# Research findings from an exploration into answering the research question

## "To what degree is learning enhanced by guided BLOG discussions?"

*Prepared  by Barbara Lauridsen*

*Spring 2017   TCC conference  THU 16:00B (20 min)*

g17076

# To what degree is learning enhanced by guided BLOG threads?

Description: The finding reveal evidence of a degree to which collaborative peer-to-peer blogging did encourage critical thinking while seeking a team solution to a complex problem. This presentation reveals results using Blackboard Discussion Forum as a tool for capturing the blog style writing while researching a complex topic for a team case study.

g17076

# CIS421 Enterprise Architecture January10 to February 4, 2017 – on-campus

Course Description: "Explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and infrastructure and their fit with the business. Students learn frameworks and strategies for infrastructure management, system administration, data/information architecture, content management, distributed computing, middleware, legacy system integration, system consolidation, software selection, total cost of ownership calculation, IT investment analysis, and emerging technologies."

# CIS421 Enterprise Architecture
# January10 to February 4, 2017

**INSTRUCTOR: Barbara Lauridsen, MBA, PhD**

E-mail:   blauridsen@gmail.com  <preferred> & instant message chat

School:   Barbara.lauridsen@natuniv.edu  when sent from BlackBoard

Website:  www.barbaralauridsen.com

# CIS421 Enterprise Architecture starting January 10, 2017

**Course Learning Outcomes (CLO):**

- **Utilize *techniques* for assessing and managing risk across the portfolio of the enterprise.**
- Evaluate and plan for the integration of emerging technologies
- Describe the benefits and risks of Service Oriented Architecture.
- Analyze the integration of enterprise systems with inter-organizational partners such as suppliers, government, etc.

# "SMART" goals are nothing new

- According to Crispin (2013), this familiar mnemonic is a "reminder to make our goals Specific, Measurable, Action-oriented, Realistic, and Timely" (Crispin, 2013).

- "Practicing managers and corporations can lose the benefit of a more abstract objective in order to gain quantification. **It is the combination of the objective and its action plan that is really important**. Therefore, serious management should focus on these twins and not just the objective" (Doran, 1981).

Crispin, L. (2013,  July 9). Problem Solving with Impact Mapping. *Agile connection*. Retrieved from http://www.agileconnection.com/article/problem-solving-impact-mapping

Doran, G. T. (1981). There's a S.M.A.R.T. way to write management's goals and objectives. *Management Review, 70*(11), 35–36.

# How to focus a team on becoming S M A R T ?

- *Specific* - **Why: Specific reasons, purpose or benefits of accomplishing the goal.**
- *Measurable* - **How much? How will I know when it is accomplished?**
- *Attainable/Achievable* - **How? How can the goal be accomplished?**
- *Relevant* - **Does this match our other efforts/needs?**
- *Time bound* - **What can I do today?**

# What is blog-style writing?

Holley Hanson summarizes the literature with her interpretation that "blog-style writing is generally detailed focused yet concise, may (but does not always) prioritize reflection over generating new arguments, employs a more conversational tone and uses interactive citations through hyperlinking" (2016, p.92).

Holley E. Hansen (2016) The Impact of Blog-Style Writing on Student Learning Outcomes: A Pilot Study, *Journal of Political Science Education, 12:1,* 85-101. Available from http://dx.doi.org/10.1080/15512169.2015.1060887

# ...blogging as "microlevel" thinking...

# What is blog writing?

Holley Hanson (2016) summarized her pilot research project with some testimonials. A participant described blog-writing as "microlevel" thinking compared to essay-writing as requiring "macrolevel" thinking, acknowledging that this observation is driven by the nature of blog writing norms.

She states that "Blog posts seemed to feature more concise writing that emphasized simpler linguistic structures" (p. 97) and encourage students to develop key communication and summarizing skills.

Holley E. Hansen (2016) The Impact of Blog-Style Writing on Student Learning Outcomes: A Pilot Study

# Defining Terms



Blog
/blog/
def: A website where a writer or group of writers chronologically express their opinion on a subject

http://langwitches.org/blog/



## Blogging in the Classroom

Blogging is about writing and reading NOT about a technology platform. When using a classroom or student blogs, a global learning community and communication center can grow to facilitate student learning for 21st Century skills and literacies.

STEP 1 → STEP 2 → STEP 3 → STEP 4

START

STEP 1

### Introduction to Blogging

Being able to read AND express yourself in a digital world is an important part of being literate in the 21st century. Blogging is a way of linking writing, reading, connecting information and learning together.

### Why Blogging?

Provide your students with an authentic learning opportunity, give them a global audience, and engage them in conversation. Blogs are the platform that support 21st century skills and literacies, from communicating to connecting, from Digital Citizenship to information, network, global and media literacy.

### Reading

Becoming an avid blog reader of a variety of blogs is the first step for teachers and students to gain confidence, articulate learning goals and objective and gauging quality. Reading blogs with metacognitive analysis in mind, will help expose readers to the potential blogging holds in relationship to LEARNING. Reading blogs also gives opportunities to make connections.

