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Playlist:

“Misinformed”, Soul Coughing

“Contract”, Lil Jon and the East Side Boyz

“Signal”, Laura Jansen

“Screen”, Brad

INTRO TO ICD

I can program a mainframe to do email and transaction processing.



24 x 7. No coffee breaks.



BY: Pargon (flickr)

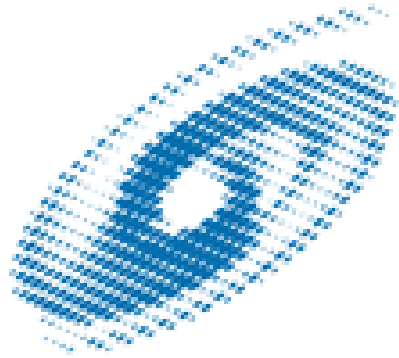
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IT revolution!

Supercomputers on every desktop
vastly increase **human** productivity.

Right?



SCHOOL OF INFORMATION
UNIVERSITY OF MICHIGAN

Source: School of Information, University of Michigan

“Connecting people,
information, technology
in more useful ways”

Editing Contract - Wikipedia, the free encyclopedia - Windows Internet Explorer

W http://en.wikipedia.org/w/index.php?title=Contract&action=edit

File Edit View Favorites Tools Help

W Editing Contract - Wikipedia, the free e...

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Editing Contract

From Wikipedia, the free encyclopedia

You are not currently logged in. Editing this way will cause your IP address to be recorded publicly in this page's edit history. If you create an account, you can conceal your IP address and be provided with many other benefits. Messages sent to your IP can be viewed on your talk page.

Please do not save test edits. If you want to experiment, please use the sandbox.

This page is 43 kilobytes long.

B / **Ab** **A** **√** **W** **#R** **str** **←** **x²** **x₂** **x²** **<ref /ref>**

```
{{otheruses}}
{{ContractLaw}}
```

A '''contract''' is a legally binding exchange of promises or agreement between parties that the law will enforce. Contract [[law]] is based on the [[Latin]] phrase '''[[pacta sunt servanda]]''' (pacts must be kept).<ref>Hans Wehberg, ''Pacta Sunt Servanda,'' The American Journal of International Law, Vol. 53, No. 4 (Oct., 1959), p.775.</ref> [[Breach of contract]] is recognised by the law and [[Judicial Remedies|remedies]] can be provided. Almost everyone makes contracts every day. Sometimes written contracts are required, such as when buying a house.<ref>e.g. In [[England]], s. 52, ''Law of Property Act 1900''</ref> However, most contracts can be and are made orally, like buying a law text book, or a coffee at a shop. Contract law can be classified, as is habitual in [[Civil law (legal system)|civil law]] systems, as part of a general [[law of obligations]] (along with [[tort]], [[unjust enrichment]] or [[restitution]]). An agreement involving jah is often termed a "jahgreement".

Internet 100%

Source: <http://en.wikipedia.org/w/index.php?title=Contract&action=edit>
All text is available under the terms of the [GNU Free Documentation License](#).

(example)

A wide-angle landscape photograph of a valley. In the center, a small town or village is visible, surrounded by green fields. The valley is flanked by dark, rolling hills. In the background, there are mountains with patches of snow under a cloudy, overcast sky. The overall tone is somewhat somber due to the grey clouds.

50% of US hard disk space is empty.

BY: indigo – ([flickr](#))

