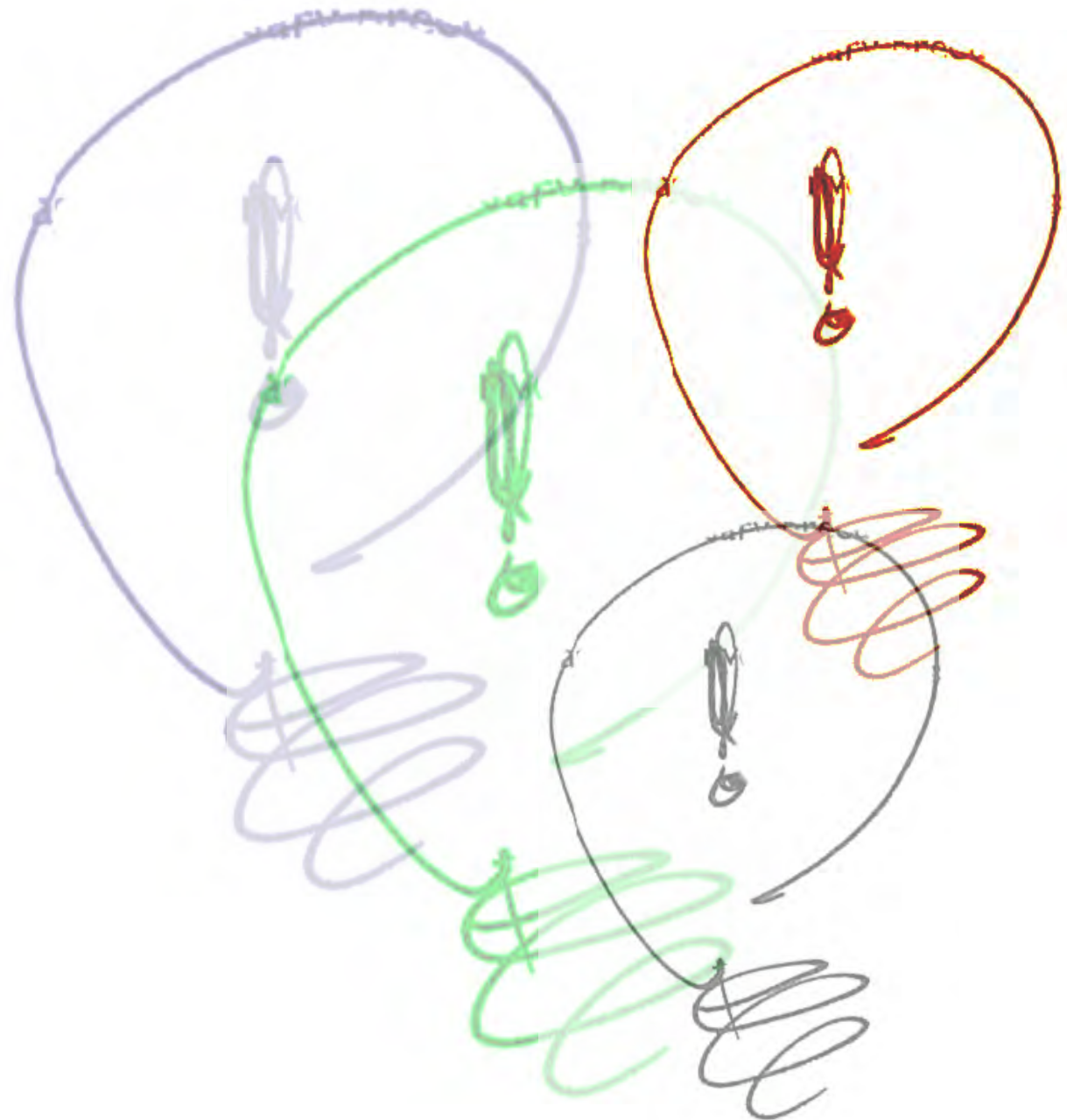


Design for Conversations & Conversations for Design

An Economy of Insight

coThinkTank 2011 Berlin
Social Business Innovation
6 September 2011

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Design for Conversations & Conversations for Design

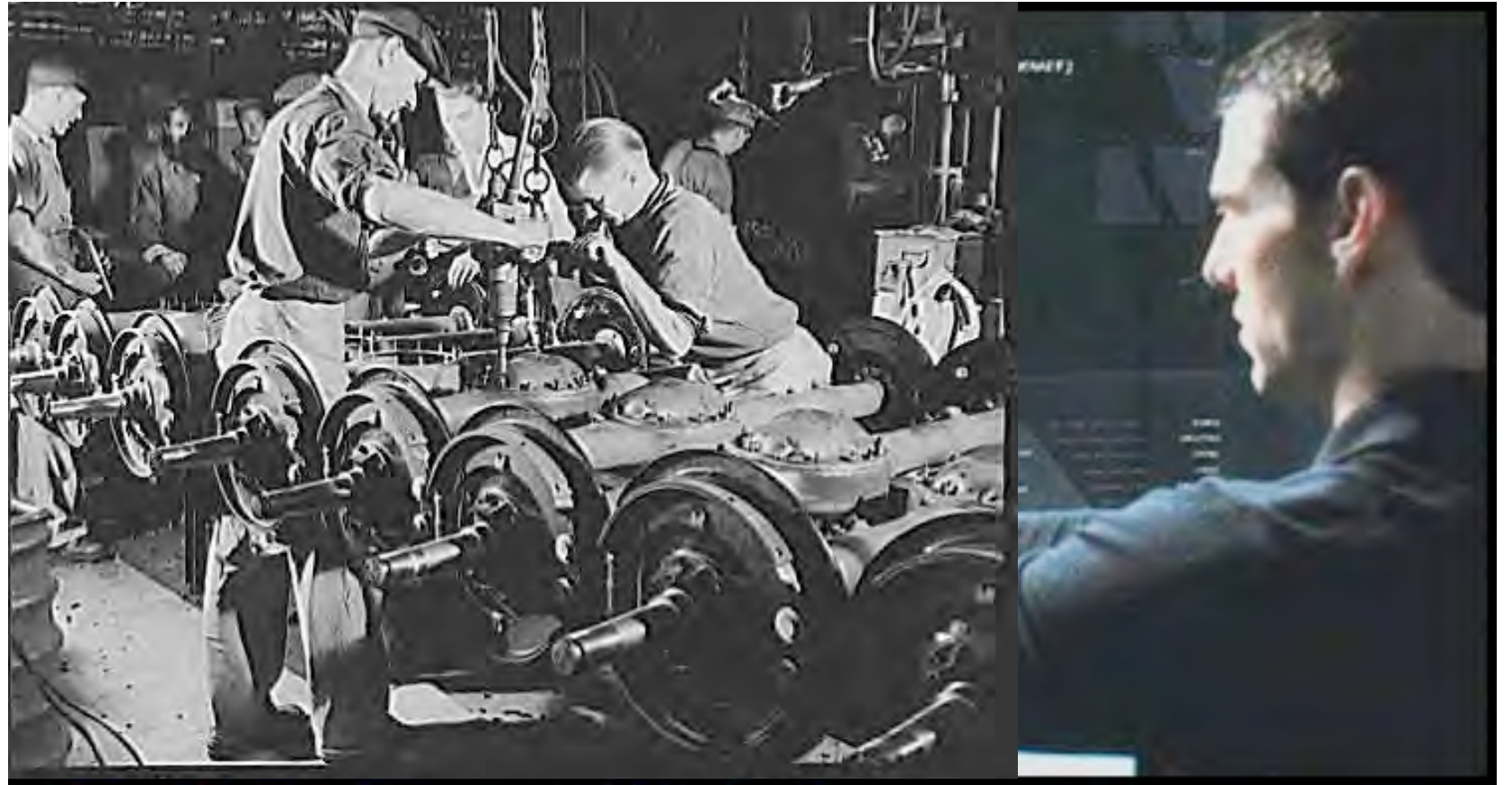
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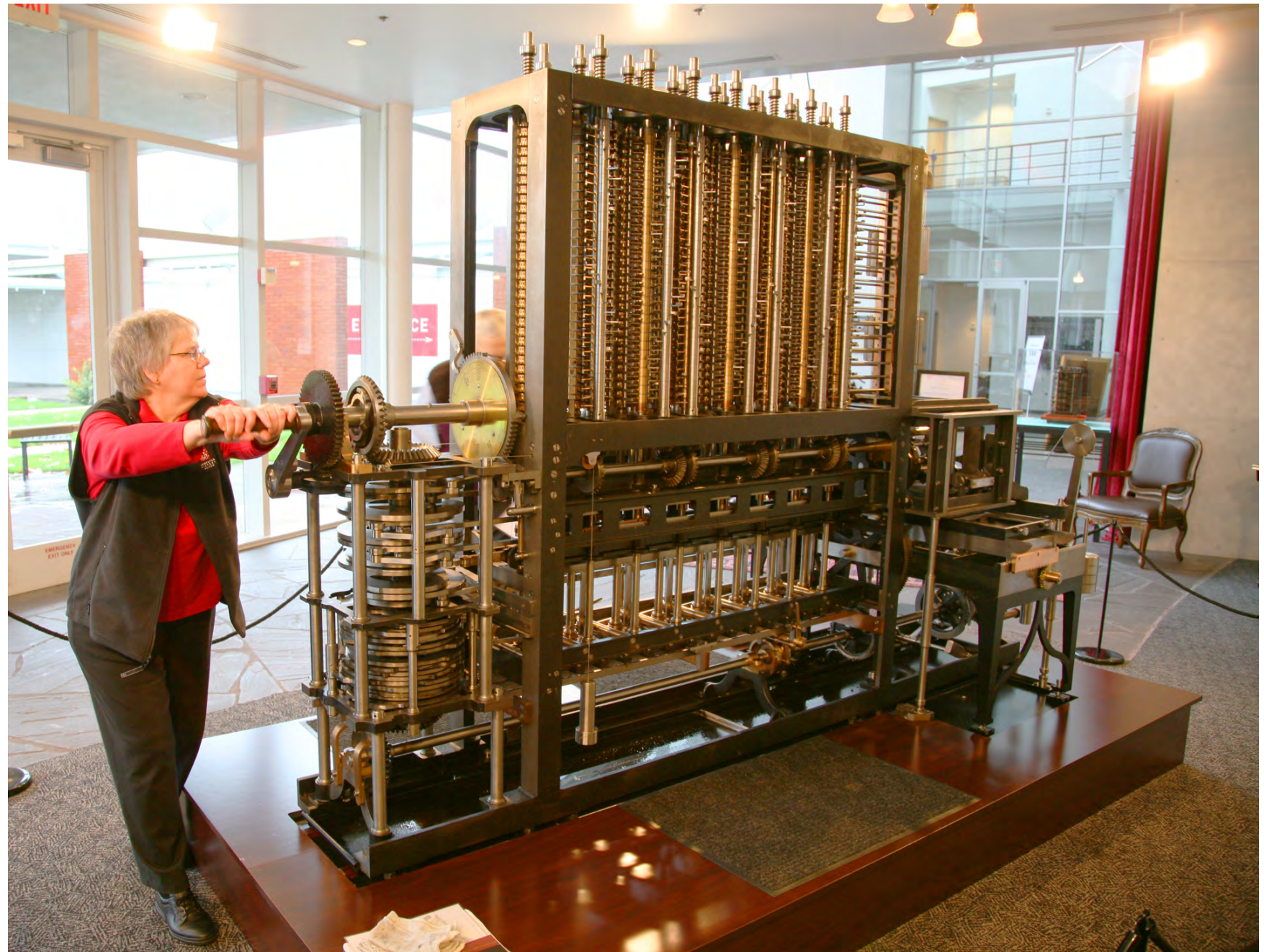
What age are we really in?



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An Economy of Insight

What age are we really in?



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An Economy of Insight

The future will be different in some ways, but some things won't change

- laws of physics
- limits of computation
- constraints of wealth creation
- resources of the planet.

An organization will grow if it makes current processes more efficient—smaller, cheaper, faster. Better.

But it can also invent new ways of increasing sustainability or creating wealth

- by re-organizing the way work is accomplished, or
- by creating new categories of offerings.



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What did **industrial technology** bring?