### Digital Citizenship

Through blogging, students receive exposure to mini lessons, woven into teachable moments. Among digital citizenship lessons are appropriate and responsible online behavior, Internet safety, digital footprint, plagiarism, copyright and Creative Commons.
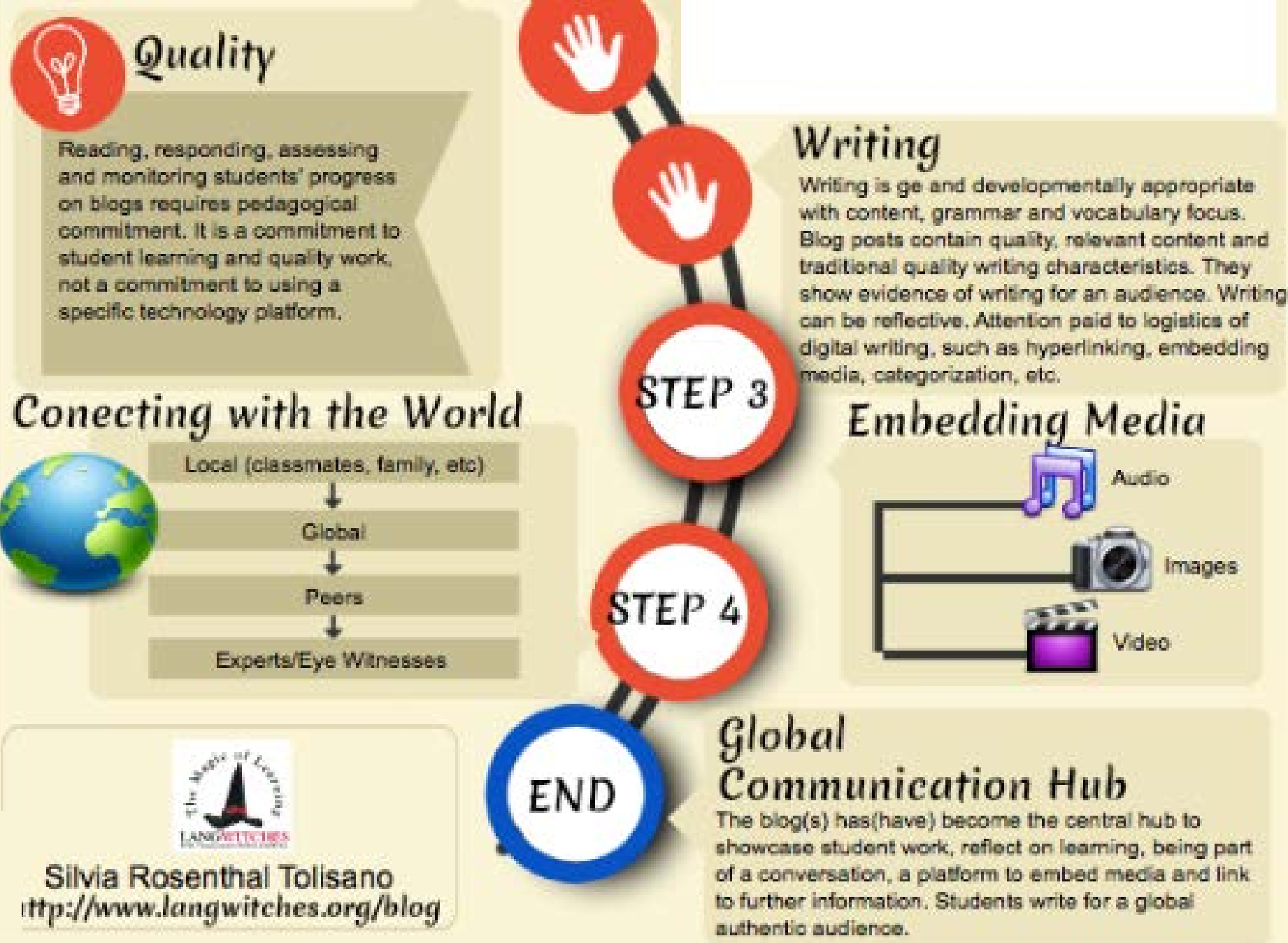
STEP 2

### Commenting

Read comments (...lots of comments) to learn to distinguish between poor, mediocre and quality comments. Model commenting to your students by leaving QUALITY comments on their blogs. Commenting is about continuing a conversation started in a blog post. Commenting is about helping to (potentially) push the author of the post in a new direction, give a new perspective or connect them to new resources.

### Quality

Reading, responding, assessing and monitoring students' progress on blogs requires pedagogical commitment. It is a commitment to student learning and quality work, not a commitment to using a specific technology platform.

### Writing

Writing is ge and developmentally appropriate with content, grammar and vocabulary focus. Blog posts contain quality, relevant content and traditional quality writing characteristics. They show evidence of writing for an audience. Writing can be reflective. Attention paid to logistics of digital writing, such as hyperlinking, embedding media, categorization, etc.

STEP 3

### Conecting with the World

Local (classmates, family, etc)
↓
Global
↓
Peers
↓
Experts/Eye Witnesses

### Embedding Media

Audio
Images
Video

STEP 4

END

### Global Communication Hub

The blog(s) has(have) become the central hub to showcase student work, reflect on learning, being part of a conversation, a platform to embed media and link to further information. Students write for a global authentic audience.

Silvia Rosenthal Tolisano
http://www.langwitches.org/blog

# Blogging in the classroom

## Introduction to Blogging

Being able to read AND express yourself in a digital world is an important part of being literate in the 21st century. Blogging is a way of linking writing, reading, connecting information and learning together.

**START**

**STEP 1**

## Why Blogging?

Provide your students with an authentic learning opportunity, give them a global audience, and engage them in conversation. Blogs are the platform that support 21st century skills and literacies, from communicating to connecting, from Digital Citizenship to information, network, global and media literacy.

## Reading

Becoming an avid blog reader of a variety of blogs is the first step for teachers and students to gain confidence, articulate learning goals and objective and gauging quality. Reading blogs with metacognitive analysis in mind, will help expose readers to the potential blogging holds in relationship to LEARNING. Reading blogs also gives opportunities to make connections.

## Digital Citizenship

Through blogging, students receive exposure to mini lessons, woven into teachable moments. Among digital citizenship lessons are appropriate and responsible online behavior, Internet safety, digital footprint, plagiarism, copyright and Creative Commons.

**STEP 2**

## Commenting

Read comments (...lots of comments) to learn to distinguish between poor, mediocre and quality comments. Model commenting to your students by leaving QUALITY comments on their blogs. Commenting is about continuing a conversation started in a blog post. Commenting is about helping to (potentially) push the author of the post in a new direction, give a new perspective or connect them to new resources.

http://langwitches.org/blog/

# Blogging in a Class room

## Quality

Reading, responding, assessing and monitoring students' progress on blogs requires pedagogical commitment. It is a commitment to student learning and quality work, not a commitment to using a specific technology platform.

## Conecting with the World

Local (classmates, family, etc)
↓
Global
↓
Peers
↓
Experts/Eye Witnesses

## Writing

Writing is ge and developmentally appropriate with content, grammar and vocabulary focus. Blog posts contain quality, relevant content and traditional quality writing characteristics. They show evidence of writing for an audience. Writing can be reflective. Attention paid to logistics of digital writing, such as hyperlinking, embedding media, categorization, etc.

**STEP 3**

## Embedding Media

Audio

Images

Video

**STEP 4**

**END**

## Global Communication Hub

The blog(s) has(have) become the central hub to showcase student work, reflect on learning, being part of a conversation, a platform to embed media and link to further information. Students write for a global authentic audience.

http://langwitches.org/blog/

# In defense of blogging in a BlackBoard (Bb) course

***An inspiration of this research, to increase effective communications***

"The brief nature of blog posts may encourage students to develop key communication and summarizing skills, while longer papers give students more room to compare and synthesize ideas" [Hanson, 2016, p. 98]. My research focused on serving as "further testing" of Hanson's suggestion that blogging and short essays be complementary assignments.

Hansen, H. E. (2016) The Impact of Blog-Style Writing on Student Learning Outcomes: A Pilot Study, *Journal of Political Science Education.*

# Bb discussion threads redefined as "blogs"?

The environment of a Bb course does constrain the meaning of "blogging". Bb is a container limited to an audience of learners who share an agenda, to pass a prescribed course. My incentive was to enhance the learning objectives.

