CEE 9510 Assignment 4 Answer Key

Question 1

The Project Manager (PM) must consider the number of stakeholders when developing a communication plan; in particular, being aware of the various communication paths. The complexity of a project's communication plan directly mirrors the number of stakeholders involved. Each stakeholder invarably has a communication path linked to one or potentailly mutliple channels. According to David P. Reed, the utility of large networks, in particular, social networks, can scale exponentially with the size of the network. For instance, in Reed's Law – **n(n-1)/2**, where N represents the number of stakeholders, a project with eight stakeholders has potentially 28 communication channels [8(8-1)/2=28]. Managing these communication channels becomes a task for the PM. For instance, the PM must determine and limit communicate links – receiving and sending information. Within a project, there will be stakeholders who will need milestone reports, project status reports and agendas, team status, issue, change request reports – directing what information (orally or visually) needs to be managed by the PM.

The primary issue with a communication model is reducing the noise between the sender and receiver. In a large meeting with multiple communication paths, it becomes expotentially difficult to manage a meeting with multiple communication paths.

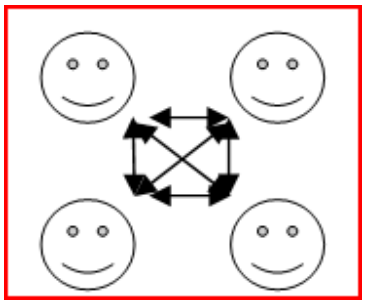


Figure 1

In figure 1, there are four stakeholders, represented by the smiling faces. Each line depicts a communication path. In an informal setting the lines are draw and cross each other. Using the formula N(N-1)/2 with the four stakeholders displays 6 communications paths 4(4-1)/2 =6. The issue is how to manage the communication lines in a meeting setting. Even though this isn't a formal meeting, figure 1 successfully displays an increase in noise and other communication barriers.

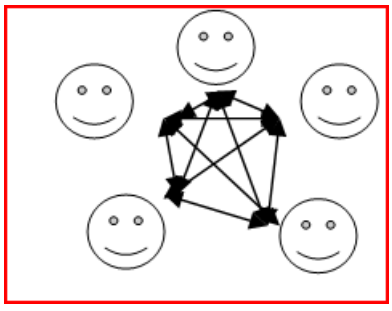


Figure 2

Using the formula N(N-1)/2 with five stakeholders there is an expontentially higher nmber of communication paths – ten in total 5(5-1)/2 =10. There appears to be confusion and extra noise in this situation. As the group size increases, the communication path increases expotentially as depicted with the arrow lines. The trend in these situations lack focus and evade time boundaries.

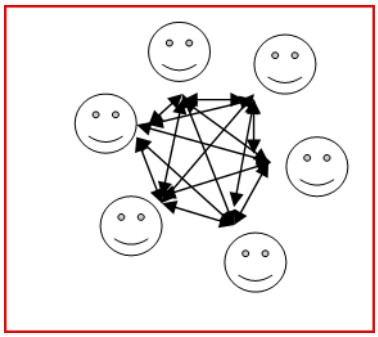


Figure 3

Figure 3 involves six stakeholders. With the formula n(n-1)/2 we have a number of extra communication lines 6(6-1)/2=15. There are fifteen communication paths involved in this case. If this was a small meeting between 3 – 7 attenees, it would not be productive. In order for this to be an organized meeting, there needs to be a chairperson.

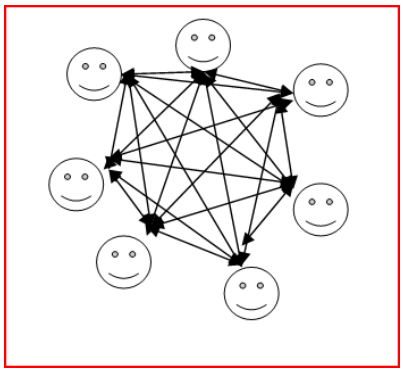


Figure 4

Figure 4 shows a group of seven individuals gathered around a table; there are a number of communication paths as displayed with the arrows. With the formula n(n-1)/2 we have a number of extra communication lines – 15 in fact as 7(7-1)/2=21 and we would like just 6. This could be considered a medium sized gathering. There are a number of lines drawn that could create extra barriers for the sending and receiving of information.

