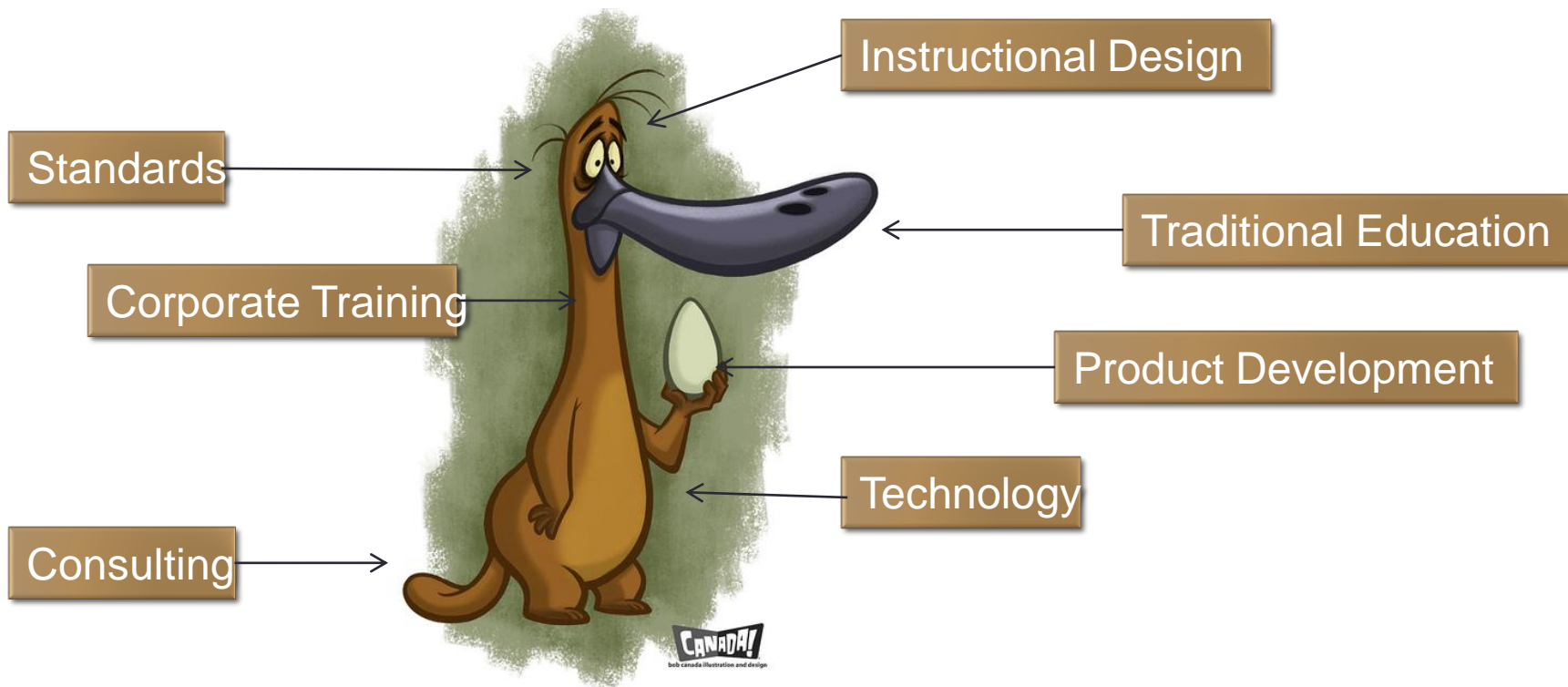


CELEBRATING, VILIFYING, AND ENVISIONING THE LMS

*A ~~3-hour~~ 30 minute tour of the technology we
love to hate*

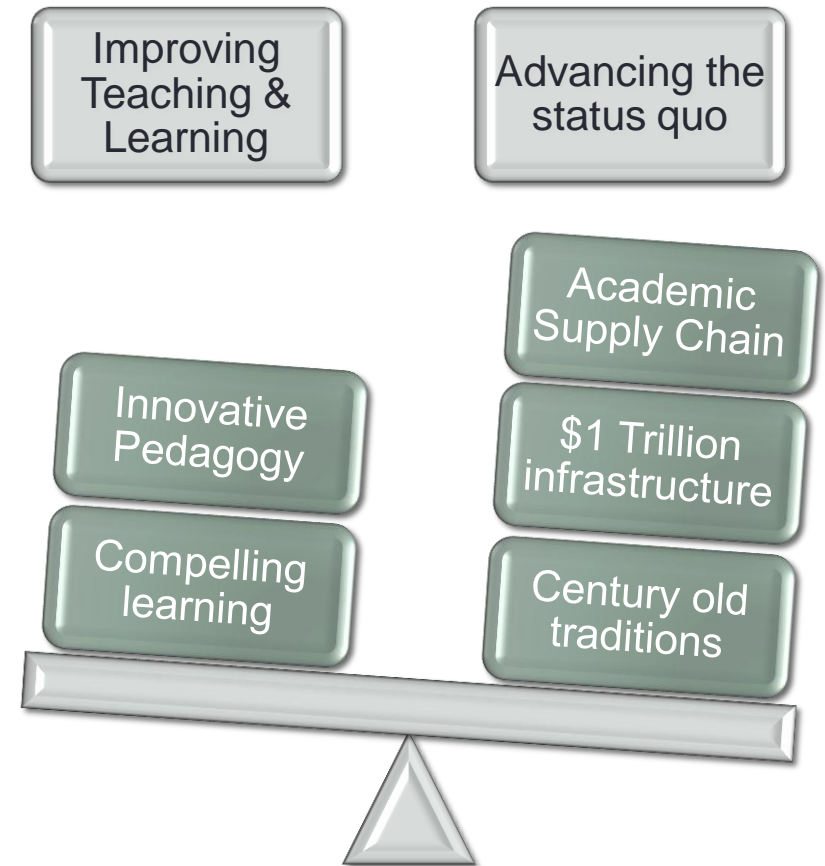
Background

- Our team is the platypus of eLearning



Why care?

- The academic LMS was originally envisioned as
 - A revolutionary technology
 - Anywhere / anytime learning
 - A cure for educational problems
- The academic LMS became
 - A classroom management tool
 - A commoditized technology
 - A part of traditional infrastructure



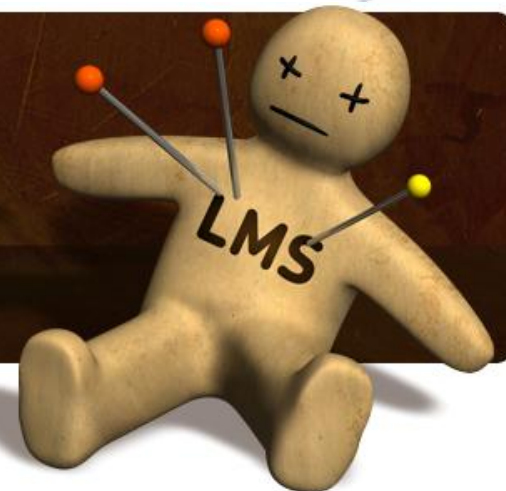
**Can the original vision be realized? Is the LMS important to the NSDL?
What's next for the LMS ...**

Shamelessly copied from
a postcard sent by
Bluevolt.

A CRASH COURSE

In LMS-ology

Don't
HATE Your **LMS**



What is an LMS?

Corporate (managing online **learning**)

