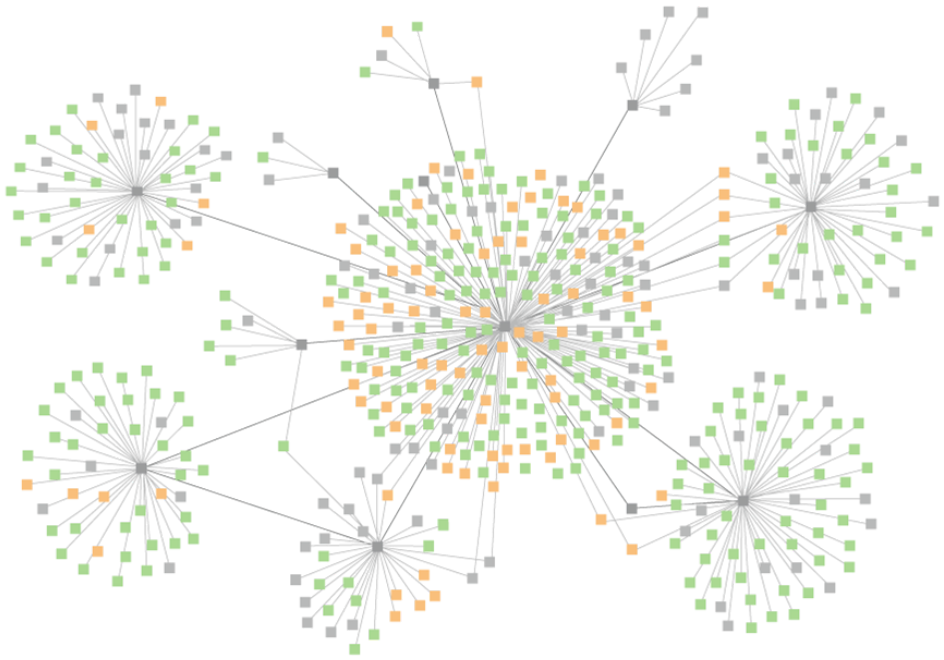
The Serendipity Economy

Quantification Study Pilot Project Report



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Executive Summary

This paper reports the results of a pilot research project focused on the quantification value derived when serendipitous activity arises within collaborative systems. Four out of the five interviews reported value from their collaboration and enterprise social investments, though most did not capture the actual value that resulted from that activity. The one company that did not report was too new to the implementation.

On average, collaboration technology took slightly more than three months to return a measureable serendipitous result. Financial results related to the serendipitous use of collaboration technology averaged $364,000, but ranged from as small as $20,000 to high as $1,000,000.

Overview of The Serendipity Economy

The Serendipity Economy concept was created to account for value that extends beyond that achieved by productivity gains. The Serendipity Economy focuses primarily on the value derived from horizontal technology, in particular, communications and collaboration technology, though it can be applied to marketing communications, education and other fields.

The idea of The Serendipity Economy originated from analyst work on return-on-investment for instant messaging applications. In certain circumstances, like call centers, if instant messaging was used for a specific purpose, for instance, to allow call center operators to more quickly reach engineers, a return on investment calculation could be guesstimated around first-time call resolution, solution quality and customer satisfaction. When instant messaging, however, was deployed widely as a horizontal communications technology, it became impossible to forecast all of the use cases ahead of the deployment, and when examining such use cases historically, many of them represented serendipitous activity. In other words, without the software, the actors in the event did not know what to expect, if anything, when they started their dialog.

The other recurring issue that drove the development of The Serendipity Economy framework was the overuse of industrial age measures, in particular, productivity, as the primary means of attributing value to collaboration software investments. Where it is true that collaboration reduces the time and effort required to communicate or create, the simple reduction in communication or creation time cannot account for all the returns associated with collaboration software. Even more of an issue, the act of looking for productivity gain among individuals, functions and organizations at small time scales causes investigators to miss the serendipitous events that occur over larger, unmonitored, time scales.

