

***Mn*IPS NEWSLETTER**

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NEWSLETTER INFORMATION

The MnIPS Newsletter is published nine times a year (September - June) by Minnesota Information Professional Society. We welcome materials submitted to our calendar or articles on computing topics. Submit materials by disc or e-mail to:

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NOTE:

MEETING INFORMATION

The meeting place:
Holiday Inn - Bloomington
35W and 94th
(1201 W 94th St.)
Phone: 884-8211

Meeting Times:

5:00 P.M. Social & Registration
5:45 P.M. Dinner
6:45 P.M. Meeting and Program
8:00 P.M. Adjourn

For reservations call:
Dennis Cummings by Nov. 12th
and Choose
Prime Rib or Salmon (each with baked potato).

Tel. (651) 707-0523 (H) or
(651) 205-2632 (W) or
E-mail:

Dennis.Cummings1@usbank.com

\$20 for members
\$25 for non-members

Dinner Meeting NOTICE **Tuesday November 16,** **1999**

Meeting of
**Minnesota Information
Professional Society
(Formerly ACM-ASM)**

Speakers Topic:
"E-Commerce: The Emergence of
Virtual Trade and an Electronic Society"

Speaker:
Ron Wood

MnIPS NOVEMBER **MEETING** **SPEAKER INFORMATION**

Ron Wood is currently with IBM Global Services Global e-business Leadership Team as an Executive Consultant. Responsibilities include providing e-business thought leadership for IBM customer senior executives including CEOs and CIOs. Responsible to provide a leadership and mentoring role for Principals and senior level practitioners in e-business customer engagements. Consults with and assists customer senior executives who are interested in developing enablement services that are consistent with enterprise objectives, that lead to e-business

solutions that demonstrate and provide real business value. Currently completing a Ph.D. dissertation research project in e-commerce. He recently completed a book scheduled to be published by Prentice Hall in December 1999 entitled Exploring eCommerce that will be followed by a second book entitled eCommerce Technology Handbook to be released in March or April 2000.

MnIPS NOVEMBER **MEETING** **TOPIC INFORMATION**

This presentation will provide insights related to the business issues, business dynamics and societal impacts that result from the introduction of Electronic Commerce into our global society. Electronic Commerce has caused many global enterprises to require faster and improved communications from business-to-business (BTB), business-to-consumer (BTC), government-to-business (GTB) and business-to-both their suppliers and customers. If an enterprise is to continue to be competitive and profitable in today's intensely competitive economy and deliver goods and services to its customers in a timely fashion, its suppliers must be quickly responsive. As a result, enterprises are beginning to develop strategies that use electronic commerce (e-commerce) as a principal medium of doing business for both the supplier and the customer side of every business transaction.

EDITORIAL
WEB IMPACTS FOR
BUSINESS AND IT
FUTURES

(Excerpts from *Internet World*
 10/25/99 ISSUE)

by Earl C. Joseph, Professor,
 Walden University & MIPS Edi-
 tor

We can learn a lot about most likely near-term computing futures by examining current trends from leading-edge early adopters. They can foretell the direction for the future that the rest of the IT world will follow.

CEO FUTURE BITES

- Greatest Fear
 - ⇒ To be left behind
 - ⇒ Privacy
 - ⇒ That the e-commerce team has enough talent
- Greatest Future Opportunity
 - ⇒ Short-term expense reduction
 - ⇒ long-term revenue generation
 - ⇒ Develop personalized products
 - ⇒ Expanding global customer base
- Business Function Most Impacted
 - ⇒ Sales; Opens new sales territory
 - ⇒ Sales; Creates greater efficiency in communicating
 - ⇒ Moving merchandise up and down the supply chain
 - ⇒ Interacting and communicating with key strategic vendors via the Web
- Internet Flash Point
 - ⇒ When employees request Internet/Web to improve communication with clients
- view of Internet Value
 - ⇒ Market is good for anticipating the future but less good at getting it right

⇒ Any company with “e” or “,com” commands an incredible market place and price

The lesson to be learned from the above CEO insights, is that, the more the IT department staff and Techies understand how the Web makes a difference from a business viewpoint the better the outcome for the future.