Extensions of our **muscles**

- greater power to do work, locally
- ability to extend our might, globally

Economic result = lowering the cost
of performing physical work

Human result = lessening of need
to perform physical work



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An Economy of Insight

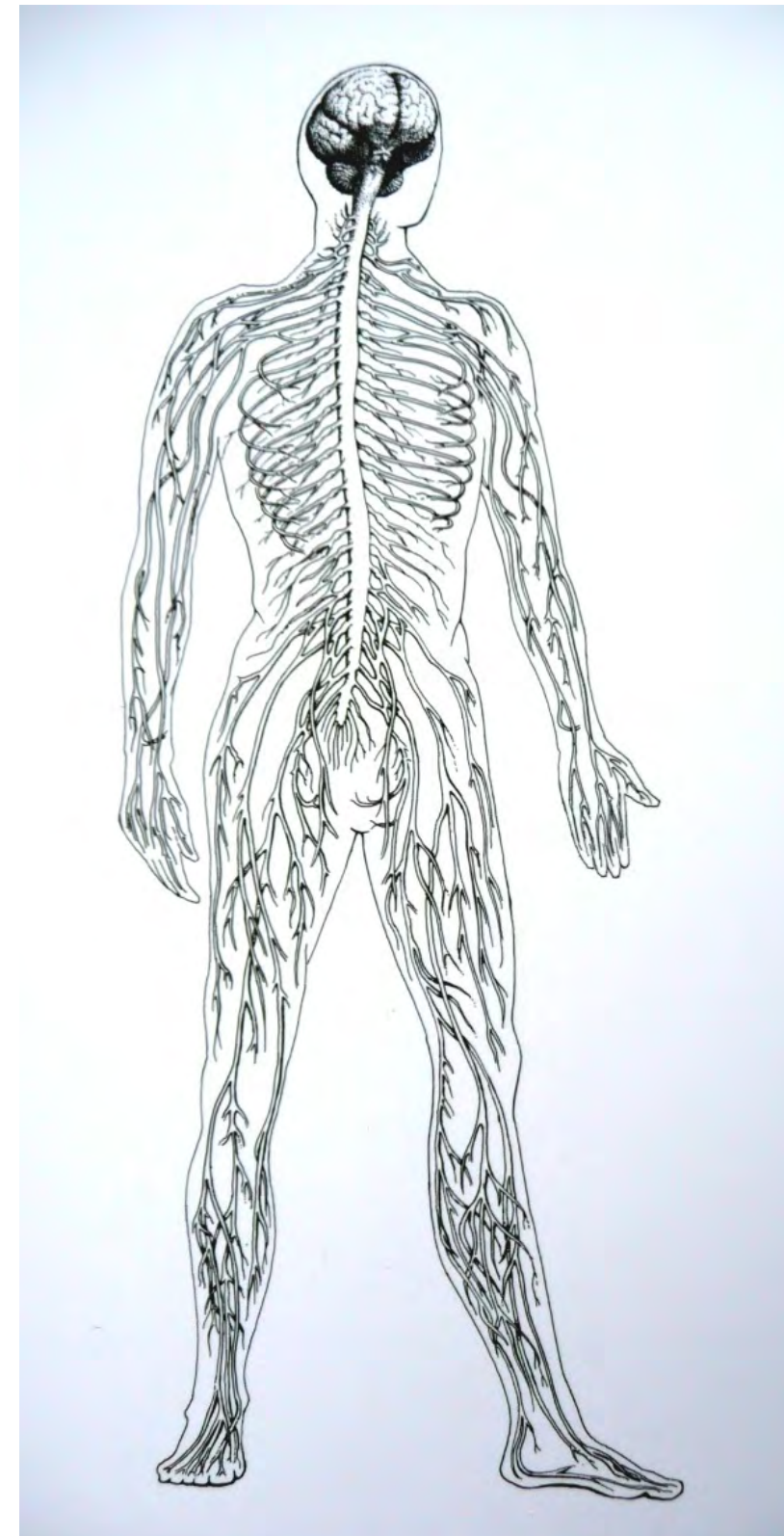
What did **digital technology** bring?

Extensions of our **nervous system**

- sensing extended to distances
- acting extended to distances

Economic result = lowering the cost of
lowering uncertainty

Human result = lowering of uncertainty
about current status



Machines & Revolutionary Eras

	Industrial Revolution	Information Revolution	Next Revolution?
	1750—2010—?	1955—1995	
Machines...	amplify muscles	amplify nervous system	
... create wealth by lowering cost of ...	doing physical work	lowering uncertainty	

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Insight leads to solutions to problems.
(At least, valuable insights do.)

Insight is a necessary precursor
to solving today's massive problems.
(If it's possible at all.)

Solving global problems depends on

- a. **speed-to-insight**
- b. **quality-of-insight**
- c. **economy-of-insight.**

Creating new economic potential also
depends on insight.



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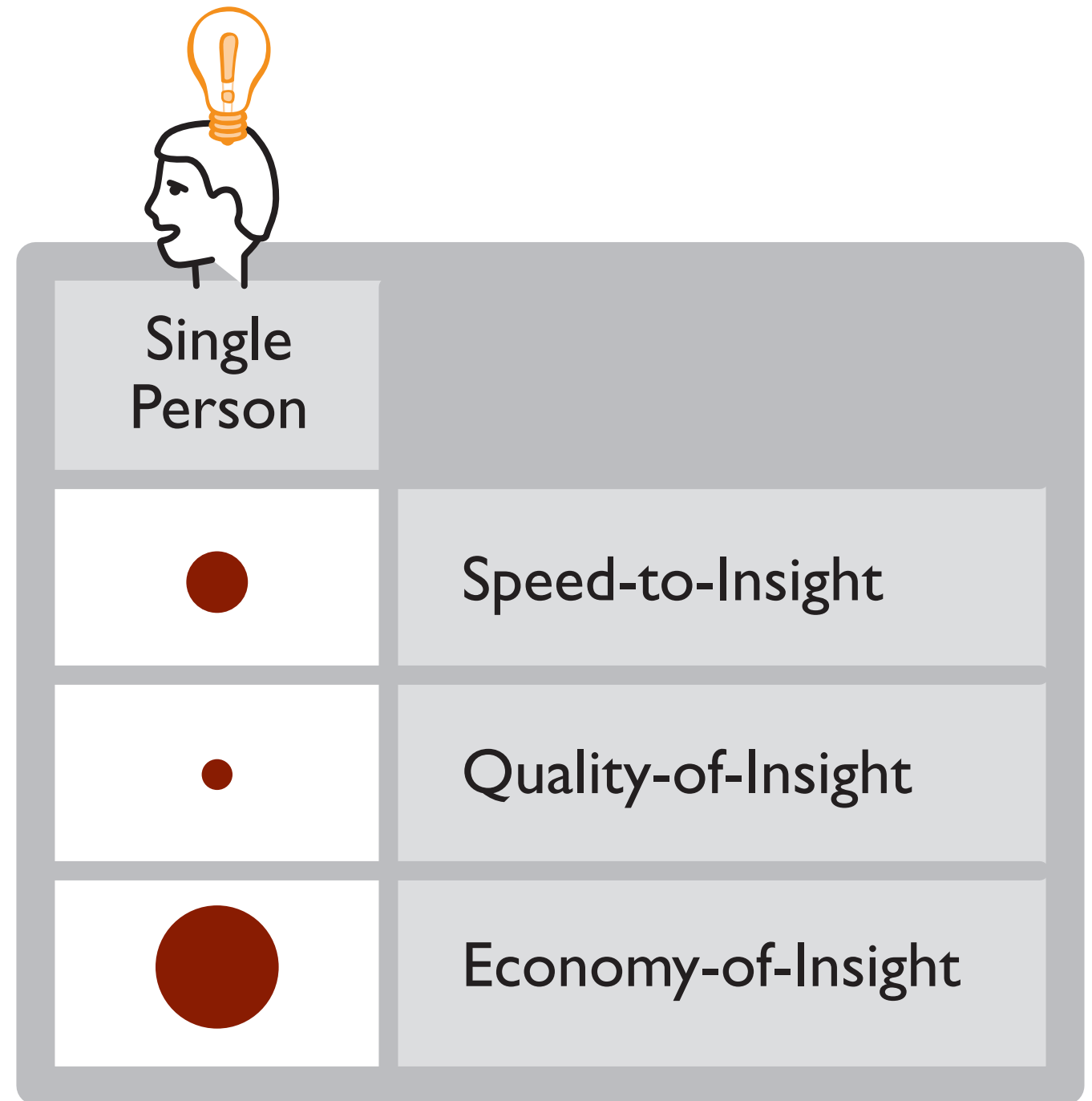
Sources of Insight—A Single Mind

A single mind may generate insight.

But today's problems are “wicked”.

A wicked problem is hard to define, no less to attack and tame.

A *single* mind is severely limited, compared to that of a group of minds.




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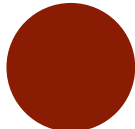
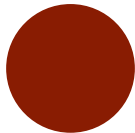

An Economy of Insight

Sources of Insight—Multiple Minds

A group of minds—also called a team—may generate insight.

Teams generally possess greater variety of thinking, and therefore may generate much higher quality-of-insight.



Single Person	Team	
		Speed-to-Insight
		Quality-of-Insight
		Economy-of-Insight

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An Economy of Insight

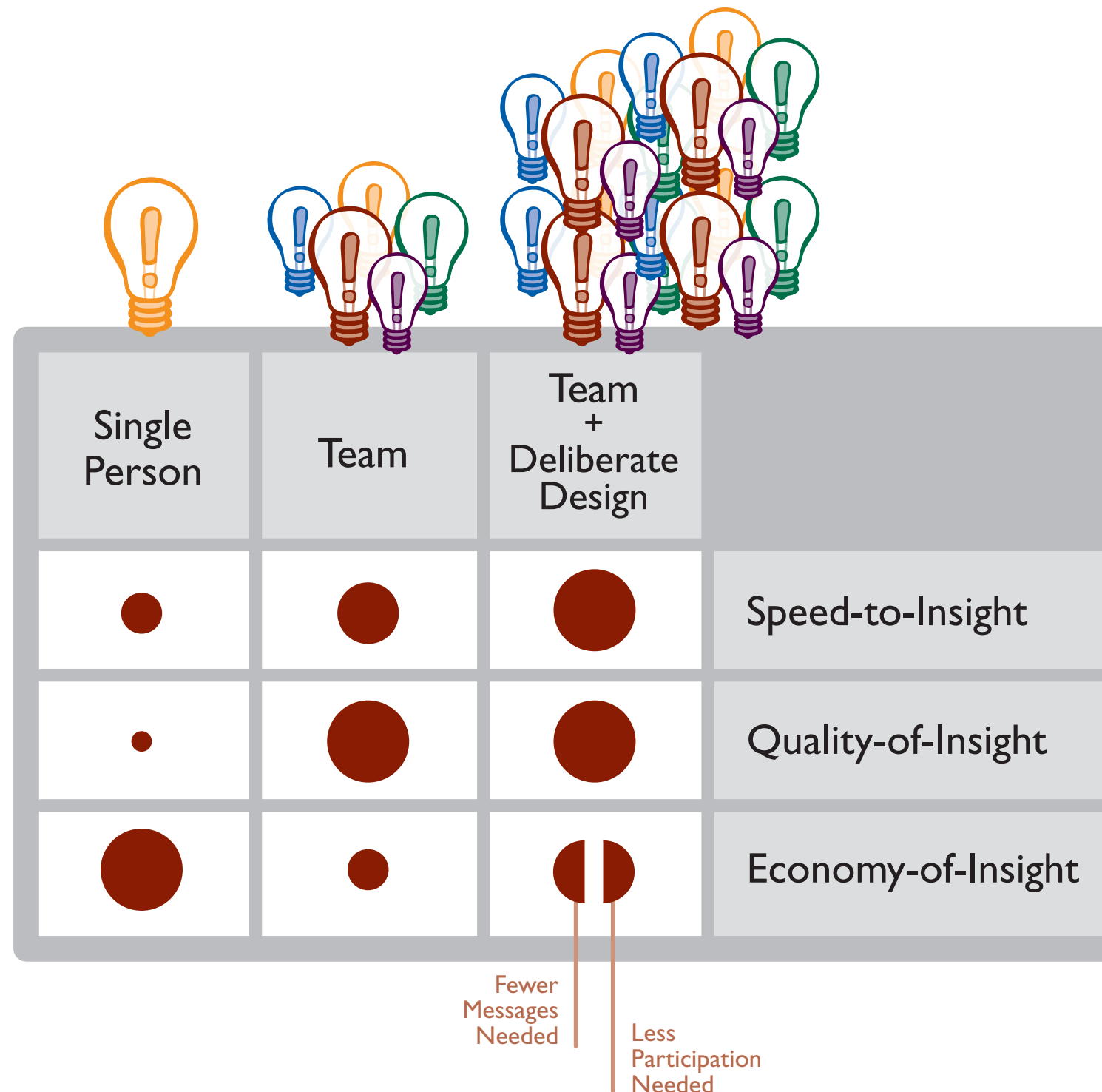
Sources of Insight—Multiple Minds

By deliberate design, insight processes may be significantly improved by

- lowering the cost of connecting participants together
- being careful about messaging, so fewer messages are needed
- reducing the number of participants without compromising anything.

How do we instrument this:

- what processes do we follow?
- what software do we design?



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An Economy of Insight

Processes for Insight—Multiple Minds

Multiple minds are key to generating valuable insights in complex situations and competitive markets.

Many methods are now popular

- “Hyper-connected Organizations”
- “Open Innovation”
- “Crowd-sourcing”.

They presume the short, shallow exchange of easily understood messages can lead to innovation.
(This is simply false.)

How do we harness multiple minds **by deliberate design?**

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Cost of Connection

We must connect with each other

- to exchange information
- to reach agreement
- to coordinate our actions.

There is always a cost to our connecting.

Of course, we want to minimize this cost, without compromising outcomes.

Can we connect better, by design?