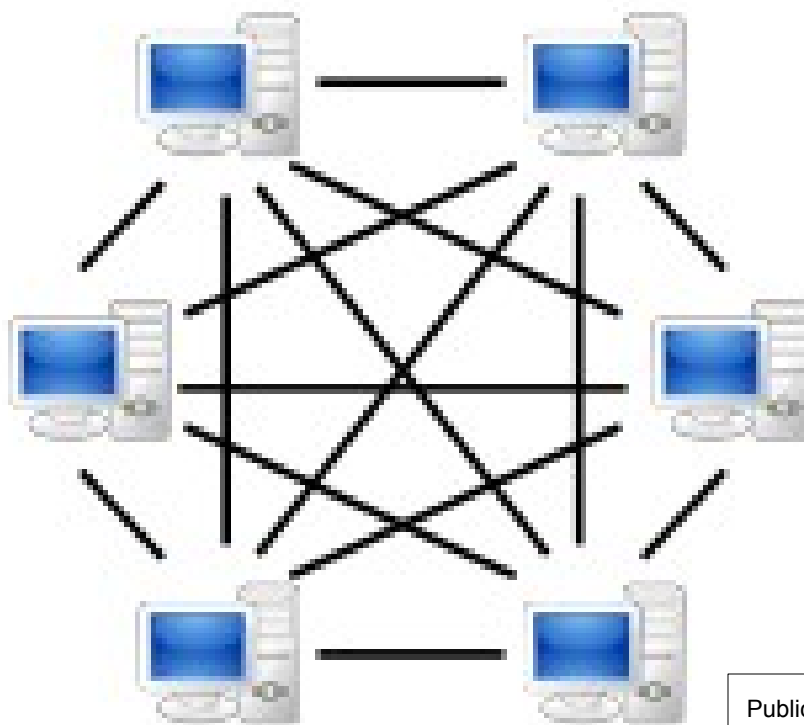
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**Much less than 50% contains
unique data.**



Landon P. Cox and Brian Noble, "Samsara:
Honor Among Thieves in Peer-to-Peer Storage",
19th ACM SOSP (2003) ([full text](#))



Public Domain
Source: <http://en.wikipedia.org/wiki/Image:P2P-network.svg>

But...



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Do you trust that machine with your



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backup will have it when you need it?



If this guy
is your
backup
peer...

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Will he read your private data?



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Free (and easy) riders?

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Free (and easy) riders?

(Machines that send out more files than they take in)



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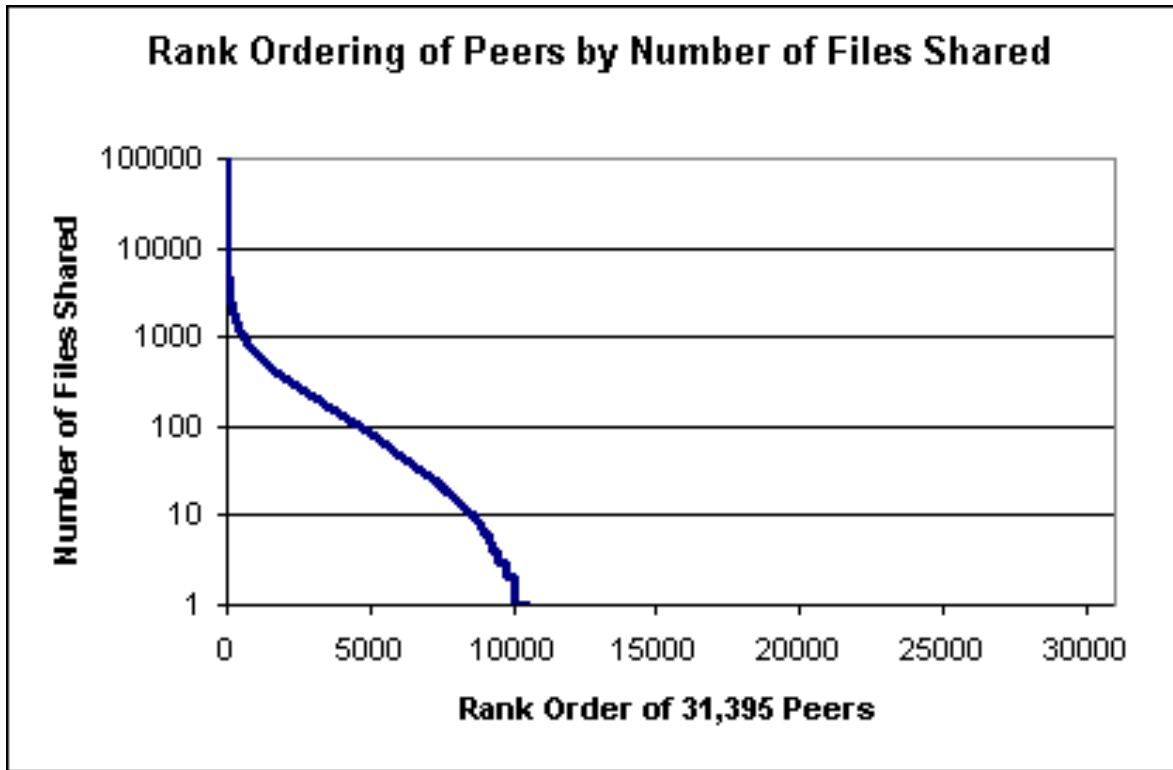