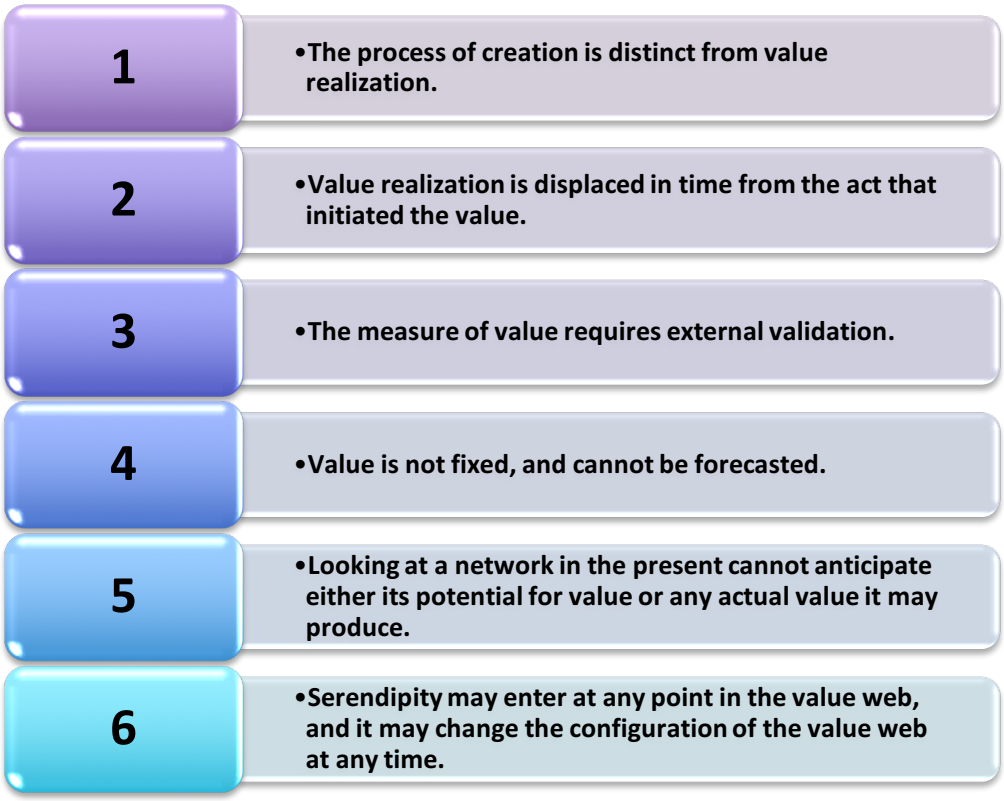
The use of industrial age measures shortchanges the value of collaboration software investments. Even if the value of a collaboration software investment can be determined to be greater than its acquisition cost based on productivity gains, the failure to capture the value of serendipitous activity greatly reduces visibility of the actual value derived from the purchase. This “missing value” is often accounted for in a few anecdotal stories. The questions created for this study can be used by organizations to more systematically

instrument the gathering of "extra-productive" value derived from their collaboration software investments.

Because so many organizations are still struggling with high-level implementations of their collaborative software environments, understanding this value could be critical in prioritizing investments in awareness, adoption and use that would increase the returns from underutilized software.

The Serendipity Economy Rules

After many years of monitoring collaboration and knowledge management implementations and examining serendipitous activity, the following six rules emerged:



Value from The Serendipity Economy arises from multiple points. In rule number 1, serendipity arises from the process of creating or documenting knowledge, or from the interpretation of data and its transformation into information. Regardless of how productive the person who creates or transforms data, until that data is used, it is of little or no value to the organization.

The movement from creation to use can happen quickly, but as rule 2 points out, it is very often displaced in time, such as when a presentation is created, but not delivered immediately.

For any kind of serendipitous event, the value must be externally determined and validated (rule 3). The process of presentation or the sharing of a data set delivery does not include a valuation, but simply a communication of desired or perceived value by the person

delivering it. Once it has been delivered, other measurements can be taken to determine what value the activity generated. It must be noted that this value, in accordance with rule 2, may not be immediate—serendipity may occur much later, and one of the reasons it becomes so hard to measure, is that those involved in the original creation may no longer be paying attention or may even be reassigned (see rule 6).

Rule 3 states collaboration software, content, data sets and other items cannot, when first examined, have their value determined because they have not generated any activity, and no one knows at the onset, what activity they will generate.

Rules 5 and 6 depart slightly from the intrinsic value of content, be that content software, knowledge or data, and looks at the context of serendipity, namely people or intelligent agents, potentially involved in serendipitous activity. As with content, tools and data, the examination of a network does not reveal its potential value (rule 5) and over time, as that network changes, its potential for value also changes (rule 6.) This means that if the network changes configuration, for instance, content not deemed of value at one time may become valuable to someone in the new network configuration, which connects back to rule 2.

