Subject: The Domain Nexus

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Hi, I did some work on defining the Nexus - how we might handle the metrics Cyrano is collecting from Jam. Here are a bunch of notes:

#### The Domain Nexus:

- 1. Build a network of meaningful relationships (e.g. on a specific domain)
- 2. Model an individual's contribution
- 3. Define the individual character types in the network (= 1+2)
- 4. Define what can be done with this new insight [not here, this is about the solution]

# 1. Network-type theory

https://www.safaribooksonline.com/library/view/social-network-analysis/9781449311377/ch04.html

Cliques: A cohesive group of people where everybody is connected directly to everybody else inside their component and not to everybody else outside.

Network connection A->B Cohesiveness using weighted metrics of:

- Shares
- Comments
- Rate
- Like
- Follows
- View
- Recency (time decay)

## **Individual Types**

This is all about Centrality

http://faculty.ucr.edu/~hanneman/nettext/C10\_Centrality.html https://socilyzer.com/guide/network-roles

#### **Isolates**

None or just a single connection.

Positioned at the edge.

# Connectors / hubs

Many direct connections - in the middle of clusters.

High in/out degrees.

Popularity/over dependency

### <u>Influencers</u>

Closely connected to their existing network

High closeness score

## **Brokers / Gatekeepers**

High betweeness score

May filter information

May be information hoarders

#### Influential

# http://www.connectedcommons.com/network-brokers/

Definition: Brokers occupy a position in-between people or groups who themselves are not connected. Connect people within and across boundaries such as locations, departments and business units. Within:

<u>Gatekeeper</u>: This individual acts as a buffer between their own group and employees in other groups. They are influential in controlling the information that enters the group.

<u>Representative</u>: This individual conveys information from their group to outsiders. They are influential in sharing and diffusion of information to the rest of the organization.

Coordinator: This individual connects people within their group, e.g., location or business unit.

https://dspace.library.uu.nl/bitstream/handle/1874/256346/masterthesislaurenshulshof-gatekeepersininnovationnetworks.pdf?sequence=1

Definition: An actor that holds a position in a network through which significant parts of the rest of the network are connected and is willing to share knowledge with other actors. Removal of this actor results in significant reduction of knowledge-diffusion in the network.

### Useful brokerage terms:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3648408/table/T1/?report=objectonly

### 2. Individual Contribution score:

Low/ High contribution rank calculated as sum of content/posts

- Comments
- Likes
- Views
- Rating
- Shares
- ++ Relevancy
  - o keywords matched
  - File-type
  - Size
  - Recency (time decay)

## 3. Individual Character types:

	Low	High (+2σ)	Notes
Isolates	Lurkers <u>Thinkers</u>	Hermits <u>Pioneers</u>	Expect not many of these
Connectors	Status holders <u>Delegators</u>	Leaders <u>Generators</u>	Highlight the Generators
Influencers	Pulse-takers <u>Enablers</u>	Glue <u>Teamsters</u>	Expect most people to be here
Brokers	Broadcasters Representatives	<u>Definers</u> Gatekeepers	Highlight these