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Models of Connection

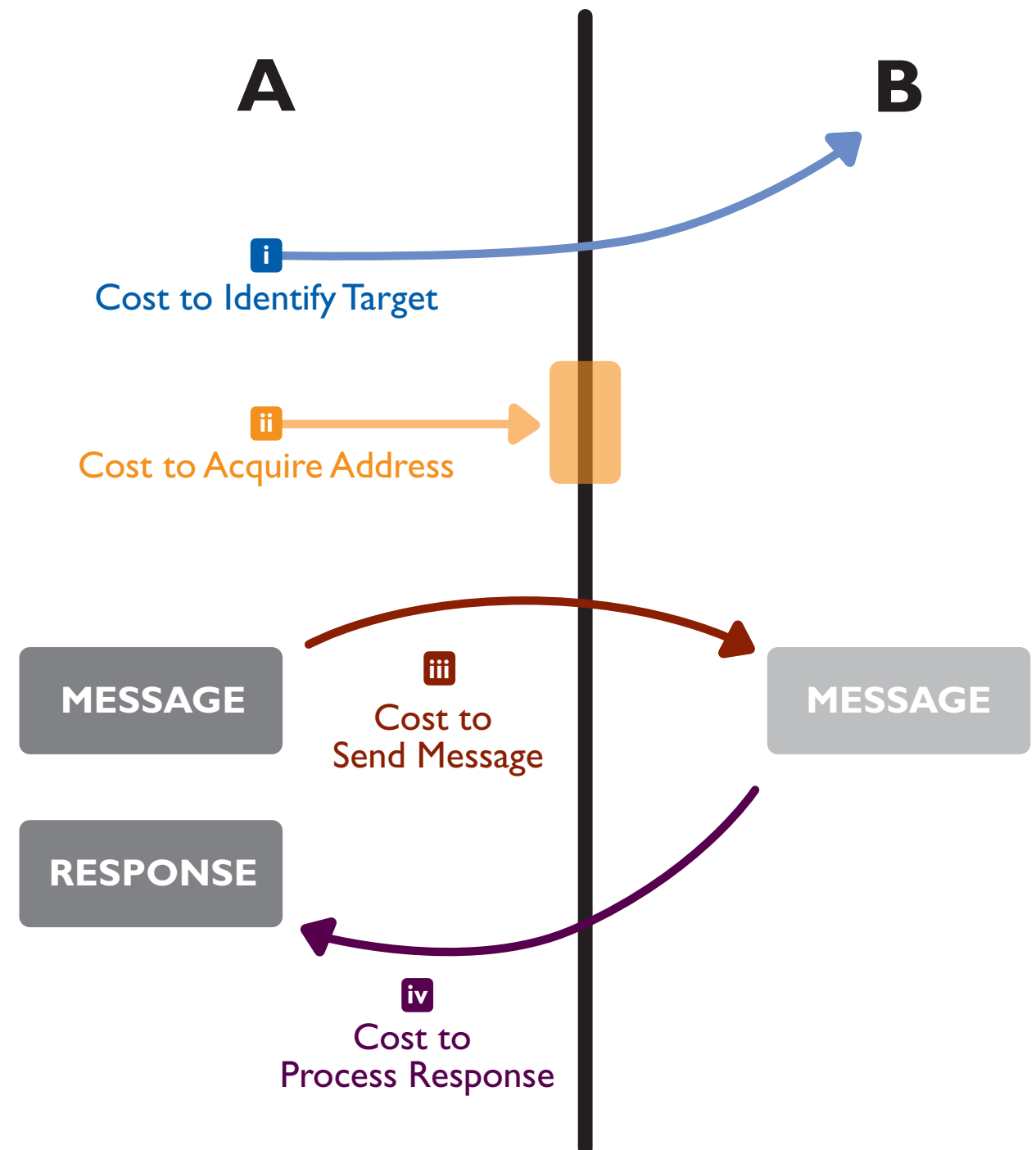
A. Messaging Model

Costs of connecting

- i. cost to identify target for message
- ii. cost to acquire address for sending message
- iii. cost to send message
- iv. cost to process message being returned.

What are success metrics—
message arriving to target?!!?

Nothing about achieving a goal—
the reason for the message!!!



Design for Conversations & Conversations for Design

An Economy of Insight

Models of Connection

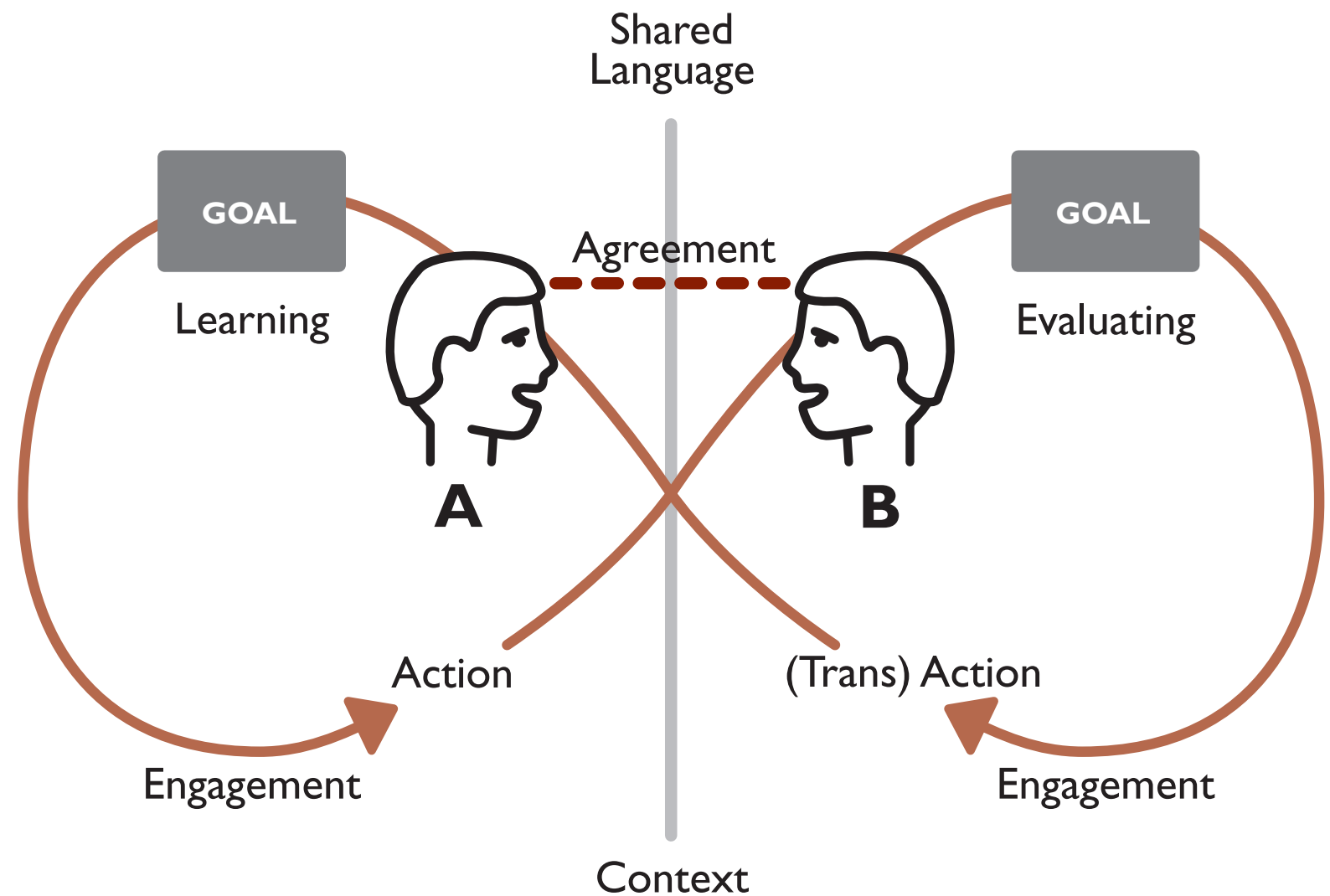
- A. Messaging Model
- B. Conversation Model

Conversation = Synchronization

- 1. context
- 2. shared language
- 3. exchange or engagement
- 4. agreement
- 5. action or transaction.

C-L-E-A-T

skip costs of conversation



Design for Conversations & Conversations for Design

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Models of Connection

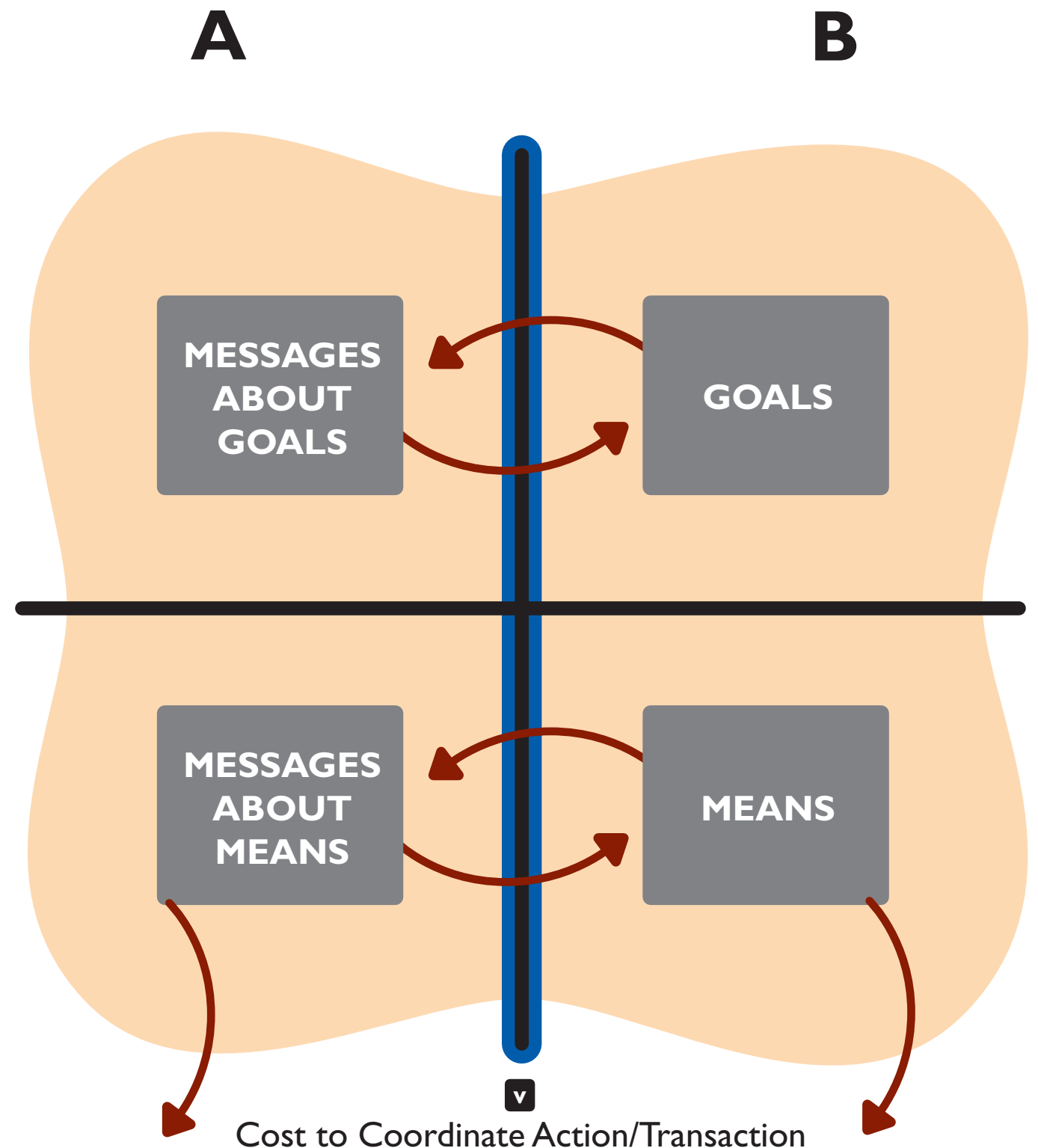
A. Messaging Model

B. Conversation Model



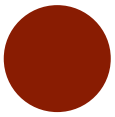





























































Costs of conversing

1. cost to identify context (interests + moment)
2. cost to establish shared language
3. cost to exchange messages
4. cost to achieve agreement (shared understanding)
5. cost to coordinate action/transaction.

C-L-E-A-T



CONVERSATIONAL POTENTIAL

	C	L	E	A	T	Speed to Insight	Quality of Insight	Economy of Insight
Face to Face								
Semaphores								
Mail								
Telephone								
E-mail								
Instant Message								
Twitter								
Social Graph								

Design for Conversations & Conversations for Design

An Economy of Insight

Today's software and service designers focus on impoverished technology and fragmented messaging. (Pure Shannon information.)

Real Conversation = Social Variety

Metrics of success

1. sufficient context established
2. sufficient shared language established
3. flow and richness of engagement
4. degree of agreement
5. degree of coordination of action.

Effective conversation requires *variety*.

An enterprise cannot affect what it cannot talk about.

Social variety is the range of capabilities and capacities available to an enterprise.

Social variety comes from conversation.

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An Economy of Insight

What does the enterprise need from conversations?

- I. Conversations for Trust
- II. Conversations for Innovation
- III. Conversations for Transactions

When an enterprise engages in **design of conversations**, outcomes are

- more reliable
- convergent
- lower risk
- more efficient
- more effective.

Design for Conversations & Conversations for Design

An Economy of Insight

I. Conversations for Trust

Trust creates a virtuous circle of interactions, that supports its current business—its current means of creating economic value.

When there is trust...

... team members are more open to responding to others

... which increases willingness to help each other

... which increases attention paid

... which increases the scale of resources invested

... which increases commitment to succeed

... which increases likelihood of success

... which is more likely to create economic value

... which provides new resources, to invest in new efficiencies (virtuous circle)

... which creates further wealth.

Design for Conversations & Conversations for Design

An Economy of Insight

I. Conversations for Trust *continued*

Trust also supports innovation because it opens a safe space in which new ideas can be explored with less fear of failure.

Conversation leads to relationship, which leads to trust...

... which creates an open space to explore possibilities

... which leads to new insights

... which lead to new understanding and coherent worldviews

... which lead to new choices in decision-making

... which may lead to new businesses as well as
new ways of doing business

... which lead to assessment of success

... which lead to new insights.

