



MnIPS NEWSLETTER

A Publication of the Minnesota Information Professional Society (Formally ACM & ASM) - Vol. 2, No. 3, March, 2001

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:

Earl C. Joseph
365 Summit Ave.
St. Paul, MN 55102-2120
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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 Mar. 17th

And Choose
Pizza Buffet
with various choices

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 March 20, 2001**

Meeting of
**Minnesota Information
Professional Society**

Speakers Topic:
**"What's New In e-Security: IP
Architecture & Lessons
Learned about
Social Engineering"**

Speaker:
Thomas D. Cocchiarella

SPEAKER Profile

Tom began his career in the computer industry in 1971 as a Weapons Control Systems Technician on F4 Phantom Fighters (Secret Security Clearance) where he maintained Radar, Air-Air Targeting, and Air-Ground Bombing Computers. Tom attended the University of Minnesota, then transferred to St. Paul Technical College, where he received degrees in Industrial Electronics and Electronic Communications. He also earned an FCC Radio Telephony Commercial License with Radar Endorsement.

While working for Control Data Corporation as a Customer Engineer, he maintained CYBER 170 & CYBER 7600 Super Computers.

In 1978 he joined Deluxe Corporation as a Computer Technician supporting a variety of systems, including DEC, Data General, and IBM systems. Tom managed the Deluxe National Hardware Support Depot and

Field Support organization, and also managed software development for a variety of applications using mainframe, client/server, minicomputer, and PC systems.

As a Telecommunications Analyst, Tom developed and delivered "Introduction to Data Communications" classes at St. Paul's Technical College. He served as Director of Systems Development for Deluxe Corporation, the VP of IS for Colwell Systems, and as the VP of IT for Deluxe Business Forms & Supplies.

As President/CEO of Preferred Consulting Services, he launched a Computer Security consulting practice in 1997, before the company was sold to AccuStaff, Inc.

Tom joined [Pareo, Inc.](#) a Minneapolis based IT consulting company, as Practice Leader for the Information Protection Practice in 1998, and oversaw Pareo's IP Team efforts on a project for a large International Financial Services client based in Minneapolis. This major project included several of the client's international sites. Tom is now Practice Leader of IT Architecture for Pareo, which includes responsibilities for Systems Design, Enterprise Application Integration (EAI), and Information Pro-

tection Services including IP Architecture. Tom is a member of the Computer Security Institute ([CSI](#)), and is Treasurer of the Midwest Electronic Criminal Investigation Association ([MECIA](#)).

TOPIC INFORMATION

Pareo - Architectural Design

Pareo [Par-e-o] is a Latin word meaning "to become evident".

Pareo's IT Architectural Design creates blueprints as a framework for implementing IT strategies. These blueprints provide an integrated view of the components required to support the IT strategies and the relationships among the components. There are four primary categories of blueprints: Process Architecture, Application Architecture, Data Architecture, and Technology Architecture:

Process Architecture provides a cohesive and integrated view of the activities in an organization's value chain. The process architecture may reflect the current business flow or may depict a target set of activities designed for a business process change initiative.

Application Architecture provides a plan for integrating applications and databases. Application Architecture groups business processes and data by business application and defines the relationships among processes, data and applications. This architecture identifies the high-level functions and data interactions required for potential applications.

Data Architecture, along with the Application Architecture, provides a plan for sharing data across the enterprise. Data Architecture groups information needs by data entity (or subject area), defines the

relationships among the entities, and determines the business rules that govern the data.

Technology Architecture provides an infrastructure blueprint for the technology resources required to support the application and information needs of the business.

The components may include elements such as operating systems, database management systems, networks, servers, middleware, development tools, and standards. Technology Architecture guides the placement of data and applications, selection of hardware and software, and identifies communication requirements. For more info contact: <http://www.pareoinc.com/pareosite/index.html>

President's Letter

Happy St. Patrick's Day (and the rest of March) to you and your family & friends!

We mailed out membership renewal forms to the veteran membership in January. Thanks to the many members that have already rejoined MnIPS as of this printing. For those of you that are still considering becoming a MnIPS member, you can receive discounts while attending our regular monthly dinner meetings and the annual MnIPS Golf Outing in June when you join.

MnIPS is a volunteer organization and we always welcome any help in our regular, ongoing committees or at a specific event. We are looking for a regular attendee at our monthly dinner meetings to register people. The time commitment would be 5:00-

6:00pm on the 3rd Tuesday from September to May, except for December. If you can help at the dinner meetings, please call me at 651-707-0523. We also need volunteers at our annual Golf Outing, usually held on the 3rd Monday in June. The time commitment would be 4:00-6:00pm or any time that afternoon. If you can assist us at the Golf Outing, please contact Jeff Hema at jhema@landolakes.com. We also welcome ideas from you that can improve our organization. If you can assist us this year in any capacity please let me or any board members (that are listed on the back page) know.

