

“Driving Change by Consensus”: dialogue and culture change at IBM

Charles Heckscher, Clark Bernier, Hao Gong, Paul DiMaggio

Abstract: We analyze two “jams” conducted at IBM in 2003 and 2004. These were open discussions on the intranet of the values and practices of the company, involving a large swath of employees. We argue that the actual discussion came reasonably close to the Habermasian standards of practical discourse, with little restriction of expression or distortion by hierarchical differences. We also document two important shifts in the conversation: a movement from a “Traditionalistic” frame emphasizing internal loyalty and stability, to a “Collaborative” frame emphasizing coordination of diverse capabilities around external challenges; and a development of the latter towards greater conceptual sophistication and detailed implementation in practice. While we cannot draw a firm causal link between the jam dialogues and the emergence of a new frame, evidence suggests that the use of open dialogue rather than top-down diffusion helped in developing a new common language and logic.

In 2003 IBM launched a major effort to redefine its corporate values. In itself this is not unusual, but the method was unique to IBM: all employees were invited to join an open “Values Jam” for three days on the company’s intranet. In the first year 3,727 employees actively joined in, posting over 9,000 times, with (by management estimates) another 60-65,000 who tuned in but did not write posts. The next year “World Jam” drew 13,017 active participants and over 35,000 posts in four days. The discussions were free-wheeling, comprehensive, often passionate, often conflictual, involving all levels of the company from top to bottom, across occupational groups and continents. They did not lead to a formal vote, but they did influence the formal values statement that was adopted by the executive team after the first jam.

This, then, was an unusually elaborate and sophisticated attempt at deliberate culture change. It moved away from the top-down method – diffusing values and mission statements down through the organization – that had been tried at many other companies, and indeed only a few years before under IBM’s former CEO, Lou Gerstner. Though there was no formal “theory” of the intervention, it was clearly based on an implicit theory that open, frank discussion is an effective element in changing culture.

The IBM executive team, in our interviews at the time, expressed in varied language a shared view both the substance of the value shift they sought, and the process by which they sought to achieve it. Substantively, they had a definite idea about the culture they did *not* want: the “old IBM,” founded in cultural norms developed by the founding family, the Watsons. These had usually been formulated in a set of three “Basic Beliefs”: “Respect for the individual; the best customer service; the pursuit of excellence.” While these words can be interpreted in many ways, there was a strong feeling among the company’s leadership that these beliefs as developed in practice had fallen out of touch with the needs of competitive businesses. One executive said,

"You can look at all three of the basic beliefs and there were parody versions of them that wound up actually being operative. "Best customer service in the world" became just servicing the customer's machines and kind of an appearance of servility. "Excellence in all things" became a kind of obsessive perfectionism. Platforms changed when IBM decided they would change for 20 years. And "Respect for the individual" became "you can't hurt anybody's feelings" -- became total entitlement. So one of the reasons that there was no talk about the basic beliefs under Lou [Gerstner, the prior CEO] was that he felt those things had been so damaged."

The ideal towards which the top leaders wanted to move was less clearly articulated. One executive expressed it as "a culture of collaboration and innovation" (Yaun 2006, 15). A central element was a more interactive relation to customers generally referred to as a "solutions" orientation: rather than trying to sell products and services, leadership believed it was essential to learn about customers' needs and problem-solve with them in a collaborative manner. Internally, there was a sense that better collaboration in cross-functional teams was needed, crossing organizational "silos." Finally, they believed the culture needed somehow to accommodate greater job mobility and change—including subcontracting and layoffs—which they saw as increasingly essential to competitiveness in light of higher customer demands for innovation and responsiveness. This rather vague conception was articulated by top management in a set of values intended to spur discussion in the first jam (see Appendix G, column 3).

The leadership also had a semi-explicit theory of the best *process* for culture change. Sam Palmisano, who became CEO in 2002, put it this way:

"You could employ all kinds of traditional, top-down management processes. But they wouldn't work at IBM—or, I would argue, at an increasing number of twenty-first-century companies. You just can't impose command-and-control mechanisms on a large, highly professional workforce. I'm not only talking about our scientists, engineers, and consultants. More than 200,000 of our employees have college degrees. The CEO can't say to them, 'Get in line and follow me.' Or 'I've decided what your values are.' They're too smart for that. And as you know, smarter people tend to be, well, a little more challenging; you might even say cynical." (Palmisano 2004, 2)

The Jams were designed to be as open as possible, encouraging disagreement and dissent, with executives and employees of all levels participating as equals in the dialogue. The senior leadership did not advocate for the initial values they had put forward as starting points for the discussion, and the final result was quite different in important ways (see Appendix G, comparison between columns 3 and 4).

The effort raises deep questions for both sociology and management science. Many companies are attempting similar shifts from cultures focused on stability and loyalties, towards emphasis on flexibility, responsiveness, and innovation; but few have attempted to do it through such a process of open dialogue. It is not at all clear that such dialogue is even possible in a hierarchical organization faced with urgent competitive demands, and it is in any case not clear that dialogue is the best method to bring about the desired change. We will look at evidence on both those issues.

Theory and background

Culture change: challenging the top-down model

We treat “culture” as a combination of two components: the shared conception of the desirable social system (Parsons 1968, 136), and the practical implementation of those values in behavioral norms, “the way things are done around here” (Deal and Kennedy 1982, 2:4). In other words, culture has both an aspirational and a practical aspect. We – like most change leaders – are interested not only in the rhetoric used to justify behaviors, but also in the way that rhetoric is worked through in the actual work of the organization.

The “parody versions” of the old IBM values that our informant described above are typical of ways in which identical value-laden words can come to orient quite different practices. The claim of the leaders we interviewed, and echoed a number of times by Jam participants, was that the Watson-era “basic beliefs” had motivated teamwork and effort in the period when IBM computers dominated the market, but that in a more competitive era they had become justifications for defensive behaviors focused on protecting the existing entity and its status order, avoiding real interaction with customers. Thus they sought a formulation of the aspirational language that would encourage deeper outward interactions and more innovation.

The dominant managerial practice of organizational and cultural change, and most theories, have emphasized top-down “leadership,” especially “transformational” leadership of the charismatic type (Burns 2012). The practitioner literature almost always describes a process starting with the executive team; the most common model is to hold a senior leadership retreat, formulate a statement of mission and vision, and diffuse it down through the organization (Simons 1994). IBM itself did something of the sort in the 1990s: the CEO, Lou Gerstner, according to a story we heard multiple times, wrote down a set of eight new company values at his kitchen table and then announced them to the organization (see Appendix G, column 2).

Research about the effectiveness of this approach has been sparse and inconclusive: a recent survey of transformational leadership studies calls for going “back to the drawing board” (van Knippenberg and Sitkin 06/2013). Beer et al (1990) are highly critical of top down “programmable” approaches, citing numerous instances of failure. In the IBM case, the employees we interviewed could not recall Gerstner’s eight kitchen-table principles, even though they were widely posted on walls around the company; when reminded, they interpreted them very differently; and they generally saw little actual effect on their own work.

There are some studies highlighting successful changes that emerged from the middle or lower levels of the organization (Mintzberg and McHugh 1985; Hamel 2000), and a small strand of work has suggested that change is best promoted through deliberate, open dialogue rather than top-down direction. Beer and Eisenstat (2004) have documented a series of efforts in which teams of middle managers conduct interviews throughout their companies and then hold free dialogues with top leadership. Many authors now recommend some version of dialogue as the core of leadership (Charan 2006).

This conception resonates with the sociologist Jurgen Habermas’ ideal of undistorted communication, unaffected by power and manipulation of all kinds. His criteria for such discourse in essence assume full symmetry and reciprocity among participants: thus that everyone has equal rights to participate, to express opinions and emotions, and to reflect on the terms of the discussion itself. These conditions are necessary so that agreement may be arrived

at entirely through, as he has often put it, “the force of the better argument” (Habermas 1975, xvi).

Habermas has recognized that his “ideal speech” is admittedly unattainable in human social systems. In his later work he has developed a notion of “practical discourse,” less stringent than the original conception of the ideal speech situation. In this work we will use the criteria for practical discourse, including freedom of expression and an orientation to understanding.

It is fair to say that the designers of the IBM jams *intended* to approach a Habermasian model of practical discourse, at least within the jams themselves. There was strong emphasis on openness and acceptance of all points of view, a tolerance of emotional expression, and a willingness by the top leaders to accept criticism and wade into contentious debate without exercising their rank. Those at the top of the hierarchy did not direct the discussion, and they did not explicitly advocate for their initial draft values. There were appointed facilitators, but their role was to ask questions to develop and deepen the discussion rather than directing or censoring.

There is a major contrasting, “critical” view arguing that such efforts at dialogue are fundamentally dishonest because all communication is necessarily suffused with and distorted by differences of power and status. As Foucault puts it:

“The exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information . . . It is not possible for power to be exercised without knowledge, it is impossible for knowledge not to engender power.”
(Foucault 1980, 52).

In the management literature, Barker’s (1993) study is well known for its claim that the promotion of problem-solving teamwork, despite its egalitarian veneer, only reinforces management control through mobilization of “concertive” peer pressure.

The main question we address here is to what extent this effort succeeded in generating Habermasian practical discourse – or, conversely, how much it was distorted by relations of authority and other forms of inequality. We will also explore, as far as we can, how well the process succeeded in changing the culture, or at least the mindsets of the participants. We can analyze the first more clearly than the second with our data, but we can draw some inferences about the latter.

Methods

Data and main analyses

IBM provided access to rich material from the period of the two jams in 2003-4. This includes the complete transcript of the two Jams, one year apart, with many details about the respondents including their job responsibilities, divisions, and locations; the time of the posts; and their location within forums and conversation threads. In addition, the first author visited the company twice during that period, observed the first jam under way, and conducted interviews with 10 members of senior management and with a sample of 8 others from lower levels of the company. We reviewed substantial documentation of the Jam planning and other education and communications planning, as well as online records of independent discussion forums by union activists and others with grievances against the company at the time.

