MIS Quarterly

RESEARCH ARTICLE

EXTERNAL BRIDGING AND INTERNAL BONDING: UNLOCKING THE GENERATIVE RESOURCES OF MEMBER TIME AND ATTENTION SPENT IN ONLINE COMMUNITIES

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Appendix A

Examples of Discussion Topics

Type of Discussion Topic	Example of Discussion Topic and Inquiry
Seeking technical advice on problem solving	**Discussion Topic: Problem with "R" Wave Guided Radar Tank Level Control?** Has anyone had a problem with the "R" modbus/level master emulation wave guided radar level transmitters? We have had problems with the controls showing a low level of-.01 inches and then showing a high level of 83.4 ft. We have "R" working this issue but I thought maybe someone has had this problem and solved it.
Seeking technical advice on decision making	**Discussion Topic: Bus Differential Relay at 4160 Volt Switchgear** In X Gas Plant, we have a main-tie-main breaker application on 4160 Volt switchgear. The tie breaker is normally closed and 4 generators feed into 4160 volt bus (2 left and 2 right). We are planning to re-install the bus differential relay back into the system. The vendor offers 2 different manufacturing options. (1) "A" and (2) "B." Do you have any suggestion or recommendation for these both relays? Any issue/false trip? Using "A," we need to have 6 relays for left and right bus. On the other hand, "B" needs to have 2 relays. Any input would be appreciated.
Asking for procedural know-how, manuals, or site-specific practices	**Discussion Topic: Natural Gas Dewpoint measurement** I am looking for experience from other facilities on the best portable analyzers for dew point measurement of natural gas and the method for sampling in the field. The gas dew point is measured exit the glycol contactors and we have inconsistencies with the measured dewpoint with different methods. We have a "S" dew point meter that is measuring -60degC. The pressure is however dropped from 100barg to atmospheric and I suspect that moisture is dropping out before the analyzer. The second analyser is the "M" which is measuring -45degC. This is a newly purchased unit that measures the dew point at 40barg pressure. The vendor suggests that it is supplied already calibrated and does not require a single point calibration in the field. Can anyone recommend whether a calibration gas with a known dew point can be supplied and should be used to verify the readings? Are there any guidelines/standards covering this matter?