The Serendipity Economy Rules and This Study

Although questions were asked about each of the rules, organizations, if they captured any kind of values measurements related to serendipity at all, only captured those related to the first two, with an implicit confirmation of rule 4.

Rule 3 proved a key impediment to capturing Serendipity Economy value in this study. The lack of instrumentation and systematic monitoring of collaboration software returns over long periods of time is not routinely conducted at any of the companies in this study.

None of the participants in this study reported any network related (rules 5 and 6) serendipitous activity, though all of them acknowledged that further value could likely be documented with the inclusion of social network configuration data.

Design and Approach

This pilot study was designed to gather data related to serendipitous value creation primarily from enterprise social networking. Five Microsoft customers with existing collaboration environments were selected for the study.

The survey was conducted via phone interview with key stakeholders in collaboration or knowledge management.

Because none of the participants in the survey were the actual actors in the events, interviewing became much more of a probing dialog than a simple interview to provide answers to the questions (see the appendix for the questions).

Only four of the five customers were able to document results, thus the data refers to five companies in interviews, but only reflects the data from four companies.

Findings

Quantitative Findings

- Four of the five customers reported time-to-value and magnitude data. One customer reported that they had just implemented and had not yet achieved a result.
- Results averaged $364,000 but ranged from as small as $20,000 to as high as $1,000,000. Chart 1 illustrates this with bubbles representing the magnitude of value. The X Axis represents time to value. The Y Axis represents industry.
- On average, collaboration technology took slightly more than three months to return a result. Chart 2 illustrates the time to value reported by the four companies in the study that reported results.