As a proxy for power, we coded the Jam posts to distinguish three hierarchical levels of employees: executives, other managers, and non-managers. It was not possible to produce a

more fine-grained occupational taxonomy; although we have job titles for almost all jam participants, they held over 14,000 different job titles, with little standardization, and many titles have changed in the intervening years. We had help from company informants who identified the main clues to the broad levels we are interested in. We also coded for gender, using standard databases of gendered names.

Topics

We began with a topic modeling analysis of all 40,465 posts in the two jams. Topic modeling is an inductive method for identifying themes in large textual corpora (Blei, Ng, and Jordan 2003), used increasingly by social scientists to study such issues as cultural change (DiMaggio, Nag, and Blei 2013) and innovation (Kaplan and Vakili 06/2014). Because topic models elicit themes inductively, they identify topics that are meaningful to participants, rather than based on the analyst's preconceptions.

First, we fit a 30-topic Spectral-initialized Latent Dirichlet Allocation (LDA topic model to the combined posts from both jams.¹ The thirty topics, summarized in Appendix A covered a wide range of themes, including client relations, mentoring, performance incentives, open source technology, IBM's old values, project delivery, leadership and work-life balance, among others. We charted how these topics rose and fell in prevalence across the jams. We also explored several other forms of computational thematic analysis, including use of different programs (IBM's own EClassifier program and QDA Miner); separate LDA analysis of the two jams; and a structural topic model (STM) with a content covariate on jam. This allows topics to have slightly different distributions over words in each jam and serves to keep jam-specific differences in word-usage from fragmenting otherwise related topics (Roberts, Stewart, and Tingley 2016). We generally rely on the first of these, the main LDA model, but have checked the others for significant anomalies and have privileged findings that are robust across the different approaches.

Frames

While topic modeling provides objective evidence of what people are talking about, it does not tell us their normative or affectual stance towards it. This is particularly problematic when there is disagreement: the modeling procedure often cannot distinguish posts that agree with each other from those that disagree, since both may use much the same language.

In effect we are looking for "frames" in the sense of Snow (2004) – that is, a socially constructed set of symbols constituting a patterned interpretation of reality, a way of seeing and interpreting the world, shared by a group. Frames are held and shared by actors in a situation, and shape their actions, even though the actors may not be able to articulate them. The sociologist's process of codifying those frames in effect constructs an ideal type in Weber's (1949) sense,

¹ The spectral LDA program initializes an LDA model that employs a spectral algorithm (Arora 2013). (Implementation is described at (<https://github.com/mimno/anchor>.) We used Gibbs sampling (implemented in the Mallet software package [McAllum 2002]) to fit the LDA model. To choose a model, we generated several models with topics numbering from 15 to 40. For each model, we characterized the themes by inspecting the most prevalent terms associated with that topic and reading the texts in which each topic was most strongly represented. We then checked our substantively-based preferences against a range of automated diagnostic tools in the Mallet package. The 30-topic solution employed here produced clearly distinguishable topics without eliding significant topics present in more granular solution. Before undertaking the analysis, we removed "stop words" (brief common terms like "and" or "is" that do not discriminate among substantive themes) and also added N-grams (recurrent phrases of any length) that occurred more than 25 times in the corpus at a $p < .0001$, given the frequencies of their constituent words.

using his methodology of *verstehen*. The generally-perceived distinction at IBM, described above, between loyalty to the “basic beliefs” and “a culture of collaboration and innovation” is a contrast between two such interpretive and evaluative schemas. We would expect that many of the topics would involve debate between these frames. So topics (from the topic model) may include both frames, and each of the frames may appear in texts representing multiple topics: people might be talking about a set of issues that can be classed as Traditionalistic, but some of them might be critiquing that frame from a Collaborative standpoint. Thus even in those topics that ordinarily appear in connection to a particular frame, the alternative frame is likely to be represented.

To capture these frames we used two of the community types drawn from Heckscher and Adler (2006): Traditionalistic and Collaborative. The theoretical conception of Traditionalistic action is based particularly on Max Weber’s work, though many other theorists have sketched a similar type: it describes an orientation that seeks to preserve an existing concrete group by maintaining custom and tradition as the guide to both ends and the means of action; this also entails emphasis on respect for status hierarchy, behavioral conformity, inward focus, and continuity with the past. Kanter’s (1977) analysis of IBM in the 1970s shows these aspects of the culture at the time.² The Collaborative orientation, by contrast, focuses on an external purpose and stresses teamwork bringing together diverse interdependent capabilities focused on common problems; thus it is more outwardly focused, and it values contribution and capability over status. It also values innovation, personal responsibility (not relying on established rules for justification of action), and willingness to express and work through disagreements.

In these broad terms, the leadership of IBM in 2003-4 can be seen as trying to stimulate a cultural change from Traditionalism to Collaboration. Though these were not the terms used by IBM leadership, these types are conceptually consistent with the perspectives drawn by those we interviewed: orientation to the “Basic Beliefs” – what might be called “old IBM” for short – vs the “culture of collaboration and innovation” referred to earlier, or “new IBM.” In particular, the language of “customer solutions,” which was heavily advocated by senior leadership, emphasized listening to customer needs in depth, and then flexibly combining employee from different areas to meet those needs.

We developed a coding model for Traditionalistic and Collaborative frames by discussing the theoretical concepts in relation to an initial sample of posts, developing a consensus on key indicators or manifestations of the types in this corpus. Thus, we classified as Traditionalistic posts that:

- embraced the idea of the company as a “family” that supported each other and could pull together in crises;
- favored the original Watson values, and were critical of the changes brought by Gerstner after the near-bankruptcy in 1992;
- understood the relation to clients and customers as a matter of making and selling technically excellent products and providing excellent service.
- believed that the answer to most organizational problems was increased integrity and trust based on ethical behavior.
- were oriented towards internal issues, with an assumption that if employees were treated well the company would perform well;

² Though the company was disguised, it is widely recognized as IBM.

- when expressing external purposes, defined them in universal and ethical terms – helping the community, treating customers well – rather than linking them to particular capabilities of and challenges to the company.
- Stressed improved communication between subordinates and managers.

We classed as Collaborative posts that:

- were oriented to external purposes, with analyses of why and how IBM particularly could contribute to them – whether these purposes focused on competitive success or social values;
- saw the company more as a set of capabilities needed to achieve these purposes, rather than an enduring family – and thus more open to subcontracting and layoffs;
- understood the relation to clients and customers as an interaction in which IBM needed to better understand their needs and help find ways to meet them – often called “solutions”;
- sought to improve the company’s ability to bring together the right capabilities for given problems, especially by crossing lines (“silos” or “stovepipes”) of function, geography, etc.;
- were less attached to the existing Watson values, and open to changing them in a changing competitive environment.
- Stressed improved coordination across boundaries of function and expertise, and discussed tools that would help in building these links.

Traditionalistic posts, in short, praised past culture and said the company could return to greatness by restoring the values and practices of the Watson era, such as reviving stable team structures rather than the matrixed or project structure of the present. Collaborative posts defined a great company more around nimbleness and responsiveness, and they focused heavily on practices that would improve cross-boundary coordination around customer solutions.

We selected a random sample of 2000 posts for coding, of which 815 were codable into these two frames.³ 500 of the posts were initially coded independently by two of the authors and compared, reaching “almost perfect” intercoder reliability using Cohen’s kappa(=0.84) (Landis and Koch 1977, 165);⁴ the other 1500 were then divided among the two coders.

From the topic model, we initially (before this coding) identified three topics as Traditionalistic (topics 12, 16, and 28) and four as Collaborative (topics 4, 6, 14, and 17 – see appendix A) by interpreting the words most frequently associated with the topic (DiMaggio, Nag, and Blei 2013, 593). The relation between these *topics* and the theoretically-based *frames* can be illustrated by examining topic 12 in the topic model. It included words like “benefit, ibmer, time, loyalty, contractor, executive, made, today, feel, back, part, make, continue, money, future, change,

³ The other 1100+ did not clearly fit into any of the categories.

We actually used three categories as in the original theoretical Adler-Heckscher theory: the third was “Contractual” – a view advocating clearer rules and job descriptions, and more sharply defined authority relations. There were, however, few posts in this category, and we have not used it in the analysis which follows. This absence of the contractual view is in itself an interesting “dog that didn’t bark” phenomenon, but we we have not explored it here.

⁴ (Landis and Koch (1977) proposed the following criteria for cohen’s kappa: 0.81– 1.00 = almost perfect; 0.61–0.80 = substantial; 0.41–0.60 = moderate; 0.21– 0.40 = fair; 0.00–0.20 = slight; and < 0.00 = poor. Cicchetti (1994) also suggested: 0.75–1.00 = excellent; 0.60–0.74 = good; 0.40–0.59 = fair; and < 0.40 = poor.

changed, worker, decision, pension, past.” We interpreted this discussion as representing the “old IBM”, or Traditionalist, perspective geared towards lamenting the loss of past benefits, the new focus on money and profit, and the diminished value of loyalty. Then in our hand-coded sample, we associated individual posts with topic 12 when at least 20% of the terms were in that topic. It turned out that 60% of topic 12 posts (by that criterion) were indeed Traditionalistic, which partially confirms the association; but almost 20% were Collaborative (the rest were not codable). One can see in looking at texts that certain Collaborative, or “new IBM,” posts, were responding to Traditionalistic ones using many of the same terms but in a negative or critical way.

Findings

The jam process: open discourse or top-down diffusion?

We first want to assess how well the jams met their professed goal of free, open discussion - or conversely, how much they were distorted by power and status differences. We use Habermas’s theory to help inform the assessment.