I look forward to hearing our March 20th speaker, Tim Stenerson of Harbinger Partners, who will speak on "E-commerce Project Management". Thanks to our February 20th presenter, Dennis Cheesbrow of TeamWorks International, who spoke on "Whole System Framework Decisions". Thanks again to our January 16 guest host, Dr. David Bahn from Metropolitan State University, who spoke on "Clicks and Mortar: The future of business strategy that includes E-commerce". For a summary of David's talk, please read the regular meeting review column in this newsletter.

I hope to see all of you at the March 20th meeting!

--Dennis Cummings, President

EC is not EZ when Speaking B2B and B2C

(January 2001 MnIPS meeting review, written by Dennis Cummings)

Dr. David Bahn was the featured presenter at the MnIPS' monthly dinner meeting held on January 16, 2001. Dr. David Bahn is an assistant professor of Management Information Systems at Metropolitan State University's College of Management. Being the author of several articles, he recently completed doctoral research at the University of Minnesota's Carlson School of Management on how to achieve more effective communication of information systems requirements between users and software designers. Dr. Bahn is also a consultant on IT planning and implementation for business and government organizations. He has conducted post-doctoral research on the impact of electronic commerce (EC) upon business strategy for "brick-and-mortar" (B&M) retailers, as well as on the broader questions of managing emerging technologies.

Dr. Bahn started his presentation by defining EC. Some of us like to think of EC as selling things on the Internet, but it is more than that. Professor Barton Weitz, from the University of Florida at Gainesville says that EC is the "online exchange of value between organizations and their partners, employees or customers with the absence of geographical and time restrictions". This means that EC is about the exchange of value in any form, even just as information.

Then he defined "Clicks-and-Mortar" (C&M) as "strategizing the optimal and evolutionary balance between B&M and B2C (business to consumer) E-commerce chan-

nels". C&M can be furthered defined as:

1. Successfully operating business operations along with B2C EC channels.
2. Achieving synergy between B&M and EC that optimizes the cost/benefits of each.
3. Balancing growth of business volume in each channel without unnecessarily harming the other channel.
4. Balancing investment in each channel.

Next, Dr. Bahn introduced us to the Value Chain (VC) as:

1. A way to look at a firm's business activities from a strategy-setting perspective.
2. A sequential array of linked business processes that transform unfinished inputs into finished outputs.
3. A way for a CEO to answer the questions:
 - a. Which activities add the most value for the customer?
 - b. Which are the most costly?
 - c. Despite cost/benefit, which activities must be performed in-house because they are strategically critical?

A typical VC is driven by 3 support activities and costs, namely Human Resources Management, General Administration, and Product R&D - Technology & Systems Development. Its primary activities and costs are Inbound Logistics, Operations, Outbound Logistics, Sales and Marketing, Service, and Profit Margin.

Finally, he asked "Why is the C&M challenge so important to business today? ". Answers could be that:

1. While B2B EC is growing explosively, B2C EC is still growing very fast. ("By 2010, B2C EC could be as much as 15-20% of all retail sales" says Goldman Sachs).
2. The opportunities are exploiting EC to augment B&M channels are great, but the risks are also large.
 - a. Implementation of B2C EC is expensive.
 - b. Uncertainty due to fear of cannibalization adds hidden costs.
 - c. Exposure of EC failure threatens firm's credibility with investors.

To heighten interest and remembrance of his data, Dr. Bahn presented "take-home messages". These were not actually a "Cliff Notes" version, but perhaps lingering thoughts for you to bring up in discussions later. The "take-home" information that was provided can be listed as:

1. E-commerce (EC) heralds a very complex evolutionary change that will take a while to unfold and will not be uniform.
2. There is no right way for how EC should be used in B2C operations. Instead, there are probably several different appropriate strategies dependent on:
 - a. What kind of product is sold?

- b. The role of retail channels in that product's industry.
- c. The relationship between manufacturers and retailers in a given industry.
3. Going from B&M to C&M is the basis for the redefinition of B2C operations in the 21st century.
4. If EC can handle so many parts of interacting and exchanging value with customers, then what is the purpose of real physical retail space and non-virtual business processes?
(i.e., What is the value of the B&M operations in contradistinction to, and in combination with EC?)

Dr. Bahn's notes sound good, but does it actually work in today's business world (or selfishly, how would I involved)? Funny you should ask, Dr. Bahn and his students did do a few C&M case studies in which:

1. 25 organizations were studied. Retail and manufacturing firms that deal with B2C products or services primarily through B&M channels.
2. Minnesota and out-of-state U.S. firms in a variety of business sectors.
 - a. Fashion retail.
 - b. Real Estate.
 - c. Auto.
 - d. Healthcare/pharmaceutical.
3. Data sources were:
 - a. Trade/Industry publications and magazines.
 - b. Financial reports.
 - c. Industry/trade organization reports.
 - d. Many interviews with managers and/or industry analysts.

The research questions for Dr. Bahn's case studies were:

1. Which VC activities would be performed online, and which only through B&M channels?
2. What kinds of transactions/activities can be performed online and which seem to require "high-touch" B&M interaction with the customer?
3. Does EC enhance disintermediation of retailers?
4. Does EC enhance "competition" between industry players?
5. How is the B&M channel to customers being reshaped by the availability of EC.

