N81...	birmingham	Alabama (AL)	USA	35291		IN PROGRESS - REQUI...
				3	DETAILS	APPROVALS	NR*	Air Quality Consultants, Inc.	NRG Power Marketing LLC	15541 Commerce Lane	Huntington Beac	California (CA)	USA	92649		APPROVED
				4	DETAILS	APPROVALS	NR*	Astra Wind LLC	Green Mountain Energy Comp...	1212 New York Ave NW, Suite ...	Washington DC	District of Col...	USA	20005	+1 202-618-7143	APPROVED
				5	DETAILS	APPROVALS	NR*	AE Power Broker, Inc	NRG Power Marketing LLC	319 Sweetmans Lane	Millstone Twsp	New Jersey (...)	USA	08535		APPROVED
				6	DETAILS	APPROVALS	NR*	Gainesville Regional Utilities	NRG Power Marketing LLC	P.O.Box 147117, Station A105	Gainesville	Florida (FL)	USA	32614		APPROVED
				7	DETAILS	APPROVALS	NR*	RB Manufacturing LLC	NRG Power Marketing LLC	399 Iterplace Parkway	Parsippany	New Jersey (...)	USA	07450		APPROVED
				8	DETAILS	APPROVALS	NR*	Fluvanna Wind Energy 2, LLC	NRG Power Marketing LLC	180 Montgomery Street, Suite ...	San Francisco	California (CA)	USA	94104		APPROVED
				9	DETAILS	APPROVALS	NR*	Rancho Wind Farm, LLC	Green Mountain Energy Comp...	4865 Sterling Drive, Suite 200	Boulder	Colorado (CO)	USA	80301		IN PROGRESS - REQUI...
				10	DETAILS	APPROVALS	NR*	Bandera Electric Cooperative I...	NRG Power Marketing LLC	3172 State Highway 16N	bANDERA	Texas (TX)	USA	78003		IN PROGRESS - REQUI...
				11	DETAILS	APPROVALS	NR*	Symmetry Energy Solutions, LLC	NRG Power Marketing LLC	1111 Louisiana St. 20th Floor	HOUSTON	Texas (TX)	USA	77002		APPROVED
				12	DETAILS	APPROVALS	NR*	WM Renewable Energy LLC	NRG Power Marketing LLC							APPROVED
				13	DETAILS	APPROVALS	NR*	WM Renewable Energy LLC	NRG Power Marketing LLC	1001 Fannin, Suite 4000	Houston	Texas (TX)	USA	77002		APPROVED
				14	DETAILS	APPROVALS	NR*	WM Renewable Energy LLC	NRG Power Marketing LLC							APPROVED
				15	DETAILS	APPROVALS	NR*	Commonwealth New Bedford ...	NRG Power Marketing LLC	199 Corey Street	BOSTON	Massachuset...	USA	02132		APPROVED
				16	DETAILS	APPROVALS	NR*	Fluvanna Wind Energy, LLC	NRG Power Marketing LLC	180 Montgomery Street, Suite ...	san Francisco	California (CA)	USA	94104		APPROVED
				17	DETAILS	APPROVALS	NR*	Central Rivers Power NH, LLC	NRG Power Marketing LLC	4920 Elm Street, Suite 205	Bethesda	Maryland (MD)	USA	20814		IN PROGRESS - REQUI...
				18	DETAILS	APPROVALS	NR*	Alabama Power Company	Green Mountain Energy Comp...	600 North 18th Street	Birmingham	Alabama (AL)	USA	35291		APPROVED
				19	DETAILS	APPROVALS	NR*	Northland Power Energy Man...	NRG Power Marketing LLC	20 St. Charles West Sui...	Montreal	QUÉBEC (QC)	Canada	H3H 2A1		IN PROGRESS - REQUI...

Entity Summary Screen



11 ENTITY NAME

Place visual emphasis on entity name selection as it is an important 1st step and easily overlooked in the current design.

