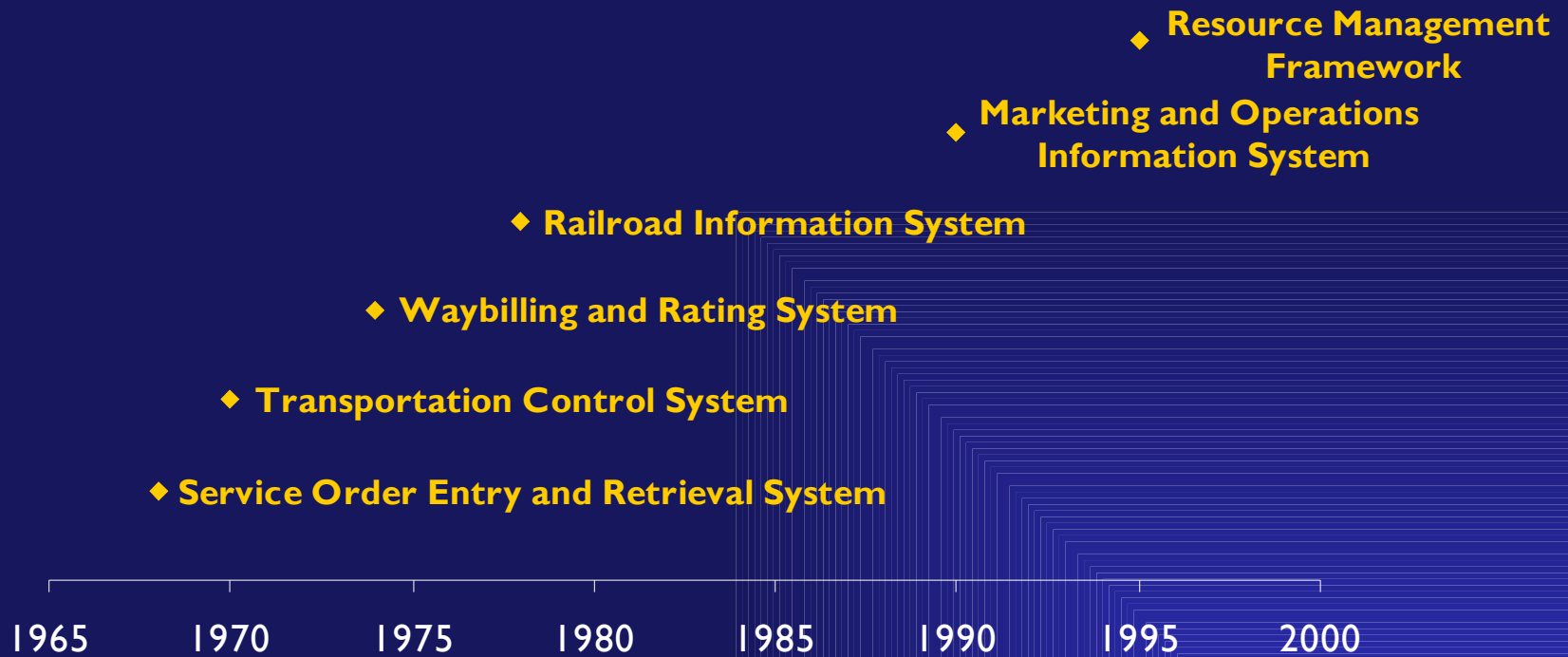

How to Use Computers and the Internet in Daily Transactions

November 3, 2003

Experience



What's a transaction?

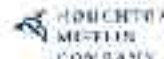
Ask GuruNet.

- Library
- Guruflet Library
 - Animalia
 - Bible
 - Business
 - High Arts
 - General Reference
 - Dictionary
 - Encyclopedia
 - History
 - Hot Topics
 - How?
 - Misc.
 - Translation
 - Government
 - Guruflet
 - Language
 - Legal
 - Liberal
 - Medical
 - Military
 - People
 - Places
 - Religion & Mythology
 - Science & Tech
 - Shopping
 - Sports

trans-action (tranz-aksh'han; zshk')

- 1.
2. The act of transacting or the fact of being transacted.
3. Something transacted, especially a business agreement or exchange.
4. Communication involving two or more people that affects all those involved; personal interaction: "a rich sense of *the transaction between writer and reader*" (William Zeffirelli).
4. **transactions** A record of business conducted at a meeting; proceedings.

