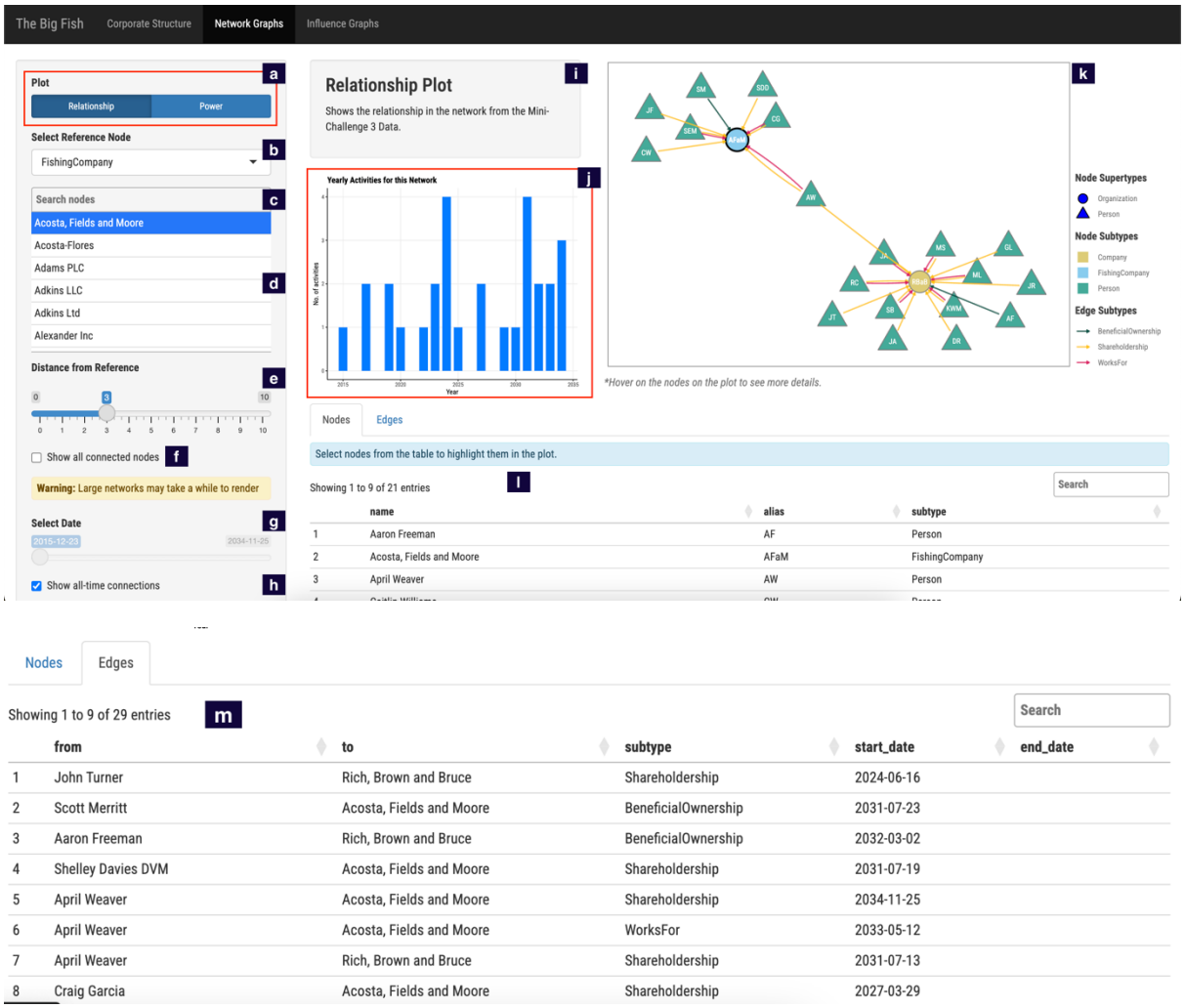
Our Shiny app comprises three major modules: the corporate structure, network graph, and influence graph. Each section includes similar components for visualization and filtering.