•For *on-campus students,* live discussion during live time is a direct experience with nothing tangible, as a written message. In-Class student had low tolerance for posting after talking, but did so as a group post, for the earned points.

# Limitation of "blogging" in a Blackboard course

Blackboard courses are a private place for students to upload assignments and to download articles and instructions.

Blackboard does not offer to align with the "public nature of blog posts meaning that students are engaging in blog-style writing but not blogging" (Hansen, 2016, p.91).

# Limitation of "blogging" in a Bb course

Blackboard Support Portal

National University Support

Discussion Board

Library F___es

Math and Writing Centers

For this research, in advance of day 1, the DQs were re-imagined & restated as **Blog prompts** to encourage original thinking, retrieving & sharing interesting ideas and images, and also to cite sources so that others can navigate to the source webpage. The Bb features of posting a concise message with more-than-just-text was encouraged and demonstrated.

Bb "blogging" as sharing new learning

During this period, blogging became **peer-to-peer (P2P)** experience that that gained a momentum and a very active participation.

Here are some actual blog posts that show evidence of enhanced P2P learning.

Blogs to explore concepts, beyond the readings

**Wk1Blog2 Mitigating IT Risk**

2 months ago

The possible risk would be compromising the system by virus, lack of storage, etc. We would have to ensure that the top notch **anti-virus protection**, up-to-date patch, **security awareness training** for the employees, monitoring, access control, etc.

1. How many *[people]* will be controlling and managing these servers?
2. Will the other companies have top notch security if we are to partner up with them? Partnerships can definitely go either way.

**Image is "clickable"**

RISKS AHEAD

Blogs to share research for team project, example from LinkedIn

**Image is "clickable"** ➡️

L____ P__     2 months ago

**RE: TEAM STIL**

https://www.linkedin.com/pulse/4-lessons-from-blockbuster-failure-david-reiss

# NETFLIX VS. BLOCKBUSTER (2004-2010)

■ BLOCKBUSTER REVENUE     ■ NETFLIX REVENUE

$6 BILLION

$4 BILLION

$2 BILLION           — $2.2 BILLION

$0                      — BANKRUPT

2004   2005   2006   2007   2008   2009   2010
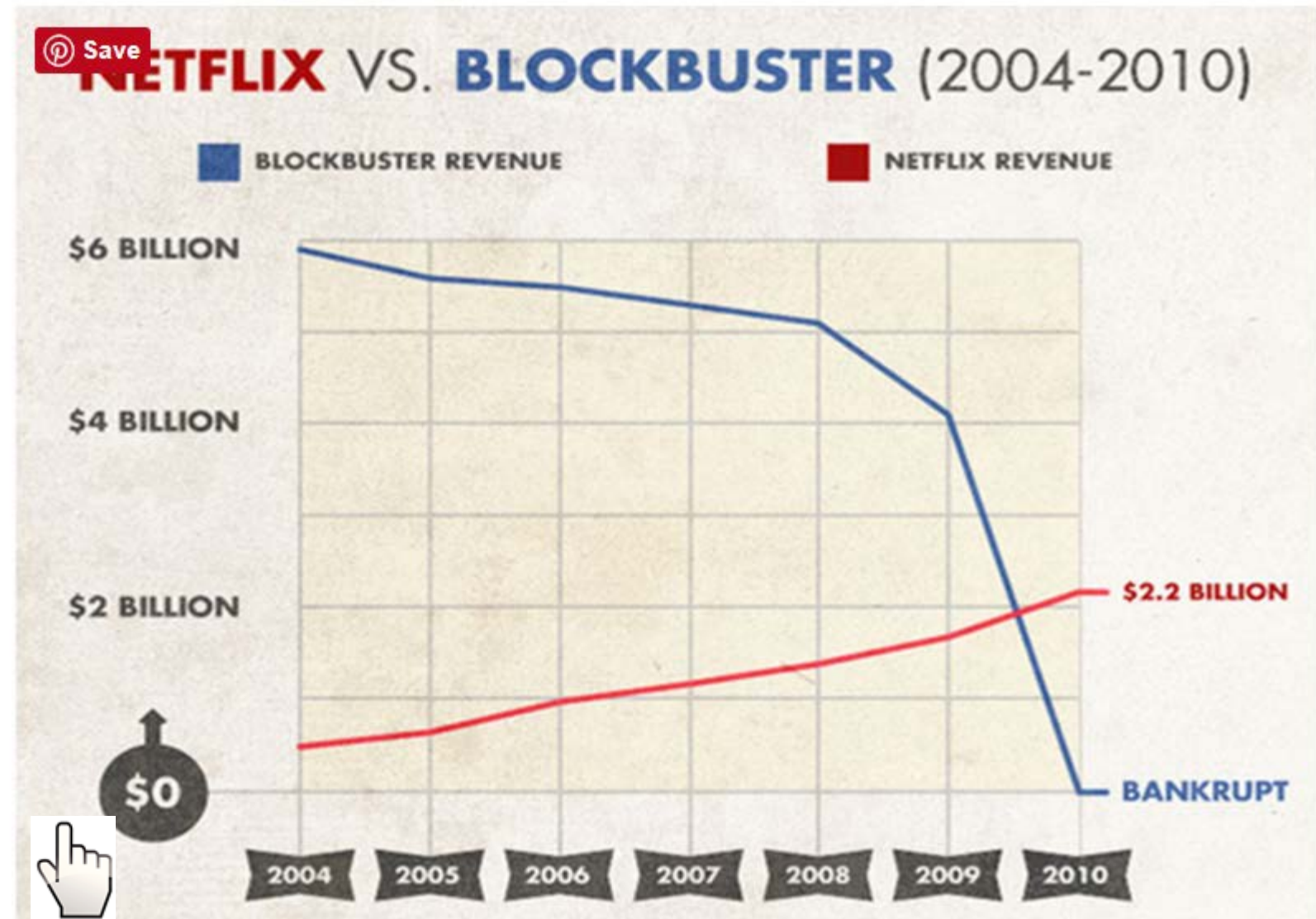
# Blogs to share progressive research

RE: TEAM STIL

Here's a slide that sums everything up.

## Case study Blockbuster

- Blockbuster was a "bricks and mortar" video rental service that went into administration in 2013
- Netflix started operating a postal rental service in 1997 that was a subscription service, no late fees. Netflix then moved into digital downloads
- Blockbuster in response cut its late fees which was a significant part of its revenue, and moved into being a convenience store with DVD rental
- Netflix was "disruptive innovation" in that when one service is invented it destroys another
- Blockbuster failed to see that a niche idea was going to go global and become a $2.8 billion dollar a year industry
- Reason for failure – refusing to move with the times in a dynamic market

https://image.slidesharecdn.com/233businessfailure-150828202231-lva1-app6892/95/edexcel-a-level-business-new-spec-233-business-failure-19-638.jpg?cb=1440794933

Blog posts to share discovery of good ideas found, asking questions

**Link is "clickable"**

Wk1Blog2 Mitigating IT Risk [3] outsourcing?