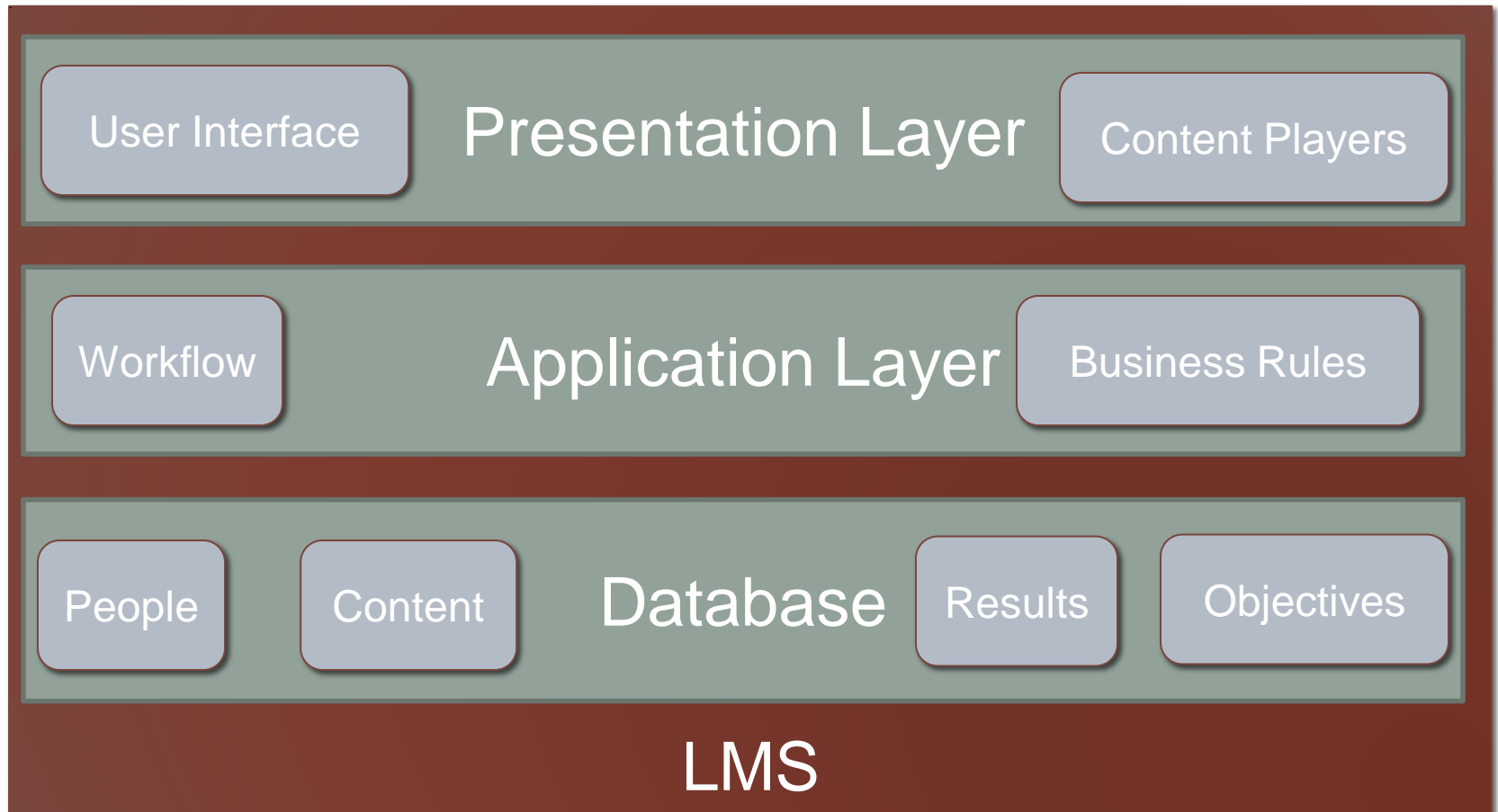
- Evolved from classroom management systems
- **Primary function**
 - Delivering and tracking self-paced web-based training
- Typical functions include
 - Skill gap analysis
 - Learning plans / catalogue
 - Certification & notification
 - 360° evaluation
 - Analytics

Academic (managing online **courses**)

- Evolved from home grown Web pages
- **Primary function**
 - Administration of online courses and online educational tools
- Typical functions include
 - Grading
 - Online syllabi / resources links
 - Online testing
 - Discussion forums
 - Online assignment submission

How do they work?

The LMS 2000 - 2010



What's happening to them?