A. Components

Our components for modules are similar due to same visualizations used in modules.



Nodes Edges

Showing 1 to 9 of 29 entries **m** Search

	from	to	subtype	start_date	end_date
1	John Turner	Rich, Brown and Bruce	Shareholdership	2024-06-16	
2	Scott Merritt	Acosta, Fields and Moore	BeneficialOwnership	2031-07-23	
3	Aaron Freeman	Rich, Brown and Bruce	BeneficialOwnership	2032-03-02	
4	Shelley Davies DVM	Acosta, Fields and Moore	Shareholdership	2031-07-19	
5	April Weaver	Acosta, Fields and Moore	Shareholdership	2034-11-25	
6	April Weaver	Acosta, Fields and Moore	WorksFor	2033-05-12	
7	April Weaver	Rich, Brown and Bruce	Shareholdership	2031-07-13	
8	Craig Garcia	Acosta, Fields and Moore	Shareholdership	2027-03-29	

a. *Plot type*: Sets what type of graph to be plotted. Depending on the module, this may not always be present.

b. *Reference node type*: Shows the types of node available in the network. Select a type from here to show the available nodes of the type in d. *Reference node selector*

c. *Reference node search*: Use this input to filter the list in d. *Reference node selector* further.

d. *Reference node selector*: Select the reference node from this list. This node will be the main node for the visualization.

e. *Network depth*: Select how far from the reference node will be used in the visualization, i.e., 1 will only show direct neighbors, 2 the neighbor of neighbors, and so on. The higher this value is, the longer the visualization may take render.

   Select a higher number for a bird's eye view of the network. Select corresponding reference node and a lower number for taking a closer look at that node's local network.

   Note: some smaller graphs may not need the full range of values to render all the connected nodes. Some may need higher value to render all. Use f. *Full network render toggle* in this case.

f. *Full network render toggle*: If selected, it will disable and ignore the value in e. *Network depth* and render all the nodes connected to the reference node, no matter how far they are.

g. *Date selector*: Selects a date for the visualization. The resulting output will render the network structure on this date. This is useful for inspecting the network changes in time.

h. *All-time edges toggle*: If selected, it will disable and ignore g. *Date selector*. This is useful for looking at all the historical edges/transactions in the network.

i. *Plot description*: Describes what the plot is for.

j. *Yearly activities*: Shows the all-time yearly activities or transactions within the plotted network (function may differ a bit depending on the module).

   Hint: Higher activity for a year after years of little or no activity may indicate a suspicious period.

k. *Network plot*: Contains an interactive network plot of the selected type. Hover on a node to show more details about it.

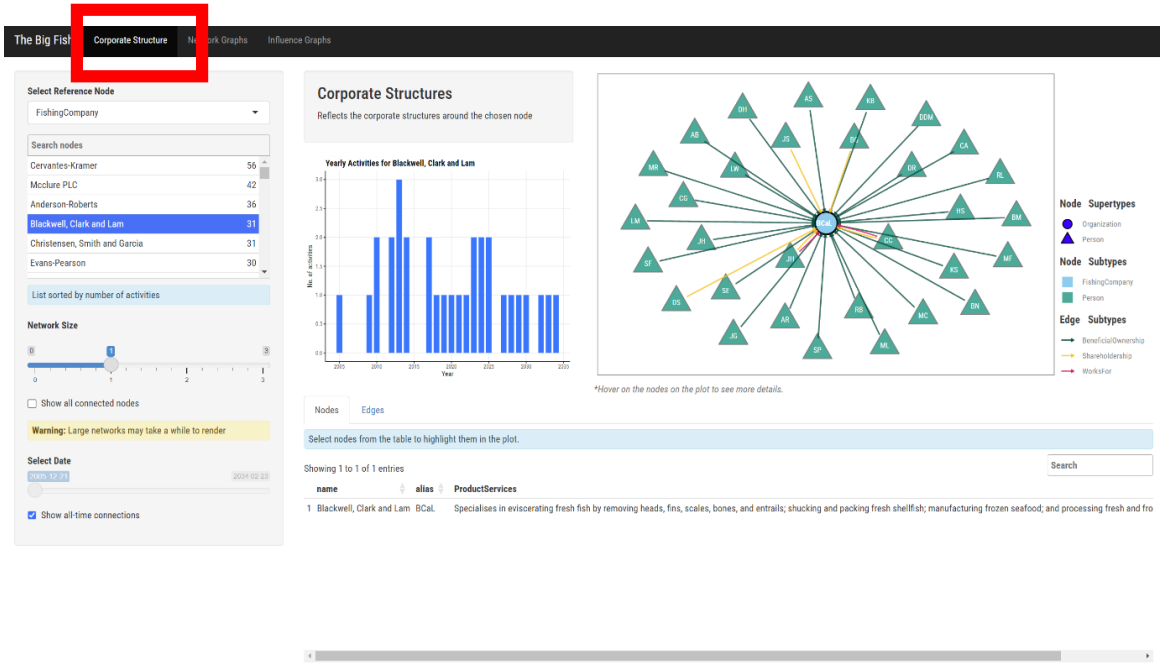
l. *Nodes list*: Shows a list of nodes shown in k. *Network plot*. The table contains additional information about the nodes (depends on network type). Select nodes from the list to highlight them in the plot.