3. Risk: Communication with other company, **outsourcing issues.** Partnership = solution?

I am wondering what is the **IT Risk** that needs to be mitigated for this item 3.

a. *It it he same as partnership with a company who is contracted?* ... to handle the pilot to prepare it for roll out to some number of other branches.

## Advantages vs. Disadvantages

Lack of customer focus

Threat to security & confidentiality

Increase speed to market

Expand Service

Loss of managerial control

Specialization

More Successful

Cost Saving

Focus

Quality Problems

http://www.slideshare.net/ArunKhedwal/outsourcing-offshoring-29267486
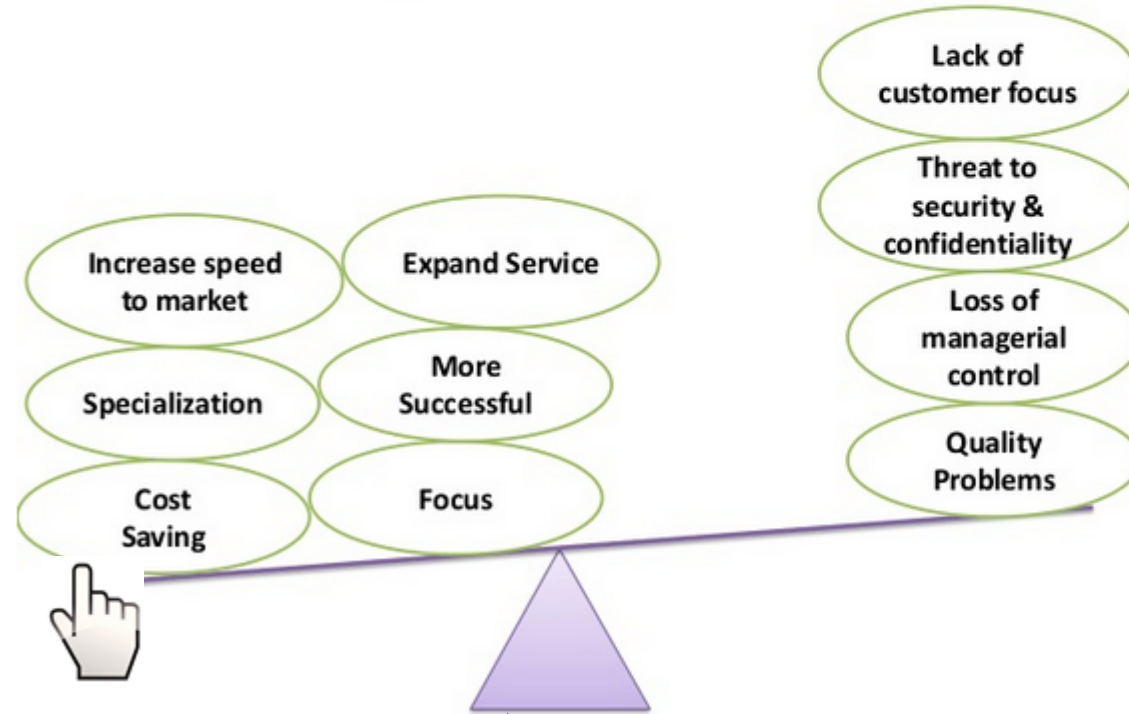
# Blogs to share answers, navigating to the source

**Link opens the source**



Wk1Blog2 Mitigating IT Risk [3] out

3. Risk: Communication with othe

I am wondering what is the **IT Ris**

a. *It it he same as partnership wit*
*prepare it for roll out to some num*

## Advantages vs.
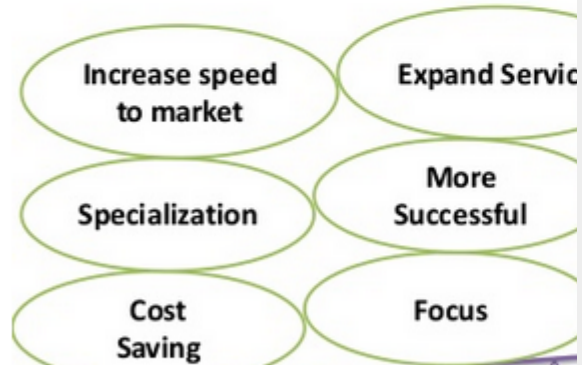
Increase speed to market

Expand Servic

Specialization

More Successful

Cost Saving

Focus

http://www.slideshare.net/ArunKhedwal/outsourcing-offshoring-29267486

Outsourcing    Offshoring

## Outsourcing & Offshoring

Date: 15th December-13

XMBA-25,ITM-Vashi

Arun Khedwal          Shirish Telsang

Archana Bamanale    Gajendra Sawant

1 of 25

Outsourcing & Offshoring

10,111 views

Blogs to start conversation with peers, to focus on exploring IT Risk, sharing a perspective.

**Mitigating IT Risk, mother nature**

Ok, ya got my attention... tell me more about how "*mother nature*" the connections... rain? sleet? wind? stale popcorn?



Pinterest | Nature Quotes, Winter Quotes and Weather Quotes

**Mother Nature Quotes**

URL: https://www.pinterest.com/explore/mother-nature-quotes/

Blogging to be in
conversation with
peers, exploring an area
of concern

Mitigating IT Risk, mother nature

Ok, ya got my attention... tell me more about how "*mother nature*"
the connections... rain? sleet? wind? stale popcorn?



2 months ago

| Reply | Quote | Edit | Delete | Email Author |

RE: Mitigating IT Risk, mother nature

The main concern is power outage. A storm may knock out the source of
power. Ice storms can wreck towers. Businesses should already have
precautions to counter this. I'm only stating catastrophic events.

https://www.quora.com/How-does-weather-affect-internet-connectivity

# Blogging with peers, exploring IT Risk with a scenario about direct experience

**Reply** | Quote | Edit | Delete | Email Author

## Mitigating IT Risk, mother nature

Ok, ya got my attention... tell me more about how "*mother nature*" the connections... rain? sleet? wind? stale popcorn?



2 months ago

### RE: Mitigating IT Risk, mother nature

The weather as to be pretty severe to degrade a wired network. We currently have a lot of our communications on a secured wireless network and we run into weather problems all the time. Heavy rains can cause attenuation in the signal, as well as anything blocking node can completely trip up your network depending on the redundancy (ours is not very good). Another big issue we run into is eucalyptus trees. They grow faster than we can keep track of them. Since our network spans across San Diego County, we run into a lot of blocked antennas.