Appendix B

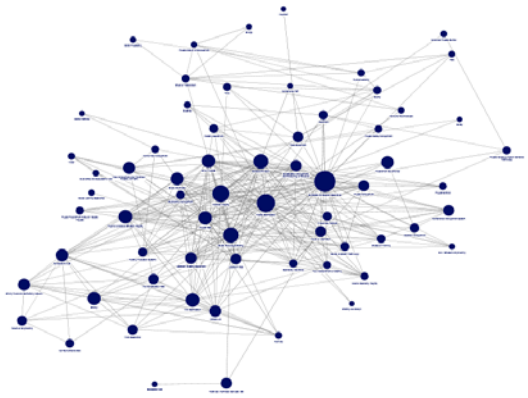
An Example of a Discussion Thread

[1] 1/26/2010 11:08 posted by Member A	Discussion Topic: Isolation Valves Under Thief Hatches Has anyone put an isolation valve in place under a thief hatch? We have a source service tank farm in which Operations would like to put butterfly valves under each of the thief hatches. This would allow them to isolate any one of the hatches for ease of replacement or repair of the unit. If this has been done, do you treat it as a carsealed valve under a PSV? Would it be necessary to have a person in place to watch the system while the hatch has been removed from service? Was there any issue with the additional valve weight on the top of the tank?
[2] 1/27/2010 5:14 posted by Member B	A, a couple of things to consider. I am not sure that a butterfly valve would be considered adequate isolation for the replace of a thief hatch. Depending on how sour your system is, there are likely man watch and safety issues involved with replace of the thief hatches that may make this more of a shutdown issue. Not sure that you would get the correct design sigh off for this as I think that installation of valves prior to safety relief devices is a sign off from ...[erased]
[3] 1/27/2010 8:28 posted by Member C	Butterfly valves are not typically considered for positive isolation, even though there are zero leakage butterfly valves. Also the valve flapper might take up some area, which could affect the sizing of the valve. In addition, the flapper might obstruct the functioning (in open position, flapper protruding into thief hatch), especially if the thief hatch is having spring loaded pallet for vacuum protection. Definitely, this would be treated similar to carsealed valve under PSV. You need to include the isolation valve also under a PM program to ensure proper functioning of the valve.
[4] 1/27/2010 10:04 posted by Member D	I think the butterfly valve will definitely reduce your venting capacity. IF this is one of the pressure/ vacuum relief hatches, you will want to car seal it open and have it on at least a monthly PM. Do you operators do car seal checks? For tank pressures, a butterfly valve might work OK with the proper seals. Doing the maintenance work under supplied air would be a good precaution.
[5] 1/27/2010 18:38 posted by Member E	Is a butterfly valve considered a full port valve? For positive isolation, a gate valve or a knife gate might be better.
[6] 1/27/2010 21:15 posted by Member F	Consider a gate valve for isolation purpose. The additional weight requires support. Consider adding a spool and bleeder between the valve and hatch valve.
[7] 1/28/2010 6:24 posted by Member G	The thief hatch also has an API bolt pattern and probably won't match up to the butterfly valve.

Appendix C

Network Images of Online Communities

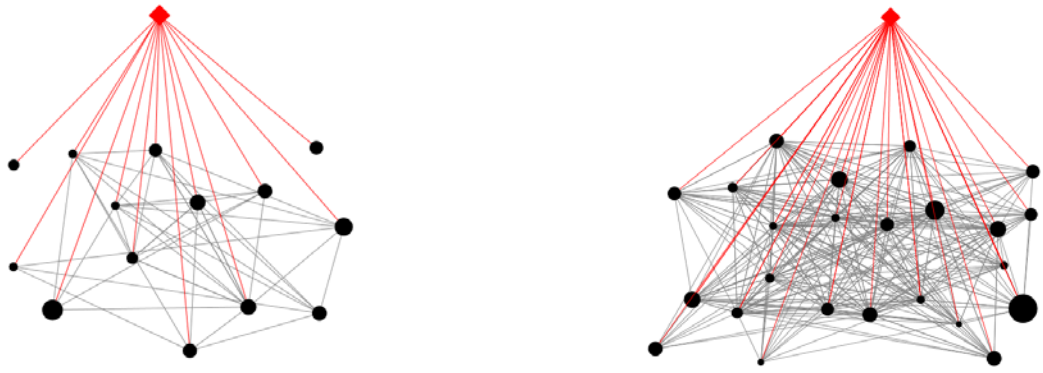
Below are several snapshots visualizing the network structures of the organizational online communities examined in this study. Figure C1 shows the whole network of the communities. This network was constructed based on the number of shared members among the communities.



Note: A node represents a community and node size corresponds to the size of the community. For simplicity, a tie between communities is shown when the communities shared 10 or more members.

Figure C1. The Whole Network of Online Communities (as of June 2010)

Figure C2 shows the external networks of two communities. Community "Marine Risk Management" (a) had a sparse external network (with external bridging of .90) and Community "Global Network Services" (b) had a relatively dense external network (with external bridging of .41).



(a) Community "Marine Risk Management" **(b) Community "Global Network Services"**

Note: A node represents a community and node size corresponds to the size of the community. A diamond-shaped node (top) represents a focal community and round-shaped nodes (bottom) are the communities with which the focal community shared members. A connection between two communities was made via shared members. For simplicity, a tie between communities *i* and *j* is shown when was larger than 1%.

Figure C2. A Focal Community's External Bridging (as of June 2010)

Figure C3 shows the internal networks of two communities of similar size. Community "Project Capital Procurement" (a) had a sparse internal network (with internal bonding of .02) and Community "Laboratory" (b) had a relatively dense internal network (with internal bonding of .19).

(a) Community "Project Capital Procurement" **(b) Community "Laboratory"**

Note: A node represents a community member. A connection exists when the two nodes had an interaction within six months prior to the current month.

Figure C3. A Focal Community's Internal Bonding (as of June 2010)