Corporate

- Some Name Brands
 - Plateau, Saba, Cornerstone, Geolearning, SumTotal
- **Some major buzz words**
 - **SaaS / multi-tenant**
 - **Content-as-a-service**
 - **Talent management**
- Some Challenges
 - Scale and integration
 - Content interoperability
 - Informal and social learning
 - Commoditized market

Academic

- Some Name Brands
 - Blackboard, eCollege, Desire2Learn, Moodle
- **Some major buzz words**
 - **ePortfolio**
 - **Social media**
 - **Repository**
- Some Challenges
 - Pedagogical innovation
 - Tools interoperability
 - Integration of social media
 - Commoditized market

They seem to be doing well ...

If adoption is a measure, the LMS has been a success.

Millions of students (U.S.)	Higher Ed		K-12	
Year	2009	2014	2009	2014
All in Classroom	15.14	5.14	50.3	40.49
Some Online	10.65	18.65	1.75	6.68
All Online	1.25	3.55	.45	3.78

Note: Not all online courses are delivered through an LMS but the LMS is the key enabling technology.

Source: Ambient Insight, "U.S. Self-paced Learning Market" as reported by David Nagel.

<http://thejournal.com/articles/2009/10/28/10.5-million-prek-12-students-will-attend-classes-online-by-2014.aspx>

They seem to be doing well ...

Researchers say that online education is effective.

nsd NO SIGNIFICANT DIFFERENCE presented by wcet

About Us FAQs Submit Entry

SEARCH:
Search articles by Year, Keyword,
Author and more...

The No Significant Difference Phenomenon

U.S. DEPARTMENT OF EDUCATION



Evaluation of Evidence-Based Practices in Online Learning A Meta-Analysis and Review of Online Learning Studies

Abstract

A systematic search of the research literature from 1996 through July 2008 identified more than a thousand empirical studies of online learning. Analysts screened these studies to find those that (a) contrasted an online to a face-to-face condition, (b) measured student learning outcomes, (c) used a rigorous research design, and (d) provided adequate information to calculate an effect size. As a result of this screening, 50 independent effects were identified that could be subjected to meta-analysis. The meta-analysis found that, on average, students in online learning conditions performed modestly better than those receiving face-to-face instruction. The difference between student outcomes for online and face-to-face classes—measured as the difference between treatment and control means, divided by the pooled standard deviation—was larger in those studies contrasting conditions that blended elements of online and face-to-face instruction with conditions taught entirely face-to-face. Analysts noted that these blended

- <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>

They seem to be doing well ...

LMS vendors have demonstrated they can make money.

Blackboard FY 2009:

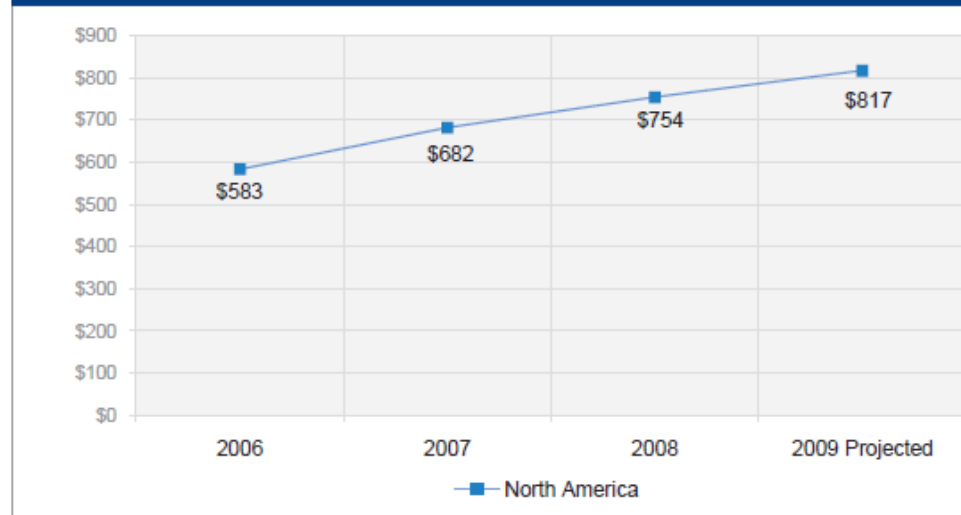
- \$136M in revenues
- \$41.8M in profit
- \$1B - \$2B market cap

Saba FY 2010:

- \$111M in revenues
- \$6.8M in profit
- \$100M - \$200M market cap

(Yahoo Finance)

Figure 1: LMS Market Growth 2006-2009⁵



Source: Bersin & Associates, 2009.