Blogging with peers, exploring IT Risk with a scenario about a solution



## Mitigating Information Security Risk

Policy

Governance

Why

Who

Assessment

Information Security Risk Mitigation

Technology

What

How

ABC CO.

johnmacasio@gmail.com

Reply    Quote    Edit    Delete    Email Author

▲ Hide 2 replies

# Blogging with peers, exploring IT Risk with a scenario about a solution

## Mitigating Information Security Risk

Policy

Governance

Why

Who

Technology

**Barbara Lauridsen**

**Mitigating IT Risk, embedding links into blog posts**

Luce, the steps for embedding a URL link into a blog post are:

1. have the URL in the clipboard,
2. highlight some words or an image, notice icon for chain will become bold,
3. click chain icon,
4. in the popup, paste the URL, choose dropdown option "open in a new window"
5. Click Submit

Reply    Quote    Edit    Delete    Email Author

▲ Hide 2 replies

# Blogging with peers,

**RE: Mitigating IT Risk, embedding links into blog posts**

We could use a scalable platform like Nutanix – https://www.nutanix.com/solutions/vdi/

These boxes provision CPU, RAM, cold and hot data. We could have a mess system with two different physical locations. This would provide redundancy in the event of an outage.

In addition to T1 lines, we can run each site though a packet shaper – https://my.mtm.com/packeteer.aspx

This would allow us to establish quality of service rules to prioritize certain traffic. The packet shaper also offers compression to give higher throughput.

Technology

ABC CO.

| Reply | Quote | Edit | Delete | Email Author |

▲ Hide 2 replies

**Discussion Board**

Create Forum
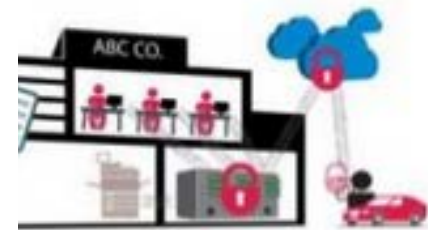
# Starting a Forum: for live discussion

ard/do/conferen  120%  Search
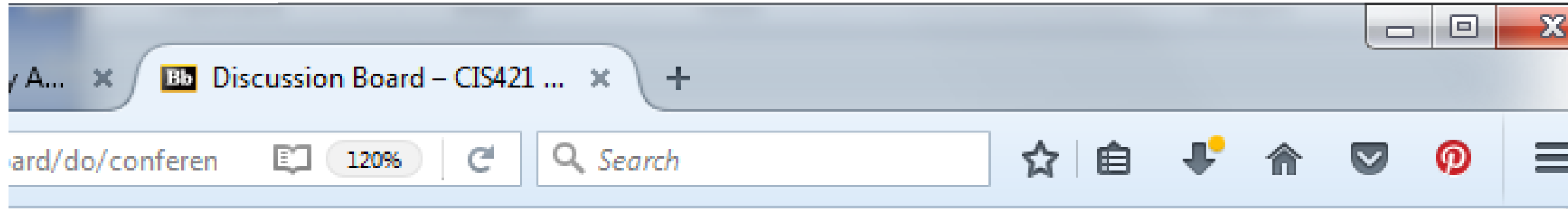
Wk2Blog4:                                    31          0

**EA Frameworks**

During Tuesday's meeting, we will have a lesson about the purpose, role, and use of *EA Frameworks* with respect to aligning business and IT strategies. Search for an image of an EA framework that makes sense to clarify the opportunity. **Task:** A member will post a clickable web link to a framework, and comments about how a generic framework handling complexity.

# Posting into Forum: summarizing live discussion

# Posting into Forum: individual research

**Image is "clickable"**

# Posting into a team thread: individual research into team project start up

**Image is "clickable"**

Van Noel Vinidan

**Human Rights within an overall achitecture**

Framework can entail many representations. In a traditional view, it may look like this:

TOGAF

External Discretionairy
& Non-Discretionairy
Standard/Requirements

Business Architecture

*Drives*

Information Architecture

*Prescribes*

Feedback

Enterprise Discretionary & Non-Discretionairy Standards/ Requirements

Information Systems Architecture

*Identifies*

Data Architecture

*Supported by*

Delivery Systems Architecture
Hardware, Software, Communications
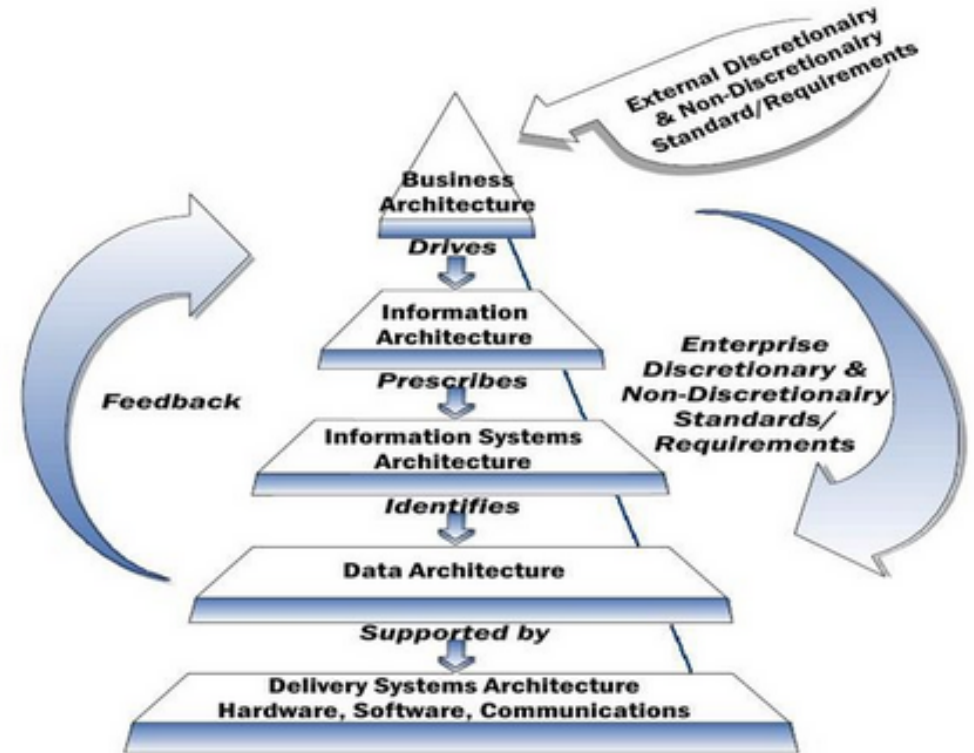
The Open Group Architecture Framework (TOGAF) is a framework a detailed method and a set of supporting tools for developing an enterprise architecture.