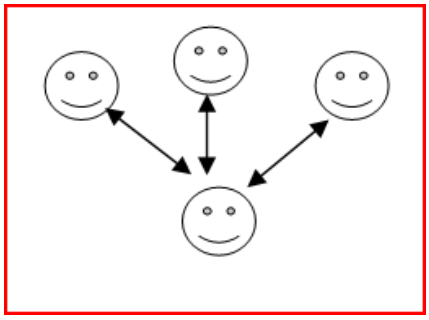


Figure 5

In the previous four examples, there was no chairperson or an individual incharge. Rather it has been informal settings – people just sitting around a table and discussing issues.

When the rule is used “Hey guys only one meeting – listen up” the communication paths are reduced to three channels – this is in stark contrast to the six communication paths when no direction is given.

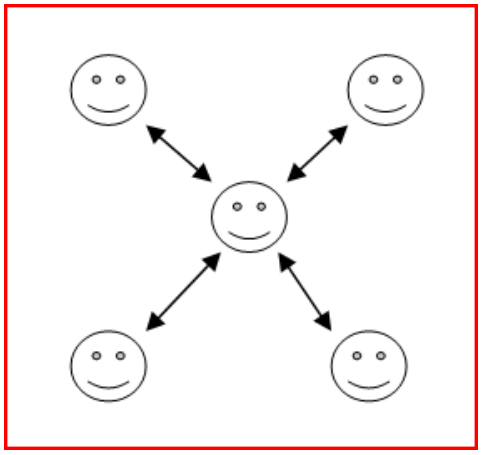


Figure 6

When the meeting involves five people, the communication path is reduced to four instead of ten. When coupled with time and money, it is clear that having an agenda and clear direction for the meeting frustation and waste could be mitigated. It is also useful to consider the role of each participant. Will they attend the meeting as an active particiapnt, a presenter or an observer? As noted by Kathy Vendrig in "All About Meetings", "if the participant doesn't have a role,they chouldn't attend".

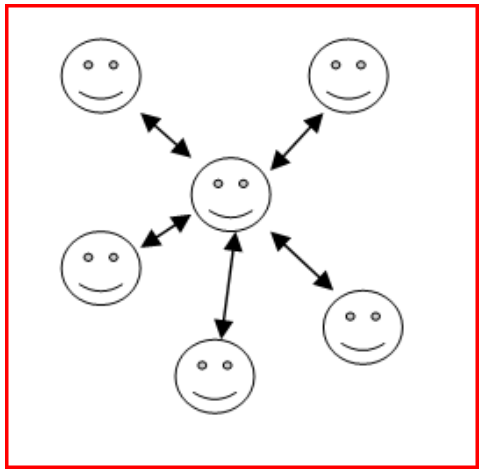


Figure 7

When a meeting involves six people, with only one person chairing the meeting the number of communicaton lines drops to five – as displayed in figure 7. In order for the meeting to be productive there needs to be a clearly defined plan – agenda. Meetings can be a crticial tool in that they: build team commitment to a task; help define the team and maintain the focus on the project; and enable the team to share experiences and learnings.