12 SPACE BELOW ENTITY GROUPING

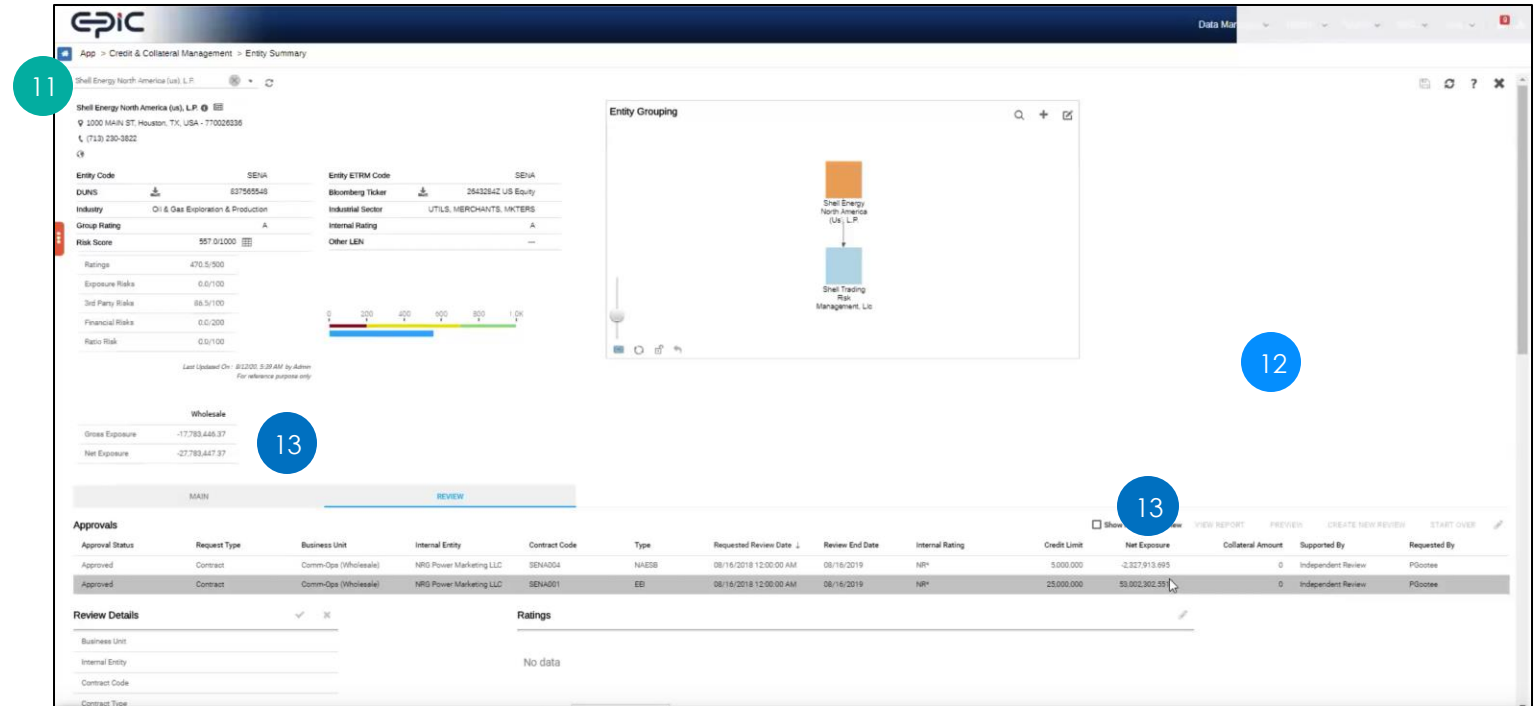
Use the white space below the entity grouping widget. There's opportunity to display important data here.

13 INCONSISTENT CATEGORY NAMES & VALUES

Name all instances of exposure the same and make sure the values are consistent. This would create trust in the system and save the user time from having to do manual checks to calculate the correct exposure.