September 1, 2010

Taleo to Acquire Learn.com

Extends Talent Management Breadth; Powers Social and Formal Learning

DUBLIN, CA, Sep 01, 2010 (MARKETWIRE via COMTEX News Network) – Taleo Corporation (NASDAQ: TLEO), the leading provider of on-demand talent management solutions, today announced it has signed a definitive agreement to acquire strategic partner Learn.com, Inc. for approximately \$125 million in cash.

BUT

Overall Rating	Fronter	Fronter AS	3	9.70
	Moodle	Moodle	130	8.84
	eCollege Course Management S..	eCollege	8	8.19
	Desire2Learn Learning Environ..	Desire2Learn Inc.	14	7.79
	ANGEL Learning Management S..	ANGEL Learning	7	7.67
	SkillSoft SkillPort	Skillsoft	7	7.44
	CourseMill Learning Manageme..	Trivantis	3	7.30
	TotalLMS	SumTotal Systems Inc.	13	7.04
	IBM Lotus Learning Manageme..	IBM	3	6.63
	Active Learner	Resource Development Comp..	6	6.57
	LearnCenter	Learn.com	6	6.55
	Blackboard Academic Suite	Blackboard, Inc.	228	6.53
	Saba Learning Suite	Saba	9	6.52
	CampusCruiser Enterprise Portal	Timecruiser Computing Corpor..	3	6.43
	GeoMaestro LMS (includes Expr..	GeoLearning	5	6.12
	Meridian KSI Knowledge Centre..	Meridian KSI	4	6.05
	Plateau Learning Management ..	Plateau Systems, LTD	17	5.74
	Saba Enterprise	Saba	6	5.68
	OutStart Evolution LMS	OutStart	3	4.87
	TopClass e-Learning Suite	WBT Systems	5	4.86
IntraLearn 5.0	IntraLearn Software Corporati..	3	4.00	

Satisfaction in Government and Education

Not everyone is happy with their LMS

<http://elearningtech.blogspot.com/2007/09/lms-satisfaction-features-and-barriers.html>

From Blog: Moodle scores very high in satisfaction, but we need to qualify that result a bit. I personally feel that Moodle is good at the limited stuff it does. It's free which improves satisfaction. But it's not really an enterprise LMS and has some very serious deficiencies when it comes to many of the needs of corporate training departments. However, I would be concerned if I was a starter LMS vendor because Moodle is going to cause you grief in the bottom of the market. If nothing else, it causes the perception that there's a free competitor

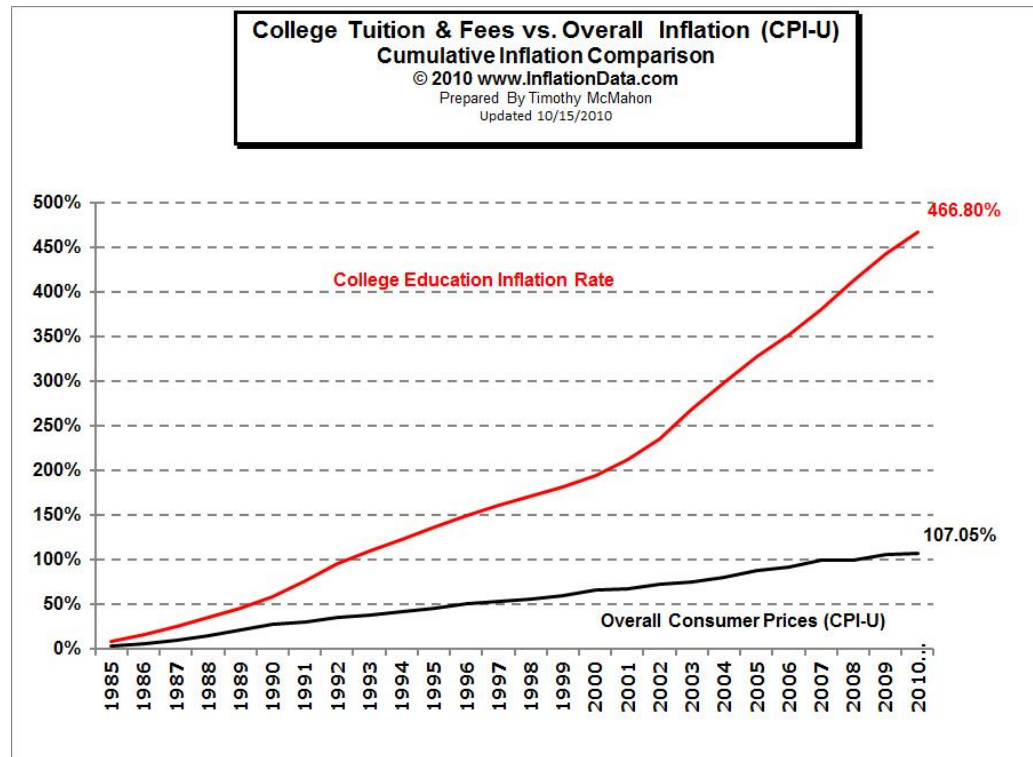
What's wrong?