-It may be used freely by any organization wishing to develop an enterprise architecture for use within that organization

Posting into a team thread: individual's idea to extend the idea

Human Rights within an overall achitecture

Framework can entail many representations. In a traditional view, it may look like this:

TOGAF

Business Architecture
Drives
Information

External Discretionairy & Non-Discretionairy Standard/Requirements

However, it can also encompass a wider spectrum such as:

Image result for ea framework examples companies

As one can see, the latter representation contains a mission. The mission may be human rights amongst others.

Team's thread: drills into ideas, to give shape to a project

**evidence of strategic planning at Coca Cola**

Here is an article I found that could possibly be EA Framework for Coca Cola

http://www.coca-colacompany.com/stories/driving-the-top-line-with-technology-an-interview-with-cokes-chief-information-officer

"The IT department built some of the applications and managed others create external agencies or our consumers. When content comes from thousands an thousands of sources, it requires a complete ecosystem. We're now running content management systems, digital rights management systems, digital acc management systems and mobile distribution systems. Packaging content an distributing it around the world is a very big area for us right now. Today, dig marketing is a joint activity in our company, with marketing in many cases looking directly to us for better ways to reach our customers." EA Framework an important aspect of Coca Cola, they want to reach to their customers the b possible way they can.

System Architecture

Team's thread: drills into ideas, to artifacts that tell a story



Fig. System Architecture of SAP SEM
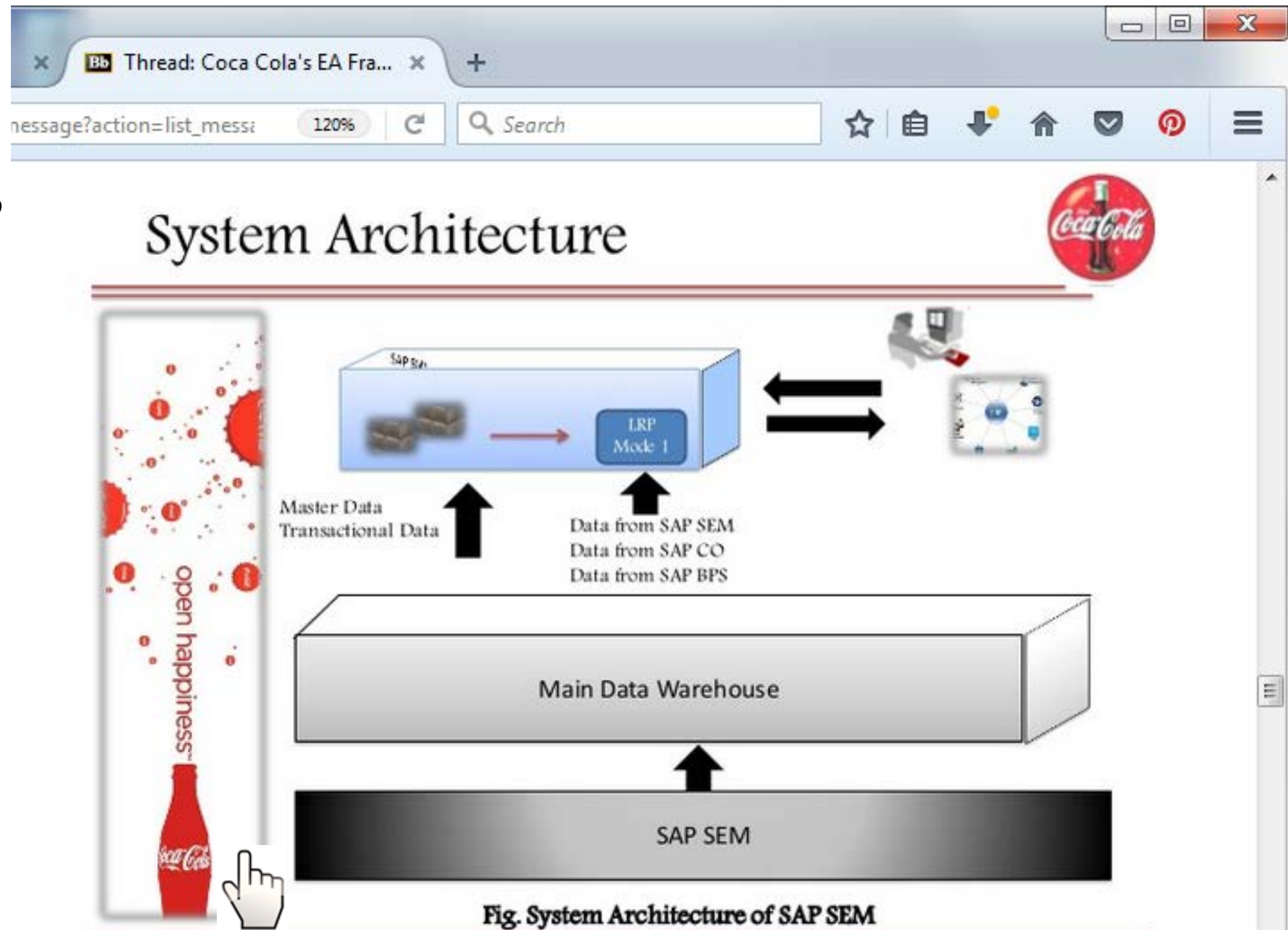
Team's thread: bring forward learning from early times

**RE: human rights important in EA**

First and for most, "great" post Matt! Of course human rights is very important in EA. Working too long on a diagram might make your eyes go crossed eyed. It's board line torture. I remember in database class, it took forever to try to connect two elements together with the arrows.

Who wants to walk around with crazy looking eyes!

Team's thread: sharing perspective & wisdom

**Barbara Lauridsen** 🎖

**RE: "conjuring your posts"** ...

"... comedic relief was prized above course relevanence" ...