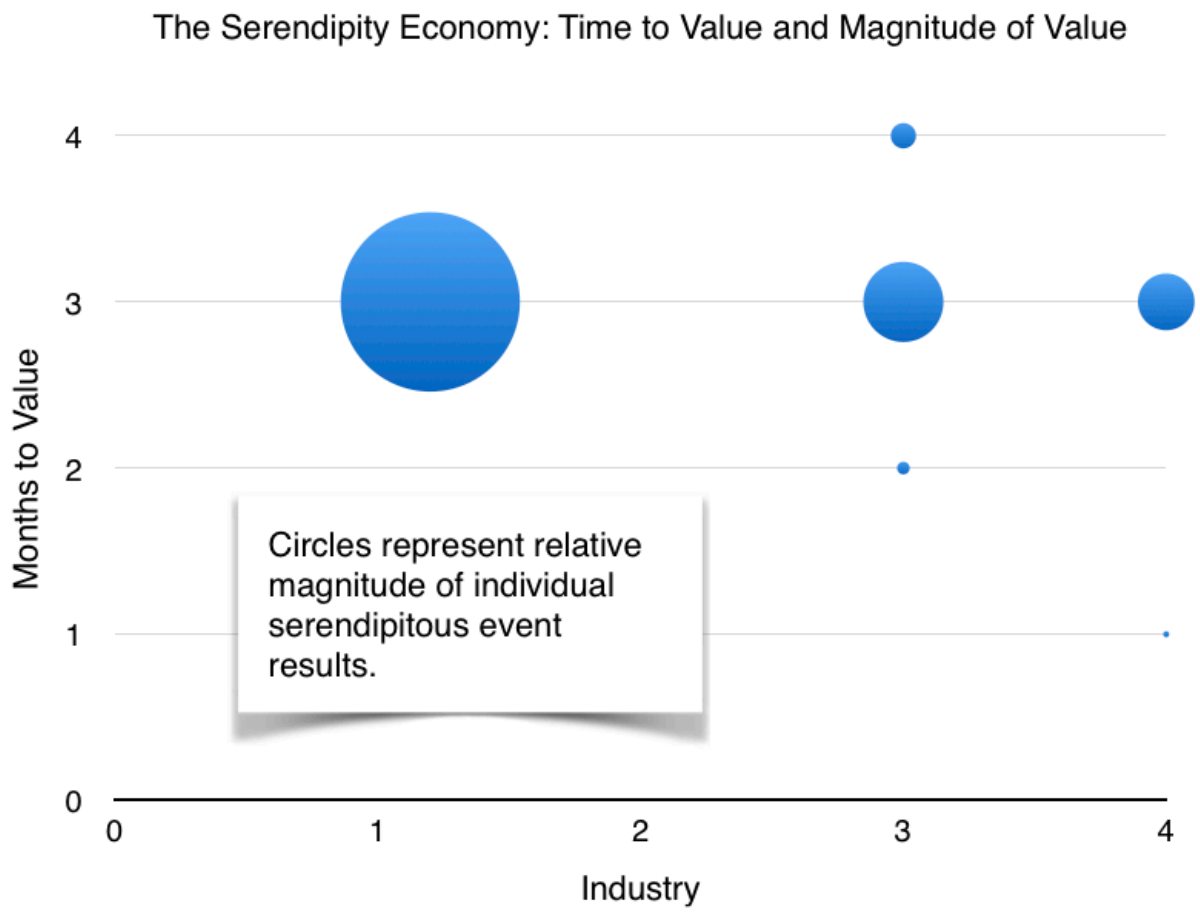


Chart 1

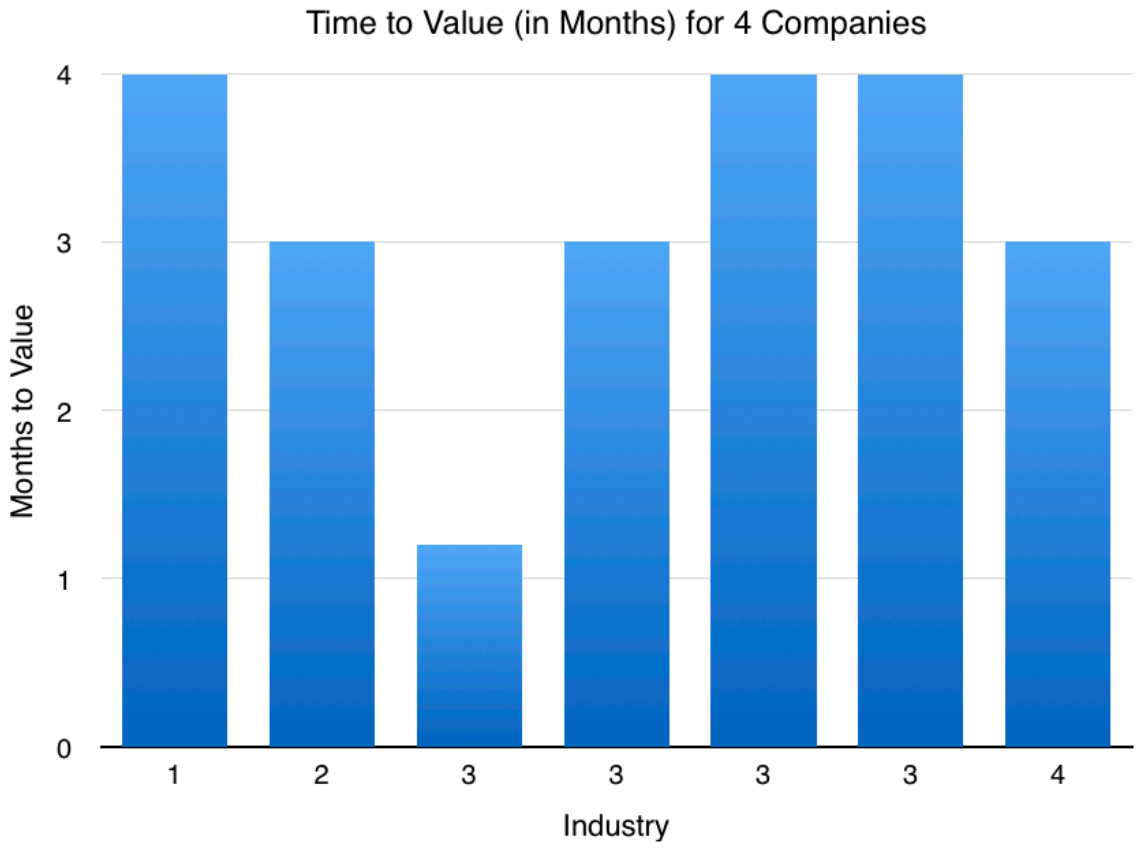


Chart 2

Additional Findings

- Customers could track the time-to-value related to serendipitous activity, but did not routinely do so. All companies had to reconstruct cases for these interviews. None of them were able to provide the original actors as sources during the interviews.
- All of the customers used some type of "hashtags" as metadata to track value generating collaborative communications (examples for Yammer implementations included "#yamwin," "#yamchamps," "#yammersolutions."
- Until asked in this survey, only one of five customers tracked the value associated with serendipitous activity, and that was the knowledge management group within a professional services firm.
- None of the companies promised returns or calculated traditional ROI before they deployed enterprise social networking.
- Three of the five interviewees mentioned the value of enterprise social networking over e-mail as a means of managing internal questions and answers. Overall transparency and openness of profiles, along with easy access to previous conversations were stated as the primary value drivers for reducing time-to-resolution for questions. Resolutions were provided both by existing content and by experts within the network.