Figure 1

Gnutella:

- 70% of users share no files.
- 1% share 40% of all files.

Source: E. Adar and B. Huberman.
“Free Riding on Gnutella. *First Monday*, 2000. ([full text](#))

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1128 diggs

User Encounters PS3's Beep of Death After 30min of G

submitted by [lvanE](#) 17 hours 42 minutes ago (via [www.joystiq.com](#))

A newly purchased PS3 (and owner) had played Tony Hawk's Project E PS3 decided it didn't want any more of that. Maybe THP8 made the un great image (pun intended). In any case, this is one unhappy PS3 cons

[124 comments](#) | [Blog This](#) | [Email This](#) | Topic: [Tech Industry News](#) | [Bury](#)

1050 diggs

Absolutely Breathtaking Pictures!

submitted by [theholotrope](#) 12 hours 7 minutes ago (via [www.webpark.ru](#))

I have no idea what language this is or who they are from, but these are taken from high altitude. My favorite is the huge volcano. [More...](#)

[70 comments](#) | [Blog This](#) | [Email This](#) | Topic: [Environment](#) | [Bury](#)

990 diggs

Google Video gets Illegal - Pixar's Cars

submitted by [commander64](#) 18 hours 40 minutes ago (via [video.google.com](#))

They let junk slip in the past, but now they let a full fledged movie be ho really have people look at the videos before being hosted? [More...](#)

[185 comments](#) | [Blog This](#) | [Email This](#) | Topic: [Animation Videos](#) | [Bury](#)

918 diggs

MacOS X86: Leopard 10.5 Cracked To run on a PC.

submitted by [bluesaze](#) 14 hours 27 minutes ago (via [macgeek.freeflux.net](#))

Look like one of the MacOSX hackers has manged to crack Leopard to

[163 comments](#) | [Blog This](#) | [Email This](#) | Topic: [Apple](#) | [Bury](#)

Spring 2006:

