Digital Workplaces – from Vision... ...to Reality

JBoye Aarhus 6 November 2014
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Search
Browse
Monitor
Discovery

Information
Governance
Technology
Intranets

Enterprise Search

Information School

The Intranet Management Handbook

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Topic List

• A history lesson
• A status report
• Up stream and down stream
• Losing control
• Seven challenging questions
• And off into the sunset...
Once upon a time......in 1945
Moving on to 1984….EDI
...and Irene Grief

Irene Greif

View video clips from Irene Greif's oral history interview**

Mentoring
- for high bandwidth users (6,063KB)
- for low bandwidth users (1,094KB)

Work/life balance
- for high bandwidth users (3,888KB)
- for low bandwidth users (703KB)

Read the transcript from Irene Greif's oral history interview***
- Irene Greif's Oral History Interview - Transcript (80KB)

Biography for Irene Greif*

Irene Greif heads the Collaborative User Experience Group (CUE), a team of Computer-Supported Cooperative Work (CSCW) researchers located in Cambridge, MA. The group has historically worked most closely with Lotus product teams on collaboration software. Irene also directs the Lotus Product Design Group (PDG) at Lotus and has developed a strategic design practice that spans both CUE and PDG.
Design Principles for the Virtual Workplace

Charles E. Grantham, Ph.D.
Institute for the Study of Distributed Work

ABSTRACT

This paper provides a philosophical basis for the design of "virtual workplace" software applications. Design is seen as growing from humanizations of technological development and this means that the principles are developed from assumptions about human behavior in organizations within large, complex social organizations—which are evolving rapidly towards different, interfunctional place collaborations. These design principles are linked to corresponding elements of healthy organizational functioning which can be expressed and used as metrics to measure the impact of these designs on organizational effectiveness and productivity.

Keywords: Design, Organizational Development, Distributed Work, Philosophy of Technology

INTRODUCTION

The purpose of this paper is to begin a discussion within the ACM community about the principles of design which can underlie the development of "virtual workplace" software applications. A problem with the current literature and research is that it is not sufficiently grounded in our practical knowledge of software development towards a closer integration with understanding of human behavior provided by more traditional social science.

Work in the "virtual workplace," where people are organized in time and space, significantly changes the nature of work behavior, provides opportunities for new organizational behavior patterns, and profoundly affects behavior quality of worklife (Grantham and Nichols, 1993). This profession needs a theoretical connection between what we design software for (e.g., networking and applications) for emerging "virtual workplaces," and how these distributed organizational structures will function. This paper is a first step in developing that connection.

PHILOSOPHY OF DESIGN

"The future of software design is philosophy." This headline appeared in a nationally syndicated column on innovation by Michael Schrage in November of 1994. This small article raised a big issue--the need for technology design for the 1990s. Design of technology systems, and hence, working organizational structures, proceeds from a set of philosophical assumptions. Sometimes these assumptions are explicit; sometimes not. Schrage's point is that not only should they be made more explicit, but also carved in the course of their influence to the collective social good.

The philosophy underlying much of this paper comes from the moral philosophy of John Rawls (1971), a distinction of several schools of thought. I would like to begin by making explicit my own underlying philosophical assumptions about human behavior. They are:

1. People strive to develop in a positive fashion towards greater self-actualization.
2. The meaning of work is derived from the interconnection of interaction with others and the environment.
3. Synthesis of people and social groups is facilitated by open communications.
4. Purposeful communication provides a material benefit to human action.
5. A person or group has meaning only within the identity of a larger social context.
6. Development of technology tools to increase the scope and use of human interaction.
7. Clear, concise conversations, based on mutual non-judgmental respect, provides clarity.
EIPs arrive in 1999
Enterprise Information Portals

Data >> Information >> Understanding Enterprise Information Portals

Structured Data
- ERP Application
- On-Line Transactional Database
- ETL & Data Quality
- Data Warehouse
- ROLAP
- Data Marts
- Analytical Application
- Warehouse Management
- OLAP Analysis
- Query & Reporting
- Data Mining

Unstructured Data
- Point of Sale Data
- Audio Files
- Video Files
- Marketing Brochures
- R&D Documentation
- General Industry Knowledge
- Project Plans
- Governmental Forms
- Paper Invoices

Source: Merrill Lynch
Jeffery Beir in 2000 – five criteria

1. It must be **comprehensible and have minimal learning curve.** If people have to learn a new tool, they will not use it, especially those people outside the firewall. The digital workplace needs to be as simple and obvious as e-mail or instant messaging.