m. *Edges list*: Visible after selecting the *Edges* tab. This shows a list of nodes shown in k. *Network plot*. The table contains additional information about the edges. Useful in checking for suspicious transactions.

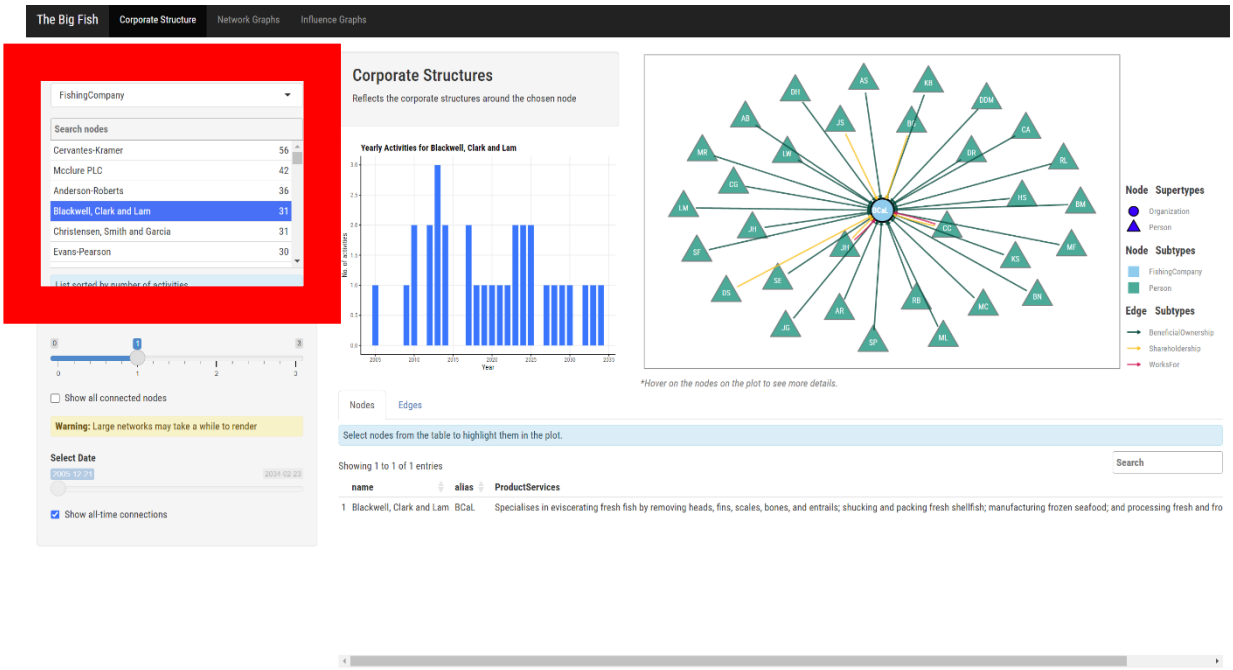
B. Sections

1. Corporate Structure

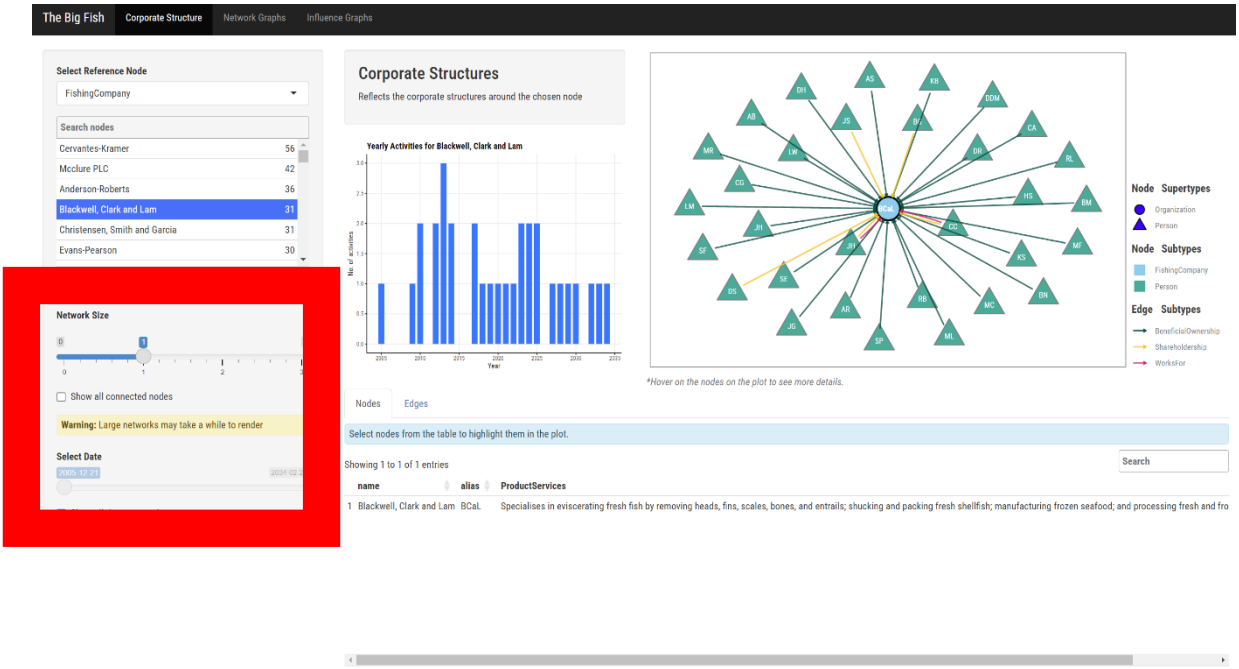
Step 1: Click Corporate Structure Tab.



