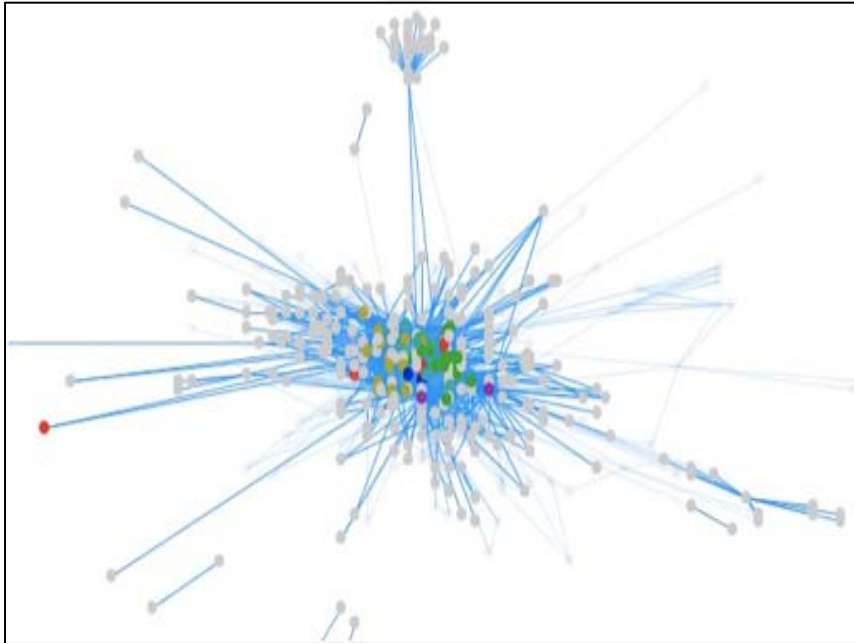


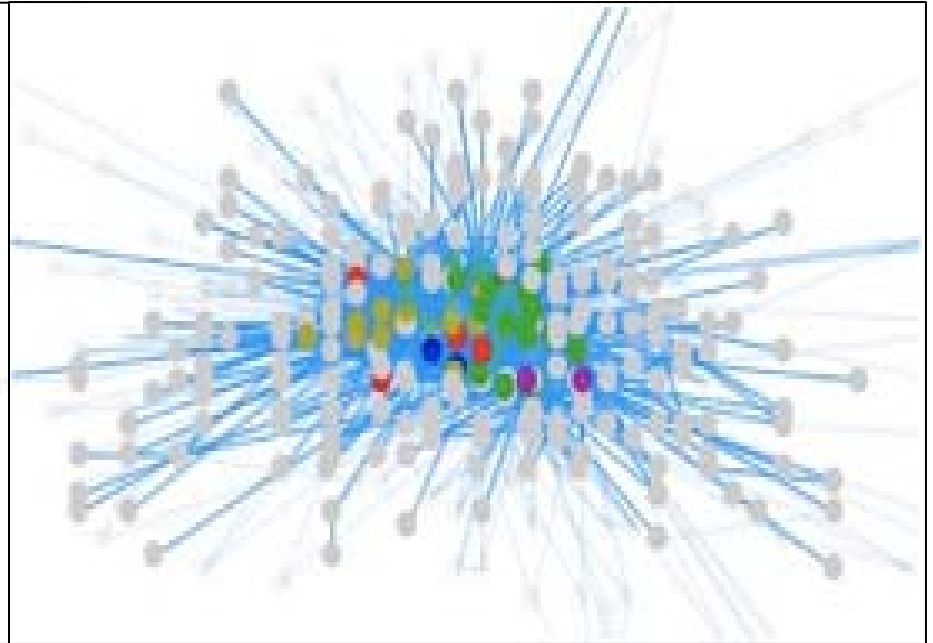
Too Much E-Mail Decreases Job Satisfaction