Researchers have found it difficult to measure the openness of discussion. The most extensive effort, the “Discourse Quality Index” (Steenbergen et al. 3/2003), requires very complex hand coding of full texts, which makes it impractical for the kind of large-scale dialogue in this study. But the scale of the jam data and its detailed nature gives us a chance to apply new methods of data analysis on large texts.

We base our analysis on Habermas’s criteria for practical discourse, adapted to the current case and data. In the absence of a canonical statement of these criteria by Habermas himself, Alexy’s (1989, 120) formulation is widely used:

1. *“Everyone who can speak may take part in the discourse ...*
2. *(a) Everyone may problematize any assertion.*
(b) Everyone may introduce any assertion into the discussion.
(c) Everyone may express his or her attitudes, wishes, and needs.
3. *No speaker may be prevented from exercising the rights laid down in (1) and (2) by any kind of coercion internal or external to the discourse.”*

To approach the first two criteria, we use topic modeling to examine whether participation is distorted by managerial level – whether, for example, higher levels talk more, or longer, or sooner, or establish vocabulary that is later adopted by lower levels. We also use the frame coding and other observations to test whether the lower-level participants appear free to express themselves, including “wishes and needs,” and whether they are free to critique higher-level managers and company traditions. For the third – the absence of coercion – we use general information drawn from the formal jam rules, interviews and observations, and reading of employee associations’ materials.

We also add a further criterion based on Habermas’s abiding concern for process that overcomes divisions and leads to legitimate consensus. This requires not only that disagreements be expressed, but that they be debated in terms that enable discussion. A key distinction throughout his work is whether the speech is strategic – aimed simply at getting the hearer to agree – or oriented to mutual understanding. Thus we we examine whether the dialogue was constructive, with mutual respect and genuine effort at understanding.

We organize these considerations in three basic questions: “Were people free to express themselves?”; “Did management dominate the discussion?”; and “Was there constructive exchange or dialogue?”

To anticipate the conclusion, we do find considerable evidence of relatively constructive and unconstrained communication in the jams, with little domination by groups at the top of the hierarchy.

a. Were people free to express their views?

For Habermas and other discourse theorists the primary and most essential condition is that all participants be free to voice their views. This is in practice very hard to judge: the restrictions on free speech may be very subtle, hardly conscious even to those who feel their limits. Thus is, in fact, the essential point made by Foucault and others in arguing that power cannot be removed from discourse.

We can test a few points from information outside the jams themselves. First, we can say with some confidence that there was no *overt* censorship or retaliation. In all the jams conducted to date by IBM, only one post has actually been removed, because it was an attack on a particular individual by name. As for retaliation: we could not get direct HR data from the time to see if any of the more aggressive posters had been terminated, but we have an indicator that is nearly as good. There were two employee associations operating at the time, one of them backed by the Communications Workers Union, both hosting anonymous web sites highly critical of recent company changes around job security and pensions. Although it is very likely that some of those activists were among the critical posters in the first jam, we found no accusations of intimidation or retaliation on either of their web sites at the time.⁵

That of course does not exclude more subtle forms of suppression and self-suppression. But there are several pieces of disconfirming data. The most obvious was that there was in fact a great deal of open criticism of management through both jam years, with little apparent holding back:

“I have seen the emphasis change and turn heavily towards profit to the extent that our job are now being sold 'Globally' to the lowest bidder. ... IBM knows that worker are important to do their business, it no longer seems to matter which worker, the cheaper the better.”

“I believe honesty and integrity are getting lost under profit and greed. employee are no longer seen as 'family', but merely as asset....”

“I was proudest to be an IBMer when as a company, we really meant and lived every day the company creed of 'respect for the individual'. This began to unravel when we changed the pension plan and started the erosion of our other benefit. How is it appropriate for our executive to be on a seperate pension/health plan while regular employee have had their pension greatly reduced by the creation of the cash balance plan? ... All of this while our former Chairman Gerstner and other executive get

⁵ The two web sites were Alliance@IBM and WatchBM. We conducted a historical search using the Internet Archives (www.archive.org).

weathlier each day. What happened to promise made through the year but then thrown away when it was convenient?...⁶

These do not sound like people afraid of retaliation. In fact, in the first day or two the volume of such posts was so great that some executives were concerned it could really harm the company; but the CEO insisted on continuing without intervention. Furthermore, though the proportion of such Traditionalist criticisms dropped significantly from the first year to the second, there were still a substantial number in the second year. A separate topic model just for the second jam still produced two topics focused on the old values and “basic beliefs”; and in our hand-coded sample Traditionalist posts dropped from 41% to 10% – but 10% still represents more than 3700 posts. Again, it seems that at the very least there were a substantial number of people who did not feel either overtly or covertly intimidated.

The evidence also suggests that while many people were reluctant to participate at first, they became more comfortable and open over time. Numerically, the ratio between active participants and “lurkers” went from about 6% in the first jam to about 20% the second year, and the total number of posts increased by a factor of 3.5. More anecdotally, there are several cases in which posters initially wrote rather vague complaints but in later posts became more explicit about their religious views or sexual orientations.

In these posts, and throughout the first jam in particular, it is very clear that strong feelings were at play, and many people were not afraid to let them loose. This is also evidence of another key criterion of genuine dialogue in the Habermas tradition: there was considerable expression of emotion and personal identities, including very personal aspects of religious and other beliefs – what is often called “authenticity” (Cooke 1997).⁷

b. Did management dominate the discussion?

Most leadership theory would suggest that manager should get out front with some inspiring visions and that would rally employees to unified efforts (for example, (Kotter 1995)). But this is not the pattern we see in the jam discussions.

1. Upper management did not dominate postings numerically: $\frac{3}{4}$ of the posts in the first jam, and $\frac{2}{3}$ in the second, were by non-managers. There was a modest increase in the proportion of high-level executive posts between the jams, from 10% to 14%. Posts by managers below the executive level also rose slightly, from 17% to 21%; and posts by non-managers fell from 74% to 65%. Or, to slice it another way: in the first jam, non-managers who posted had 2.5 posts per person, whereas executives and managers had 2.3 posts each. In the second year, executives had 2.9 posts each, non-executives 2.4. We don't know the exact proportions of these categories (executive, manager, and non-manager) in the population at the time, but this does not seem to be severely distorted.

The changes in percentages might indicate some *relative* dropoff in non-management involvement in the second year (in the context of a substantial growth in participation

⁶ The misspellings here and in other posts are in the originals.

⁷ We did try to use standard dictionaries of emotional terms to analyze the data, but these prove to be far too crude to be helpful. We are developing our own method of sentiment analysis and hope to apply it in the future.

overall), but it is not a very large shift and the non-managers were still by far the largest proportion.

2. When senior managers expressed their own views, especially in the first year, they were likely to draw considerable disagreement. We detail a case below in which a Senior Vice-President set of an intense debate, with much conflict. The CEO also entered the discussion at a number of points. In his first post, he suggested people might be focusing too much on internal trust at the expense of trust with customers (“maybe we’re too inwardly focused?”). The vast majority of responses disagreed with him – arguing that, on the contrary, internal trust was a necessary precondition to external trust.

It is also noticeable that the style of the executive postings, including those of the CEO, were very informal - containing misspellings, expressing uncertainty, wandering a bit. These were evidently not intended as PR statements, but helped create a climate that invited responses from less-informed and less articulate posters. In Habermas’ terms, this indicates a climate of seeking mutual understanding rather than a strategic effort to force agreement.

3. Digging into the details of the interactions, upper management did not dominate in terms of controlling discussions in the first year, but arguably did so a bit more in the second year. One indicator is whether executives are more or less likely to receive responses to their posts. In the first year (Values Jam), a regression analysis showed no significant association between the probability of eliciting a response among non-managers, managers, and executives, whereas in the second year (World Jam) this was not the case (DiMaggio et al. 2018 (forthcoming)).

We prepared a set of bar charts showing the extent to which levels of employees responded to each other; an example is shown in appendix B. If all categories were responding at equal rates to each other, the bars would be of equal height within each of the three x-axis categories. Thus from this example we can see that executives received a slightly disproportionate number of responses from “other” – non-managers – but this difference was not large; other differences are even more minimal. Other charts in this analysis were essentially similar.

A second indicator might be whether managers and executives ~get a disproportionate share of responses when they started new discussion threads. We could imagine that threads started by higher managers might be longer, because lower-level employees would want to be “seen” in them; or they might be shorter, because lower-level employees might be afraid to respond. In fact, there was no significant difference, which suggests – especially in combination with the other evidence – that neither distorting effect was at work. (It is of course possible that the two effects are canceling each other out. But that is unlikely, given the other evidence above and our sense from reading a great many of the posts over time.)

4. Using the topic modeling method, we are able to view shifts in topics and in word usage within topics over time, especially between the two jams. If executives were dominating, and others were following along to conform, we would expect to see the topics and word usage of executives to be echoed later in time by the other groups. This is not what happened.

For topics, we first constructed a set of charts of the form shown in Appendix C – one for each of the 30 topics extracted from the corpus. These charts trace the evolution of the topics through the six days of the jams, over two years, for each of the three management levels. For the most part there is not much difference among the levels, especially in the first jam. Managers and executives were actually higher in this jam than non-managers on two of the topics we interpret as focusing on old values (12 and 16), and the three levels converged more, at a lower level, in the second jam.

In the second year the executives did “step out” somewhat more in a few instances: in particular, they were significantly higher than one or both of the other levels on several topics having to do with the shift from pure product selling towards customer solutions. (This included both topics with a rather general solutions orientation, and some with a more practical focus on how to organize and motivate the necessary cooperation.) There is no evidence in the time sequence, however, that they led any kind of stampede: the non-executive managers and non-managers stayed at pretty much the same level throughout the second jam, rather than rising to meet the executives. Whatever was going on in that divergence, it was not a matter of everyone falling into line.