2. It has to be **contagious.** The digital workplace must have clear benefits to all parties involved, to both distributed workers and the different enterprises interacting in these new workplaces. The workplace also has to be a trusted place, thus secure, both for the individual and the companies involved. People have to want to use it.

3. It must be **cross-enterprise.** The digital workplace must span company boundaries and geographic boundaries. It also must operate outside the corporate firewall with an organization's customers, suppliers and other partners, and require very little IT involvement, or it will not gain acceptance.

4. The workplace has to be **complete.** All communication, document-sharing, issues-tracking, and decision-making needs to be captured and stored in one place.

5. The digital workplace must be **connected.** If not, it will not gain acceptance.
And in 2014.....

Nine key insights ...all that glistens..

1. Most organisations are just starting their journey to an effective digital workplace

2. The digital workplace helps organisations to be smart, flexible and customer focused

3. Collaboration for business purposes is established in Early Adopters

4. Early Adopters have more participatory cultures where people “work out loud” and innovation is open to everyone

5. Mobile services for the workforce will be implemented in 30 to 40 percent of organisations by late 2014

6. Real-time communication (voice + video) is bringing people closer, building relationships across silos

7. Business functions are active in the digital workplace and operational managers are key to driving change

8. Information management and enterprise search are not on the radar today

9. Early adopters report that top managers are not just vocally supportive but also act as role models
**...is not gold!**

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Level 1
No common information practices. Individuals manage information on an ad hoc basis.

Level 2
Some departments are aware of the need to manage information but are only able to allocate limited resources and skills.

Level 3
Enterprise information management practices developed by and managed by the IT department in line with IT policies.

Level 4
Enterprise information management practices developed and managed by business units in line with business objectives.

Level 5
Board-level commitment to managing information as an asset with a member of the Board taking specific responsibility for information quality.

Based on the Meta Group/Gartner model.
Information as an asset

Majority | Early adopters
---|---
1% | Optimised | 17%
5% | Managed | 48% | 31%
25% | Proactive | 24%
49% | Reactive | 27%
26% | Aware |
17% | No awareness |

From The Digital Workplace in the Connected Organisation 2014
© NetStrategy/JMC and used with permission
http://www.digital-workplace-trends.com
In your organisation, how important is it to improve the ability to find the right information (for employees, customers as well as other stakeholders)?

How difficult/easy is it for users to find the information they are looking for within your organisation today?
Making cross-enterprise collaboration work

By Ynantis Silverstone, Terence Wallis and Craig Mindrum

To drive a new era of growth, companies will increasingly be required to collaborate with enterprises outside their corporate boundaries. Doing so successfully requires coordinated attention to a range of human capital strategy issues covering talent, leadership, culture and organization.
Learning
One vital ingredient of getting multiple enterprises working in sync is a common base of knowledge and skills about the functional and process areas at the heart of the collaboration.

Leadership
The challenges that cross-enterprise collaboration presents to many accepted ideas of leadership are varied and profound. It’s commonplace, for example, to prize “strong” leadership. But that concept of strength changes in cases where executives must work together and marshal their resources and energies toward a shared goal.

Culture
Collaborating organizations do not have to have identical cultures. But they must understand and respect each other, and people must know how to work together effectively in an atmosphere of trust. Any cultural differences need to be explicitly addressed so they do not impede the ability of the organizations to work together.

To drive a new era of growth, companies will increasingly be required to collaborate with enterprises outside their corporate boundaries. Doing so successfully requires coordinated attention to a range of human capital strategy issues covering talent, leadership, culture and organization.

Processes and tools
Cross-enterprise collaboration has a better chance of success when the participating organizations can follow established structures and processes and use a set of common communication tools.

Governance
To guard against failure, structures must be in place to provide cross-organizational visibility into alliances and collaborations and to facilitate the reporting that leads to better decisions.