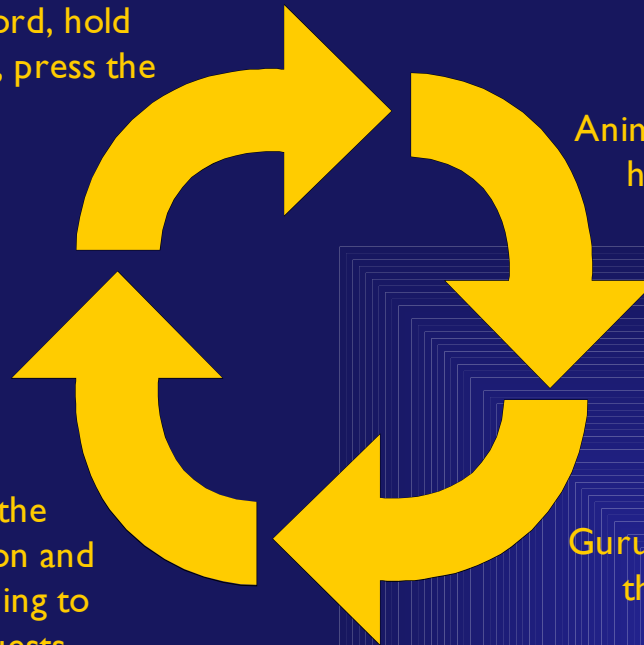
trans-action-al adj.

 The American Heritage® Dictionary of the English Language, Fourth Edition. Copyright © 2003 by Houghton Mifflin Company. Published by Houghton Mifflin Company. All rights reserved.

How did my transaction take place?

Put the cursor over the word, hold down the left mouse button, press the ALT key.

Animation shows that GuruNet has received the request.



I'm satisfied and I.) use the response in this presentation and 2.) feel comfortable returning to GuruNet with other requests.

GuruNet responds by giving me the screen shown on the previous page.

Peter G. W. Keene, *Shaping the Future*, Harvard Business School Press (1991), pp. 228-237

Transactions represent the exchange of value.

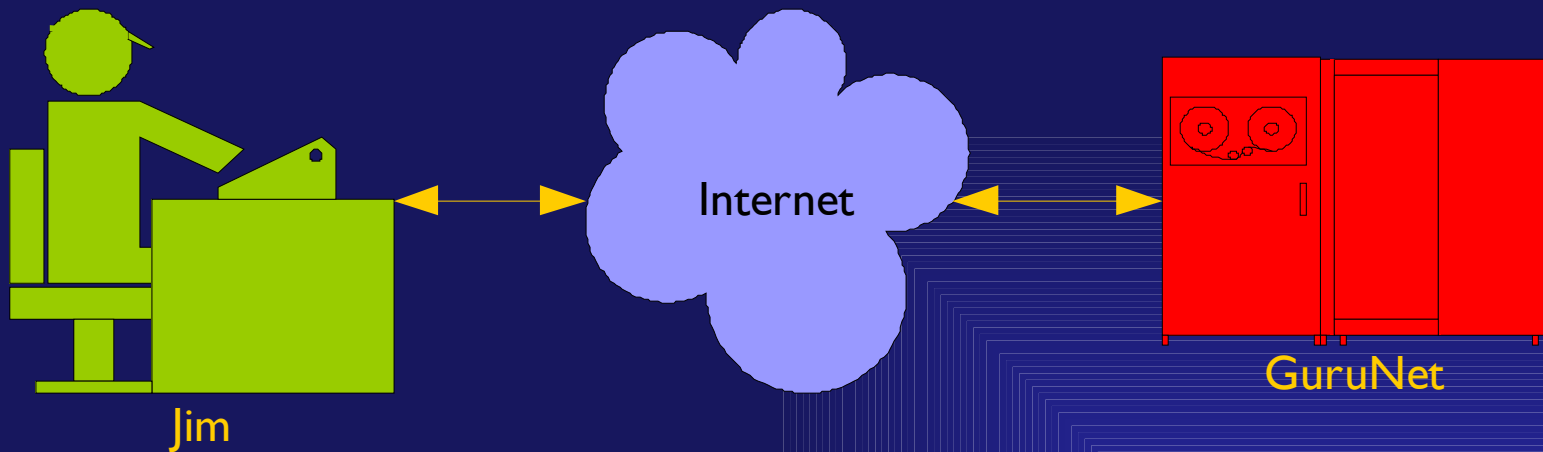
Value is exchanged if

- the grammar and syntax of the messages being exchanged is understood,
- the information communicated in the messages is relevant,
- the medium of communication is acceptable, and
- what one party has is worth more to a second party than what the second party has.