**Frank Merten, Peter Gloor,
MIT Center for Collective Intelligence, University of Cologne
pgloor@mit.edu**

Integration of New Employees



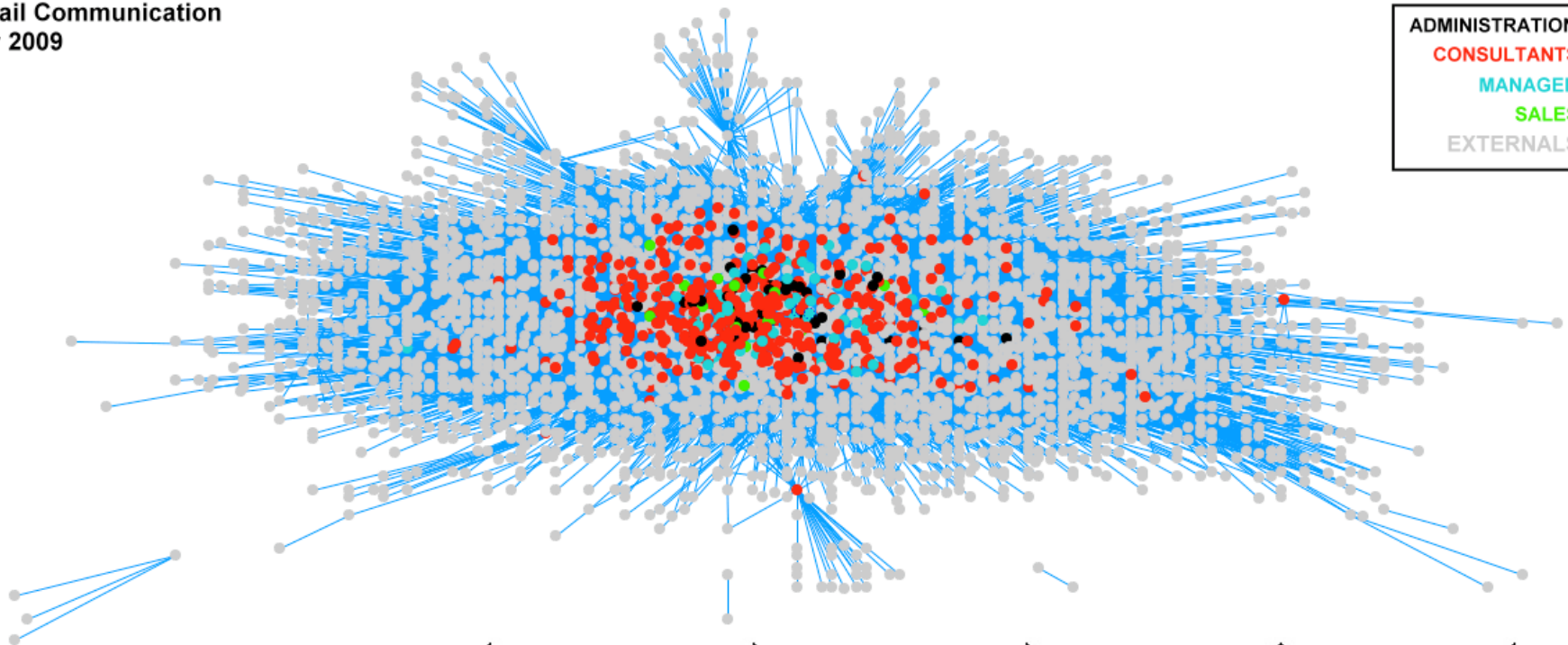
Day 1



Day 5

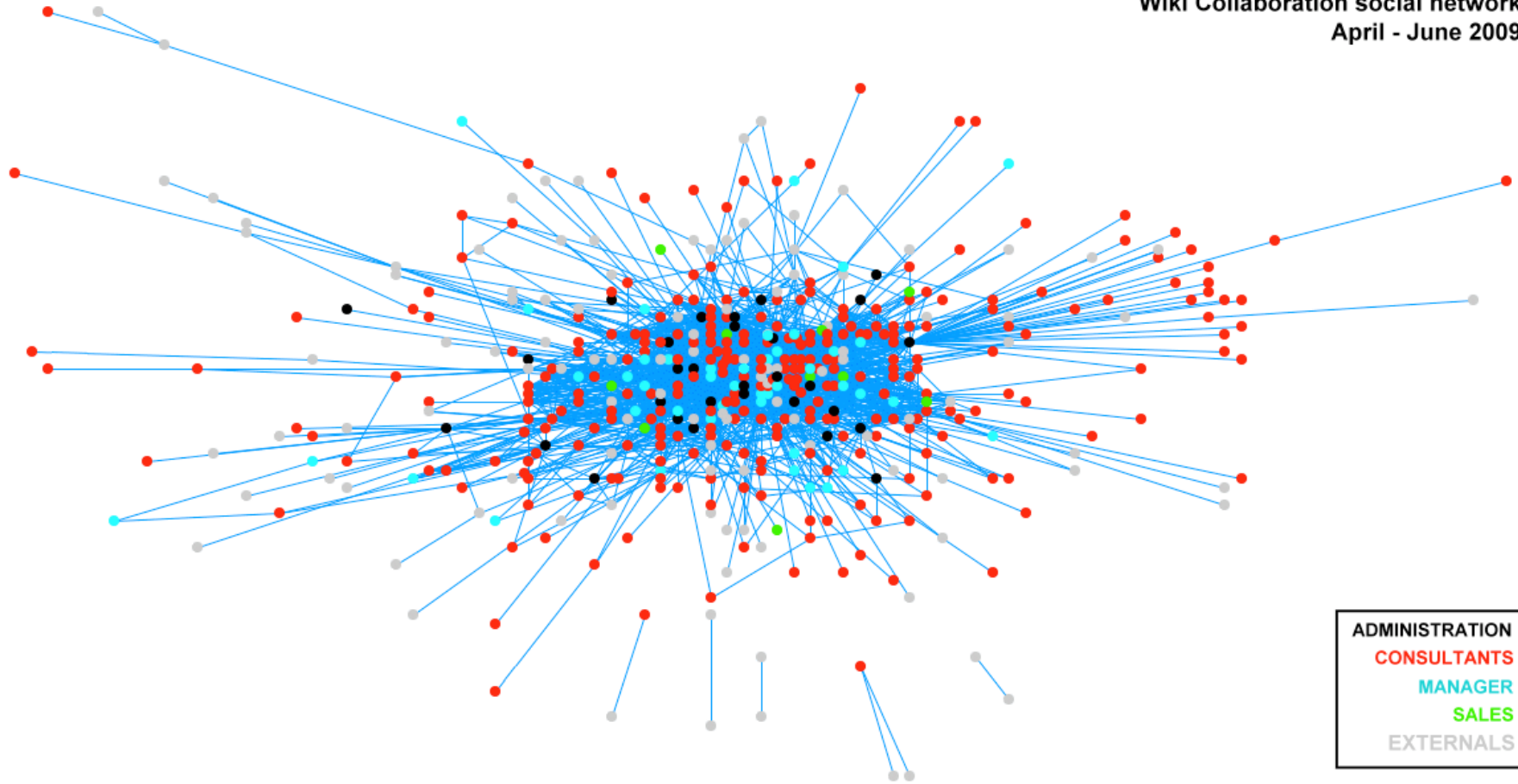
Makes them unhappy.....