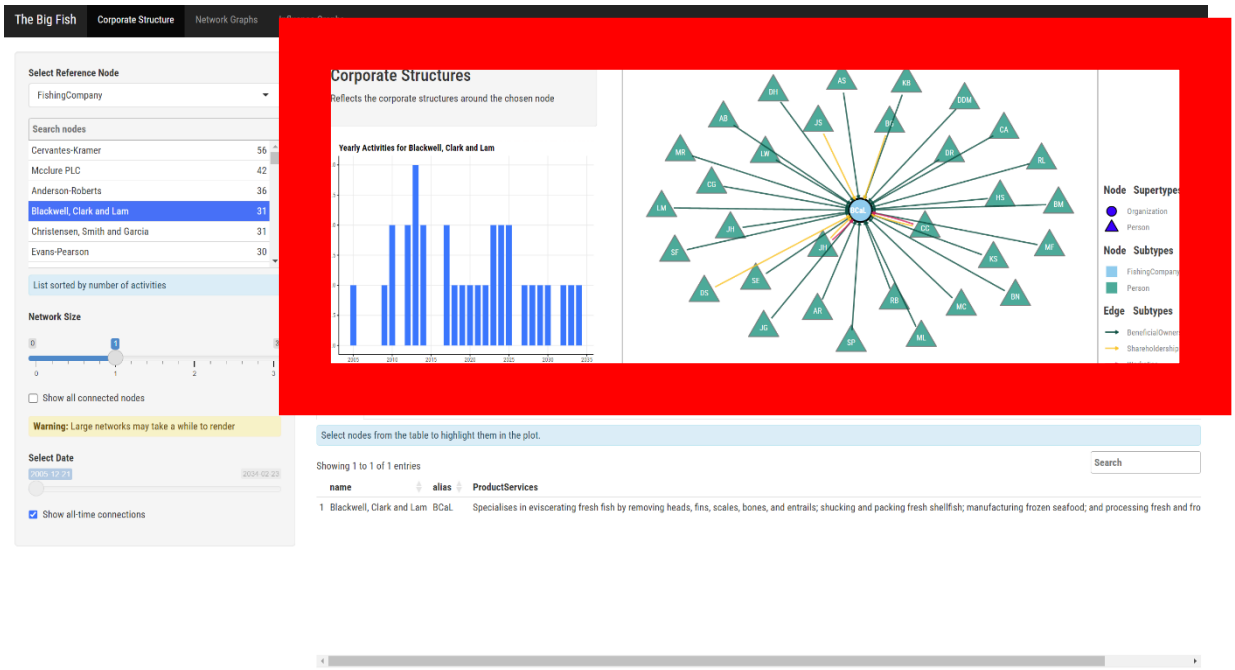
Step2: Select the company type and search for the company you want to investigate.



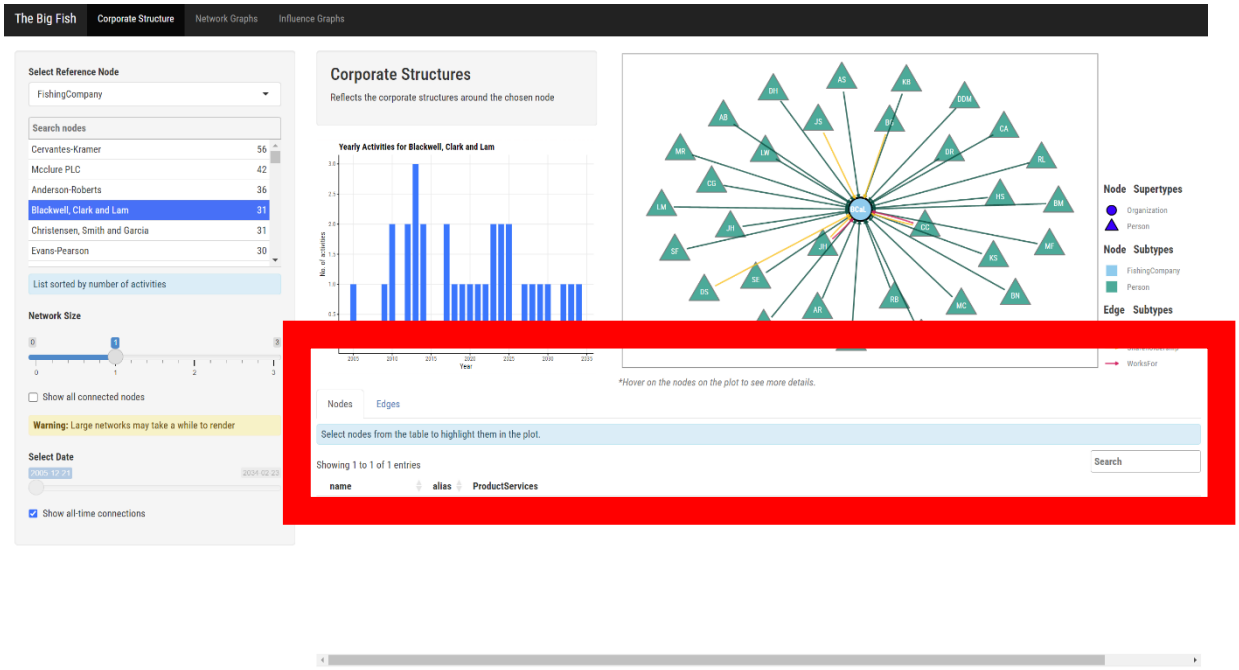
Step 3: Select the network depth and date. For the corporate structure, a smaller depth number is preferred. A larger depth number is typically used for network investigations.