* LAYOUT CONTROL

Ability for people to customize the Entity screen with the ability to move widgets and columns based on their working preference.



13

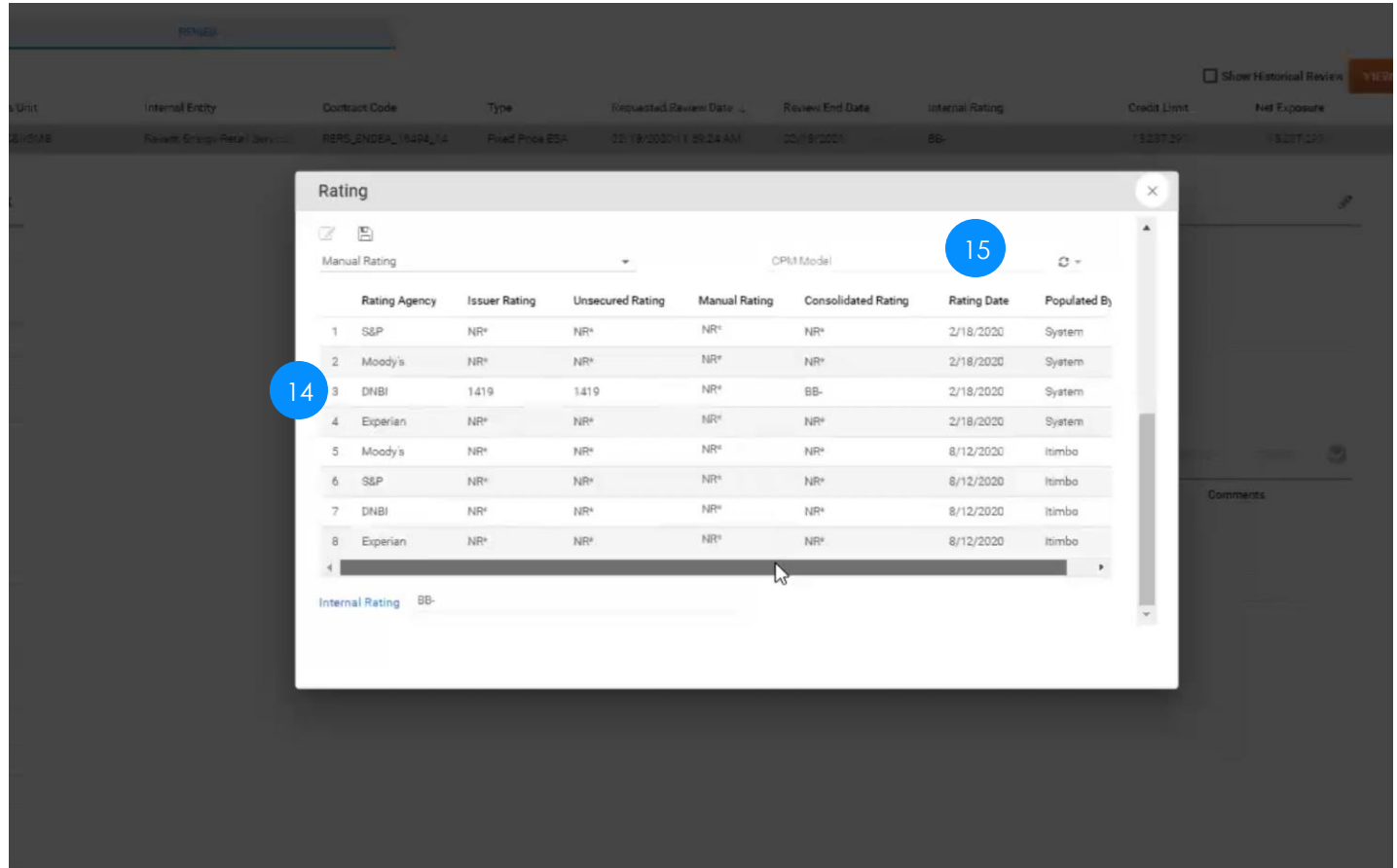
Business Unit	Internal Entity	Contract Code	Type	Start Date	End Date	Credit Limit	Exposure	Contract Status
Comm-Ops (Whol.)	NRG Power Mktg.	SENA004	NAESB	05/01/2016	12/31/2016	0	423,528,765	APPROVED
Comm-Ops (Whol.)	NRG Power Mktg.	SENA001	EE	12/01/2014	12/31/2014	0	-27,918,795	APPROVED