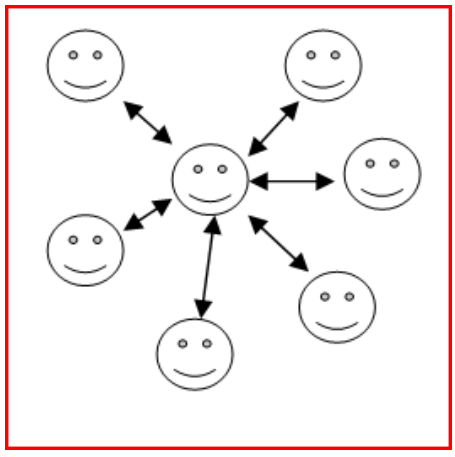
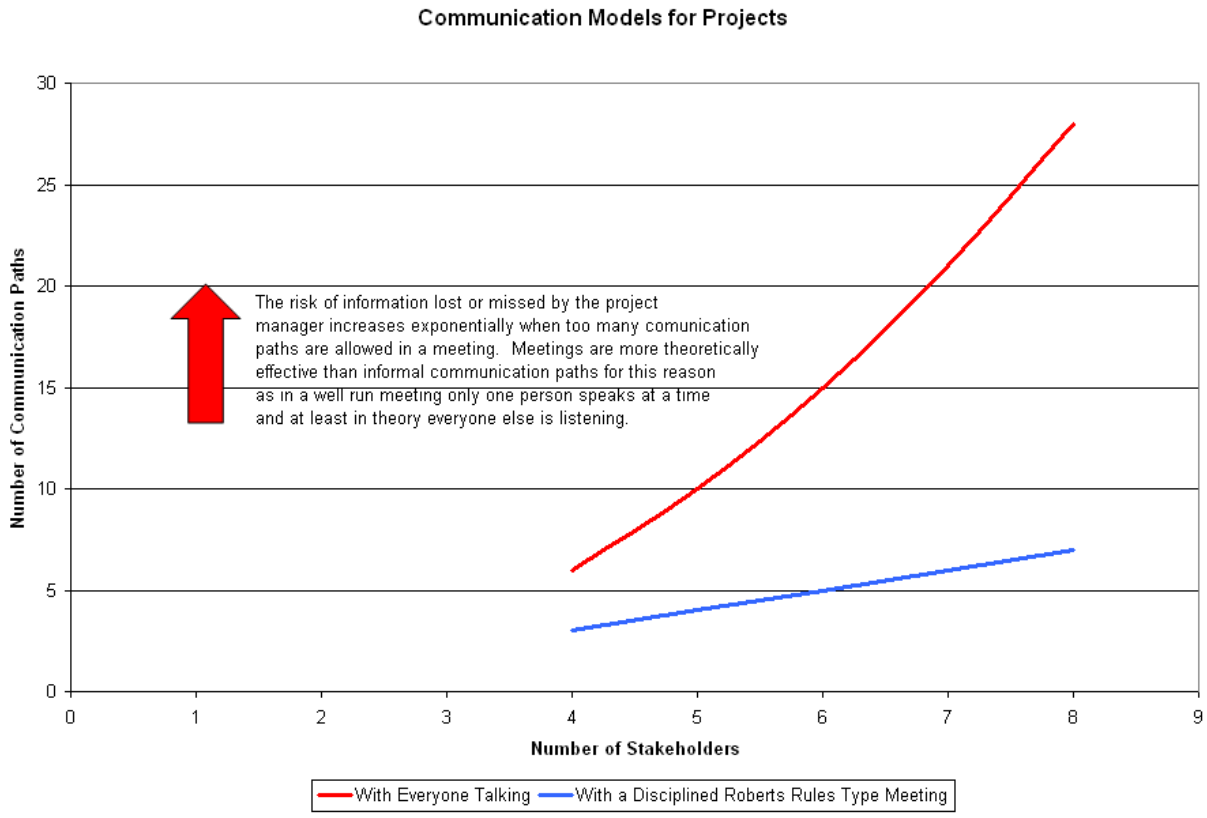


Figure 8

When a meeting consists of only seven people, as depicted in figure 8, the communication paths consist of only six. Is the larger group necessary and could the meeting be met by fewer people- this would be a relevant question to ask. By reducing the communication paths, time would be saved. It is also important for the agenda and purpose of the meeting to be clear. The advantage of establishing a communication plan, is that the PM can control the flow of information, reducing confusion and unnecessary interruptions.


Communication Models for Projects
Number of Communication Paths
30
25
20
15
10
5
0
0
1
2
3
4
5
6
7
8
9
Number of Stakeholders
The risk of information lost or missed by the project manager increases exponentially when too many comunication paths are allowed in a meeting. Meetings are more theoretically effective than informal communication paths for this reason as in a well run meeting only one person speaks at a time and at least in theory everyone else is listening.
With Everyone Talking
With a Disciplined Roberts Rules Type Meeting

Question 2

Status Report Ending Period 1						
Task	% complete	EV	AC	PV	CV	SV
1	0	0	3	0	-3	0
Cumulative totals		**0**	**3**	**0**	-3	0

Status Report Ending Period 2						
Task	% complete	EV	AC	PV	CV	SV
1	finished	6	5	6	1	0
Cumulative totals		**6**	**5**	**6**	1	0

Status Report Ending Period 3						
Task	% complete	EV	AC	PV	CV	SV
1	finished	6	5	6	1	0
2	0%	10	5	10	5	0
3	30%	9	7	9	2	0
4	25%	5	5	8	0	-3
Cumulative totals		**30**	**22**	**33**	8	-3