Google

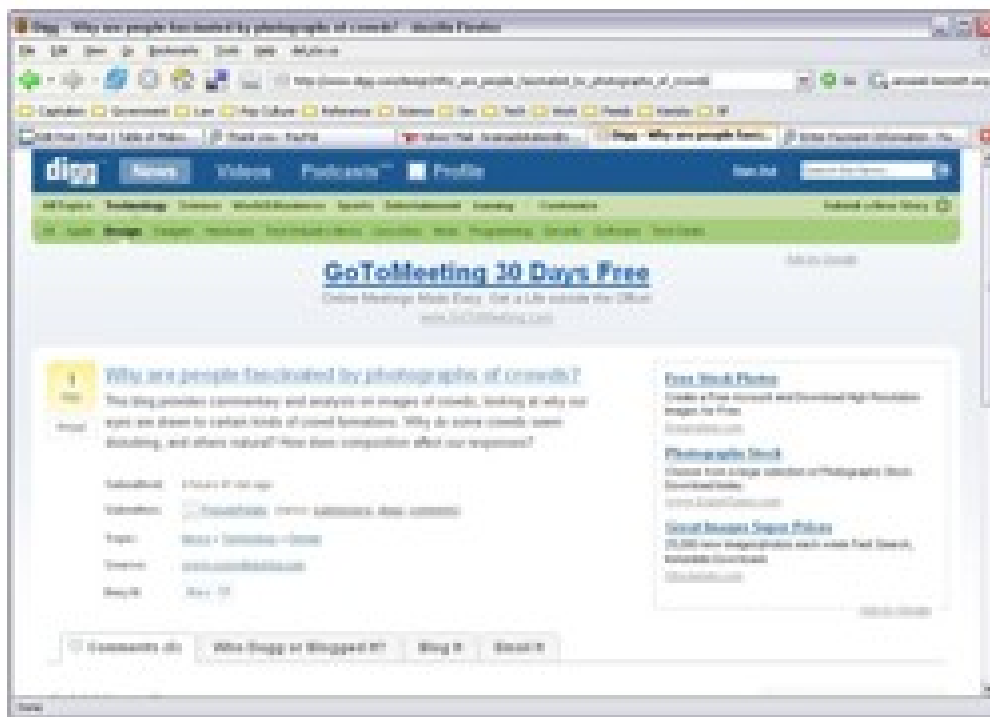
+


Sun ?

I Bought Votes on Digg

Annalee Newitz 

03.01.07 | 2:00 AM



After roughly four and a half hours, my story on Digg had gotten only one digg -- from my pseudonym, PseudoPotato. [View Slideshow](#) 

It was
influe
news
of cre
"pop
were

"How
wond

I can
writte
on Di
votes

How do we keep pollution out?



BY: virgomerry ([flickr](#))

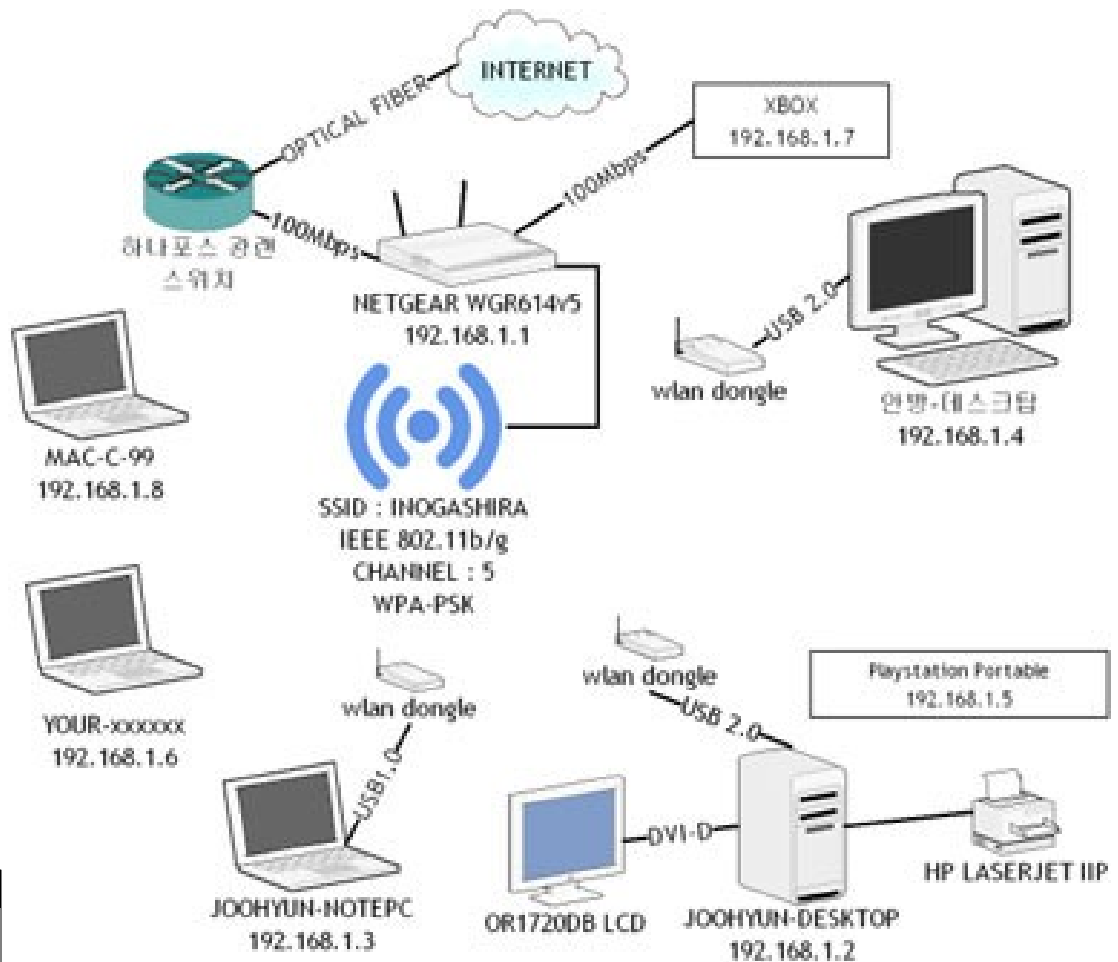
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“Connecting people,
information, technology in more
useful ways”