It is clear from these preliminary results that organizations understand collaboration software has value, but that its value is difficult, if not impossible, to determine prior to implementation. It is also clear, however, that once procurement is made, most companies do not implement instrumentation in their implementations that allow them to determine the actual value derived from their collaboration software investments.

When value is captured, such as time-to-resolution for questions, that count of activity doesn't go far enough to determine the ultimate value of interactions. Time-to-resolution is a productivity measure that essentially documents the decrease in time to answer a question. What it does not capture is the outcome of any new relationships formed between people or content during the process, that may or may not lead to additional value. The collaboration software may yield enough time-to-resolution moments to justify continued investment, but because it appears useful in these short timeframes, larger value returns are never accounted for, outside of anecdotal stories.

This failure to capture higher order value does a disservice to software vendors trying to identify value propositions for potential customers, and it may undermine existing implementations where traditional returns don't exceed the costs of acquisition, maintenance and operation of the collaboration software. The failure to capture this serendipitous value may also reduce the overall perceived value of collaboration software within companies and within the market, although anecdotal stories offer a stop gap against a total loss of perceived value from serendipity.

Company Profiles

The companies involved in this study permitted data gathering on the basis anonymity. They represented the following industries. Relative size is indicated by rounded employee counts.

- Software—Supply chain management (2,500 employees)
- Multinational entertainment company (175,000 employees)
- Multinational consultancy (175,000 employees)
- Multinational manufacturing company (18,000 & 29,000 employees)

Serendipity Stories

The Serendipity Economy Quantitative Value Pilot Project was designed to understand how and where to place instruments within collaborative processes in order to ascertain the value of activities that emerge from those processes. Stories have proven the primary historical means of documenting and sharing value. Unfortunately, stories only capture large, intriguing incidents, often missing additional activities that could represent considerable value either in single instances, or in aggregate.

Given that the interviewees in this project could not provide value in most instances, the stories can provide illustration for Serendipity Economy events. It is important to keep in mind that even if organizations do put in place instruments that routinely capture serendipitous activity and its value, the story will remain a qualitative aspect of The Serendipity Economy that provides an emotional connection to the possibility of value, and in documenting the specific context of the value. Since serendipitous activity can be so

broad and far ranging, any attempt to foster a repeat of any given instance, if that can be done at all, would require the context in order for that to occur.

Here is one positive story that represents the idea of serendipity.

Proposal development. A lead consultant in the Russian office of a major global management consulting firm had the opportunity to respond to a request for proposal for a large bank in Eastern Europe shortly after the implementation of an enterprise social networking system. She did not have the expertise to craft the proposal. She went to what the company calls a "verified group" of experts that were approved by an executive sponsor. In six to eight weeks, the Russian consultant received a response from another consultant in Bahrain who possessed the necessary knowledge. He also offered his resume so she could work him into the deal. A community manager, seeing this conversation thread, jumped in, and offered a link to existing content that would also be useful in responding to the proposal. Although this conversation initiated within an enterprise social networking environment, it also used several other means of communication, but none of this would have happened had the consultant from Bahrain, who was unknown to the person in Russia, responded to the original post for assistance. The company was able to accommodate a cross-organizational loan so that the consultant in Bahrain could work with the consultant in France. They won the contract. The time-to-value was about six weeks (1.2 months,) and the value of the return was slightly more than $1M USD in contracted services.

Examined through the lens of productivity, the reduction in communications costs, even if the original consultant had to spend several hours searching for the person from Bahrain, might not have yielded a team or the knowledge required to respond to the request for proposal. It is highly unlikely that the consultants would have connected with the enterprise social networking environment, and even if they did, that search and subsequent connection would itself represent serendipitous activity. Whatever content pointed the Russian consultant to the colleague in Bahrain would have been created and posted for some other purpose than this proposal.

Failure to gather metrics. Sometimes negative cases make the point. The entertainment company in this study reported that they wanted to acquire an enterprise social networking analytics tool, but were facing pushback because they were unable to demonstrate the value of existing social networking investments. The interviewee commented: "It looks like we should have had this conversation before we asked for the analytics software."

Recommendations and Conclusions

Customers

- Buyers of enterprise social networking and collaboration technology who want to encourage the highest use of collaboration software, need to focus on all of its positive values, including productivity gains and serendipitous activity.
- Use hashtags or other metadata to capture initial instances of serendipitous activity.