We also looked at usage of particular words; again, a critical perspective of the Bourdieu type might expect that the words used by higher levels would be echoed at lower levels because of the imbalance of power. But we found no consistent tendency for managers and executives to use words that are later picked up by other levels. For example, “solutions” language – a key aspect of the strategic push by top leadership – was not led by executives and managers. In topic 19, non-managers were much higher in the use of “solution”, while managers tended to use “engagement” (See Appendix D). Throughout all the topics, executives tended to use the word “solution” less than the other categories in the first jam, and be around the median in the second jam (See Appendix E).

6. We applied the same kind of reasoning to analysis of our sample of 2000 posts coded into the Traditionalistic-Collaborative frames. In basic agreement with the topic-model analysis, there is a surprisingly high level of Traditionalistic posts by executives and managers in the first year: for each of those groups, these comprised about half of the posts that could be coded. Unlike for the Traditionalistic *topics*, the non-managers were somewhat (not dramatically) higher, at 60%. Traditionalism in *all* the groups then dropped sharply and at roughly the same rate in the second jam (to 11%, 14%, and 19% of coded posts), while Collaborative posts rose.

It would be a stretch to say this shows higher managers setting a path that was followed in the second year by non-managers. There was a high level of division between frames *within* the management ranks in the earlier period, which was very far from a united managerial-executive downward push of Collaborative values.

In sum, the evidence from many directions is consistent in rejecting the hypothesis that power differences greatly affected the discussion.

c. Constructive debate

Dialogue requires that disagreements be expressed and engaged. Considerable research and practical concern has centered on the tendency for people to cluster into bounded groups with similar views and to avoid engagement beyond their “tribes”; thus their discourse across tribal boundaries is likely to be strategic rather than oriented to understanding. Some research has suggested that discussion and conversation is likely to exacerbate this tendency (Levendusky, Druckman, and McLain 2016; Myers and Lamm 1975). But the Habermas approach of practical discourse is intended to overcome such clustering by creating conditions for understanding across clusters.

We have already seen considerable evidence of substantial cross-boundary interchange in the jams – in particular, that the three employee levels respond to each other with very little in-group clustering. To this we can add that there is considerable mixing of frames within topics. For instance, we originally classified topics 12 and 16 in Appendix A as Traditionalistic topics based on the importance of terms like “basic beliefs”, “loyalty”, and other keys to the old days. In our sample coding for frames, they are indeed predominantly Traditionalistic, but with a strong minority of Collaborative postings (59%-19% for topic 12, 47%-20% for topic 16). Topic 12, the most heavily Traditionalistic topic, was also the one where we found the highest proportion of posts that deliberately reached out and tried to bridge gaps between the two frames.⁸ This evidence indicates *some* tendency to pile on agreement with others, but also a considerable willingness to engage divergent views.

An even better indicator is the development of frames within discussion *threads*. We can’t judge that quantitatively for the jams as a whole, since it would require a much larger sample than the 2000 we coded for frames; but we can look in detail at some specific threads. We selected one particularly important and contentious thread for a deeper dive. In the middle of the first jam, a Senior Vice-President posted:

“I spent many hours on values jam last night, reading as many of the post as possible. One thing that struck me is that a number of people still long for the day of the basic beliefs [the original Watson values statements]. I think that is a fine sentiment, but we as a company need to grow and must adapt our thinking to better reflect the reality of business in the 21st century....One last thought: the basic beliefs were dictated to the company by one man. Our entire employee population is being given a say in establishing the company's values for the 21st century. Let me ask you to consider which approach says more about our company and the respect we hold for our employee around the world.”

This set off a strong reaction because it touched directly on the central emotional theme of the jam: the end of the Watson era of stability and security, and the move towards a more externally-focused “businesslike” orientation. There were over 130 responses over the next day, making this one of the largest threads. 41 of the posts directly challenged the executive who started the thread and 61 – almost half – generally disagreed with his view, supporting the “old” values against his definition of needed changes.

⁸ This “Transitional” coding was less theoretically grounded than the Traditionalistic-Collaborative ones; we were just making intuitive judgments of whether the post was trying to reach out to the other side.

We looked more closely at the interchange among hierarchical levels by constructing a network map of responses, included as Appendix F. The initial circle of responses was directed at the original poster, and included reasonable representation from all three employee levels. It then continued into a second generation in which people were responding to each other, not to the original poster; there was one executive and a few managers among the early posters of this second generation, but it was overall more heavily weighted to non-managers. The discussion later continued into a third and fourth layer and even a small fifth layer. Very little of it if any was simply agreeing with higher levels, and much of it was very developed argumentation.

In general, there was considerable interaction across levels and also across frames. almost 60% of the posts in the thread were directed to someone who did not agree with the poster, and over 75% were directed to someone from a different level. These numbers run strongly against the tendency to tribal clustering.⁹

An effective dialogue in the Habermas tradition, as mentioned above, requires that differences be debated in terms that enable discussion – what is often known as “civility”. We reviewed the entire thread for whether the expressions were constructive or destructive – that is, whether they tried to shut down discussion with sarcasm, scorn, or other belittling tactics; or whether they engaged the other side with respect.

We found none that could unambiguously be classified as destructive, but fifteen or so did show a dismissive or scornful tone – for instance (from a non-manager):

“Well, I don't think I could disagree with you more. Nothing in ibm original belief was lacking, and they certainly never 'almost killed this company'. ... it's somewhat sad that you could find fault with ibm basic belief, or the man who wrote (not 'dictated') them. He quite simply thought much more of his employee than you seem to today....”

But the majority, even if they expressed strong disagreement, did it with justifications that were more open to discussion, including some evidence:

“I don't think those of us who remember the 'old' basic beliefs are longing for those day so much as the ethos of those day: the spirit of going the extra mile, pitching in wherever you could help, keeping the customer satisfied by making sure that they had all the right IBM solution installed and running smoothly. While today's economic reality means that we must be tightly focussed on the bottom line, putting 'the number' before all else has had a chilling effect on the ability of the average worker bee to create solution or resolve customer problems. I have had other ibmer refuse to help on Sev 1 problem because providing such help wasn't in their budget.”

And many engaged in real exchange, trying to deepen the understanding and interpretation of the core values in response to the challenge:

“I agree with [another poster's] comment, particularly with how the original belief were passively stated and should be adapted. I would keep the second value - Excellence...through innovation - untouched but would amend two of the other values as follows: - Total commitment to the customer - Integrity that earn and build trust

⁹ It is logically possible that these numbers represent a “tribal” battle between levels, in which there was much interaction but the levels clustered around different ideologies. However, there were substantial divides within as well as across levels, which largely rules out this possibility.

and respect with employee and others I have seen quite a bit of deterioration in integrity and respect in our company; therefore, I have made this third value more explicit.”

In all, we found 56 posts – about 40% of the total – that supported the original poster’s view that change was needed in the company’s values. 35 of these were bridging or transitional comments suggested some need for revision without complete change.

From this close reading, and other reviews of the posts we conducted for other purposes, we conclude that there was a high degree of constructive exchange: people disagreed with each other openly; they largely expressed those disagreements in civil terms that invited further dialogue; and they often sought to use the interaction to develop new formulations of the key issues.

Major changes during the jam discussions

While we documented a large number of discernable shifts of various kinds over the course of the two jams – changes in topic frequencies, in word usages, in activity of various groups, and so on – two major moves stand out: a decline in the traditionalistic frame in favor of a collaborative frame; and an elaboration of the collaborative frame, moving from vague rhetoric to a coherent frame with both elaborated justifications for collaboration and focused ideas for implementation. We see in these both aspects of culture as we have defined it: aspirational language and practical working-through. The jams thus give us at least a peephole into the whole culture bundle: the activity of subjects, their interpretations of events, their value commitments, and the ways they apply those commitments and interpretations in practice. Not only that, the scene we glimpse through this peephole is one of transition from one frame to another, so that we can get some ideas about how the movement happens.

The aspirational, value-oriented language in the first jam was heavily oriented towards internal loyalty and fairness; the dominant theory – sometimes implicit, often explicit – was that the company benefits most when employees are treated well. In the second the aspirational language was much more oriented towards interacting with outside forces: understanding customer needs and adapting to business changes. The latter, Collaborative frame was developed in far more detail on both the general values dimension and in terms of practical working through.

The general shift between frames is clear in the sample of 2000 posts we coded. In the first jam, 41% of the posts were coded Traditionalistic and 13% were coded Collaborative; in the second the proportions were almost reversed: 10% Traditionalistic, 44% Collaborative.¹⁰ Drawing on the topic model (Appendix A, the three most frequent topics in the first year year (16, 12, and 28) were ones whose posts were predominantly Traditionalistic and dropped sharply in year 2; the four most frequent topics in the second year (1, 2, 6, and 30) were ones whose posts we coded predominantly Collaborative, and all jumped strongly from the first year to the second.¹¹

In the early phases of the jam, as well as in our interviews with senior leadership, the aspirational frame was quite vague. One senior jam leader told us:

¹⁰ 1% in the first year, and 4% in the second, were coded Contractual. The rest were judged uncodable – the frame was not apparent.

¹¹ As mentioned earlier, a post was considered part of a topic if it met a prevalence threshold of 20% – that is, 20% of the post’s terms were associated with that topic.

“I said to Sam [Palmisano], ‘What do you want them to do different?’ He said, ‘I want them to live the values; I want them to be obsessed with their clients; I want them to innovate, not only on behalf of their clients. And then he paused and said: Then there’s this thing about trust.’”

Over the course of the year spanning the two jams, this general perspective was, in effect, *developed* through the process of dialogue into more conceptually elaborated frame. In the first year the word “collaboration” is often used very generally to mean any form of cooperation, including informal teamwork:

“I work on an awesome team. Smart, dedicated, experienced folk. But we have not realized our potential due to a lack of true collaboration, teamwork, and trust. These are the values we must embrace to excel.”