Design for Conversations & Conversations for Design

An Economy of Insight

II. Conversations for Innovation

By conversations, we don't mean sending messages.

Even search software is very primitive compared to the kinds of help we really need, which go far beyond finding the information.



Design for Conversations & Conversations for Design

An Economy of Insight

II. Conversations for Innovation

Conversation = Engagement to Reason & Debate

To innovate, an enterprise can invest in **software-based dialectical environments** that promote a shared understanding of—and insight into improving—the enterprise.

CRITICAL THINKING

- 1 Surfacing Assumptions
- 2 Increasing Shared Understanding
- 3 Developing Effective Worldviews
- 4 Laying Out Consequences
- 5 Enumerating Conditions For Action
- 6 Opening New Spaces For Action

CRITICAL THINKING

FAMILIAR TASK NAME

1 Surfacing Assumptions

=

Systems Modeling

2 Increasing Shared Understanding

=

Team Collaboration

3 Developing Effective Worldviews

=

Team Learning

4 Laying Out Consequences

=

Risk Assessment

5 Enumerating Conditions For Action

=

Feasibility Planning

6 Opening New Spaces For Action

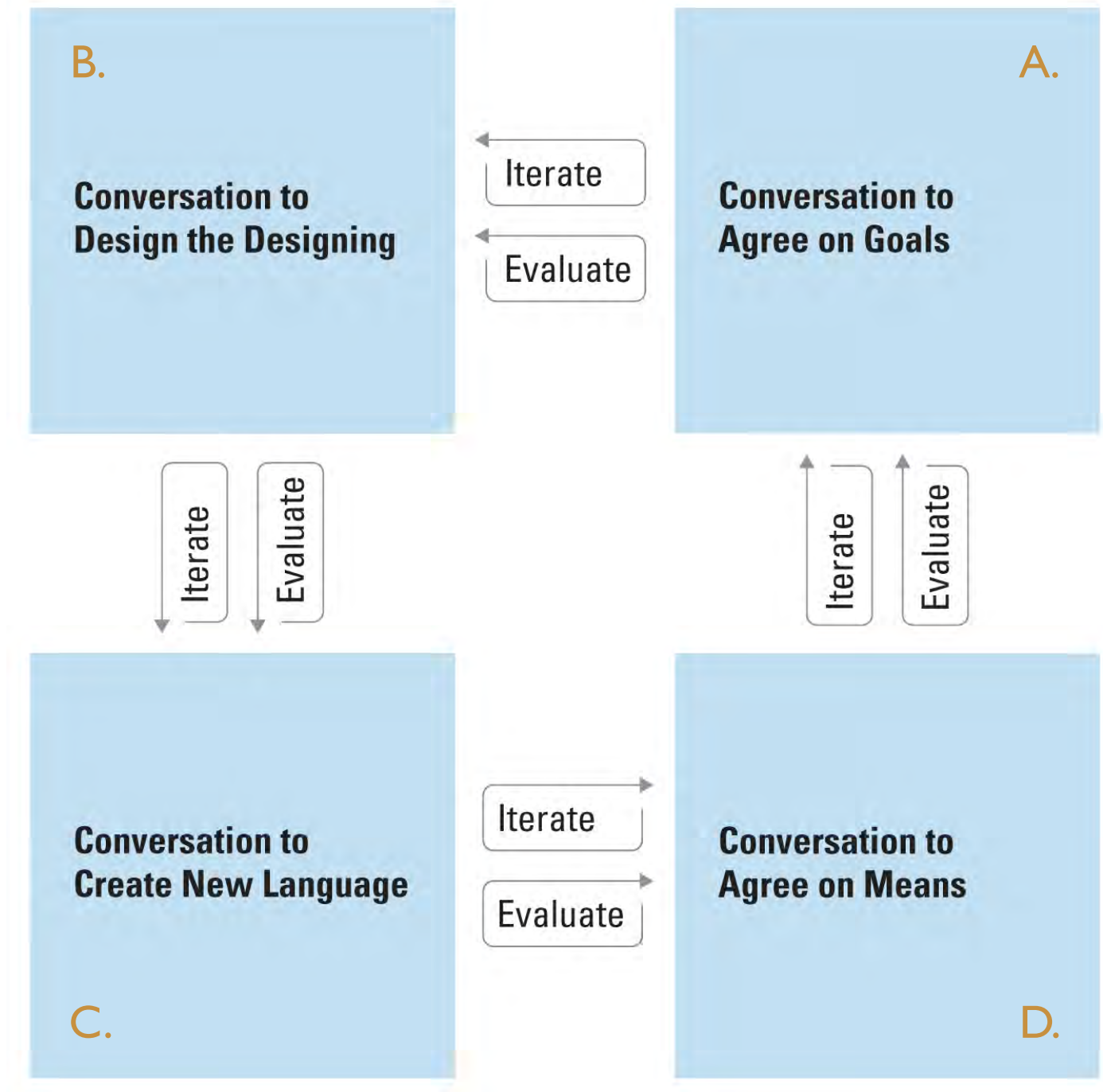
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Innovating

Design for Conversations & Conversations for Design

An Economy of Insight

II. Conversations for Innovation *continued*



skip 4x

Design for Conversations & Conversations for Design

An Economy of Insight

II. Conversations for Innovation *continued*

- A. Conversation to Agree on Goals
Decide why we are doing what we are doing
 - to create value for shareholders
 - to pursue our vision for a market
 - to commit to sustainable innovation.
- B. Conversation to Design the Designing
Identify irreplaceable expertise for success in designing a new space of possibilities.
- C. Conversation to Create New Language
As a new space of possibilities evolves, a new language frames and defines it.
- D. Conversation to Agree on Means
Decide how to achieve our goals, that is, create a plan for the actions of the enterprise.



Conversation to Agree on Goals

A.

Design for Conversations & Conversations for Design

An Economy of Insight

II. Conversations for Innovation *continued*

- A. Conversation to Agree on Goals
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B.

**Conversation to
Design the Designing**

Design for Conversations & Conv

An Economy of Insight

II. Conversations for Innovation *continued*

- A. Conversation to Agree on Goals
Decide why we are doing what we are doing
 - to create value for shareholders
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- D. Conversation to Agree on Means
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**Conversation to
Create New Language**

C.

II. Conversations for Innovation *continued*

- A. Conversation to Agree on Goals
Decide why we are doing what we are doing
 - to create value for shareholders
 - to pursue our vision for a market
 - to commit to sustainable innovation.
- B. Conversation to Design the Designing
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Conversation to Agree on Means

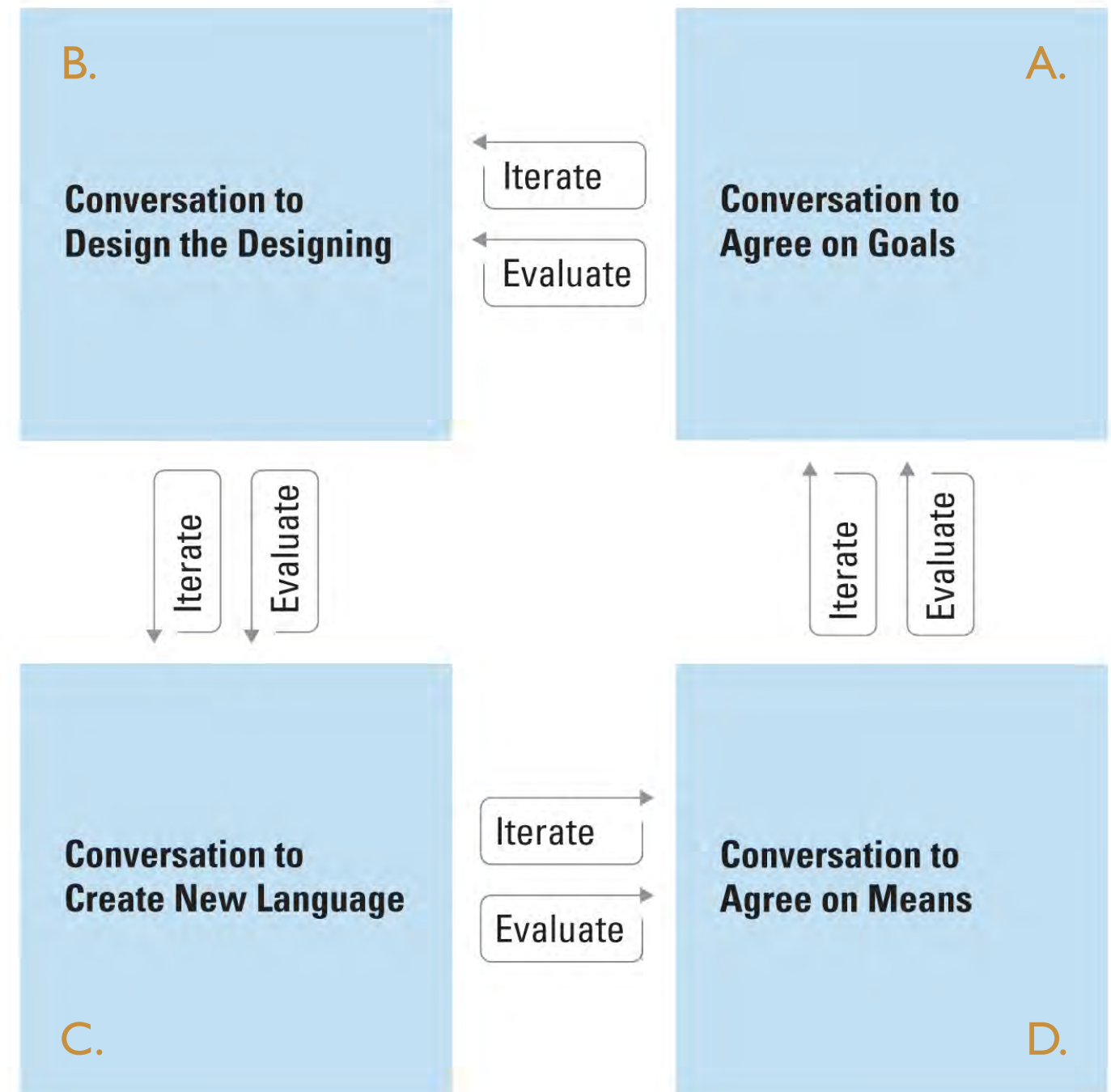
D.

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II. Conversations for Innovation *continued*

- A. **Conversation to Agree on Goals**
Decide why we are doing what we are doing
- to create value for shareholders
 - to pursue our vision for a market
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Decide how to achieve our goals, that is, create a plan for the actions of the enterprise.



Design for Conversations & Conversations for Design

An Economy of Insight

III. Conversations for Transactions

New insights may create new value.
(Only new insights do.)

So, insights that create new value have direct impact
on the future of the enterprise.

Insights come from conversation.

So, conversations affect the future.

It is a simple, logical, and inevitable step to consider
conversations as transactions of value that can be
monetized and exchanged.

Conversations = Transactions



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III. Conversations = Transactions continued

Future enterprise interactions will all be mediated by technology. (They nearly are all today.)

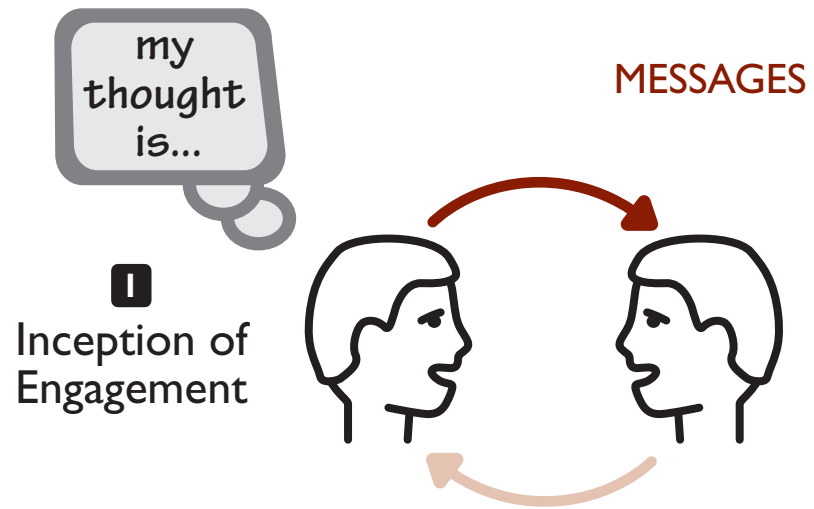
Therefore, a record can be kept that stipulates

- initiators of conversation and context
- participants and initial language
- contributions by whom and about what
- through-line of engagement to agreement
- actions/transactions taken or planned.