Step 4: Examine the temporal patterns and the current corporate structure.

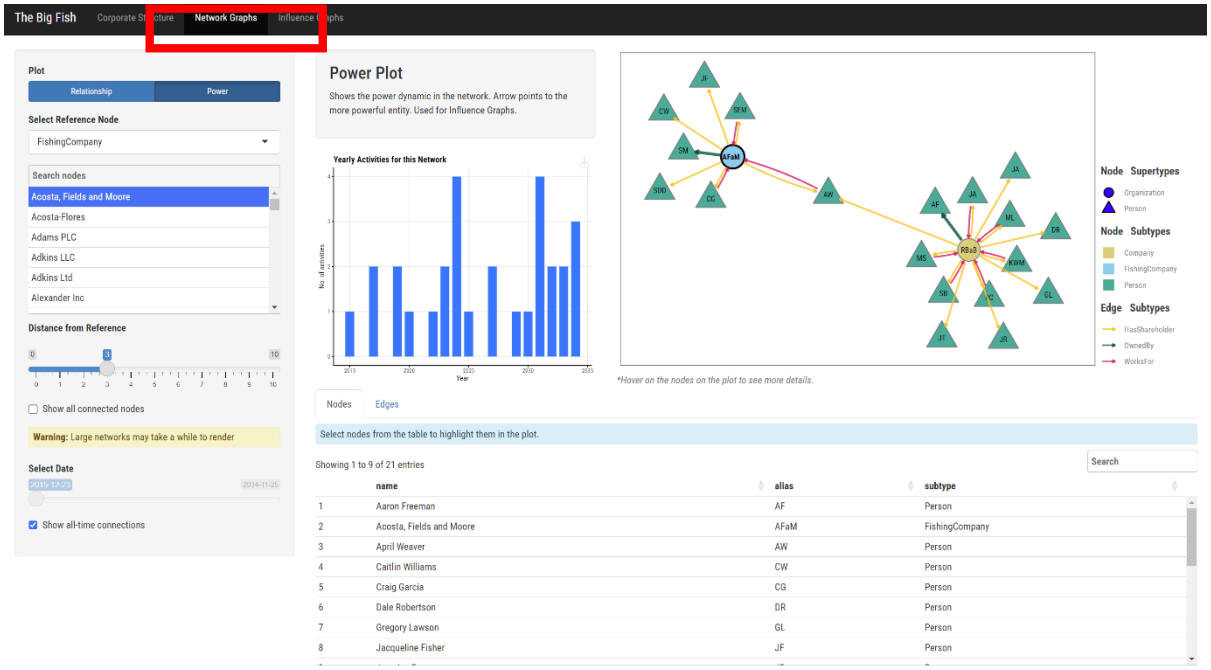


Step 5: Analyze the details of the nodes and edges.