Humor does often convey an idea that shares a perspective about a situation that gets attention, so that those talking about topic understand it better. Often a statement that has a perspective or conveys a metaphor that **clarifies a complex idea**, can add value. Sometime humor goes along for the ride... being relevant is nevertheless very important,

(last edited 0 minutes ago)

# Enabling links to be alive: in edit mode,
# 1. highlight the link, copy into clipboard
# 2. click the link icon

For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).

zachman.com

http://www.icmgworld.com/corp/events/apac/Qatar/Zachman/2011_Dec/home.asp

He can speak Russian… in French

Enabling links to be alive:
3. Fill in popup, paste the URL
4. change drop-down option to "Open in a New Window"
5. Click [Insert]
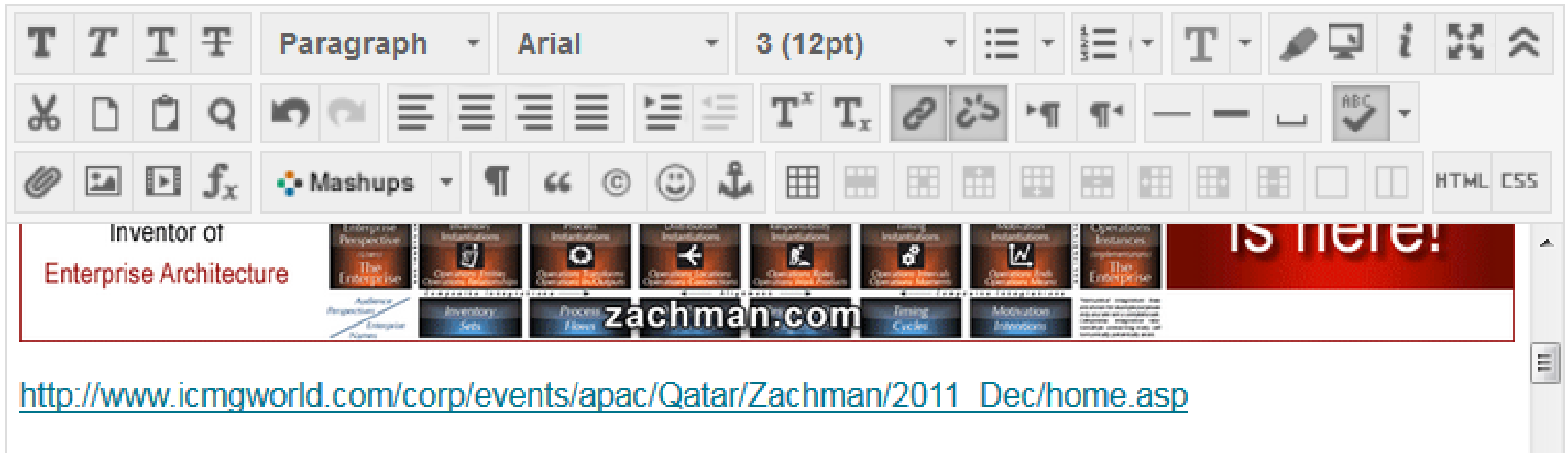
# Enabling links to be alive:
# 6. Save the post, ... then test it.

For the toolbar, press ALT+F10 (PC) or ALT+FN+F10 (Mac).



http://www.icmgworld.com/corp/events/apac/Qatar/Zachman/2011_Dec/home.asp

Cancel    Submit

# Enabling links to be alive:
# 6. Save the post, ...then test it.

# Enabling links to be alive:
## 6. Save the post, ...then test it.



http://www.icmgworld.com/corp/events/apac/Qatar/Zachman/2011_Dec/home.asp

# Enabling links for visitors to view:
## …observe new ideas in webpage

# ...observe ideas, think, learn, share

# …observe ideas that can become a reality

... share learning and insights with team mates

**Image is "clickable"**

"As one can see, this doesn't involve a mission statement. However, it is represented in another framework" (VNV, 2017).



RE: Zachman is the man...

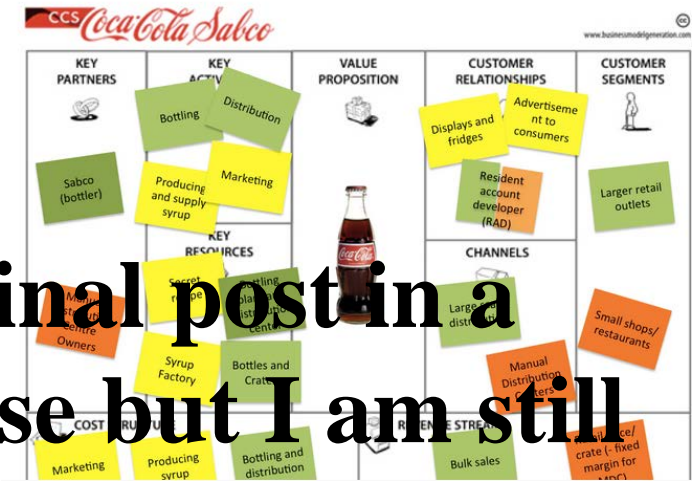To piggyback off the other group's post, here is a diagram done in Zachman's style:

# ... sharing insights

## RE: Zachman is the man...

Hey Vxx, this is a good caparison of our **original post in a different view**. I don't know about anybody **else but I am still** trying to get a grasp on the whole EA concept and the purpose of all the models. *I am noticing that EA can be looked at in a lot of different ways* and be called many different things. Every business has to have a plan and an end goal to be successful. **Models such as TOGAF and the Zachman framework seem to be ways to put a name and a standard to making these business plans"** (KG, 2017).

… share insights, grabbing an idea to run with it, asking questions

RE: Zachman is the man...
Your sticky notes concept is definitely good for our post. But is this the draft stage of building an EA system for a company?"
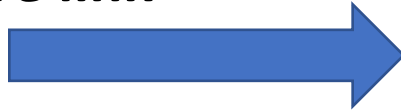(LP, 2017)



RE: Zachman is the man...

To piggyback off the other group's post, here is a diagram done in Zachman's style:

... sharing insights,
validating shared idea

*Imbedding a live link
within a word*

**Barbara Lauridsen** ⭐

2 months ago

"sticky note concept"

It is reasonable and interesting metaphor to recognize that cells in a framework each present a concept that has been done, or is now being justified for action.

Source for many similar images is service to purchase image for those who are subscribed. I allowed Kapersky to open it as a resource, once after seeing the warning. I snagged these two images from the search google images pallet but could not secure the JPG name.

"Sticky Notes as a Concept "

# … share insights, validating the ideas

*navigating live link*

# Pole attendees for their opinions about:

question

Do what degree do you agree?

High  (5)  (4)  (3)  (2)  (1) Low

1. The S M A R T approach provided guidance for focusing research for starting up a team case study.
2. Using Bb DQs with embedded links provided a encouragement to be engaged in sharing ideas.
3. Instructor's blogging provides insights and useful hints for students' actions.

# Works cited

Crispin, L. (2013, July 9). Problem Solving with Impact Mapping. *Agile connection*. Retrieved from http://www.agileconnection.com/article/problem-solving-impact-mapping

Doran (1981). There's a S.M.A.R.T. way to write management's goals and objectives. *Management Review,* 70(11).