The LMS has not revolutionized learning.

- “Advances” over the past 10 years have been
 - Single sign on
 - HR / SIS integration
 - (Limited) branding of user interfaces
 - Addition of analytics in the corporate LMS
 - Adoption of standards for content portability
 - Keeping pace with general trends in software (e.g. SaaS and the re-branding capabilities of Web content management systems)
- The paradigm of the academic LMS is an online version of classroom instruction.

What's wrong?

The LMS has not lowered the cost of education



http://www.inflationdata.com/inflation/Inflation_Articles/Education_Inflation.asp

What's wrong?

As a technology, the LMS just **seems** unsatisfactory

Learning Management Systems:

The wrong place to start learning

November 22, 2004
George Siemens

Introduction

Learning Management Systems (LMS) are often viewed as being the starting point (or critical component) of any elearning or blended learning program. This perspective is valid from a management and control standpoint, but antithetical to the way in which most people learn today.

<http://www.elearnspace.org/Articles/lms.htm>

Based on the **92** systems we cover, here's the average pricing for learning management systems this year:

HOSTED (SaaS) IMPLEMENTATIONS:

- 500 users: **\$68,977**
- 10,000 users: **\$314,444**
- 25,000 users: **\$568,201**
- 100,000 users: **\$1,288,054**

INSTALLED IMPLEMENTATIONS:

- 500 users: **\$48,231**
- 10,000 users: **\$260,569**
- 25,000 users: **\$486,076**
- 100,000 users: **\$1,204,942**

<http://brandon-hall.com/richardnantel/2009/05/28/average-pricing-for-learning-management-systems-in-2009/>

ID workspace

One Instructional Technologist's Adventures Designing, Technologizing, and Adjunctifying in Higher Education

About the Workspace

Hacking the Academy: Four Lines of Attack on the LMS

By RICHARD | Published: JUNE 5, 2010

So I'm starting a series in which I do my best to take a look, seriously, at [Hacking the Academy](#) (or at least the section on educational technologies), and I want to start with the various attacks on the LMS (especially Blackboard). This is just one of the themes (which include alternatives to the LMS, alternative diagnoses to the problem, and at least one partial defense of the LMS), but I wanted to begin by tackling the attacks and the arguments behind them.

<http://me.ruane.com/idworkshop/2010/06/05/lms-and-its-discontents/>

and academics generally view them as expensive for what they do*

*Personal observation

So What's Next?