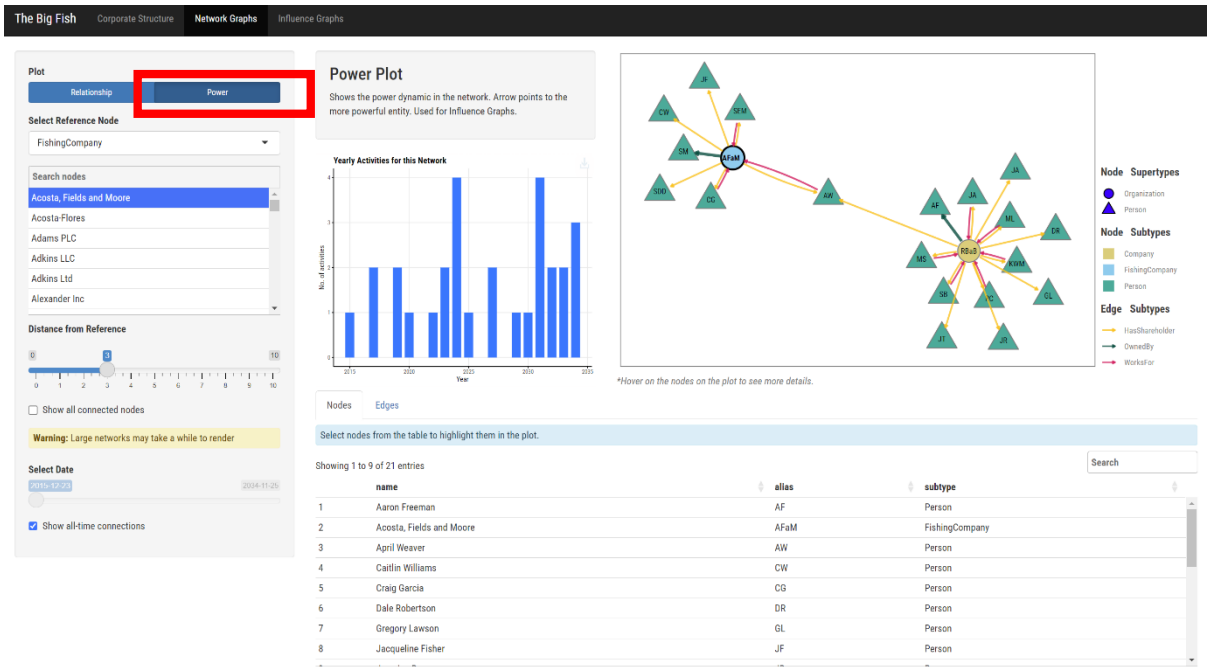


2. Network Graph

Step 1: Click Network Graph Tab.

