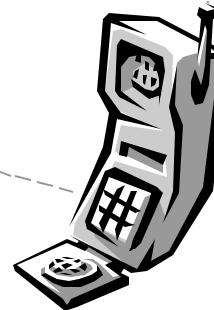


Thoughts are Forever

Catching the Digital Crazy Train
Before it Reaches the Station

Philip Eskelin
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About the Speaker

Philip Eskelin

- Currently Co-Founder & Chief Technology Officer of a Newco
- Former Chief Technology Officer of DareStep LLC, CGE&Y's E-Commerce Practice
- Former Chief Architect of Fixed Income & Derivatives, Credit Suisse First Boston
- Reformed Microsoft Bigot
- Scuba Diving Fanatic

Thoughts are Forever

Agenda

- The Past
 - A History of Making Life Easier through Creation and Innovation
- The Present
 - The Net Changes Everything
- The Future
 - Hold On Keynes - Change is the Only Constant!

The Past:

A History of Making Life Easier
through Creation and Innovation

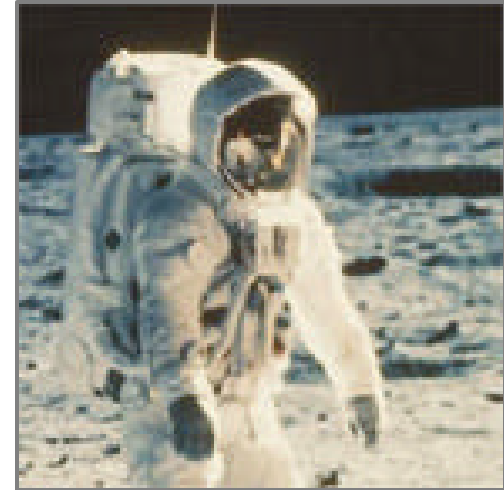
A History of Innovation

Why weren't caves, sticks, and rocks enough? It's all about making it easier to move, communicate, and just plain *live life*.



The Net is Born

- **1970:** Government-funded network designed for no single point of failure
- **1980:** Charles Goldfarb invents SGML at IBM
- **1990:** Tim Berners-Lee invents the Worldwide Web
- **1995:** Netscape powers new digital renaissance
- **1996:** XML rises as open data exchange standard



Paradigms of Digital Connectivity

Since the Net's birth, we've endeavored to make connecting people, devices, and businesses easier

- **From Atari to Quake**
 - Who knew kids would be fighting each other with plasma rifles all over the world in simulated 3D
- **From Documents to Connections**
 - 10 years ago it would be crazy to ask someone using their 80286 how the stock market is doing
- **From Telephones to Cellphones**
 - 20 years ago people called a location

Paradigms of Digital Connectivity

Since the Net's birth, we've endeavored to make connecting people, devices, and businesses easier

- **From trading stocks to trading bandwidth**
 - Just a few years ago, trading anything but stocks and bonds was inconceivable
- **From brokers and used car salesmen to knowledge agents**
 - New digital channels greatly enhance the business-customer relationship
- **From MRP to Global Trading Webs**
 - All about removing friction from the supply chain

The Present:

The Net Changes Everything

The Net Becomes An Adolescent

All the signs of a teenager: zits, rebellion, graduates, drop-outs, break-ups, and pranks

- Outages cause revenue discharge
- Market chock full of cliques
- Fortune e50 emerges
- Flight and plight of dot coms
- DoJ forcing Microsoft
- I Love You, Melissa

Power of the Net

From email viruses that bring down corporate messaging services to the dawn of viral marketing starting with ICQ, the Net brings about new possibilities for society

- Evokes change
- Encourages collaboration
- Eliminates space, time, and physical barriers
- Emancipates people and ideas
- Turns traditional economics upside down

The Net's Strengths

- Strong technology framework
- Power in numbers, tremendous growth potential
- Intellectual and venture capital resources abound
- Impressive track record of dot coms
- A more frictionless platform for innovation

Current Challenges

Today's market climate is chaotic and uncertain...this has become the only constant

- Rapidly changing technology climate
- Critical initiatives have aggressive timeframes
- Decision making = life or death
- Systems depend on systems that aren't available yet or don't scale
- Market dynamics and customer behavior change at Internet Speed

The Net Effect On Society

Today, we live in an invisible, perpetual electronic blizzard of messages, events, pages, calls, and transactions, outages, viruses, and lack of privacy

- Electronic commerce
- Online venture activity, Internet IPOs
- Virtual universities
- Online communities
- Mobile workforce
- Human genome database
- Electronic town meetings

The Future:

Hold On Keynes - Change Is the
Only Constant on this Roller
Coaster Ride!

Seven Immutable Net Forces

The following attributes make it the beast what it is:

1. Drive toward transparency & pervasiveness
2. Accelerated change disrupting status quo
3. Creation of free markets
4. Connected economy feeds on itself
5. Integration & segregation of people and knowledge
6. Economic development
7. Power of one and increasing idea flow

Analysts Place Their Bets

Tomorrow's winners will power the next big paradigm shift before it reaches its inflection point. By 2003, the following is expected to occur:

- 45% of online users will connect to the Net with more than one device (Forrester Research)
- The market for wireless communication will grow to 13.2B/year (Yankee Group)
- One billion cellular phones will be in use (Jupiter Communications)
- Shipments of "smart" phones and handheld Net devices will exceed 350M units (IDC)

Future Net Impact

Through piecemeal evolution, humans will relate to their world in a very different way

- The Net *becomes* the Net
- Homes and businesses become totally fiberized
- Access to services, content, and community via inter-device communication becomes transparent
- Voice browsing becomes key for mobile interactions
- The number of bits in the world will exceed the number of atoms
- Governments legislate mapping between atoms, bits, and intellect
- Moore's gets exponential with breakthroughs in terraflop processing

Net Impact on Innovation

Will possession remain 9/10ths of the law? Depends on your definition of the word “property”

- Three types of property
 - **Tangible Property** - Owning, buying, and selling atoms
 - **Digital Property** - sending, receiving, and abstracting digits
 - **Intellectual Property** - trade secrets, copyrights, patents
- Three create confusion akin to dreams vs. reality
- New opportunities will arise in hybrid plays

Net Impact on Politics

As the number of Net users goes into the billions, a pervasive connected society emerges that uproots traditional government like the connected economy uprooted industrial giants

- Political parties splinter and diversify
- Authoritarian governments fall
- The Net facilitates collaboration across geopolitical borders
- The voice of the people booms
- Political parties “go public”

Net Impact on People

The notion of societal value will shift away from power and influence, shifting toward capability and executability

- Descartes rolls over in his grave
 - What is identity?
 - What is perception?
 - What is illusion?
 - What is reality?
- Mass markets die
- Distribution and organization matter less than flexibility and speed

The Net at 50 Will:

- Be on all the time so the notion of “on” becomes moot
- Unleash the power of the individual
- Pull people and organizations to greater levels of productivity
- Create the ultimate platform for innovation
- Create the biggest free market of all time

Key Points

- The Net's only 30 years old
- It's brought about multiple paradigm shifts in the last decade alone
- Along with this change came strengths and challenges for businesses
- The Net will accelerate its tendency to shift paradigms as it gets older
- Human mental, spiritual, and emotional relationship with life will change too
- Hold on! But remember that...

Thoughts are Forever

Questions?

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