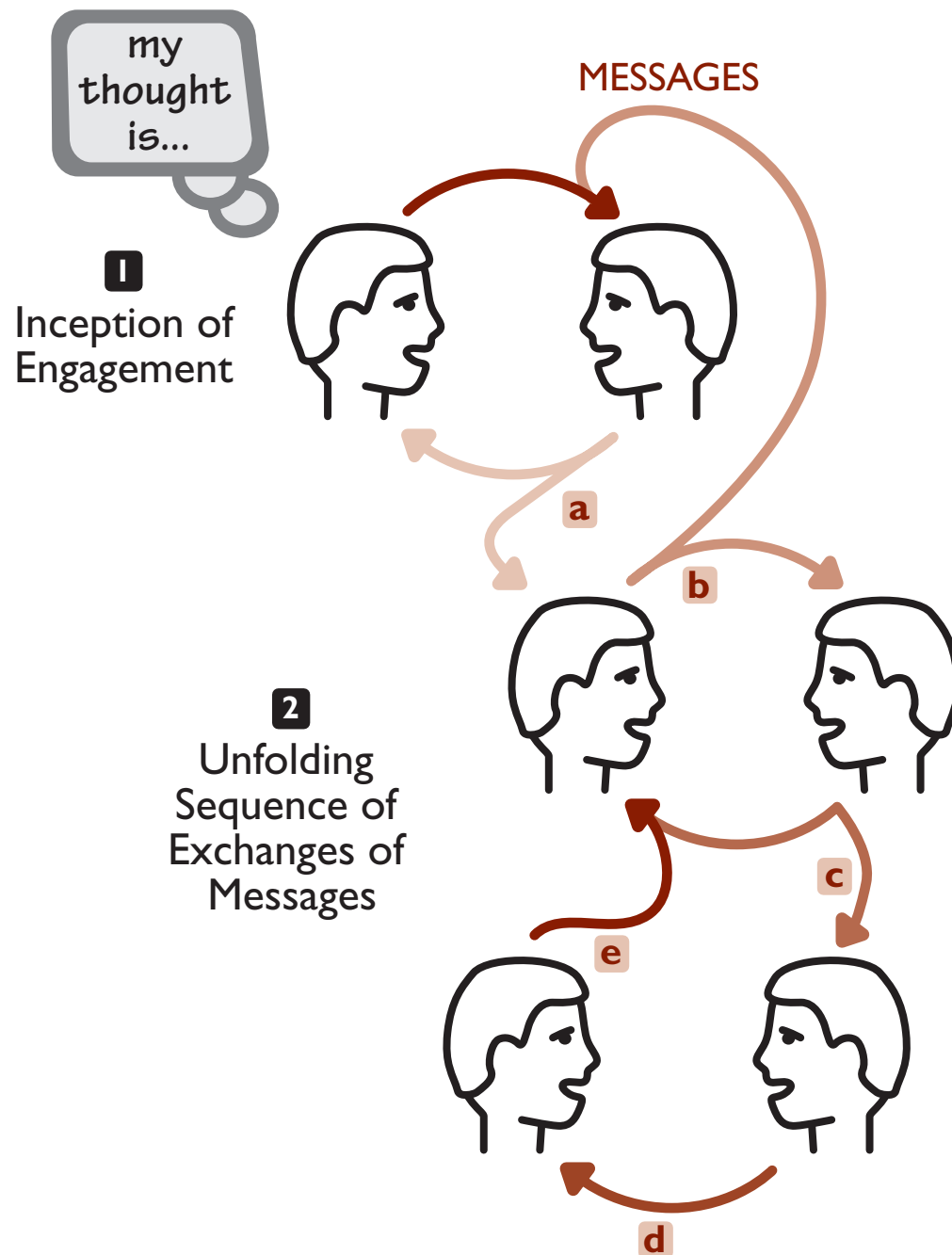
Let's outline a technology to support this vision.



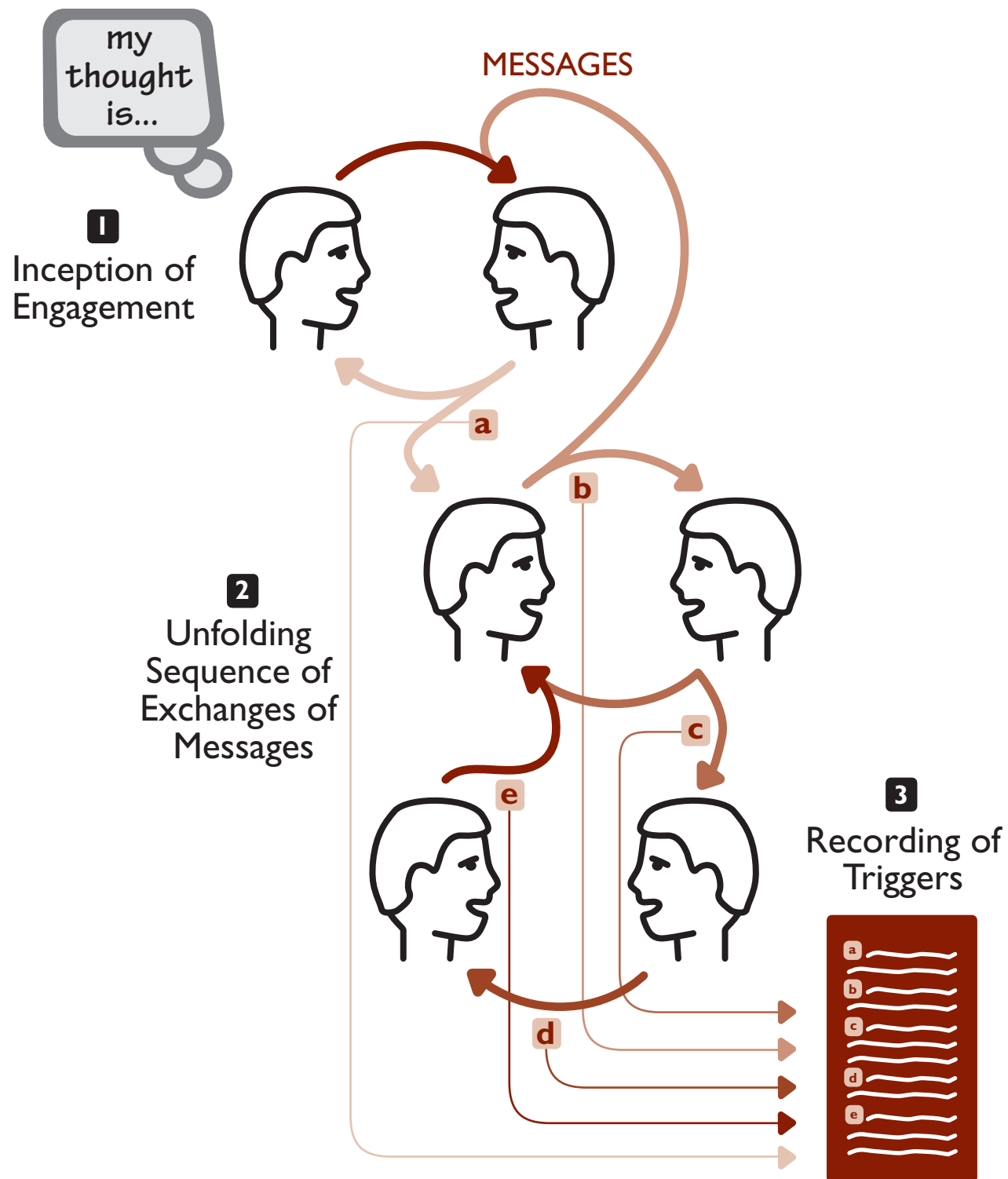
C-L-E-A-T



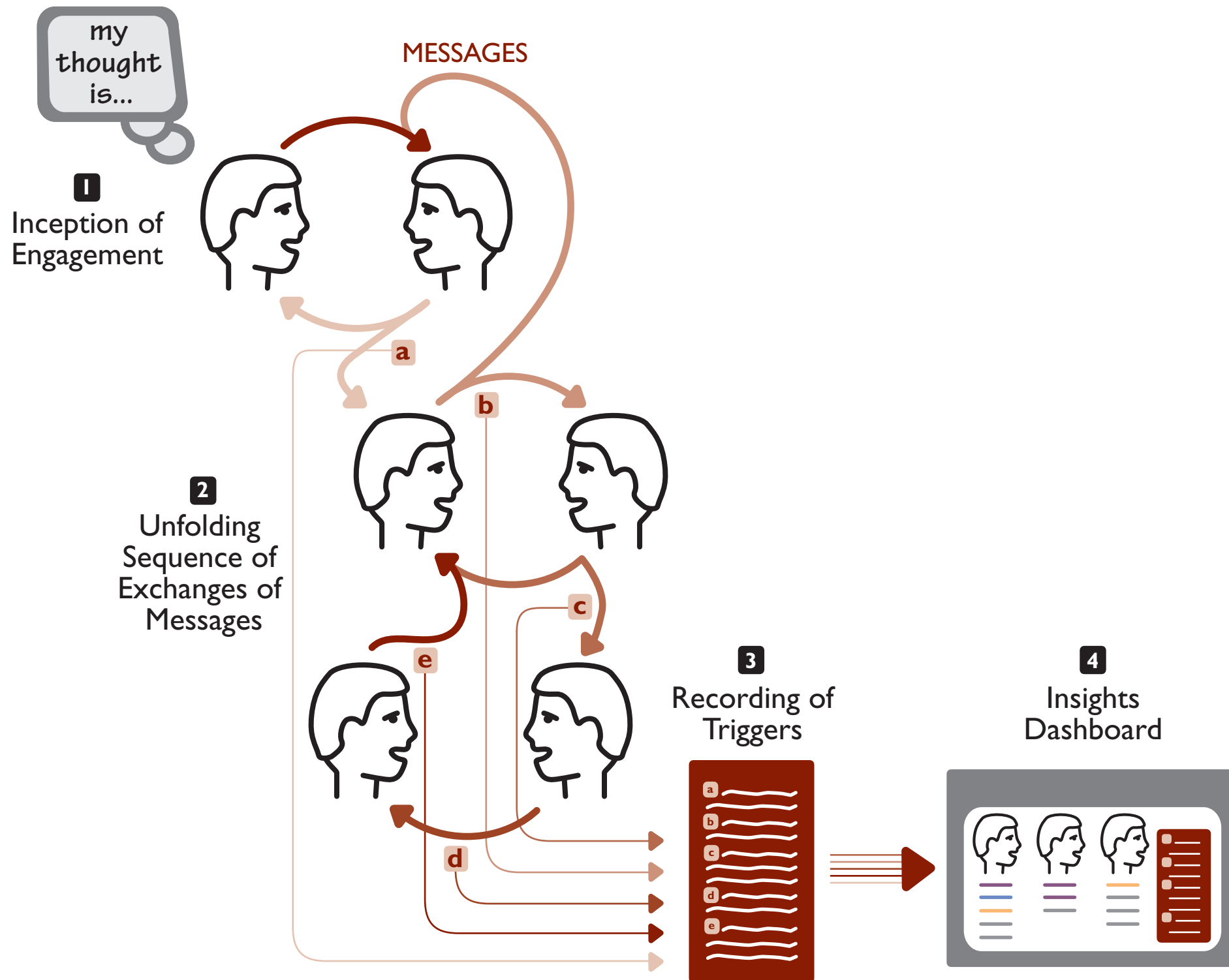
I. Initiation of engagement—who connects with whom, when, and about what.