Entity Summary Screen



14 MANUAL RATING COLUMNS AND ROWS
In the current Manual rating process there are multiple rating agencies with standardized ratings that cannot be changed. In this instance the user doesn't need those rows to complete the task of manual rating input. Instead, the user would benefit from a manual rating row that can be edited.

15 MANUAL RATING VERSION CONTROL
Replace the old rating agency entries with new ones automatically.



Entity Summary Screen



16 PUSH COLLATERAL REQUIRED TO SIEBEL

The collateral required checkbox captures this information in ePic, but there is currently no automated way to communicate with Siebel that collateral in fact is required and should be received before pushing through the contract. Automate this communication between ePic and Siebel to save time it takes to manually comment in Siebel so that Sales and Marketing are made aware of the need for collateral.

17 CREATE A BOX FOR COLLATERAL RECEIVED

The collateral received box would lift restrictions on the contract and communicate this to Siebel automatically.

ENDEAVOR ENERGY RESOURCES, L.P.

Contract Start Date: 02/18/2020
 Contract End Date: 11/18/2026
 Review Date: 02/18/2020
 Review Start Date: 02/18/2020
 Expires In: Custom
 Expiry Date: 02/18/2021
 Internal Rating: BB-
 Review Supported By: Independent Review
 Credit Limit: 13,237,297
 Net Exposure: 13,237,297
 Review Requested By: DSP_EXECUTE
 Potential Exposure: 0
 Collateral Required: **16**
 Required Collateral Type: Cash **17**
 Required Collateral Amount: 0
 Actual Collateral Amount: 0
 Other Collateral Amount: 0
 Purpose of Review:
 Address: 110 N MARIENFELD ST STE 200, MIDLA
 Opportunity ID: 1-146WXG3
 Alert ID: 1-148KQNP
 Estimated Load Factor: 0.77973
 Estimated Peak: 36.21612

Internal Rating: BB-

Risk Score
 335.0/1000

Designation	Approver
CREDIT MANAGER	MMontpe1
SNR DIRECTOR	CSlaughter
CHIEF RISK OFFICER	GMackay1

Ratings	250.0/500
Exposure Risks	0.0/100
3rd Party Risks	85.0/100
Financial Risks	0.0/200
Ratio Risk	0.0/100

Next Steps

Next Steps

BSI:

1. Setup 2-hour interviews in blocks of 1 hour with one person from each persona to walk through key screens. Part 1 Tuesday and Part 2 Thursday Time blocks are the same for both days:

10am-11am CDT

1pm-2pm CDT

4pm-5pm CDT

Ibrahim

Phoung

Matt

2. Work with NRG to complete the setup required access to ePic

NRG:

1. Ibrahim, Phoung, and Matt select the time blocks best suited for Tuesday and Thursday.



The background is a dark gray color. In the corners, there are several light gray rounded rectangles of various sizes, some overlapping, creating a modern, geometric design.

Appendix

Participant Interviews | Participant Task List | Post Test Questionnaire

Stakeholder Interview Questions

PROJECT INFORMATION

- What business objectives are you meeting by investing in this application?
- What sets ePic apart from similar solutions?
- What is the level of technology experience for your target users?
- What do you want them to accomplish using ePic?