In the second year the Collaborative frame is much more consistently developed to mean complex coordination across lines of function and level, combining different kinds of knowledge, and requiring more formalized processes. There are much clearer arguments for the operational justification for collaboration – that it enables the combining of disparate capabilities

“I think that the key to open innovation is to attract the best possible people from around the world to work together as a community. ... it is an extension of what we have already been doing applied to area where software is important and thus being able to ‘read’ and share software is mandatory. All kind of ‘rule of the road’ have evolved to make sure that open community work in an orderly manner. ... Open collaborative innovation is a major way that civilization advance. As the problem we are facing get tougher and tougher and as the tool for collaborating get better and better (e.g. the Internet) I expect that open collaborative innovation will be increasingly important to progress around the world.”

This working-through process appears to emerge most clearly in a set of topics around the solutions strategy, discussing the changing relation to clients and the internal processes needed to coordinate around their needs. These were among the topics with the largest share of the second jam; and significantly, they were among the most heavily dominated by the Collaborative frame. They were not debating the rightness of the approach, but rather working out problems of implementation. Reading through the posts with highest percentage of words associated with these topics, one finds diverse efforts to figure out how better to coordinate internally to meet the needs of external customers.

Ideological debates clearly diminished between the two jams, and posts swung towards critiquing existing procedures and proposing new ways of doing things. The jam setup encouraged this shift: the second one was presented from the start as focused on generating practical suggestions for improving implementation of the core values that management had revised and promulgated based on the first jam. (It is nevertheless encouraging to see that our analytic methods clearly show this shift occurring.) We ran separate topic models for the two jams, and classed the resulting topics (30 for each jam) into batches – one of topics around the old values and objections to new practices (loyalty, the Basic Beliefs, religion, offshoring and job security, and pensions); another on practical tools and methods. In the first year, there were 11 topics in the first batch and 2 in the second; in the second year, the ratio reversed (2-12).

There were some significant differences in emphasis among the managerial levels. On two topics, executives' participation rose most strongly in the second year, followed by managers: topic 4, centered on solutions strategy, and 18, on managing incentives and branding issues in these complex sales. On these topics, it appears, the executives were working on clarifying their own views of the Collaborative frame (recall that there were a lot of Traditionalist posts by managers in the first year). But the lower levels, especially non-managers, were more active in the second year on other "solutions" topics focused on somewhat more concrete mechanisms of cross-unit information-sharing and relating to customers (6, 17).

In the first year, even topics that might have involved practical suggestions, such as remedies for offshoring, were almost entirely focused on consequences for employees – for example, arguments that offshoring is bad because it undermines loyalty – as opposed to consequences for the company's success in the current environment. The "practical" topics in the second year, by contrast, dug deep into issues like internal databases, project management techniques, delivery contracting, and tracking tools. These include two of the highest-frequency topics in the second year: topic 1, where the top terms are "system, tool, data, information, time, note, access, report, application", and topic 30, where the top terms are "product, development, software, quality, customer, developer, test, support, design, application, requirement, code, tool, system, standard, component, user, release, feature, testing." Our coding showed that these topics focused predominantly on the problems involved in bringing together different parts of the organization for problem-solving centered on customers.

To show one example from a non-manager:

The Client IT architects are being asked to know every product in the IBM line which means that they have the '40000 foot' view. customer would love to have someone on hand with specific deep skills who can help and advise them like the sis used to do. In SWG the I/T specialist have these skill. However each ITS is asked to help drive sale so it is difficult to just hang out at a customer site for a day unless there is a specific opportunity to work on. The current model is to sell service to provide the hand-on mentoring but most customer seem to only want this type of help on a project basis. So there is nobody there to cover the old SE role. It would be great if there were people in each business unit with the deep skills who could be allocated to large customers where their presence would help make project successful improve relationship with IBM which would over the long-term drive more revenue. ..."

These discussions show the extent to which the Collaborative framing was increasingly incorporated in a real way into people's thoughts about working relations, rather than remaining as slogans on the walls.

Thus the overall picture from these and other analyses, indicates a consolidation of a collaborative frame – most strongly among executives and managers, but also among non-managers – and, moving beyond this ideational phase, a developing application of the frame to actual practice at work.

Did the jams change the culture?

Did the jams actually make an impact on the company's culture? This question goes beyond the jam data, but those data have some relevance to it. And the question is so crucial in the end that it is worth an excursion into (cautious and informed) speculation.

The evidence we have reviewed indicates that the jams approximated the Habermasian model of dialogue to a considerable degree, and that in the year between the two jams the nature of the conversation shifted in important ways. We cannot, however, establish a causal link between those two facts. In fact, we can be quite sure that the jams were not the sole or even principal cause of the shifts. There were many things going on during those twelve months, as well as before and after, that were clearly influential.

To be clear, no one would claim that the change process as a whole was merely a matter of open dialogue: it was only the jams themselves that followed those norms to the extent we have shown. As mentioned earlier, a team of top leaders proposed an initial draft and revised them in light of the conclusions drawn from the discussion. The broad outlines certainly reflected the prior “absolute conviction” of the senior team going in, though it was substantially affected by the discussion (see Appendix G, columns 3 and 4). David Yaun, the vice President of corporate communications at the time and one of the jam leaders, described the process with the paradoxical phrase, “Driving culture change by consensus” (2006).

We would not expect the jams by themselves to transform a culture: everything we do know about changes in frames suggests they do not happen over three days – especially when the experience is loose in this way, with people dropping in and out, many watching without actively participating, most people posting only once or a few times.

Why, then, conduct these jams, which were after all quite costly in time and attention, especially of senior management? Some stock analysts asked that question at the time. Why not just proclaim the values and let them diffuse top-down through the organization, as many management theorists would advocate?

Our evidence suggests, though it certainly does not prove the validity of, three reasons:

First, The jams certainly helped senior executives get out of their own bubble, and to get in touch with the concerns, framings, and language of employees throughout the organization. The story is told that that Sam Palmisano came into an executive meeting the week after the first jam with the entire transcript in his hands, threw it on the table, and said to his team, “I’ve read all of this; have you?” As we have seen, many executives found out first-hand during the jam that their way of framing the issues did not resonate with many employees.

Although the final set of values was structurally similar to the original, it also differed in important ways. The initial statement of “excellence through innovation” became “Innovation that matters—for our company and for the world”; “Commitment to the customer” became “Dedication to every client’s success.” These changes involved real conceptual development and clarification (for elaboration of this point, see Applegate et al (2006, 8ff.)). They were not produced by the jam in any objective sense – no one wrote those words, and there was no process of approval in the discussion; but they reflected changes in the thinking of the senior team as a result of their participation in the discussion.

Second, as described above, the jams may have helped to *develop* a widely shared common frame. In the early phases of the discussions the emergent frame – what we have termed Collaborative – was expressed in inconsistent and fragmented ways by individuals; by the end of the second jam, many people were using an elaborated shared language to communicate developed ideas around practice.

We reviewed above examples of this development during the jams themselves. In our own interviews with people who had not participated, we also saw some evidence of ripple effects – echoes of the themes of the first jam that they had picked up in general conversations with their peers. Several people said they had not realized the full import of the “solutions” language before the discussions. One rumination went like this:

“Dedication to the client success’—what does that really mean? I think it means that we do not just get rich off a client by selling solutions the client does not need at a cost the client cannot afford. It means that we put political in-fighting and red tape aside to give the client the kind of result that will build our relationship for life. It’s about relationships that create repeat business. There is a difference between ‘customer’s success’ and ‘client’s success.’ The word ‘client’ implies our drive to develop a long-term business partnership rather than just sell some servers to a customer who comes in.”

Third, the jams may have played a part in marginalizing and delegitimizing the “old IBM” frame by exposing it to genuine debate that expanded the understanding and sense of possibility of collaboration. This is perhaps the most speculative and controversial of our suggestions; it is a plausible interpretation of the dynamics as we know them, but will certainly require further research to confirm and develop.

For Weber, the main mechanism for changing cultural frames is charisma, and charisma is usually associated with a top-down “great man” approach. But Kalyvas (2002) suggests that dialogue represents a second type of charisma sketched, though never fully developed, by Weber – another avenue for redefinition of value patterns. This redefinition is always a matter of contest between symbolic systems, but it can be accomplished through various processes, some of which approach democratic discourse. The major points of this redefinition are that it formulates ideals that are relatively inclusive, that “make sense” to a wider swath of people than the older versions; and that it connects to everyday routines in a way that “organize[s] practical behavior into a direction of life” (Weber 1993, 59; cited in Kalyvas 2002, 87).

It appears from what we can see in the jams that they may have played a significant role in just such a process. The discussion engaged people in actively thinking through how a more collaborative system would work, and how they might fit in it. Many people came out with a sense of genuine excitement about the potential for wider interaction within and beyond the walls of the company, and hope that those changes were actually feasible.

“What a forum! To be given such that we can honestly and soberly consider what values we share and how we differ; and to get a sense of what issue we’re dealing with, what concern we have. ... To be given such that we can gain a sense of the whole: our individual and benefiting position on our 320,000 member team I’ve never felt this before! ... To be encouraged to implement a productive approach toward common objective via common values (employee’s, customer’s stakeholder’s. etc.)”

There is an alternate interpretation of these events that harkens back to the “critical” perspective cited at the start: perhaps the Traditionalistic frame was suppressed; perhaps there were many people who believed in it who simply fell silent, their discontent continuing to seethe beneath the surface. All we can say is that it doesn’t look like it from our evidence. The Traditionalistic view was not only loudly and widely voiced in the first year; it was very present throughout the second year’s jam as well. But it just lost traction, with fewer responses. It also failed to develop:

the second year's Traditionalistic posts were much like those of the first year, complaining about management policies around subcontracting and pensions, with no elaboration of practical ideas of how to improve things (other than returning to the past).