2. Unfolding Sequence of Exchanges of messages—who says what, in response to prior messages, and in what order.



3. Recording of Triggers—noting which messages lead to expanded possibilities, and who makes them.



4. Insight Bank & Dashboard—record of who participates in developing which insights, and how—a collective memory.

Design for Conversations & Conversations for Design

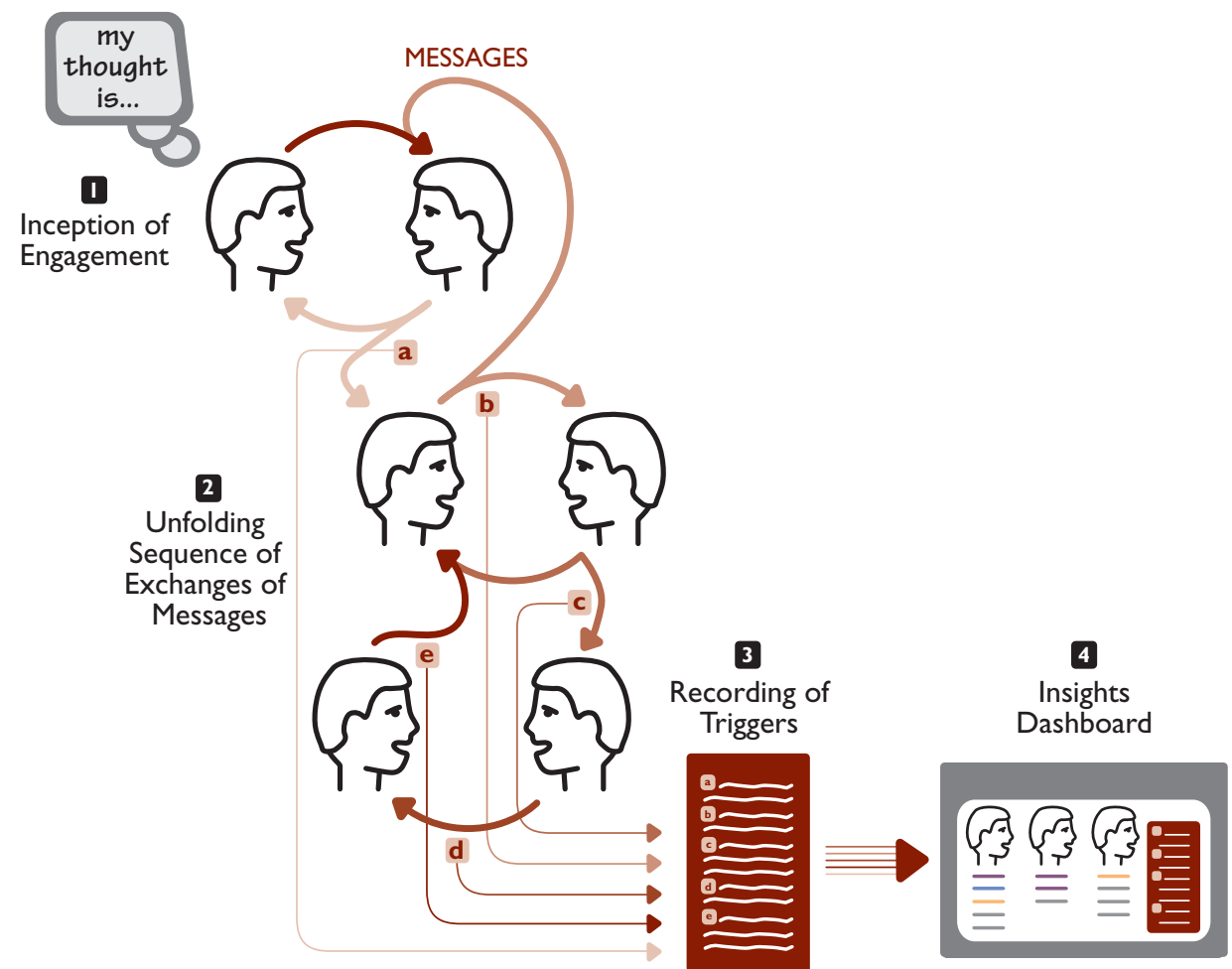
An Economy of Insight

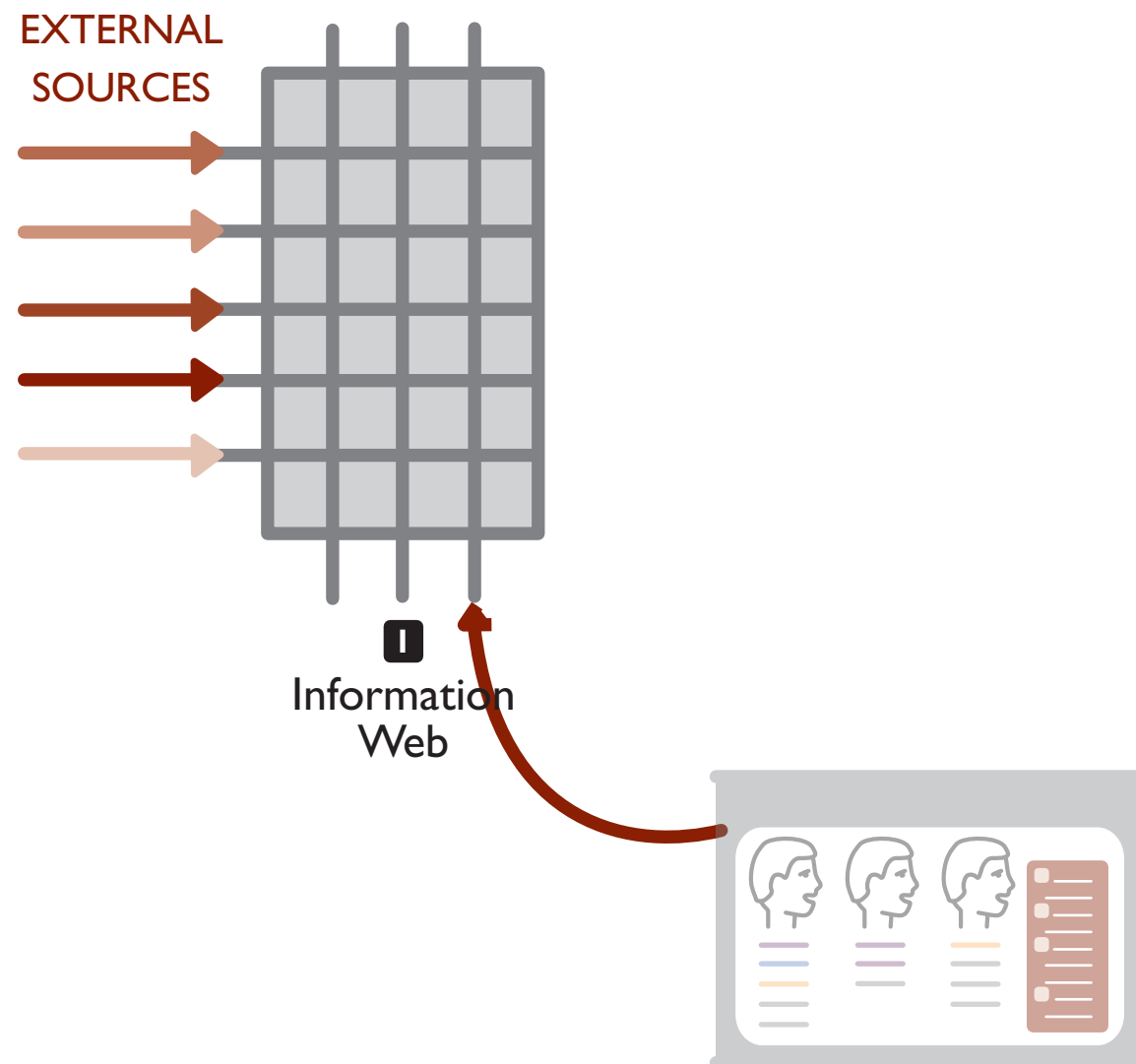
III. Conversations = Transactions

Enterprise software can accelerate the evolution of valuable insights.

User experiences must support trust, critical thinking, innovation, and conversation = transactions.

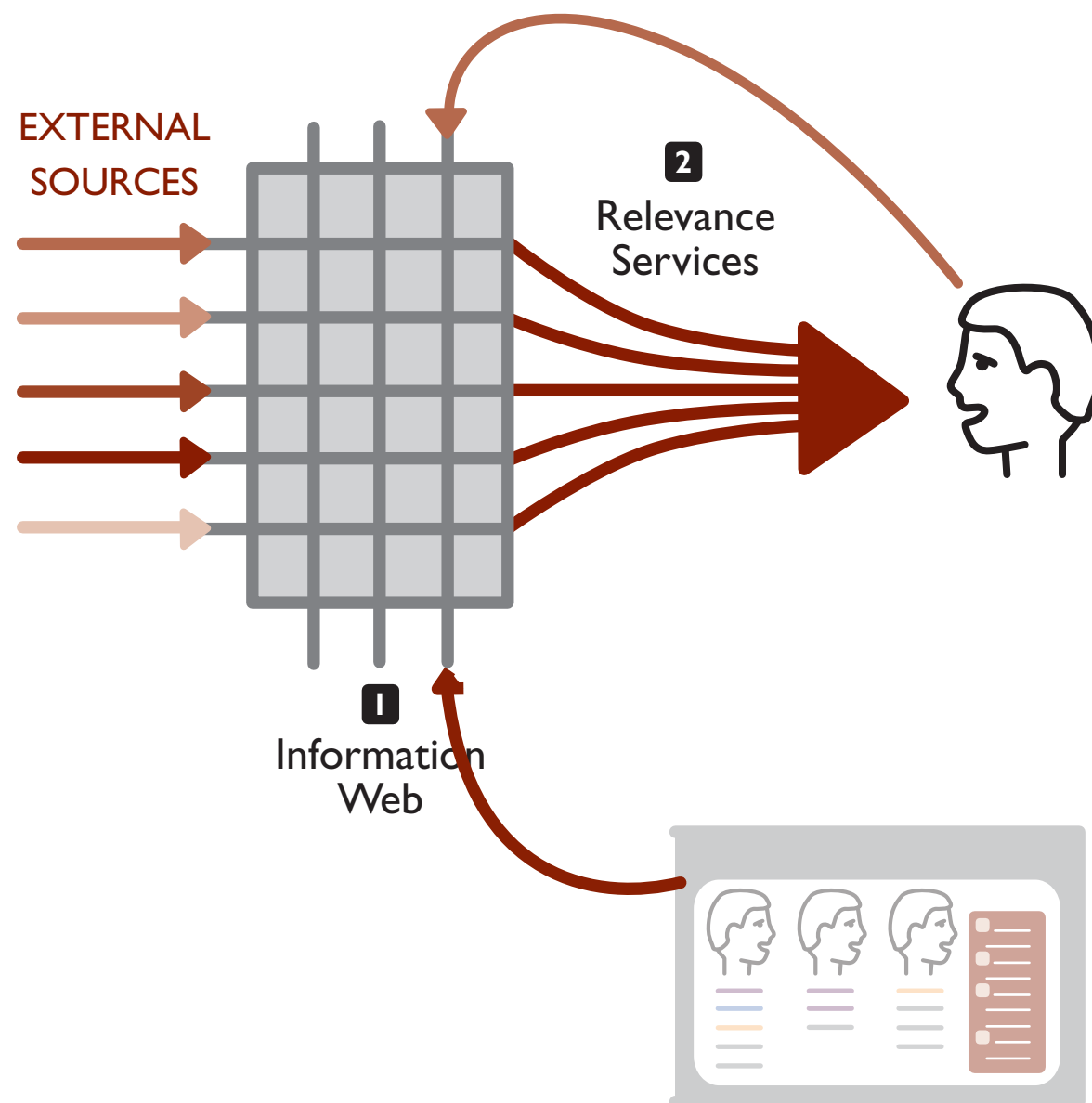
Services must be available seamlessly everywhere, on any device, with continuity of state.





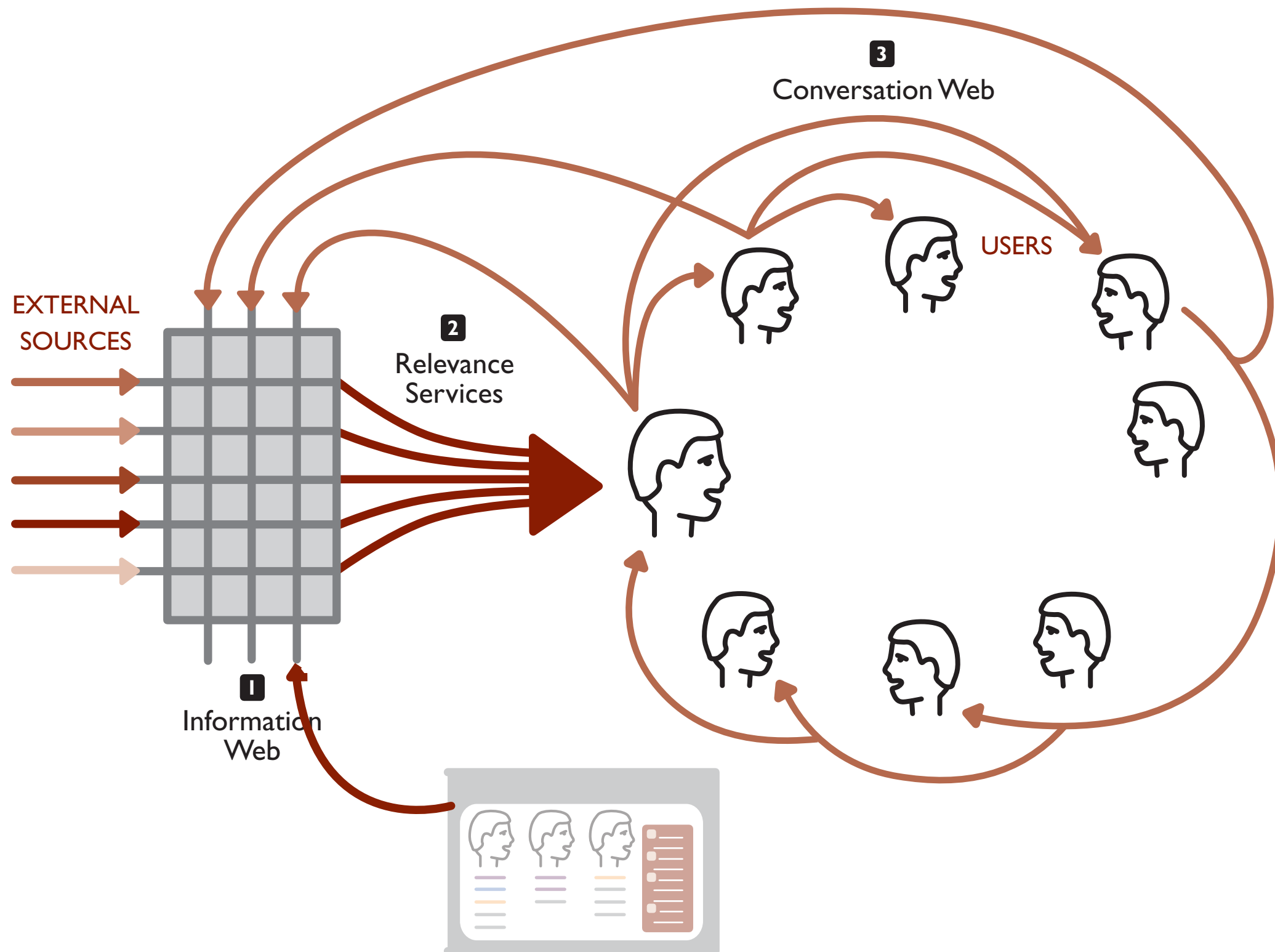
I. INFORMATION WEB

Automatically accumulates and manages internal and external content of any media type under bank-like privacy and security.