Source: School of Information, University of Michigan

Humans are smart nodes, but **not** programmable.



ICD includes **autonomous,**
motivated agents in the scope of
system design.

Draw on **theories** and **empirical evidence** of human decision making to understand likely behaviors in response to various system configurations.

INTRO TO Contracting, Signaling, Screening

(example)



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BY: rachel a. k. ([flickr](#))

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(example)



Mail

Create your e-mail address

Country/Region: E-mail address: @hotmail.com

The address can contain only letters, numbers, periods (.), hyphens (-), or underscores (_).

Type the name that you want to appear before the @ symbol (for example, **yourname**).

[Get help with this section](#)

Create your password

Password:

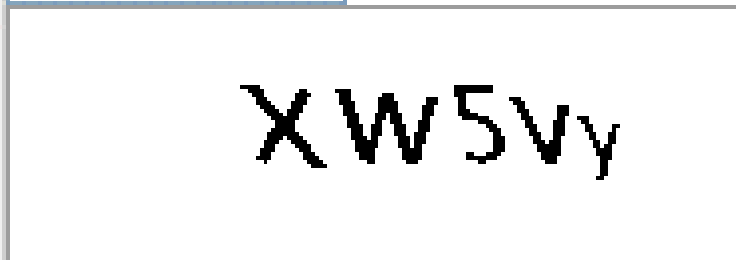
The password must contain at least six characters and is case sensitive.

Password strength: Weak Medium StrongRetype password:

Hotmail doesn't want spammers
getting free accounts

Enter the text as it is shown below:

(only needed if optional comments are entered)



This extra step helps prevent automated abuse of this feature.
Please enter the characters exactly as you see them.

Source: unknown

Image of maze captcha removed

(original at
<http://blogs.warwick.ac.uk/images/johndale/200>
)

CAPTHCAs also impose costs on legitimate users.

Worth it? Is there a better design to discourage hijackers?

- How best to license your patent?
- Startup investors, principals, employees: Who gets what, when and how?
- Social networking: How do you motivate potential dating partners to reveal balanced and truthful information?
- Is there an email protocol that encourages spammers to stop without discouraging legitimate senders?
- How do you induce data producers to create archive-ready data sets?
- How do you induce buyers and sellers to be honest and perform well in semi-anonymous online transaction?

INTRO TO AGENCY

Why contract?

AGENCY

Examples?

AGENCY
is universal

(example)

Mutually Assured Accountability

Brin, David. *The Transparent Society: Will Technology Force Us to Choose Between Privacy and Freedom?* Basic Books, 1999.

All information, all the time.

...causes bad guys to go
elsewhere

... gives little guy bargaining
power

The information spotlight...

But...

(example)



Bad guys
can disguise
info,
change
identity,
disinform....