Many other Web impact trends can tell its value for the future, namely:

- Processes and tasks that are changed by the Internet:
 - ⇒ Corporate communications
 - ⇒ Marketing and Memos
 - ⇒ Customer service and Job posting
 - ⇒ Meetings
 - ⇒ Benefits administration
 - ⇒ Financial reporting
 - ⇒ New product development
 - ⇒ Inventory management and its automation
 - ⇒ Accounts receivables and payables automation
 - ⇒ Manufacturing
- Web IT technologies that have the most impact on the enterprise:
 - ⇒ E-mail and Bandwidth
 - ⇒ Security and firewalls
 - ⇒ NT 4.0/5.0
 - ⇒ Web application architecture
 - ⇒ Web to host access
 - ⇒ Browser and Web servers
 - ⇒ ISP services and Java
 - ⇒ E-commerce software
- How the Internet and Web are changing IT’s role:
 - ⇒ Increased IT’s importance
 - ⇒ IT’s functioning more like a service provider
 - ⇒ IT’s more involved with planning corporate strategy
- CEO’s use of the Internet and Web:
 - ⇒ Communicate with employees
 - ⇒ Communicate via e-mail with business partners
 - ⇒ Scan business, economic, competitor, and industry news and intelligence

- ⇒ To obtain more accurate data about customers and suppliers
- ⇒ Better forecasting tools
- ⇒ To access financial data
- ⇒ Increase in conducting “web threaded discussions” instead of holding a growing number of face-to-face meetings

- Additional functions most improved by the Internet and Web:
 - ⇒ Communications amongst departments
 - ⇒ The way projects are managed and operated
 - ⇒ The way teams work
 - ⇒ Inter-department communications
 - ⇒ Organization’s structure
- The payoff areas from the Internet and Web:
 - ⇒ Productivity increase
 - ⇒ Cost savings
 - ⇒ Increased revenues
- Departments most changed and impacted by the Internet and Web:
 - ⇒ Engineering
 - ⇒ IT
 - ⇒ Marketing and sales
 - ⇒ Education and Purchasing
 - ⇒ Customer service and Finance
 - ⇒ Research and development
 - ⇒ Human relations
 - ⇒ Manufacturing

After assembling this list of how the Web is changing and impacting business and IT, I was amazed at how much change has occurred and is in the wind for the future.

After reading these inroads that Web has made, it should be more easy to understand the transformation of the enterprise that continues to occur from advances in IT.

1999-2000 FUTURE
MnIPS MEETING
INFORMATION

by Carol Pederson

Below is the program for 1999-2000 dinner meetings. The schedule is complete with confirmed speakers. We still have the opportunity to pursue other organizations for joint meetings. So, if anyone has suggestions, please let me know.

Date, Title & Speaker

- Nov 16 E-Commerce, Ron Wood
- Jan 18 Job Satisfaction of Software Developers, Kurt Linberg
- Feb 15 Strategy how to formulate a sensible approach and maximize your return on investment when taking your company into E-Business, Michael Tapper of PSCDM
- Mar 21 Planning Technology for Small Companies, Anita Cassidy
- Apr 18 Communication and Technology, Paul Kiley
- May 16 AITP joint meeting.

1999-2000 FUTURE AITP MEETING INFORMATION

- **November 4, 1999 Monthly Meeting. Speaker.:** Michael A. Tapper, **Topic:** eCommerce with ROI
- **January 6, 2000 Monthly Meeting Speaker:** Nancy Hughes, **Topic:** Online Investing
- **February 3, 2000 Monthly Meeting. Speaker:** Michael McNamara, **Topic:** Team Duluth
- **March 2, 2000 Monthly Meeting. Speaker:** Michael Norton **Topic:** Recent Developments

in Secure Electronic Transactions

- **April 6, 2000 Monthly Meeting. Speaker:** Rachel Hollstadt (moderator), **Topic:** IT Managers Panel on "How to Have a Successful Project"
- **May 4, 2000 Monthly Meeting. Speaker:** John Thorp, **Topic:** Realizing the Benefits of Information Technology

Is Metadata Mega-trendy

??

September Meeting Review

Written by Dennis Cummings,
MnIPS Board Member

Mr. David Bahn was the featured speaker at the MnIPS September 21st meeting, which was held at the Bloomington Holiday Inn. He started the session by joking that some people think that "Metadata" and "Megatrend" were actual Poke'mon characters. If I didn't have 2 elementary school kids that worship the group, I would've believed him. But Bahn covered the material in an easy-to-follow format that even "Pikachu" could handle (or be trained in it).

Why is "Metadata" an important topic? Metadata organization helps distinguish between information and knowledge. All people (white collar workers, especially) are overloaded with information to the point that it becomes a "quality of life" issue. Society is inundated with a mass of unfiltered/unorganized data depletes our capacity to recognize the information in our lives that really is meaningful.

What does "Megatrend" mean? John Naisbitt first coined the term in 1982, but Bahn defines it as "A major trend or driving force in the external environment that has the potential to reshape a set (or series) of current expectations". What does Metadata mean? It was originally described as "Structured Data about Data" and it came from 2 traditions: Library Systems ("card catalog systems") and Database/Information

Science. While this may pass the KISS principle, it was limited as it described the data structure (e.g., DDL = data definition library) and it originated when collections were largely physical (non-digital) with stable changes.