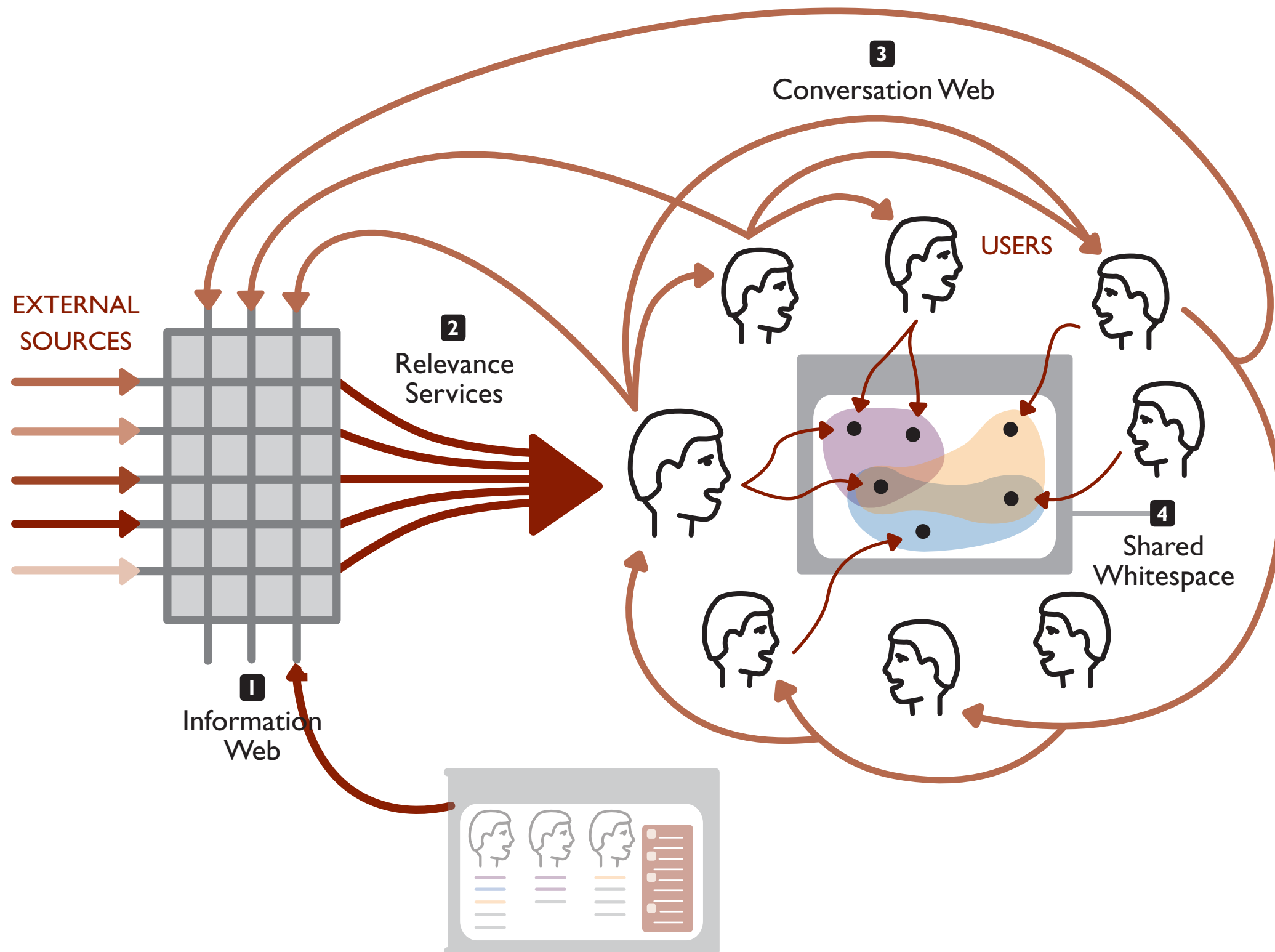
2. RELEVANCE SERVICES

Highlights or attenuates content based current context, user focus and context, prior knowledge and learning style.



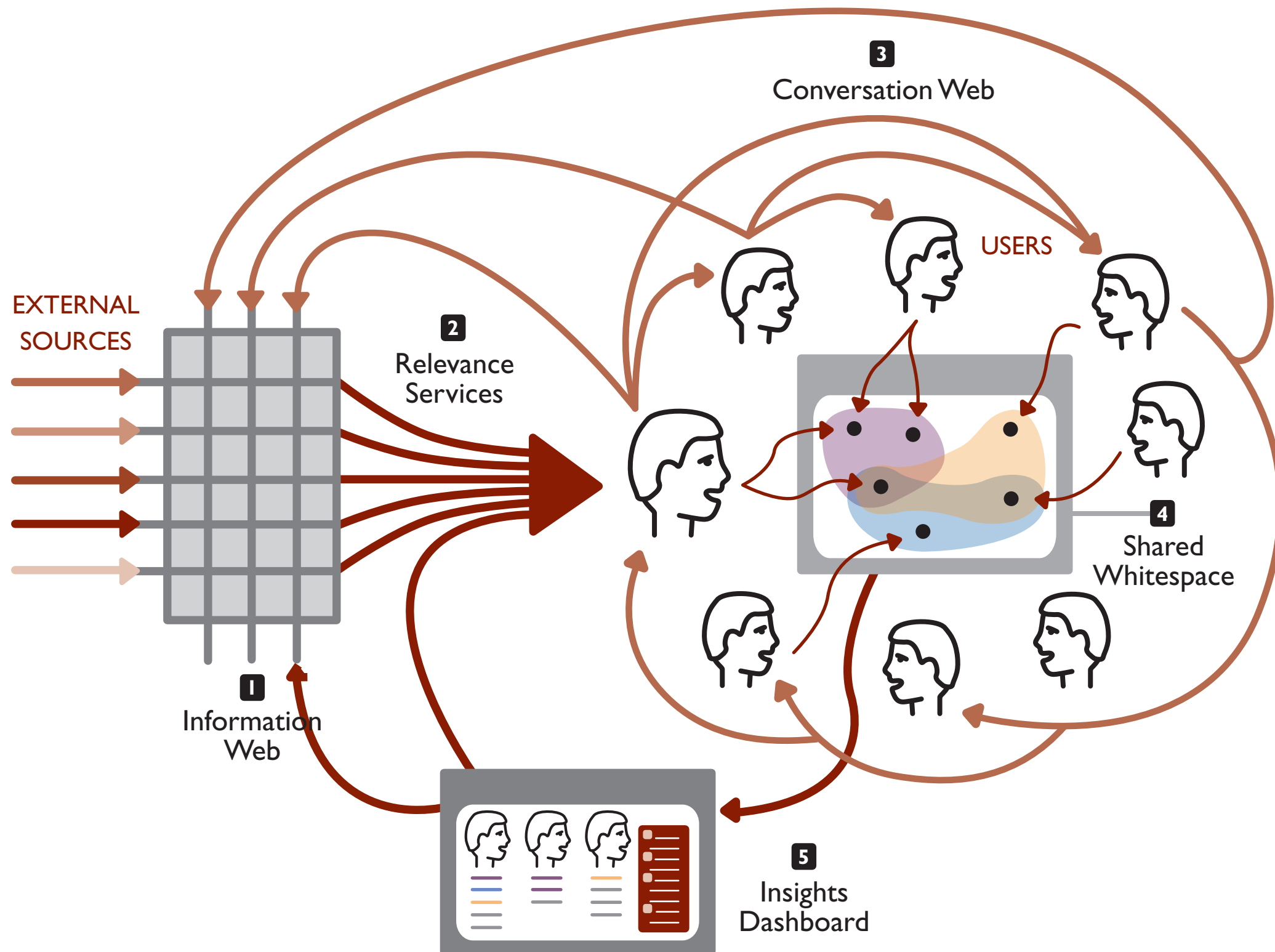
3. CONVERSATION WEB

Identifies requisite expertise for conversation, from inside as well as beyond a user's social graph.



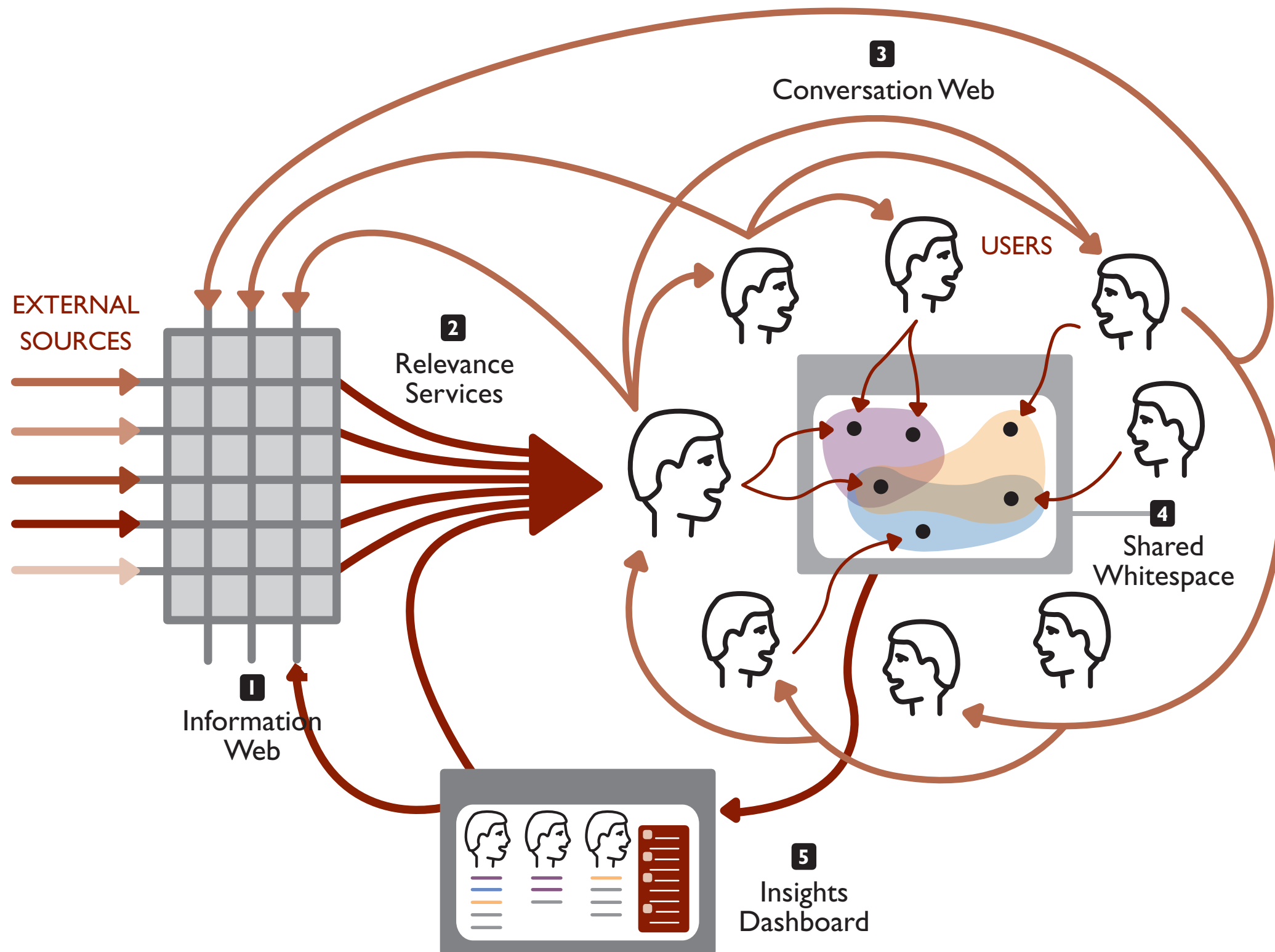
4. SHARED WHITESPACE

Facilitates agreements by visualizing proposals, acceptances and modifications, not merely messages.



5. INSIGHT DASHBOARD & BANK

Tracks insight-generation, conversational participation, timing & triggers, and business consequences.



Integrated subsystems in platform for **Conversations = Transactions**

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An Economy of Insight

Summary

Organizations that evolve rapidly will grow faster than competitors in today's rapidly changing markets.

Innovation, social and otherwise, means

- speed-to-insight
- quality-of-insight
- economy-of-insight.

Wealth creation has shifted from prior knowledge to the ability to gain new-knowledge-in-action.

This means that it is more cost-effective to invest in processes for insight than in material possessions or present-day intellectual property (IP).

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Synthesis

In the future, the most important transactions will not be exchange of money for goods.
(Next phase for “atoms to bits”.)

In the future, the most important transactions will be **exchange of value for insights**.

Investing in effective, focused, convergent conversations is to invest in wealth creation in the next era.