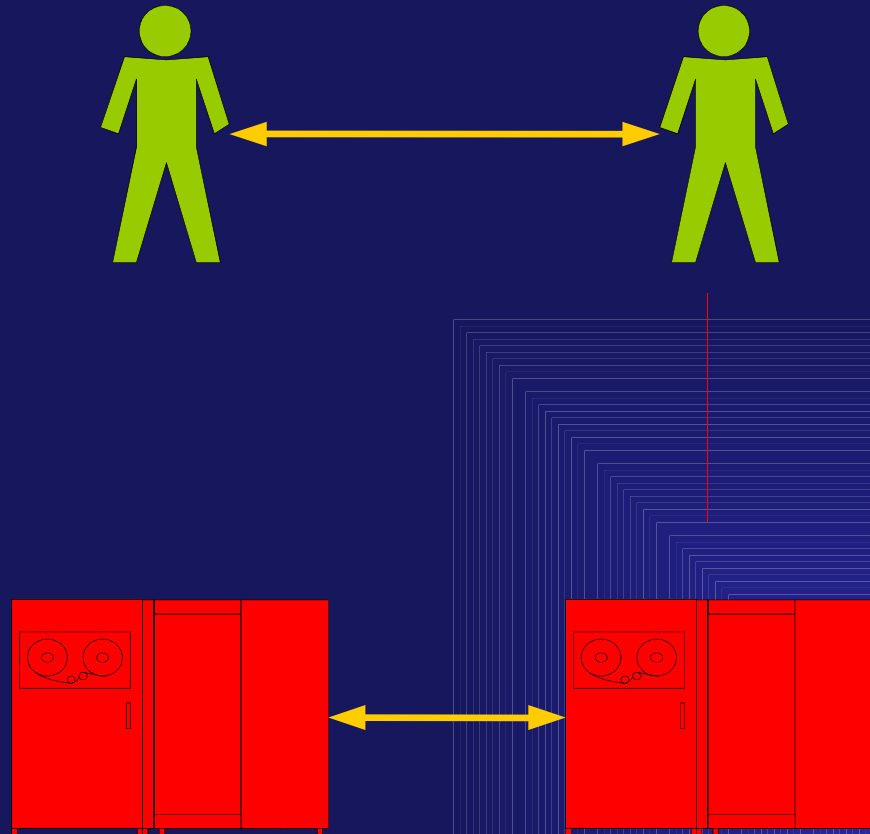
Systems aligned with human motivational factors will sometimes work. Systems opposing such vectors will work poorly or not at all.

John Gall, author of *Systemantics: How Systems Work and Especially How They Fail* (Fontana, 1979) as noted in *Railroad Business Information and Control Systems* (January 1980).

My transaction (which I use several times a day) is an example of a person-machine transaction (a mechanism) used to gather information.



Two other mechanisms.



More of my daily transactions.

Name	Mechanism	Information	Action	Some Observations
e-mail	PM	✓	✓	<ul style="list-style-type: none"> • Gathering information is a prelude to action. • Hard and softcopy of the news – why? • Mechanisms could be changed for various transactions. Under what conditions would this be a good thing? • Mechanisms are a means to an end.
g-news	PM	✓	✓	
i-news	PM	✓	✓	
weather	PM	✓	✓	
newspapers	PP	✓	✓	
train	PP	✓	✓	
coffee	PP	✓	✓	
subway	MM	✓	✓	
casual conversation	PP			
meetings	PP	✓	✓	

Different types of transactions and actors affect the previous statements defining how value is exchanged.

- The grammar and syntax of the messages being exchanged is understood.
- The information communicated in the messages is relevant.
- The medium of communication is acceptable.
- What one party has is worth more to a second party than what the second party has.

What are the implications for designers of transaction systems?

How does culture affect transaction systems?

Dimensions of Culture

- Assertiveness
- Future Orientation
- Gender Differentiation
- Uncertainty Avoidance
- Power Distance
- In-Group Collectivism
- Performance Orientation
- Humane Orientation

Cultural Groups

- Anglo
- Arab
- Confucian
- East Europe
- Germanic
- Indigenous Africa
- Latin America
- Latin Europe
- Nordic
- South Asia

Project GLOBE <http://www.haskayne.ucalgary.ca/GLOBE/Public/index.htm>

Machine-aided transactions have changed, and will continue to change my life style. Am I happy with what's happening?

- Thinking with a laptop in hand.
 - The pencil-paper-brain loop versus the brain-laptop-net loop.
- Presenting with a laptop in hand.
 - Will I forget what my subject is really about?
 - Will I forget how to read an audience and adapt to their wants and needs?
- September 2003 issue of the Harvard Business Review, *Technology and Human Vulnerability* by Sherry Turkle; Diane L. Coutu.
 - "We know that technology changes our lives -- but could it be changing our selves as well?"

In ‘ Danger, Stupid Human! Danger! ‘ Andy Borowitz says:

'Our world is becoming a smarter place. We have smart phones, smart cards and smart bombs... An unprecedented surge in smartness, however, applies only to inanimate objects and has avoided humans altogether. In fact, as our high-tech devices have grown smarter, we've become much more dim-witted.

...