Status Report Ending Period 4						
Task	% complete	EV	AC	PV	CV	SV
1	finished	6	5	6	1	0
2	0%	10	7	10	3	0
3	50%	15	10	15	5	0
4	50%	10	8	10	2	0
Cumulative totals		**41**	**30**	**41**	11	0

Status Report Ending Period 5						
Task	% complete	EV	AC	PV	CV	SV
1	finished	6	5	6	1	0
2	50%	20	8	20	12	0
3	60%	18	12	21	6	-3
4	70%	14	10	15	4	-1
Cumulative totals		**58**	**35**	**62**	23	-4

Status Report Ending Period 6						
Task	% complete	EV	AC	PV	CV	SV
1	finished	6	5	6	1	0
2	50%	20	10	20	10	0
3	80%	24	16	27	8	-3
4	finished	20	15	20	5	0
Cumulative totals		**70**	**46**	**73**	24	-3

Status Report Ending Period 7						
Task	% complete	EV	AC	PV	CV	SV
1	finished	6	5	6	1	0
2	finished	20	14	20	6	0
3	finished	30	20	30	10	0
4	finished	20	15	20	5	0
5	0%	0	0	0	0	0
6	50%	9	9	9	0	0
Cumulative totals		**85**	**63**	**85**	22	0

At the end of October 2012, it is safe to advise the Consortium that work is proceeding on time as the SV is 0, and the SPI is 1.00;

It is an even easier meeting with your manager. You are tracking 2.2 million dollars ahead of plan. Good work! Hopefully you are meeting scope!

EAC = AC + (BAC - EV) Formula 1
EAC = AC + (BAC – EV) / CPI Formula 2
EAC = BAC / CPI Formula 3
ETC = EAC – AC

EAC Formula 1 is used when actual to date plus remaining budget is the criteria. Used when current variances are thought to be "atypical" of the future.

EAC Formula 2 is used when actual to date plus remaining budget modified by performance is the criteria. Used when current variances are thought to be typical of the future.

EAC Formula 3 is used if no variances from BAC have occurred or you will continue at the same rate of spending.

The student can make any of these assumptions.

Using formula 1, the EAC is 63+(118-85) = $ 9.6 million
Using formula 2, the EAC is 63+((118-85)/1.35) = $ 8.744 million
Using formula 3, the EAC is 118/1.35 = $ 8.741 million

You can tell the boss to relax. You will be between $2.2 and $3.1 million under budget.....

Period	SPI	CPI	PCIB	EV	AC
1		0.00	0.00	0	3
2	1.00	1.20	0.05	6	5
3	0.91	1.36	0.25	30	22
4	1.00	1.37	0.35	41	30
5	0.94	1.66	0.49	58	35
6	0.96	1.52	0.59	70	46
7	1.00	1.35	0.72	85	63

Question 3

What can be said about this? The student is left wondering…huh?...for real?....we are going to study this? Well actually what is most interesting about these video clips is just that. They are totally hilarious in my eyes, and I can imagine that for even the most conservative of mind sets, they are bound to cause a reaction. They are very provocative. That is what we are looking for in this exercise. All we need is a framework for discussing the major elements of emotional intelligence. We don't need a good example. Bad examples are more fun in any case. Terry Tate is a very interesting palette for us to work with as well for another reason. The student can actually go either way in their review of Terry. Clearly his behaviour is crimminal were it not a parody. But mixed in amongst the brutality is a pure heart and a desire to see a better work place. In that respect, he is not different from the rest of us. But as his flaws are so overt, it allows us to quickly check off the list of emotional intelligence qualities that a good project manager should have.

Regardless of whether the student supports Terry's behaviour or whether the student takes a hard line against it, their commentary should reference various elements in the table below. Clearly a student who recommends behaviour similar to Terry will not be eligible for marks, but any supporting arguments for explaining how Terry sees himself in his world referencing the table below are just as valid as the dissenting ones.

	Self **Personal Competence**	Other **Social Competence**
Recognition	**Self–Awareness** - emotional self awareness • accurate self-assessment • self-confidence	**Social Awareness** - empathy • service orientation • organizational awareness
Regulation	**Self-Management** - self-control • trust worthiness • conscientiousness • adaptability • achievement drive • initiative	**Relationship Management** - Developing others • influence • communication • conflict management • leadership • change catalyst • building bonds • teamwork & collaboration