- The documentation of serendipity must be captured with immediacy and detail, and include those directly involved in the case. If the incident has not reached its conclusion, the organization should purposefully monitor the evolution of the event.
- Organizations who want to effectively capture Serendipity Economy benefits need to create cross-functional teams that actively monitor projects and mentor people in serendipity identification and documentation.

Follow-on Research

The quantification of serendipitous economic activity within organizations requires a study of considerable duration in order to monitor the eventual outcome of a serendipity event rather than its more immediate consequences. Such a study should include the following characteristics:

- Identify serendipitous activity immediately.
- Capture the state of those involved in the serendipitous activity, including some historical information (an include how long the actors have been in role, and hire date – and if content oriented, when the content was created, posted and last updated or interacted with).
- Set regular touch-points with those involved in order to document how the serendipitous event value evolves over time.
- Conduct this research at five to ten companies in order to document variations among industries and organizational types.

Conclusion

Conducting this study was essentially an exercise in digital forensics. Because organizations did not routinely or systematically capture the value of serendipitous activity, cases needed to be reconstructed in order to rediscover all of the elements that lead to value. In many cases, the details were not able to be recovered by the person being interviewed, though records about content dates, posting and reading, along with organization records, such as hire date and organization affiliation, do exist.

This study suggests that serendipitous activity does occur and that it can be captured. It also suggests that further work on integrating analytics into collaborative environments will be required to move away from the manual collection and documentation of serendipitous activity.

Appendix: Initial Questions for Serendipity Economy Survey

Event Questions

- When did the initial event take place?
- Describe the event?

(An event is defined as any serendipitous activity that resulted in value generation. Questions are designed to document discrete events).

Organizational Questions

- How many people were involved in this event?
- Did everybody know each other before this event?
    - If not, how many people represented new relationships?
    - Did the people new to the relationship contribute more or less than the members with the existing relationship to driving the event to realize value?
- How long have the people involved in the event been in their current role?
    - Did a change in role have any influence on the event taking place?
- How long has each person involved in the event been employed by the company?
- Were any of the people associated with this event contractors or contingent staff?
- Did your organization record or create any documentation related to this event?

Technology Questions

- What technology platforms contributed to this event?
- Did the technology platform have a return on investment (ROI) associated with it upon purchase?
- When was the platform acquired?
- How much was the initial investment? Annual costs?

Content Questions

- How long was the content available before it was discovered or reacted to?
- Which of the following best describes the content:
    - ❑ Document in repository
    - ❑ Post on social network
    - ❑ E-mail
    - ❑ Face-to-face conversation
- How did you find the content?

- ❑ Social stream?
- ❑ Post in a team portal?
- ❑ Post in an enterprise portal?
- ❑ Search?
- ❑ E-mail with a link?

Value Questions

- When did the initial value occur?
- What was the initial value attributed to the event?
- What was the first economic value derived from the event?
- How was the value determined?
- Have you recorded subsequent or ongoing value, savings or revenue related to the event?
    - If so, what value have you derived to date?
- What was the outcome:
    - ❑ Improved process?
    - ❑ Reduced cost?
    - ❑ New product/revenue?
    - ❑ New business model?
    - ❑ Acquisition or merger?
    - ❑ Other?

Demographics

- What industry is your company associated with?
- How many employees?
- Company size?
- Location/locations where event took place?

Appendix 2: Additional Reading

Fast Company

The Serendipity Economy: How Spontaneity Plus Social Networking Drives Innovation

http://www.fastcompany.com/3015886/leadership-now/the-serendipity-economy-how-spontaneity-plus-social-networking-drives-innovat

Harvard Business Review

How IT Professionals Can Embrace the Serendipity Economy

http://blogs.hbr.org/2013/08/how-it-professionals-can-embrace-the-serendipity/

Daniel W. Rasmus

Daniel W. Rasmus, the author of *Listening to the Future* and *Management by Design*, is a strategist and industry analyst who helps clients put their future in context. Rasmus uses scenarios to analyze trends in society, technology, economics and politics in order to discover implications used to develop and refine products, services and experiences.

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Prior to starting his own consulting practice, Rasmus was the Director of Business Insights at Microsoft, where he helped the company envision how people will work in the future. Rasmus was the creative leader for Microsoft's Center for Information Work. Before joining Microsoft, Rasmus was a Vice President and Research Director at Forrester Research.

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