There were never accusations of suppression – either in the jams, from the Traditionalistic posters, or outside it; in our formal and informal interactions onsite; or in the union and association web sites. We see the latter as particularly important, since it seems very probable that if an underground resistance movement had continued those organizations would have reported it and reflected it. Instead, they reported no suppression at the time, and their own strength gradually weakened in the years after. Some Traditionalists *may* have dropped out in the second year from a sense of powerlessness, and others may have left the firm, but they did not develop any kind of underground oppositional voice or network.

By contrast, there is a published case study that shows what a genuinely distorted process looks like: Da Cunha and Orlikowski's (2008) description of a similar management-sponsored, web-based online forum in a European petroleum company in the late 1990s. Much like the early phases of the IBM jams, many employees voiced bitter complaints about recent changes, recalling an earlier period of loyalty and security. But unlike IBM, the management in this case did not leave things open: they suspended a key leader of the anti-management faction, and issued verbal warnings to employees who participated in the forum. A feeling of repressed rebelliousness then spread. Employees began posting blank messages – one of the protesters told the researchers, “It was a message that I think was very strong. It was condensed, like it was saying: ‘We can't speak out but we don't want [the company] to die’” (da Cunha and Orlikowski 2008, 150).

This was obviously a very different kind of process from that of the IBM jams. The result was also different: the company remained deeply split, but the dissatisfaction moved underground. There was certainly no consolidation of a new perspective or energy around practical directions.

We came across no such sentiments in our various readings of the IBM jam material. Many participants, by contrast, expressed very positive feelings about the jams, and often suggested continuing the discussion:

“This world jam is wonderful for establishing and enhancing the culture of IBM and a business area specific Jam could potentially be even more beneficial to the company.”

Some readers may feel that the “wrong” side won out at IBM: that subcontracting, defined-contribution pensions, and the general devaluation of loyalty are bad things. That is, however, independent of the question of whether the jams were effective as a means of culture change. As far as we can tell from the evidence at hand, the jams contributed to a process that built a new perspective and embedded it in practice throughout the company, without forcing resistance underground.

Further research could help in clarifying the impacts of the jams. One thing we have learned from this study is that no single method is adequate for grasping this complex phenomenon: we started with topic modeling, but saw increasingly that it could tell us only part of what we wanted to know, and therefore supplemented it with our frame coding, analysis of interviews, and other evidence.

The basic approach we have taken could also be applied to other major online forums and debates, to test effectiveness of open web dialogue in other contexts. For example, the web

discussion site reddit has been through two intense ideological battles over the handling of conflict: once in 2015, over attempts to restrict hostile and demeaning posts; and currently in 2016-7 over claims of censorship by pro-Trump users. The texts of these very extended and intense debates are freely available to researchers.

Attention to open public dialogue has risen in recent decades, both at a philosophical level represented by Habermas, and at a practical level represented by rapidly-growing forums for conversation such as reddit or Twitter, and the rapid development of techniques for group facilitation and visioning. The IBM jams give us a glimpse into the actual workings of such dialogue, which should be further explored.

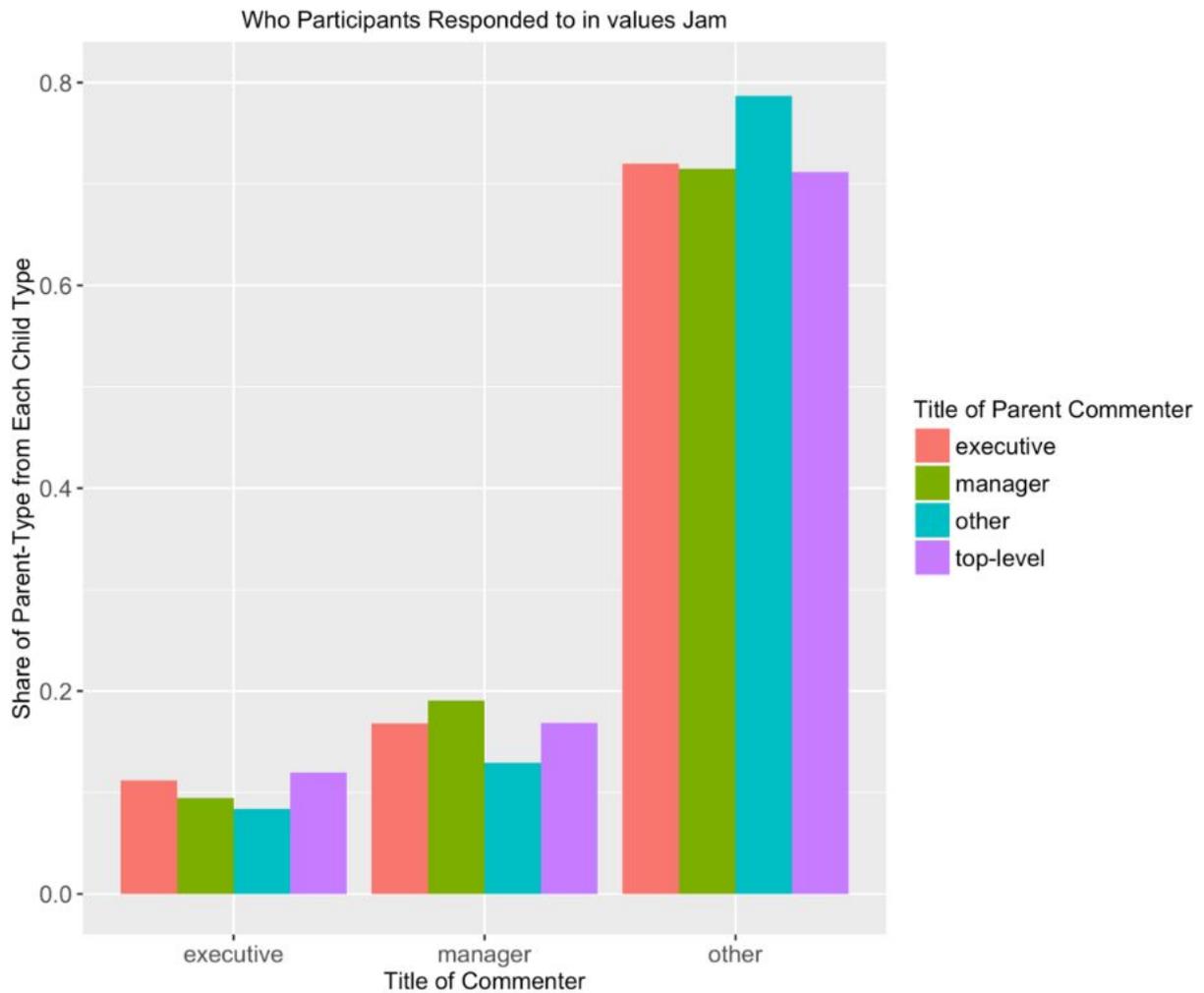
Appendices

Appendix A: 30-topic Spectral LDA topic model results

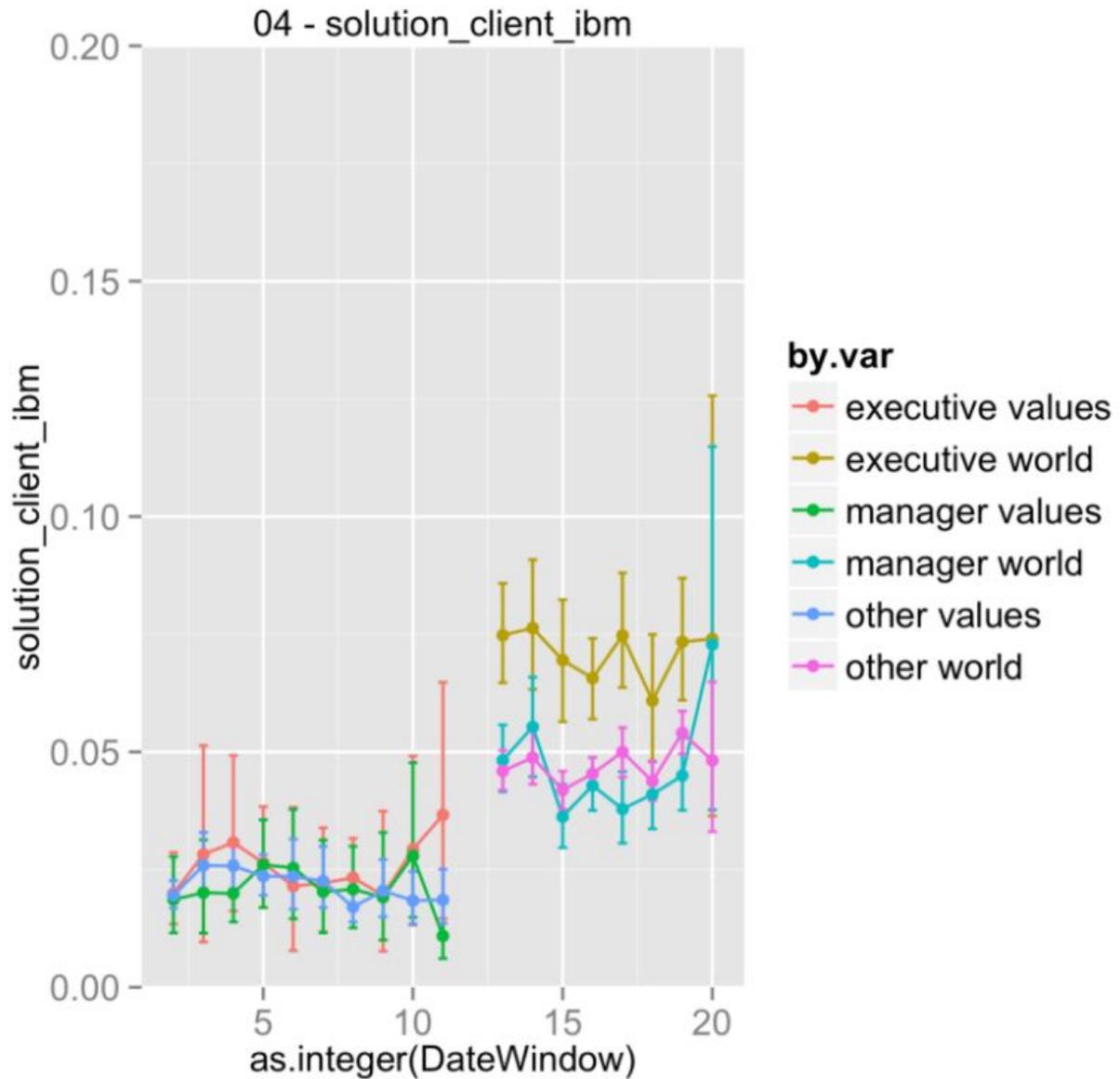
Our categorizations	Top terms
01: tools	system, tool, data, information, time, note, access, report, application
02: global company	ibm, country, global, world, local, community, diversity, region, india, company, international
03: employees & leadership	employee, management, survey, business, team, leader, feedback, role, pbc, manage, result, coaching, performance, goal, important, agree, improve, managing, area, coach
04: solutions (strategy)	solution, client, ibm, business, service, demand, technology, model, industry, capability, organization, bcs, strategy, offering
05: internal knowledge tools	information, find, tool, ibm, search, site, web, link, ibmer, page, document, content, access, knowledge, make, intranet, profile, bluepages, list, database,
06 customer relations	customer, ibm, business, client, service, product, solution, make, provide, relationship, deliver, internal, ibmer, focus, sell, customer's, understand, time, sale, order, competitor
07 mgt empowerment	manager, decision, level, approval, budget, make, trust, business, control, management, responsibility, give, authority, empowerment, delegation, manage, expense, executive, process, empowered, accountable
08 work-life balance	work, ibm, employee, time, day, hour, family, home, life, working, week, office, balance, vacation, year, child, company, benefit
09: systems? competitor products?	ibm, price, system, buy, purchase, order, machine, equipment, travel, computer, employee, dell, car, card, thinkpad, cost
10 open source, technology	open source, technology platform: Open source, technology linux, server, ibm, application, software, window, microsoft, open_source, platform, support, user platform
11: bureaucracy, procedures	Auditing, control risk: control, process, risk, audit, standard, rule, policy, security, business, compliance, requirement, management, review, business_controls, procedure, guideline, ensure, auditor, legal