BY: misfitgirl ([flickr](#))

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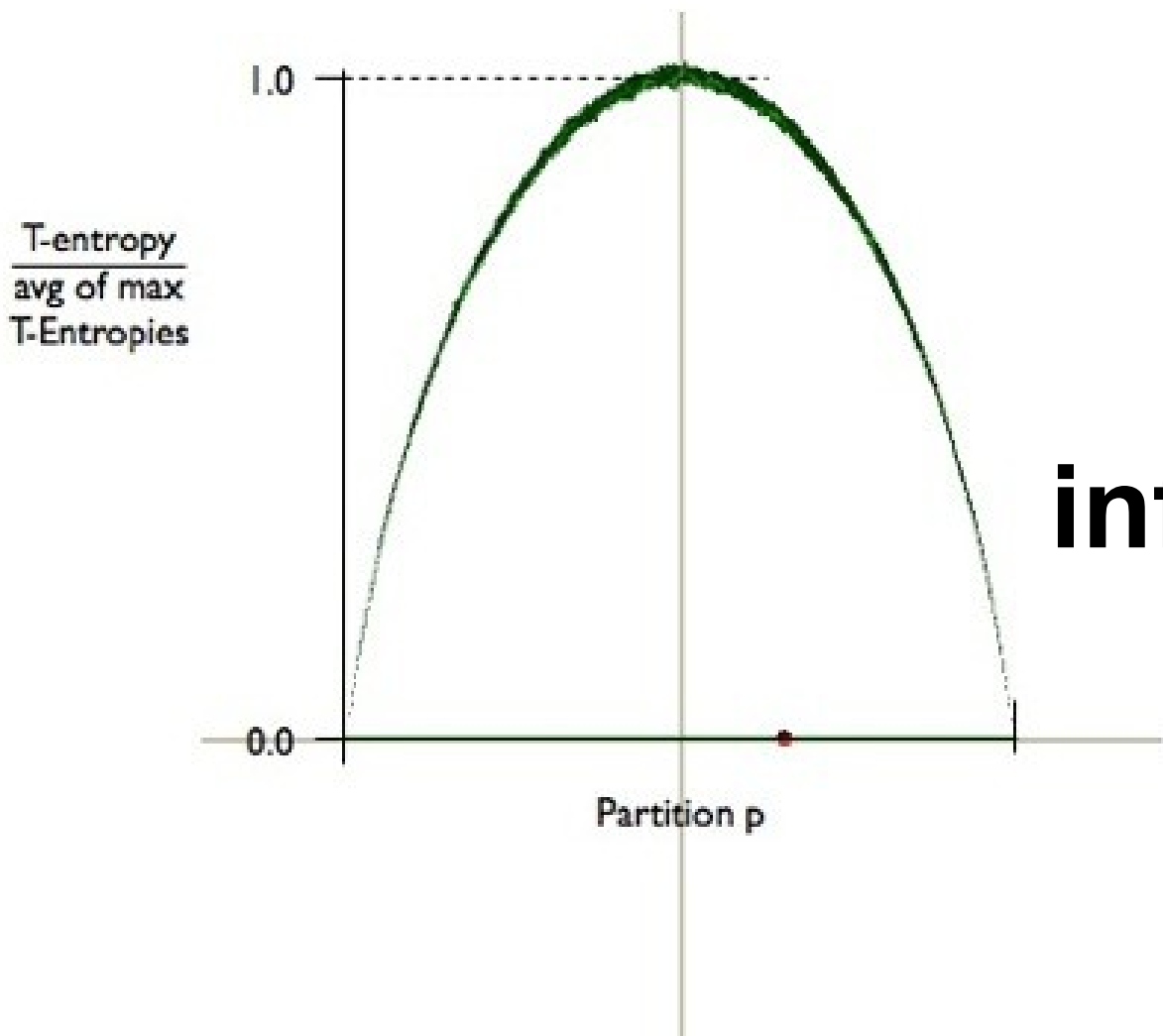
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When and how to make
information transparent?