A car's global positioning system does, as advertised, help position us on the globe. It also strips us of our ability to read maps, plan itineraries and, ultimately, find our way from the bedroom to the bathroom.'

<http://www.smartmobs.com/archives/001798.html>

The rise of the machines?



What are the implications of being able to track a honeybee?



Underwear 'can detect heart attack and call ambulance'

Dutch scientists have developed underwear that calls an ambulance if the wearer has a heart attack.

The Philips Research Laboratories in Eindhoven has developed bras, vests and pants that register and analyse the wearer's heartbeat.

The sensors are linked, via wireless technology, to a mobile phone which automatically makes contact with an alarm centre or an ambulance in an emergency.

Director Karel Joosse told Algemeen Dagblad: "They are so easy to use, the patients wouldn't realise they are wearing special underwear."

Mr Joosse says the system is designed to help cure more people at home rather than in hospitals, and expects it to be widely used in Holland and Germany within two years.

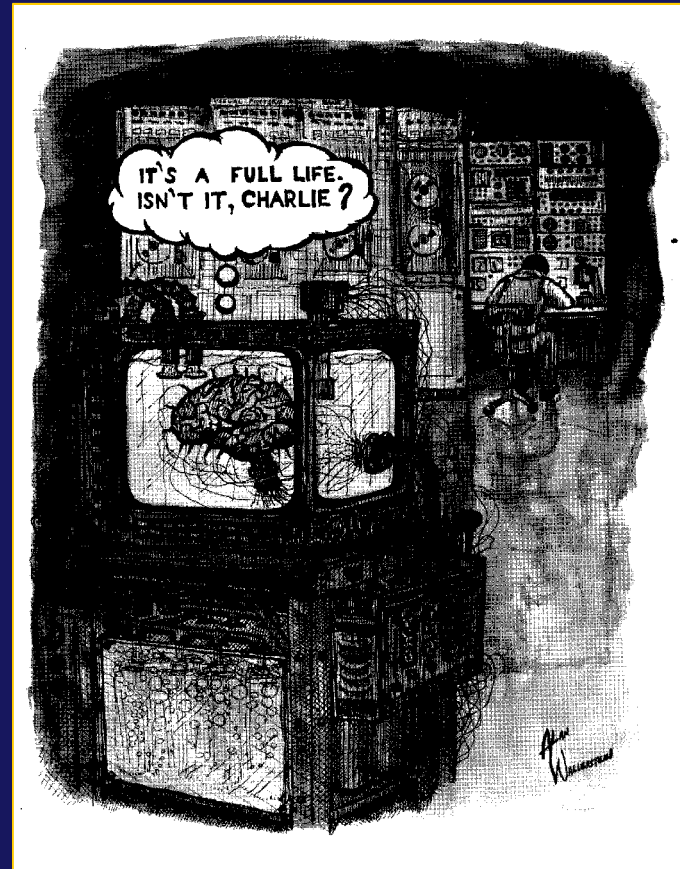
http://www.ananova.com/news/story/sm_827582.html?menu=news.quirkies

Is this a good thing?

Always on, always connected, always transacting.

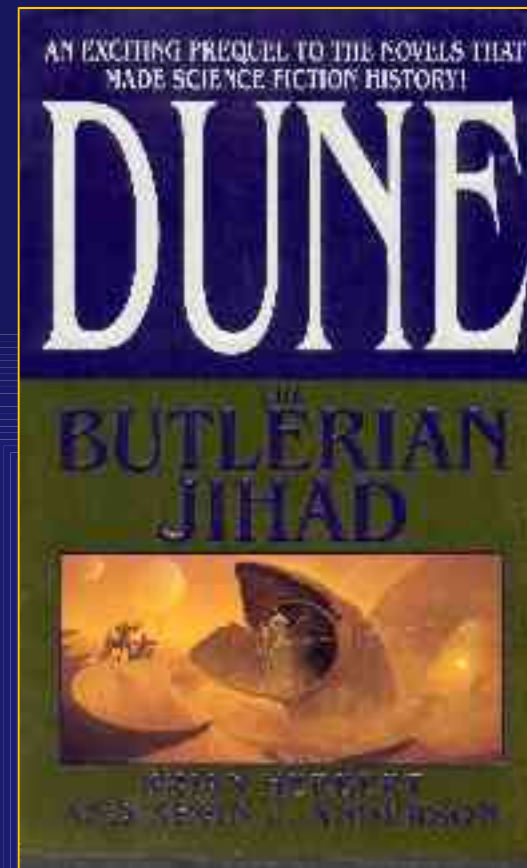
Ethics

- Kurzweil, R. (2000). *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*, Penguin Books.



Ethics

- Herbert, B. and K. J. Anderson (2002). *Dune: The Butlerian Jihad*, Tor Books.



Transaction Systems

From
time-savers and enablers
to
controllers?