12 loyalty	ibm, employee, company, year, job, benefit, ibmer, time, loyalty, contractor, executive, made, today, feel, back, part, make, continue, money, future, change, changed, worker, decision, pension, past
13: mentoring young employees	ibm, education, mentor, training, experience, mentoring, ibmer, learning, learn, school, class, year, student, skill, knowledge, great, opportunity, community, university, courses, organization, new_hire, college, learned, technology
14 customer responsiveness	problem, customer, issue, support, solution, solve, call, time, situation, question, answer, needed, fix, team, contact, find, case, understand, person, response, day, provide, area,
15: innovation	innovation, idea, ibm, research, patent, innovative, program, innovate, project, process, group, team, ibmer, new_ideas, part, creative
16 old values	values, company, ibm, employee, integrity, respect, set, customer, respect_for_the_individual, trust, individual, belief, basic_belief, business, important, commitment, action, excellence, live, principle, people, ibm_values, world, company_values
17 solutions (practice)	ibm, customer, solution, service, product, partner, software, sell, marketing, market, offering, sale, hardware, smb, selling, channel, business_partners, brand, make, small, support, swg, server
18: revenues (sale-brand-team), measurement, alignment	sale, brand, team, client, revenue, account, bcs, opportunity, measurement, deal, incentive, igs, ibm, unit, model, resource, sector, profit, solution, target, s&d, focus, organization, silo, drive
19: project delivery, meeting commitments	project, delivery, client, sale, engagement, deliver, team, contract, solution, expectation, process, account, ensure, deal, requirement, delivery_excellence
20: performance ratings and rewards	employee, award, reward, performance, manager, year, rating, recognition, team, based, pbc, give, bonus, system, contribution, pay, incentive, recognize, compensation, salary, individual, promotion
21: meetings	team, meeting, work, time, face, people, communication, working, event, call, location, meet, day, remote, phone, person, group
22: bureaucracy, red tape, process tools	process, time, tool, change, work, system, internal, make, place, order, request, business, agree, complex, reduce, simple, step, control, procedure
23: contracts, selling	contract, deal, customer, client, ibm, proposal, term, pricing, price, service, business, legal, bid, agreement, issue, risk, negotiation, procurement, condition, bcs

24: career opportunities, skills	skill, people, job, ibm, opportunity, experience, area, person, role, resource, management, manager, career, work, position, technical, employee, knowledge, professional, project, move, company, talent, good, find, individual, training, assignment, staff, certification, level: skill, people, job, ibm, opportunity, experience, area, person, role, resource, management, manager, career, work, position, technical, employee, knowledge, professional, project, move, company, talent, good, find, individual, training, assignment, staff, certification, level
25: time, cost, year, project - time and resources	time, cost, year, project, resource, work, money, plan, number, spend, budget, result, investment, expense, hour, igs, target, due, utilization, funding, increase
26: future of the business	ibm, business, market, company, technology, industry, world, growth, opportunity, future, area, competitor, investment, innovation, strategy, today, big, focus, marketplace, create, competition
27: cost targets, measurements, budgets & planning	time, cost, year, project, resource, work, money, plan, number, spend, budget, result, investment, expense, hour, igs, target, due, utilization, funding, increase
28, team people IBM	team, people, ibm, work, individual, organization, ibmer, success, make, culture, result, trust, goal, change, focus, leader, important, personal
29 junk	Junk: people, work, make, time, thing, good, day, company, lot, agree, great, find, point, back, part, feel, made, problem, start, put
30 product development	Product development: product, development, software, quality, customer, developer, test, support, design, application, requirement, code, tool, system, standard, component, user, release, feature, testing

Appendix B: who participants responded to (example)

Explanation: the left-hand bar indicates that roughly 10% of executive posts were responding to other executives. The left-hand bars in the other two groups indicate that about 15% of executive posts were responses to managers, and about 75% of executive posts were responses to non-managers (“other”).

Appendix C: topic trajectories (example)

Explanation: this indicates that topic 4, with terms emphasizing solutions, rose considerably between the two jams, and that executives rose more than the other two levels.

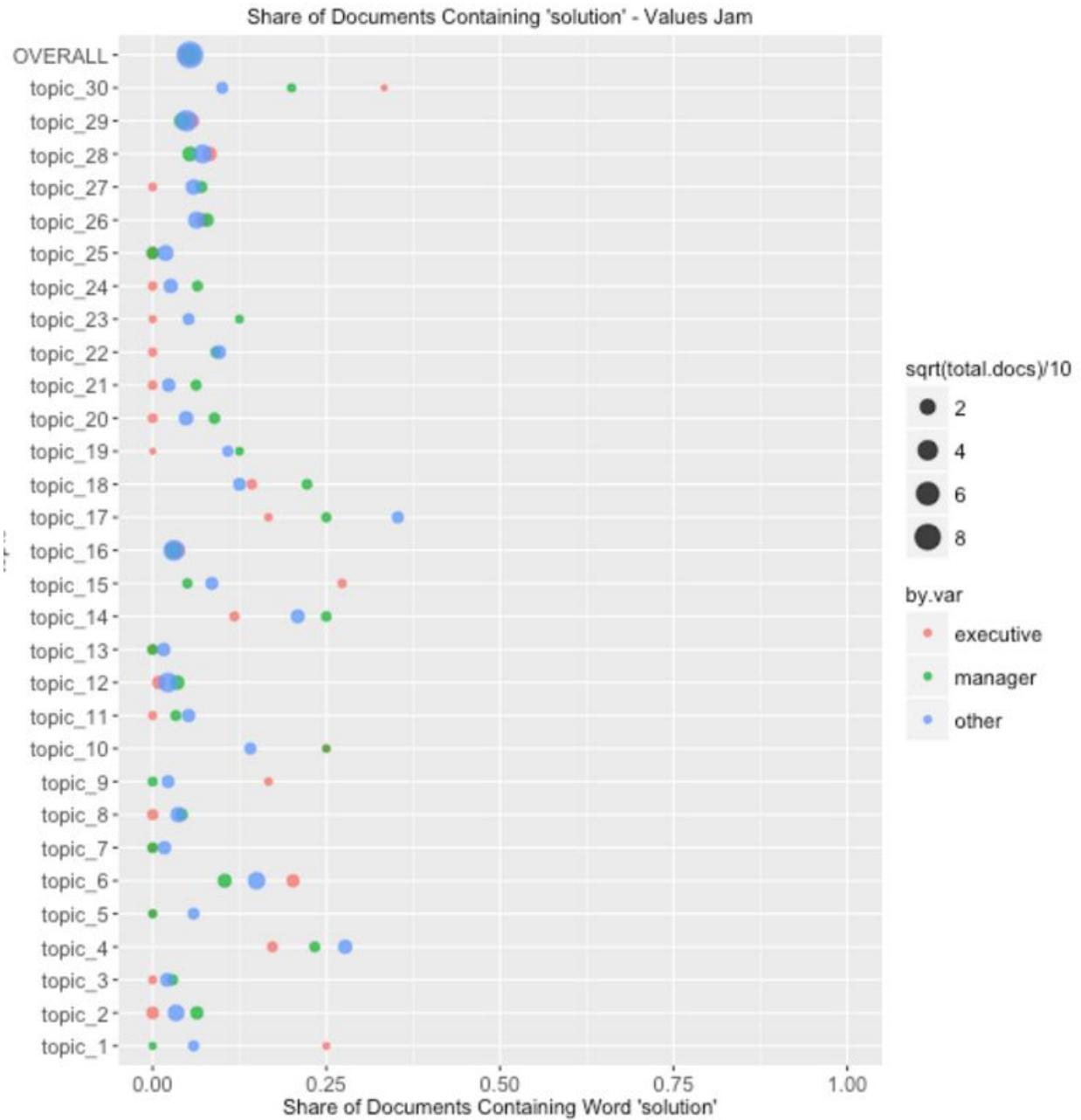
Note: the very last data point in each jam is unreliable and has been omitted from analyses, as the numbers are very small (note the increase in the length of the significance marker).