"Metadata" is defined as the data about the design, storage, management and structure of data (data about data again?). The data's attributes and descriptions not only include intrinsic structure, but also have access & interfacial characteristics and quantitative measures that describe how data collections are managed & operated (e.g., record counts, access time estimates and data utilization measures). In addition, the data's purpose or its routine users are identified.

"Megatrend" experienced exponential growth due to the reduced cost and wide variety of physical storage availability (e.g., chips, tapes and disks) including data formatting (e.g., EDI or encryption) if needed. Industry competitiveness and sometimes even legal issues are driven by data significance and the cost per storage capacity ratio as well as customer service. While we may have cheap physical storage costs, we must consider training and access time costs as well so that we do not have "data landfills".

Over the last 40 years, we have gathered large and more dispersed data collections triggered by marketing, financial and legal considerations. In addition, ANSI standards, mergers and new platforms (e.g., PC-to-mainframe uploads, ASCII-to-EBCDIC) have created data file or system conversion problems. These disparate data collections need skilled people to manage them, but the current labor shortage raises their availability cost. As a result, many data-access tasks must be "dumbed-down" for others! Much information processing tasks will become embedded in "Point-of-____" devices. Some of these devices will often have to incorporate data-indexing features (e.g., TIVO).

Metadata's and Data Warehouses' (DW's) needed skilled position include database administrators and developers/analysts who are responsible for planning and developing Metadata structure and Data-Warehousing applications. In addition, Metadata needs interface engineers who are like graphic or web designers, but are responsible for interfaces to large DW and responsible for Metadata semantics. Finally, Metadata/DW need operators who are responsible for physical

maintenance tasks that are semi-routinized and automated. As data access time and skill people costs increase, so does the incentive to better manage large data collections.

One of the ways to cut costs is to get rid of obsolete data, such as eliminating payroll information after 7 years. Just as there are tools to facilitate the reduction of inventory-on-hand in physical warehouse, so too DW tools will enable the monitoring and purging of old or unused data in an automatic or semi-automatic manner. One of these new semantics will describe the data maintenance characteristics of data collections. One example could be the measuring how often the database was sampled over the last 12 months - can be used to guide archiving of selected data.

An organization's data can self-organize itself in 3 different ways. Reverse Engineering is a new software tool that will support automatic or semi-automatic merging of variable data definitions, which are already used in Healthcare sector). Facilitated Knowledge Extraction is a tool that supports automatic extraction of useful data from data warehouses, of which automated kinds have prototypical "Data Mining"). An Example of this would be Synera tools for automated "Knowledge Extraction" from organizational databases and DW in order to support and facilitate organizational learning. In addition, self-measuring data tools can help the DW preemptively monitor files and queries with respect to query access time and system resource costs.

Bahn finally talked about the opportunities and obstacles for individuals, not firms, involved in managing an organization Metadata process. Regarding the opportunities, more organizations and groups in society increasingly require guidance for their own Metadata needs. This increased need creates a market for fee-based services and projects (e.g., law firms). A skilled person must be found to solve the data organization problem (though Bahn jokes that it occasionally is passed off to a semi-independent body that is underfunded for the task). As for the obstacles, Metadata initiatives are inherently long-term programs as many organizations only think in the short-term and on the surface, the topic is too complex for most people to grasp (e.g., a layman's DW could be his "junk-mail flood"). Even an organization's long-term support for physical (or non-virtual) infrastructure projects is quite hard to galvanize.

Bahn summarized his thoughts on Metadata knowledge sharing by starting with sectors/groups with a vested interest in Metadata standards. These could be law firms and bar associations, the housing and road construction sectors, marketers in need of GIS and demographic data, software vendors and consulting firms. These groups can piggyback on the efforts of others such as the Metadata Consortium, the Dublin Core project and the Federal Geospatial Metadata standards. They should also identify those other groups in the public and private spheres with the greatest vested interests in confronting the strategic challenges of managing society's data, including links and standards.

For more information on Data Warehousing, you may wish to contact the Twin Cities' DAMA (Data Administration and Management Association) chapter. They meet monthly at various companies. See you at the November 16 meeting.

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MnIPS Newsletter

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DINNER METTING

Tuesday, November 16, 1999

5:00 PM - 8:00 PM

TOPIC:

**“E-Commerce: The Emergence of
Virtual Trade and an Electronic Society”**

NOTE: MEETING LOCATION

Holiday Inn Bloomington
35W & 94th (1201 W 94th St.)

FUTURES by Earl C. Joseph

“HOW CAN YOU TELL
WHEN YOU ARE
ADDICTED TO THE NET?
WHEN YOU INTRODUCE
YOUR SPOUSE AND
FRIENDS WITH AN @ IN
THEIR NAME AND YOU
TYPE .COM INSTEAD OF
A PERIOD!”