(Keeping in mind that predictions are dangerous)

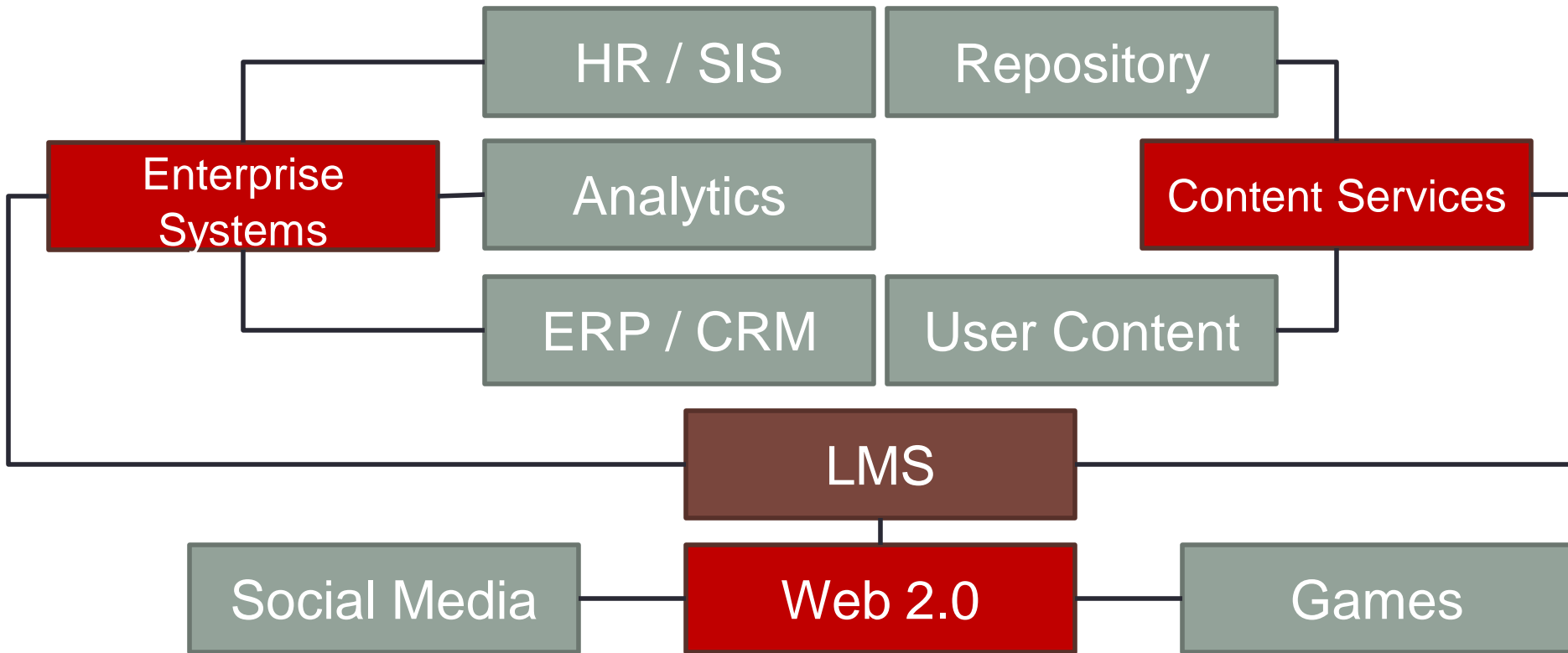
John Chambers, CEO, Cisco Systems,
COMDEX, November 16, 1999

The next big killer application on the internet is going to be education. Education over the internet is going to be so big it is going to make e-mail usage look like a rounding error.

David Wiley, Open Content Blog,
May 28, 2009

Even though I'm on vacation, things with the potential to completely transform the way we teach and learn come along so rarely I had to share. It's called Google Wave.

The LMS Circa 2011+



A few topics: *LMS Futures and Applications* group on NSDL community site.

YES?

- **Is the academic LMS Dead?**
 - It is just a tracking service
 - Rich content will be mashed up
 - Social media, games, and other innovations will dominate
- **Will open source dominate?**
 - Licensing fees are outrageous
 - Vendors are inflexible
 - The technology is just as good
- **Do standards matter?**
 - SCORM saved billions
 - Cyberspace is built on standards

NO?

- **Is the academic LMS Dead?**
 - It is a core function
 - Publishers control content
 - LMS is established and will be the platform for innovation
- **Will open source dominate?**
 - If anything, it costs more
 - Vendors provide services
 - Commercial technology is better
- **Do standards matter?**
 - Many standards, little adoption
 - Cyberspace is built on software