E-Mail Communication
May 2009



	All Employees	Administration	Consultants	Managers
# analyzed Employees	188 ¹	14	145	27

Wiki Collaboration social network
April - June 2009



Correlations of the Interaction Analysis

	All employees		Administration		Consultants		Managers	
	Satisfaction	Performance	Satisfaction	Performance	Satisfaction	Performance	Satisfaction	Performance
E-Mails								
# E-Mails Sent	0.0303	0.2787 ***	-0.0228	-0.0284	0.0613	0.2015 **	-0.1156	0.0401
# E-Mails Received	-0.0194	0.3751 ***	-0.5187*	-0.2173	0.0806	0.2369 ***	-0.1416	0.3794 *
Average Response Time	-0.1078	0.0279	-0.5755*	-0.0320	-0.0752	0.0308	-0.0815	0.0714
Contribution Index	0.0197	-0.0405	0.5564*	0.2015	0.0055	0.0289	-0.0575	-0.1532
Electronic Mailing Lists								
# E-Mails Sent to	0.0375	-0.0211	0.4145	-0.0311	0.0441	-0.0475	-0.2382	0.1637
# E-Mails Received from	0.0463	0.1996 ***	0.4821	0.1134	0.0211	0.1211	0.0104	0.1857
Average Response Time	0.0319	-0.0266	-0.4467	0.3802	0.0411	0.0353	0.1409	-0.1047
Contribution Index	0.0517	0.0048	0.3164	-0.0650	0.0459	-0.0108	-0.2824	-0.0690
Mobile Phone Calls								
# Calls Placed	0.1502	0.3057 ***	-	-	0.1924 *	0.2964 ***	0.1514	-0.0038
# Calls Received	-0.0638	-0.0931	-0.4174	-0.4834	0.1543	-0.0701	-0.3813 *	-0.0664
Contribution Index	-0.1107	0.1007	0.3544	-0.4729	-0.3016 ***	0.0549	0.3688 *	0.0003
Mobile Phone Text Messages								
# Mobile Text Messages Sent	0.0930	-0.1393	-0.4656	-0.5529	0.1144	-0.1309	-0.0197	-0.0177
# Mobile Text Messages Received	0.0938	-0.0618	0.1695	-0.3865	0.1050	-0.1525	0.1133	0.2290
Contribution Index	-0.0152	0.0363	0.9627 **	0.3454	-0.0260	0.0190	-0.2318	-0.0437
Corporate Wiki								
# Wiki Page Edits	-0.0856	0.2004 ***	-0.0959	0.1483	-0.1762 **	-0.0177	0.0783	0.4038 **
# Wiki Page Views	0.0081	0.2674 ***	0.1449	-0.2554	-0.0920	0.0079	0.0992	0.3746 *
Contribution Index	-0.0332	0.0728	-0.0165	0.4363	-0.0773	0.0809	0.1496	0.1990

*: p < 0.1 **: p < 0.05 ***: p < 0.01

It matters who you are!

Medium	Most-significant for ...	Metrics to be measured
E-Mail	Consultants	<ul style="list-style-type: none"> • Number of sent E-Mails • Number of received E-Mails
Wiki	Managers	<ul style="list-style-type: none"> • Number of edited Wiki articles • Number of viewed Wiki articles

Medium	Most-significant for ...	Metrics to be measured
E-Mail	Consultants	<ul style="list-style-type: none"> • Betweenness Centrality in E-Mail social network • Degree Centrality in E-Mail social network
Wiki	Managers	<ul style="list-style-type: none"> • Betweenness Centrality in Wiki collaboration social network • Degree Centrality in Wiki collaboration social network