

artificial

market

actors

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Kraftverket Stockholm, 18 april 2002

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outline

about the teacher
introducing artificials
managerial implications



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outline

Richard Gatarski, PhD

- o 1974 college degree in electronics
- o 1978-1984 engineer at Ericsson Telecom
- o 1984-1985 global exploration
- o 1985-1989 university degree, Bsc BA
- o 1989- consulting
- o 1995-2001 academic research, PhD
- o now I'm here :-)



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setting the Future

old fantasy

1968



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setting the Future

old fantasy

HAL 9000



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Marketing

brands



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Future behavior

It would be possible for subscribers to Ad Specialties, Inc. to inspect an elaborate catalog of product listings and then code their television sets for the reception of ads dealing with some particular type of products. They can inspect the various ads for that product, facsimile those they choose to, and are prepared for further inquiries.

(Isaac Asimov in Advertising Age, May 9, 1977)



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Future agents

Real-time pricing and auctioning

Intelligent software agents stand a great chance of being the "killer app" for Artificial Intelligence (AI) technology, since they are designed from scratch to work in very complex systems and they can present real business value. **The opportunities for using intelligent agents in an e-business application are enormous.** They can for example be used for real-time pricing and auctioning, involving different parties in a supply-chain network. Suppliers can present their products on the web - over Internet or an extranet - and **collect real-time price bids** from multiple customers. Intelligent software agents can carry out work on behalf of human knowledge workers both on the supplier's and customer's behalf. **The most intelligent software agent will win the best deals**

(TP-bolaget AB, 2001)



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Future science fiction or facts?

Vision

Illustration

Realisation



(Gap-model, adopted from Lennstrand, 2001)



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Artificial Intelligence today

Ask Jeeves Home Shopping

You asked: **Ask**

I have found **answers** to the following questions:

- Ask** Where can I find the definition of a word?
- Ask** What does the financial term mean?
- Ask** Where can I find encyclopedic resources on
- Ask** Post your question and get answers from other users in our Community Forum

People with **similar questions** have found these sites relevant

- Ask** [New Meanings for Marketing in a New Millennium](#)
New Meanings for Marketing in a New Millennium THE 2001 ACADEMY OF MARKETING SCIENCE PROGRAM CHAIRS, Anne L. Balaz, Division of Business and Communication, Mississippi University



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New market actors



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CD / NYINKOMMET

hemsidan kommande nyinkommet singlar rea cd-boxar tv-annonseras barn country dans / techno dansband film / musikal

Titel Artist/Grupp Release/datum Pris

Brand New	Disciples	20000	188kr	NY
Brand New	Sultan	20000	120kr	NY
Brand New	Carlson/Wille	20000	120kr	NY
Free to see	Sturtevant	20000	190kr	NY

Din körg:



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Artificials

definition

Artificials are digital machines that interact in markets.

An observer's understanding of the interactions of an artificial depends on how it is:

- **controlled** (humans vs. autonomously) and how its
- **system is designed** (visible vs. hidden).

(Gatarski, 2001)



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Artificial Market Actors

analyzing

Autonomous control

Observable system

Hidden system

AltaVista

Yahoo!

Human control



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Artificial Market Actors

analyzing

Autonomous control

Observable system

Hidden system

Amazon.com top 10

Amazon.com recommendations

MS-Outlook mail filter

PriceGrabber spider

Human control



back...

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Artificial Market Actors

analyzing

Autonomous control

Observable system

Hidden system

managing relations with artificials

engineering focus

behavior focus

managing relations with humans

Human control



back...

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Artificials

meaning

Mind (of) the artificials



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Slutsatser

i avhandlingen

Digitala maskiner:

- blir allt mer lika människor
- existerar i affärssammanhang

Vi saknar teorier om detta fenomen

Etablerade teorier:

- skadliga
- nyttiga



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Managerial implications

emerging issues

Three kinds of artificials, that are:

1. representing organizations
2. representing individuals
3. cyborgs



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på ritborden

nya saker

Brain Bar

Mann et al.

Cyborg2



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Managerial implications

strategy

Think artificial actors!

- use them
- face them
- understand them



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