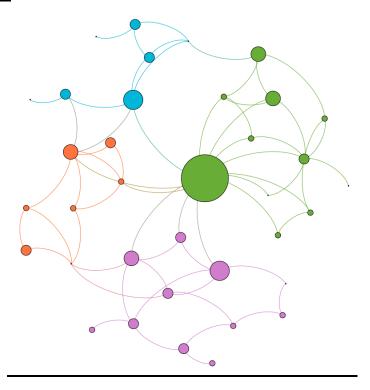
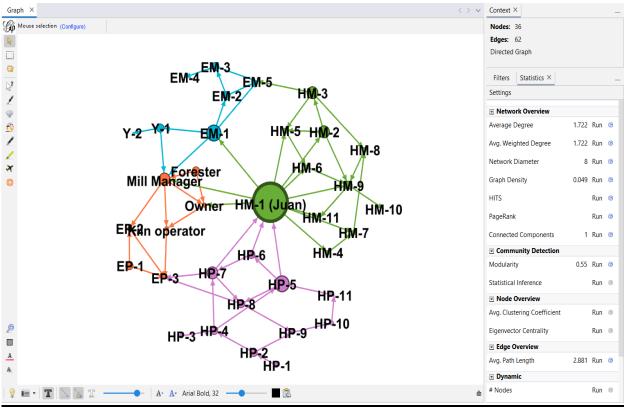
## **Sawmill Visualization**





## Part 2. Questions to answer

1) What is the average degree?

Ans: 1.722

2) What is the network diameter?

Ans: 8

- 3) What is the Modularity value? Is this value indicative of good community structure? Ans: 0.55 is the modularity value and as the value is much closer to 1 it indicates strong community structure.
- 4) How many classes are produced?

Ans: 4

5) What observations can you make based on the groupings (i.e., in terms of language and/or role in the organization)?

Ans: From the sawmill visualization we can observe that most people in mill section and planner section are Hispanic because of which Juan, a Hispanic employee in Mill Section is the most connected person with the highest betweenness. We can also see that English speaking employees in mill section and planner section are grouped together accordingly.

6) Who has the highest betweenness score?

Ans: HM-1 (Juan) has the highest betweenness score.

7) What are the betweenness and closeness values for the Mill Manager?

Ans: Betweenness Value: 22.833333

Closeness Value: 0.8

## Part 3. Summary analysis

The communication structure in sawmill seems to be related with the ethnicity/language of the employees. The employees speaking the same language are well-connected with each other than with the ones speaking other languages. The employees in lower designations levels communicate with the higher level employee (Juan or EM-1) who speak their same language. Those higher level employees communicate to the mill manager and the owner of sawmill. From that we can infer that communication seems to be happening in a hierarchical structure based on the ethnicity/language.

As the majority of the employees are Hispanic, Juan a Hispanic top level employee in the mill section seems to be the most important person and serves as a liaison between the management and the production workers. We can also notice that Juan has the highest level of betweenness i.e. 147 which is more than the betweenness of mill manager which is 22.833333 from which we can infer that he may have considerable influence within a network by virtue of his control over information passing between others.

The communication in this structure will be faster as the network diameter is only 8 but if people like Juan are not present then the communication between the stakeholders will be highly affected but will not be stopped.