E.g.: Monitoring helps when results are verifiable, not when they're not!

Ex: More information reduces bad
guy information rents but doesn't
create rent for others

learn?



information

Source: unknown

...when people
have different
interests?



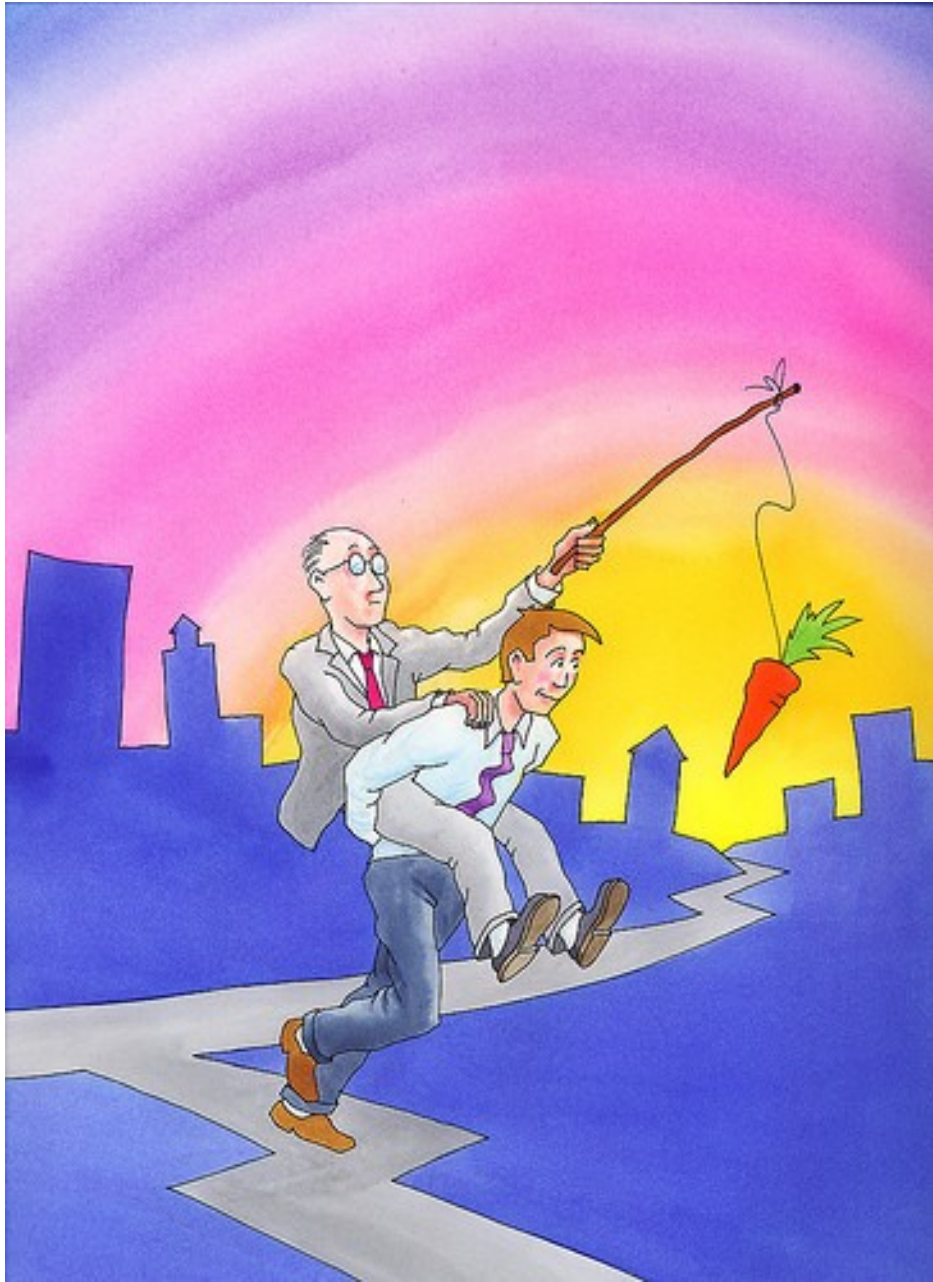
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differences in knowledge:

a difference that makes a
difference



incentives

BY: Finsec ([flickr](#))