From Accenture – Making Cross-Enterprise Collaboration Work
Dion Hinchliffe

- **There is no all-in-one enterprise collaboration platform.** Despite the trend towards convergence into suites and unified communications platforms, collaboration tools and scenarios have become far too varied for any single solution to handle well.

- **Internal technology landscapes are becoming very hard to change, while tech change continues to accelerate.** Deep integration across systems as well as the growing baggage of legacy applications are becoming the leading cause of drag in moving to the latest tools and platforms. This is now substantially impeding the move to new collaboration tools.

- **Workplace skills are not keeping pace with what modern collaboration tools make possible.** A collaboration solution is only as effective as those that use it. Not only new the latest tools often require a new mindset, they require organizations that support and encourage new behaviors and cultural shifts in the workforce.

- **Conflicting modes and silos of collaboration are delaying organization-wide improvements.** The tension between legacy collaboration tools is coming into direct opposition with newer approaches, often championed by different internal groups or departments, leading to various competing camps, with no clear winner and general state of paralysis.

http://adjuvi.com/how-to-deliver-on-a-modern-enterprise-collaboration-strategy/
Collaboration personas: A framework for understanding & designing collaborative workplace tools

Tara Matthews, Steve Whittaker, Thomas Moran, Meng Yang
IBM Research - Almaden
San Jose, California, USA

Lifespan of the group is (i.e., time to accomplish objective)... short-lived light-weight to setup limited structure, simple access controls long-lived customizable organization, advanced features for finding content, ways to share knowledge / history of work

For long-lived teams, what stays constant is... team ability to manage multiple projects over time objective ability to on-board new team members

Created because of a shared... interest discussion, info sharing objective task tracking, scheduling, meeting support, info sharing

Size of the team is... small (3) can share more detail about daily work, more likely to collaborate in shared space (e.g., writing docs v. just storing docs) large (100s) visualize team, create sub-groups, fewer topics of interest to large group may want to partition members' work

Management of the team is... self-managed equal access/privileges designated leader manager may want to track members' status, manager likely to be in charge of maintaining team space

Degree of dependency among members... interdependent sharing detailed daily work is likely useful independent sharing general info, lessons learned, best practices

Existence of sub-groups... no sub-groups all info visible to all members many sub-groups ability to partition sub-groups' work, hide content from other sub-groups report status & outcomes to larger group
Ask a friend!

No Task Left Behind? Examining the Nature of Fragmented Work
Gloria Mark, Victor M. Gonzalez, Justin Harris
Donald Bren School of Information and Computer Science
University of California, Irvine

Creepy but Inevitable? The Evolution of Social Networking
Hui Zhang
University of Washington
Munmun De Choudhury
Microsoft Research
Jonathan Grudin
Microsoft Research

Facts and Figuring:
An Experimental Investigation of Network Structure and Performance in Information and Solution Spaces
Jesse Shore
Ethan Bernstein
David Lazer
THE PRIVACY CRISIS
Taking a Toll on Employee Engagement
Can I switch my phone off when I’m at the concert this evening?

How can I limit interruptions from co-workers?

Not another email about the work I did in Kuwait!

I need to focus: is it OK to turn off instant messaging?

Can I shield my name from my manager when giving advice to a colleague?

Where can I work on my own for a few hours? At home?

How much do I have to reveal about my personal interests?
From vision to ......reality?

• There seems to be too much emphasis on introspective projects that support social networks, team working, mobile access etc.
• No one seems to take the time to look at the immense amount of research that has been carried out over at least 30 years in the area of physical and virtual workplaces
• The focus tends to be on enabling corporate and/or HQ staff and not on customer and supplier facing teams
• No organisation works in isolation. There are always suppliers and customers
• There is an assumption that virtual teams can be managed the same way as table teams
Before you ask questions...!

1. When will you allow suppliers and customers into your corporate information repositories and collaboration areas?
2. Is your collaboration strategy driven by IT or by the requirements of teams?
3. Can you find the information you need as soon as you need it, and can you trust when you eventually find it?
4. Do you certify skills in virtual team management?
5. Have you considered internal information privacy issues?
6. Have you taken account that digital work takes place inside physical spaces, either the employers, the customers or the airport lounge?
7. Do job performance interviews and engagement surveys in your organisation include a review of how you are managing your digital working environment?