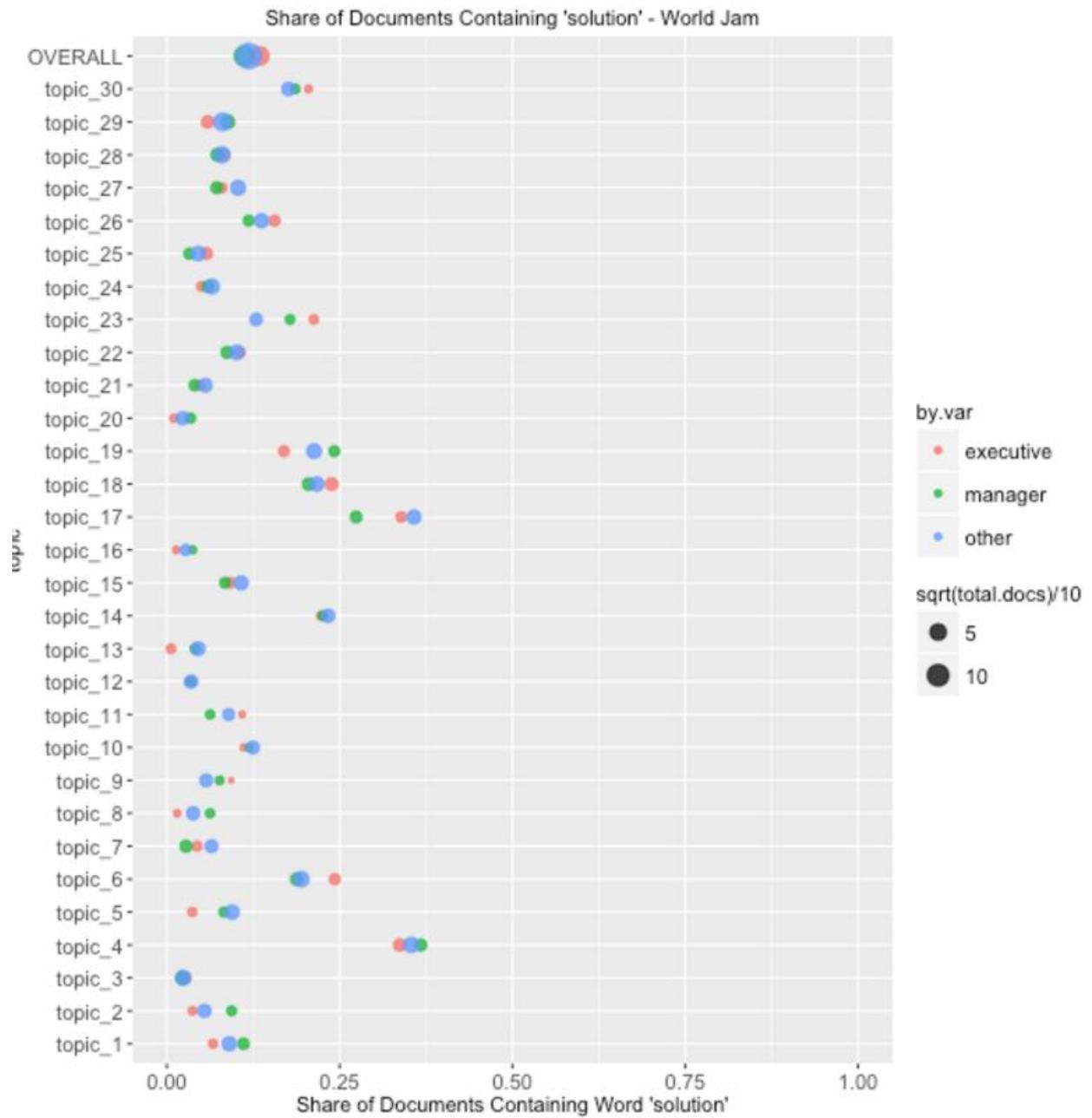
Appendix D: word usage shifts, topic 19 (Values Jam vs World Jam, Executives/ managers vs non-managers)



Explanation: This indicates (in the first line) that within Topic 19, in Values Jam “contract” and “delivery” were the most heavily used words, whereas in World Jam this shifted to “project” and “process.” Similarly, within this topic, for both jams, executives and managers used “expectation” most heavily, while non-managers used “client.”

Appendix E: changes in usage of “client” and “customer”

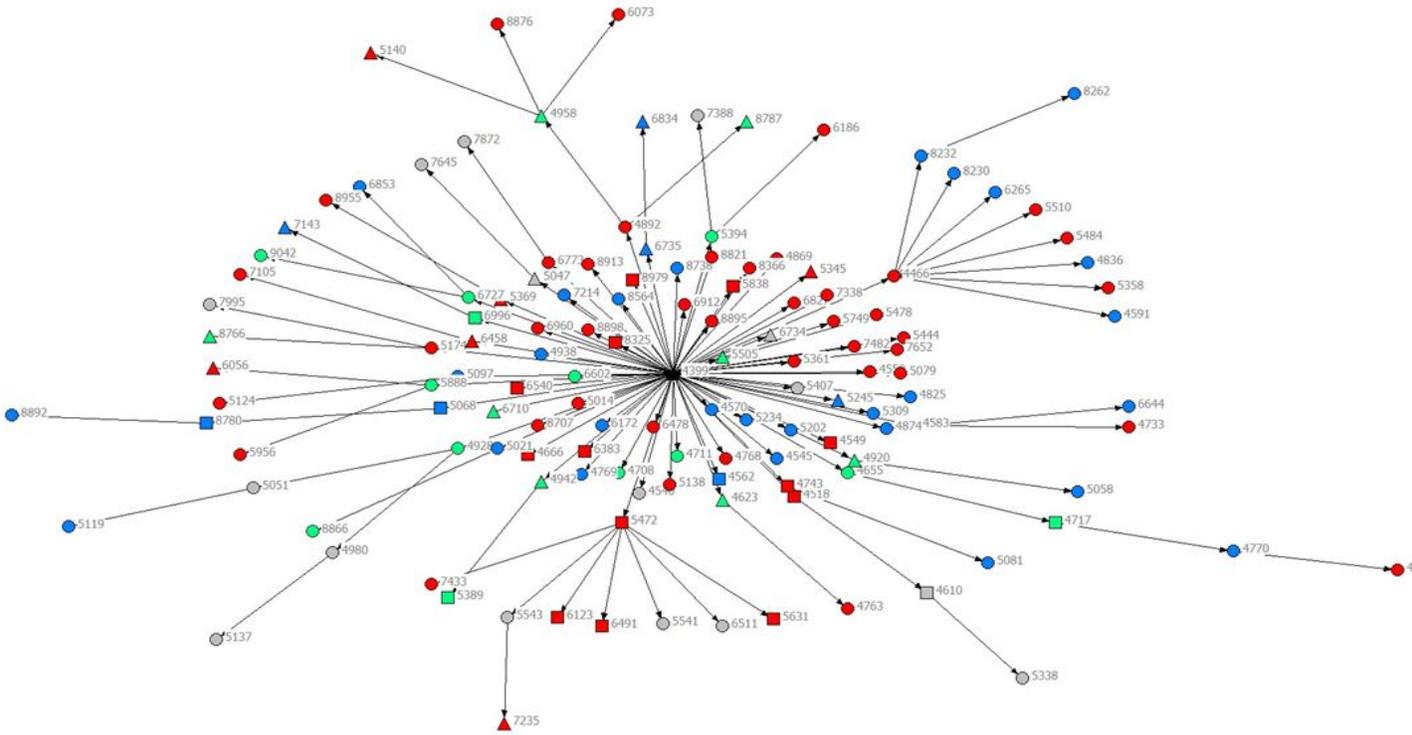




Appendix F: interaction map of thread, "I spent many hours on values jam last night"

Code Book-Job Title	Shape
1 executive	Triangle
2 manager	Square
3 other	Circle

Code Book--attitude to old value	Color
0 unclear	Gray
1 Restore Basic Beliefs	Red
2 Revise Basic Beliefs	Blue
3 Create new values	Green
4 Original SVP post	Black



Appendix G: four versions of IBM values

The left-hand column is the “basic beliefs” as formulated by the Watson families, and often referred to nostalgically by those who opposed current change efforts. The second column is a set of values developed by the CEO in 1992 and propagated through the company. The third column is a set of values formulated by the top leadership team before the first jam in 2003. The fourth column is the final company statement of values after the first jam.

Basic Beliefs (Watson), 1914	Eight Principles (Gerstner), 1992	Values Proposed by Executives at the Start of ValuesJam (7/2003)	Values Based on Employee Feedback During ValuesJam (11/2003)
<ul style="list-style-type: none"> ● Respect for the individual ● The best customer service ● The pursuit of excellence 	<ul style="list-style-type: none"> ● The marketplace is the driving force behind everything we do ● At our core, we are a technology company with an overriding commitment to quality ● Our primary measures of success are customer satisfaction and shareholder value ● We operate as an entrepreneurial organization with a minimum of bureaucracy and a never-ending focus on productivity ● We never lose sight of our strategic vision ● We think and act with a sense of urgency ● Outstanding, dedicated people make it all happen, particularly when they work together as a team ● We are sensitive to the needs of all employees and to the communities in which we operate 	<ul style="list-style-type: none"> ● Integrity that earns trust ● Commitment to the customer ● Excellence through innovation 	<ul style="list-style-type: none"> ● Trust and personal responsibility in all relationships ● Dedication to every client’s success ● Innovation that matters—for our company and for the world

Source: Company documents.

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