SECURITY

- Who can access ePic?
 - Who is involved?
 - Can it be revoked?
 - What do you want them to accomplish using ePic?

- Is there any content within the current state that is security trimmed?
 - Are there different level of security/access that need to be considered?
 - Please describe the existing process behind managing user access and security
 - What is the expected behavior when a person attempts to access content that he/she does not permission to?
- How is ePic accessed remotely?

OTHER SYSTEMS/TOOLS

- Are there any tools or systems you are using we need to be aware of that may affect ePic?
- Does your group have any expectation for integration between the new system and existing systems?
If yes, please describe them.

Stakeholder Interview Questions Cont.

- Has an accessibility assessment been done for ePic?

ALL-STAKEHOLDERS QUESTIONS

- What does your organization do and how does your role fit in there?
- How long have you worked at the company?
- Describe the role of your team
- How would you describe the culture at NRG?
- Describe the type of person that would fit your group's typical employee profile?
- How would you describe your team's stance on change?

CURRENT STATE OF PRODUCT

- How often do you use ePic?
- Is this product valuable to the work you? How?
- Describe your experience using ePic as it is today.
- What feature is most valuable? Why?
- What do you like least about this product?
- If you were able to stop using this product all together, what would be the number 1 reason?
- What type of device do you use to access ePic?
- What browsers do you use? Is it available offline?

Stakeholder Interview Questions Cont.

- What type of device do you use more often for work related software?
- What are you trying to accomplish when using ePic?
- What features or sections of ePic do you rarely ever use?
- What features or sections of ePic do you use most frequently?

FINDING INFORMATION

- How would you describe your experience when looking for tools, items, information within the current state?
- How do you currently find what you need in ePic? (Do you use navigation links or do you search for information?)
- How would you describe the Search experience? Are the search criteria useful? Are the search results relevant?

COLLABORATION

- Is there any type of collaboration that occurs within ePic? IF so:
- Briefly describe your current collaboration processes within the existing solution?
- How often does collaboration take place?
- Where does the information the team collaborates on currently reside? Describe the teams / roles that are typical consumers of your information?
- Are these processes effective and are they different than other groups within the organization?
- Can the collaboration process involve external or 3rd party users (i.e. vendors, client, etc.)?
- What content and file types do you collaborate with? MS Office (Words, Excel, PowerPoint, Visio) and PDF documents. Any others?

Stakeholder Interview Questions Cont.

- What are some pain points around Collaboration?

SUCCESS FACTORS

- Are there any barriers that may hinder progress on achieving the project objectives?

Participant Task List

PATH TO MOST COMMON SCREENS FROM HOME SCREEN

- Take us to the Initiation screen. Please customize the columns to your preference
- Take us to the Entity Summary screen. Please customize the columns to your preference
- Take us where you can generate a monthly report for a credit customer. Please customize the columns to your preference

MONTHLY REPORTS

- Execute a residential batch and update PowerBI monthly report.
- Pull down a comprehensive status report against a single entity (position with exposure, open contracts, collateral, etc.)

ADDING NEW ENTITIES

- Add a new contract with a new entity.
- Add a new wholesale internal entity that exists in Aligne but not in ePic.
- Add a new wholesale external entity that exists in Aligne but not in ePic
- Add a retroactive contract to update in the system (first identify contract type)

Participant Task List Cont.

EVALUATE THE CREDIT QUALITY OF A CUSTOMER/COUNTERPARTY, TO ACHIEVE A CREDIT APPROVAL

- You are evaluating the relationship with a cx/counterparty in wholesale and C&I:
- Take us through the process of calculating Potential Future Exposure
- The internal credit rating has not been assigned, take us through the process of assigning a rating manually.
- It is determined that collateral is required for a particular cx, take us through the process of inputting the collateral decision into the system.
- All prerequisites have been met, take us through a complete approval.
- Take us through the renewal of a customer review.
- You've performed a credit review and now must escalate for approval. Take us through this process.