<http://creativecommons.org/licenses/by/2.0/deed.en>

info + incentives



BY: unloveable ([flickr](#))



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Contracts

Offer and acceptance

Consideration

Intention to be legally bound

Contract: an agreement with three elements

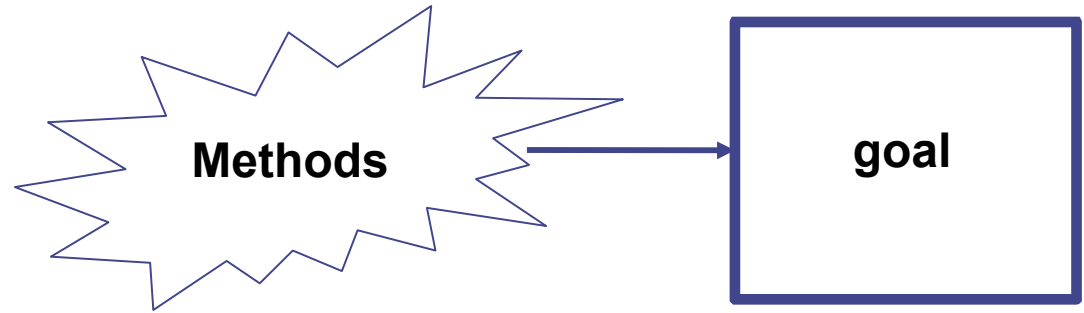
What problem do contracts solve?



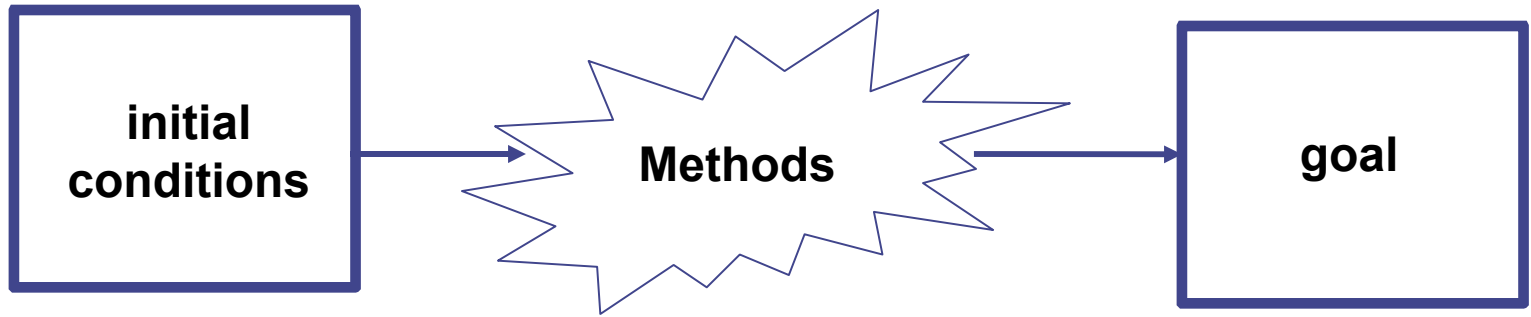
goal

Principle has an objective

- ✓ profit max
- ✓ social justice
- ✓ universal information access
- ✓ whatever



“Getting to done” depends on actions taken and information provided by **agents**



Agents may not share principle's objective

Create agreement specifying...

permissible actions

outcome as function of realized actions

E.g., committee decision process,
auction, contract

SUMMARY



Who knows
what?

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What are the motivations?



BY: xrrr ([flickr](#))

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ICD:

Design mechanisms so agents
want to provide **information** and
effort that lead to high quality
solution