Hansen, H. E. (2016) The Impact of Blog-Style Writing on Student Learning Outcomes: A Pilot Study, *Journal of Political Science Education,* 12:1, 85-101. Available from http://dx.doi.org/10.1080/15512169.2015.1060887
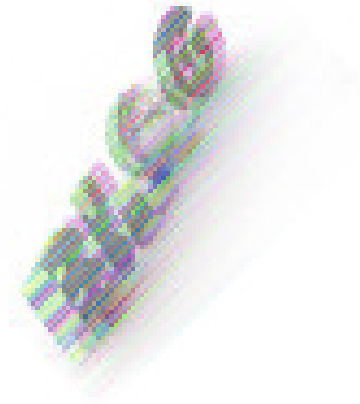
Lauridsen, B. (2017, January). CIS421-10533-1701: CIS421 Enterprise Architecture *(last available Saturday, February 25, 2017)* Instructor: Barbara Lauridsen; Referencing blog posts under terms of IRB rules for anonymity of students' identities

Meyer, P. J. (2003). "What would you do if you knew you couldn't fail? Creating S.M.A.R.T. Goals". *Attitude Is Everything: If You Want to Succeed Above and Beyond*. Meyer Resource Group, Incorporated, The. ISBN 978-0-89811-304-4.

Tolisano, S. R. (2016). Langwitches Blog. [Blog Site] available from www.langwitches.org/blog
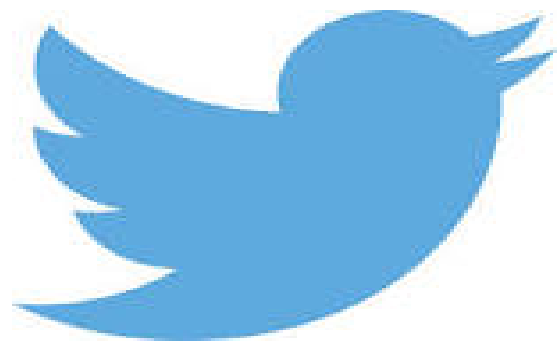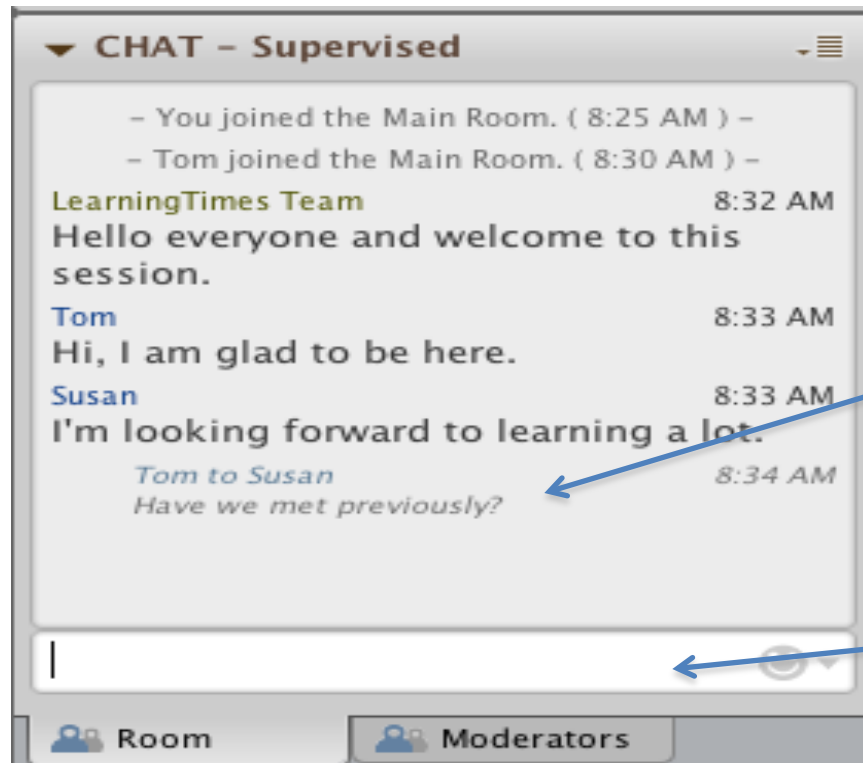
# Questions?



**What is the Meaning of Blogging?**
Ani    March 27, 2016

# #tcc22nd



OLC and 1 other follow

**Bert Kimura** @kimubert · 12h
Join Lucy MacDonald for a special TCC 2017 Pre-conference webinar. March 15, 1400 HST. **#tcc22nd**

**TCCHawaii** @tcchawaii
TCC 2017 Pre-Conference: A New Way of Looking at Apps
March 15 at 2pm (HST)
Free
Details: 2017.tcconlineconference.org/pre-conference/
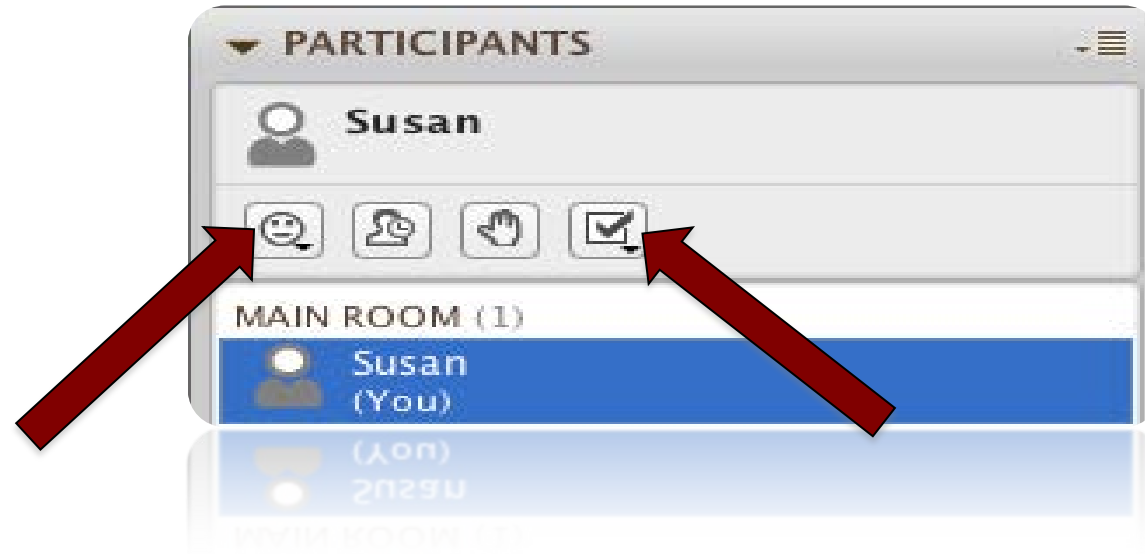
1                    1

LearningTimes

# Chat with us!



Private messages can be viewed by Moderators, just so you know.

Type your message here and press Enter to send.

# Polls, smiles and handraising

# You have a voice!

Audio Setup Wizard



Click on the Talk button.  We won't be using Video.