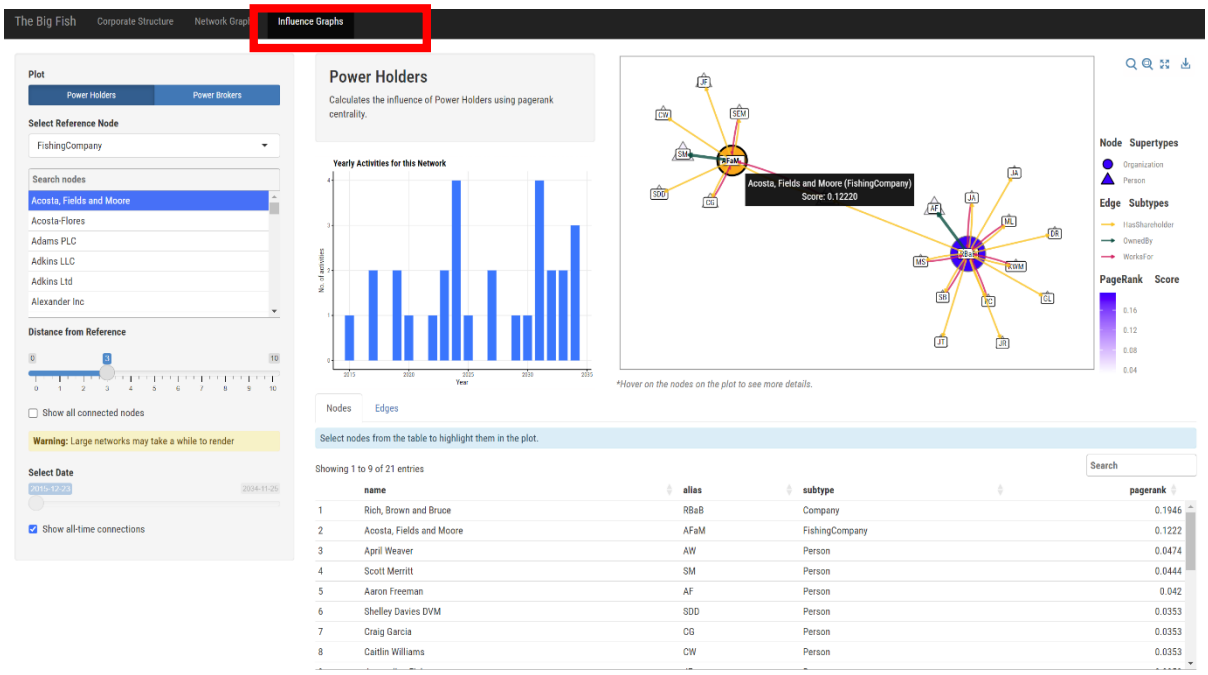


Step 2: Perform similar filtering and visualization actions as in the corporate structure. However, users can also switch to a power plot instead of the default relationship network.

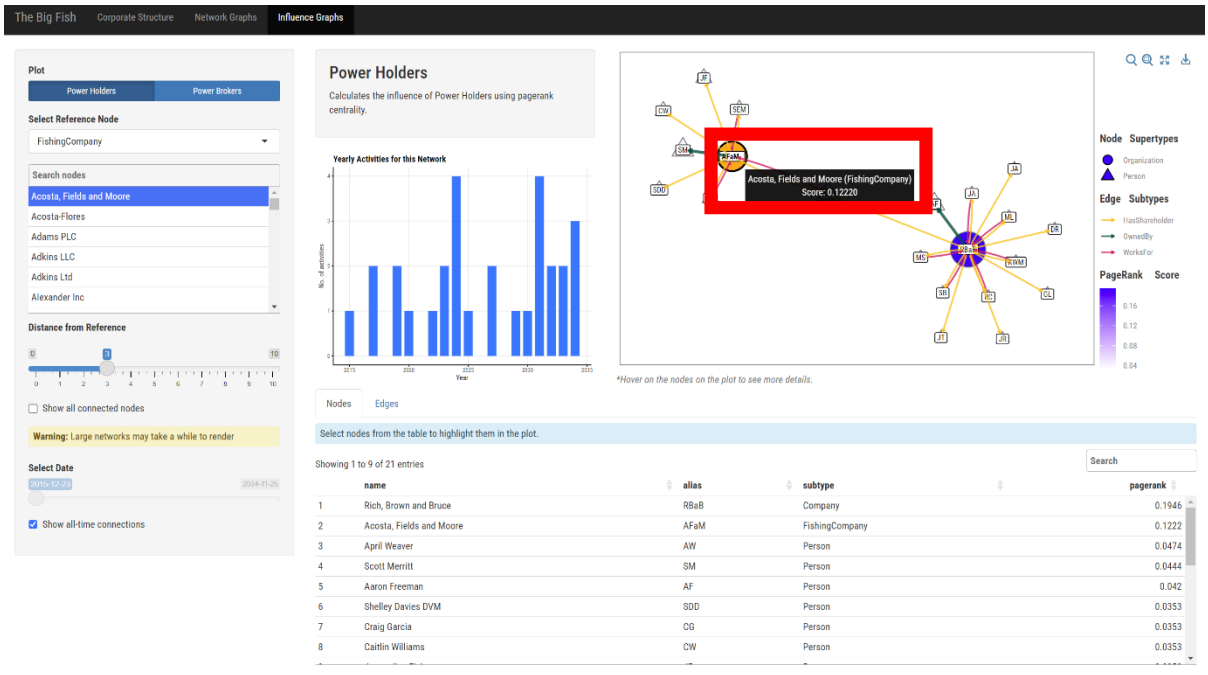


3. Influence Graph

Step1: Click Influence Graph tab.



Step 2: Perform similar filtering and visualization actions as in the corporate and network graphs. Hover over the nodes to view the page rank score.



Step 3: Switch to Power Brokers. Hover over the nodes to view the betweenness centrality score.