B2B EC was not studied, except in so far as B2B capability influenced B2C initiatives.

Some of the research's emergent issues were:

1. Within B&M industries, what is the future role of business intermediaries (i.e., wholesalers and retailers)?
2. Are firms formulating a coherent business strategy in respect to EC alongside B&M.
3. Several approaches to formulating business strategy for C&M balance were apparent.

C&M Strategies can be grouped into 6 categories: Direct Integration, Parallel Lines, Fighting Retreat, Unbundle Burdensome Transactions, Maximize Identity Only, and Front Lobby. Each of these categories and some companies who use them will be covered below.

Direct Integration strategy (used by REI and the GAP) directly integrates B&M operations with EC operations. This is the approach we all intuitively think

of when we first consider C&M. Some activities involved include:

1. Perform all primary B2C activities in both channels, even direct sales.
2. Cross-promote each channel using the other (create "ubiquitous brand identity").
3. Provide both channels in-store through kiosks.
4. Maintain or expand traditional B&M retail operations.
5. Provide cross-channel sales returns and service.

Parallel Lines strategy (used by Pier I Imports, Walgreens, and Paper Warehouse) helps maintain B&M and EC as full but distinct channels. Its characteristics include:

1. EC channel is a limited purpose complement to the B&M channel.
2. Perform all primary B2C activities in both channels, even direct sales.
3. Online inventory array < in-store inventory array.
4. Limited cross-promotion of channels.
5. Maintain size of B&M retail operations without regard to EC.
6. May or may not provide cross-channel sales returns and service.

Fighting retreat strategy (used by Eddie Bauer and Blockbuster Video) is an EC channel grown at the expense

of B&M. Its characteristics include:

1. A strategic and gradual retreat from B&M as primary sales channel for profit growth; a strategy for an uncertain future.
2. Contract or redefine B&M retail space. Retain enough B&M to hold/maintain brand name and an essential level of foot traffic.
3. Perform all primary B2C activities in both channels, even direct sales.
4. Extensively promote the EC channel and transfer the B&M brand identity to EC.
5. EC inventory array usually B&M inventory array.

Unbundle Burdensome Transactions strategy (used by Ford, Saturn and Edina Realty) is used for products and services where the B&M sales transaction is rarely straightforward or uncomplicated. Its characteristics include:

1. Perform pre and post-sales B2C activities in EC channel. Sales activities through EC are the exception.
2. EC channel is deployed primarily to support and enhance a B&M centered transaction – to create and hook an educated customer.
3. EC channel is there to promote B&M. If B&M promotes EC, it is only to enhance loyalty to B&M.
4. Often involves high-ticket items with significant requirements for price negotiations or risk bearing / insurance (Westland & Clark, Global Electronic Commerce, MIT Press, 1999).

Maximize Identity Only strategy (used by Toro and Lawn-Boy) is used for products or services where the B&M sales are through a

dealer/retailer network. Its characteristics include:

1. Dealer/retailer locator is nexus of website. Indeed, one strategic purpose of the website is to reassure the Dealer/Retailer network.
2. No product sales. Possible sales of accessories or parts.
3. EC channel is deployed primarily to enhance product image/identity. Some pre- & postsales B2C activities to educate on differentiated features of products.
4. Some advisory function for product model selection.
5. Often involves items that are too large for direct shipping, but this is not always true.

Front Lobby strategy (used by Valspar and Plasti-kote) has activities that include:

1. Other than broad description of products and some general pre-sales marketing/advertising, there is no B2C EC business activity.
2. This is appropriate for some products that must be dealt with through a strictly defined supply chain (e.g., potential environmental hazards).
3. Befits the limited role of an OEM (original equipment manufacturer) where any direct B2C involvement is restricted to a minimum.
4. Motivation may just be to put OEM on the map (negate total invisibility to consumer dictated by powerful retailer) through marketing a basic product/brand awareness.

Dr. Bahn finished his presentation by summarizing for us (in a

neat "take-home message") the main points covered in his EC/C&M research study, namely:

1. The notion that full-blown EC is uniformly strategically beneficially is dubious, even disregarding implementation cost issues.
2. EC business strategy is often shaped by B&M strategy considerations.
3. EC business strategy is a function of "transaction ergonomics".
4. Despite the necessarily limited role of EC in many instances, it still can help in reshaping B2C B&M operations in surprising ways.

If you wish to learn more about Dr. Bahn's EC/C&M research study or have any general questions or comments, please contact him at bahn0013@tc.umn.edu.

**BRING A
FRIEND
WITH YOU
TO THE
NEXT
MnIPS
MEETING**

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MnIPS Newsletter

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ADDRESS SERVICE REQUESTED

DINNER METTING

Tuesday, March 20, 2001

5:00 PM - 8:00 PM

TOPIC:

**"What's New In e-Security: IP Archi-
tecture & Social Engineering"**

NOTE: MEETING LOCATION

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

**"WHICH IP ARCHITECTURE
WILL YOU FOLLOW?!"**



by Earl C. Joseph