Design for Conversations & Conversations for Design

An Economy of Insight

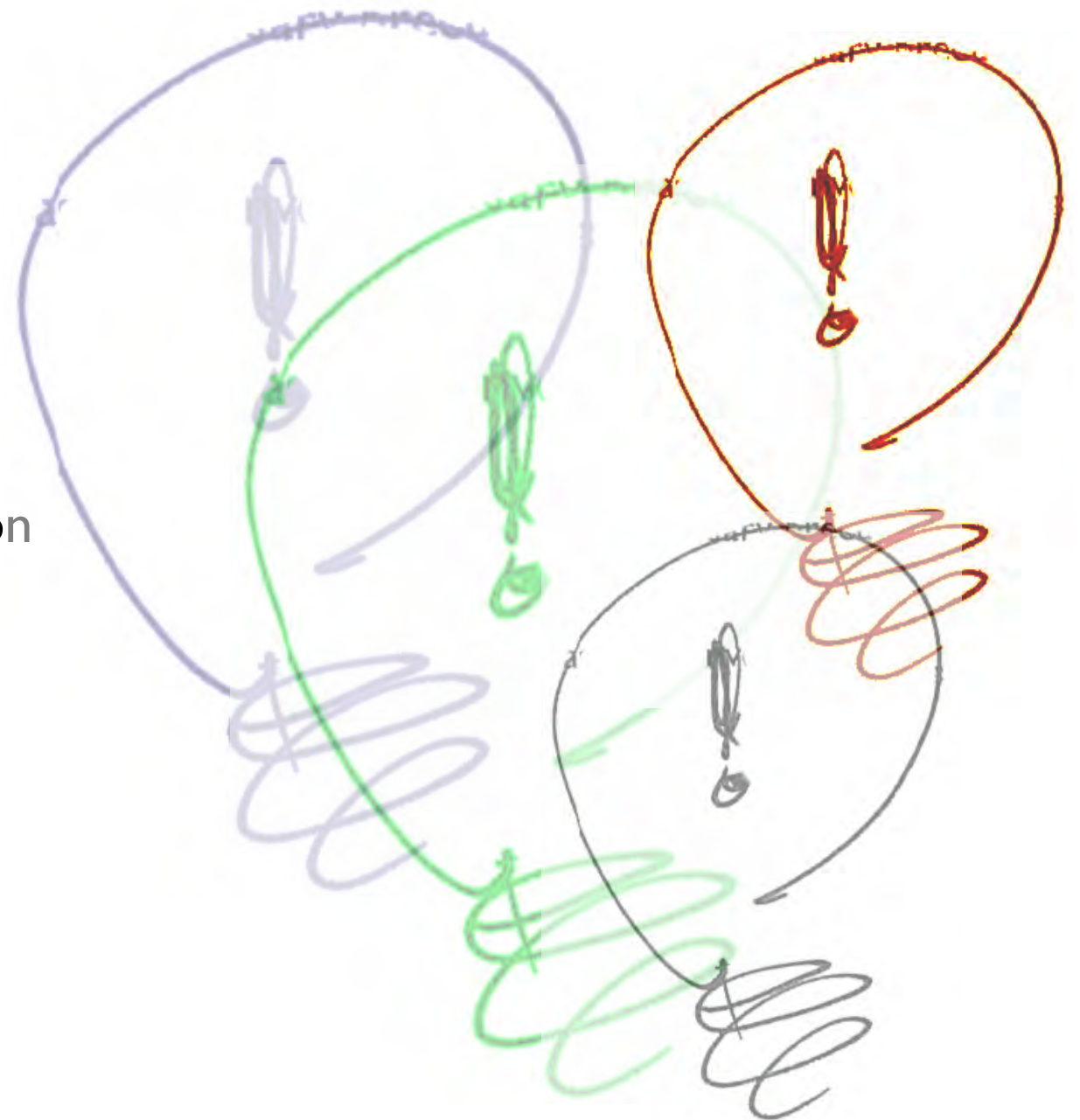
What did **conversation technology** bring?

Extensions of our **creative minds**

- cognitive variety extended across cultures
- collective insight applied to wicked problems

Human result = accelerating cognitive evolution

Economic result = lowering the cost of
designing conversations



Machines & Revolutionary Eras

	Industrial Revolution	Information Revolution	Conversation Revolution
	1750—2010—?	1955—1995	1995—?
Machines...	amplify muscles	amplify nervous system	amplify our collective mind
... create wealth by lowering cost of ...	doing physical work	lowering uncertainty	evolving valued insights

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An Economy of Insight

Epilogue

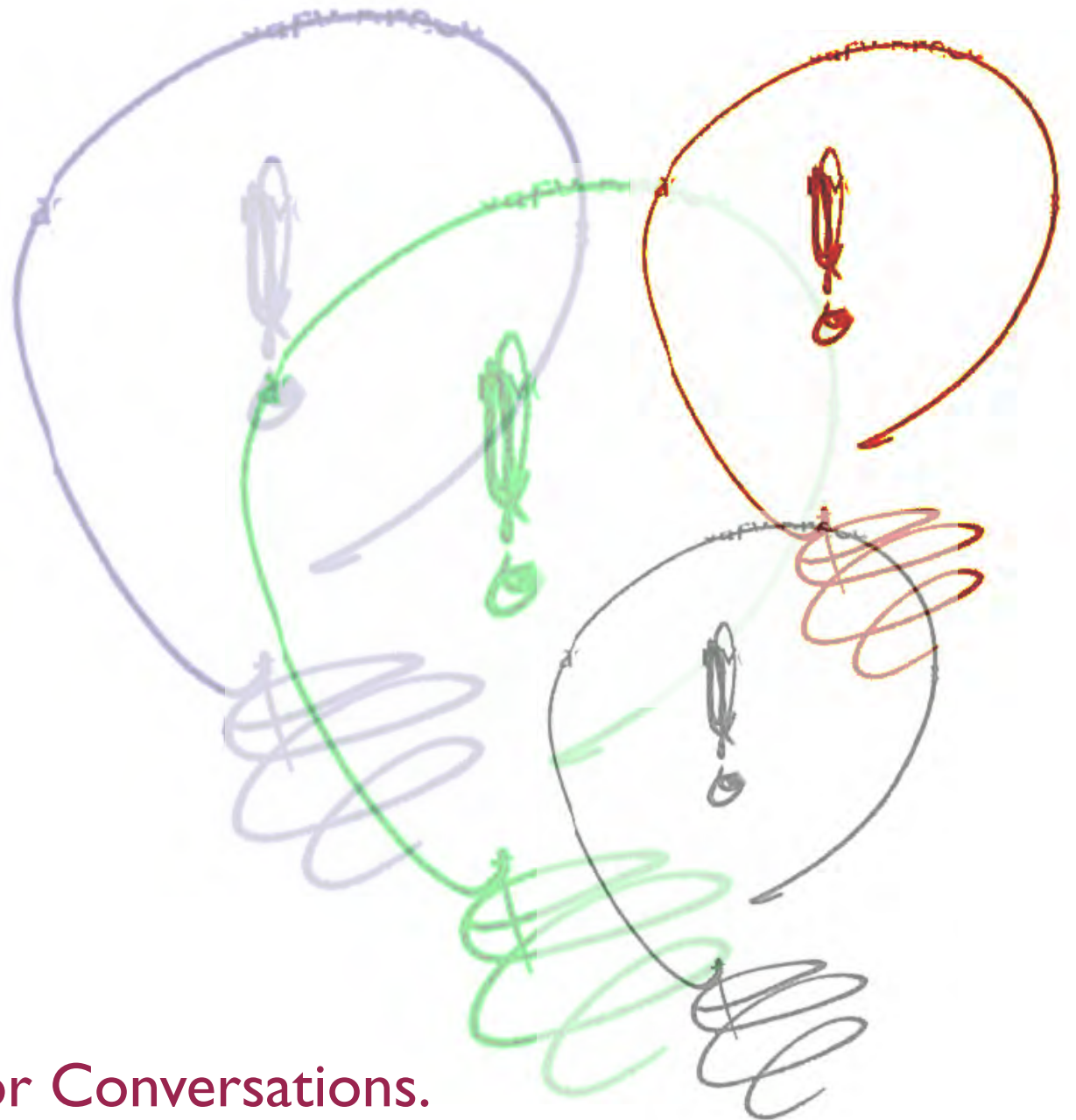
From an industrial age
to an information age
to a conversation age.

The future we see holds
an economy of insight.

Do we know how far that takes us
into the future? **No.**

Are we sure we will see this future? **Yes...**

**Because wealth comes from insight, and
Economy of Insight comes from Design for Conversations.**

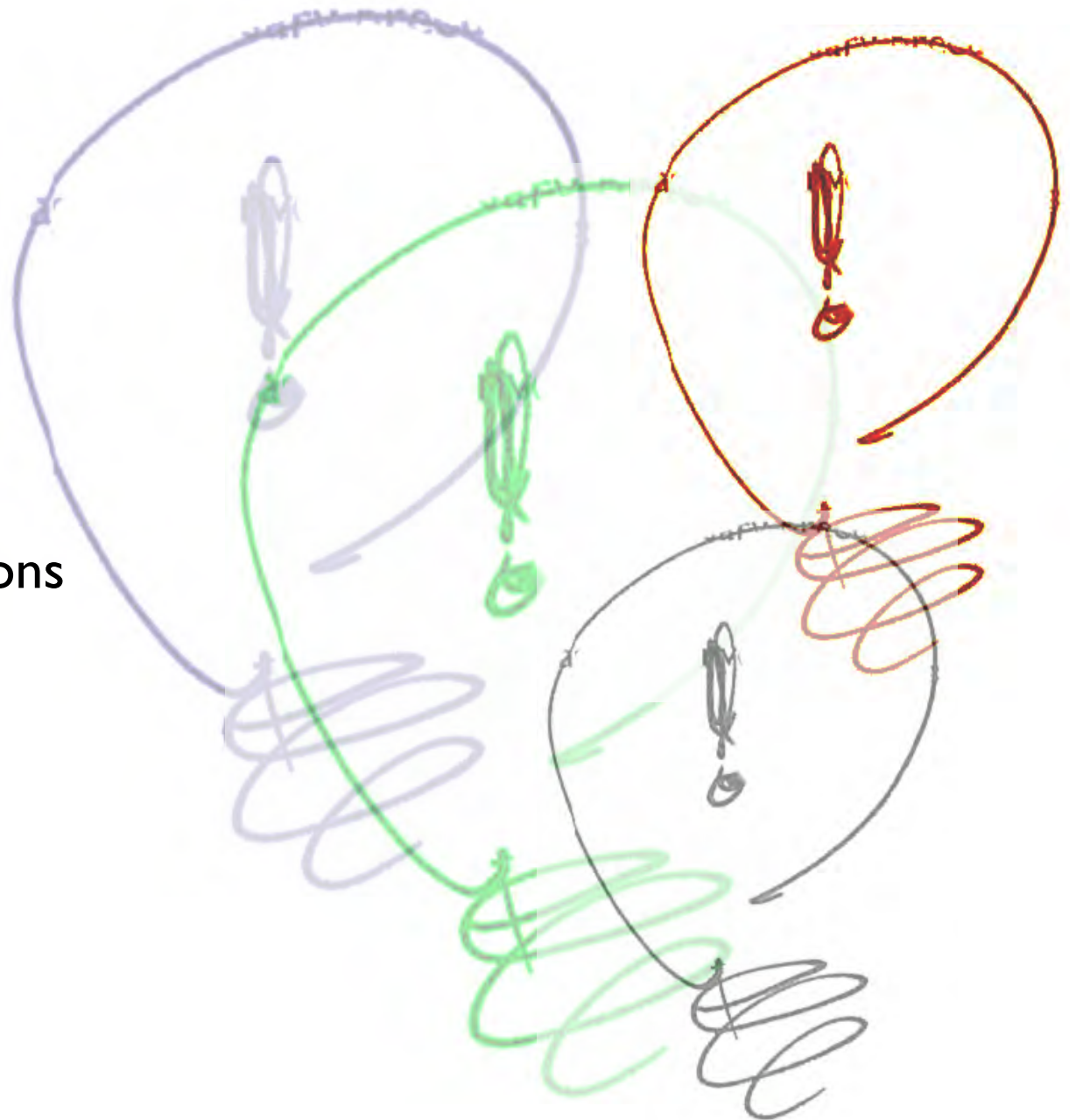


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Thank You.

and with thanks to
Alexander Baumgardt, coThinkTank chair
Andreas Wichmann, newthinking communications
Walter Lee, Cybernetic Lifestyles, US
André Vellozo Luz, Red Drummer, Brazil





Eras

Industrial Age Worldview

Every era has a dominant worldview that is the basis for creating value by exploiting a surplus to compensate for a scarcity.

years

1760 to

constraint /
primary cost

labor = time + effort

efficiencies
sought by...

saving = break work into
time smaller pieces

save = machine extension
labor of muscles

Eras

Every era has a dominant worldview that is the basis for creating value by exploiting a surplus to compensate for a scarcity.

Industrial Age Worldview

Information Age Worldview

years

1760 to

1970 to ...

constraint /
primary cost

labor = time + effort

information processing

efficiencies
sought by...

saving = break work into
time smaller pieces

save = machine extension
labor of muscles

break information into
smaller pieces: DB
records & fields, message
packets

coordination by message
passing

abundance

energy from fossil fuels

Moore's Law
in computer hardware

means of
wealth creation

mass production
of product

mass production
of data

Eras

Every era has a dominant worldview that is the basis for creating value by exploiting a surplus to compensate for a scarcity.

Industrial Age Worldview

Information Age Worldview

Conversation Age Worldview

Each coming era overlaps with the prior one.

This creates confusion about how wealth may be created.

years

1760 to ...

1970 to ...

2010 to ...

???

constraint /
primary cost

labor = time + effort

information processing

reaching insight

converging on
effective plans

efficiencies
sought by...

saving = break work into
time smaller pieces

break information into
smaller pieces: DB
records & fields, message
packets

evolving insights
faster & cheaper
via just-in-time
conversations using
the social graph

just-in-time design:
faster & cheaper
agreement through
dialectic

save = machine extension
labor of muscles

coordination by message
passing

abundance

energy from fossil fuels

Moore's Law
in computer hardware

Metcalf's Law
of social networks

tracking of
evolving agreements

means of
wealth creation

mass production
of product

mass production
of data

demand-activated
production

demand-activated
innovation

technology of
commoditization

hardware = machines +
assembly lines

software = DBMS queries
+ messaging

services = agreement
+ trusted
nets

services = bank of
insights

new constraint
created

lack of flexibility

reaching coherence

creating new designs

insight inflation

Design for Conversations & Conversations for Design

An Economy of Insight

Barriers

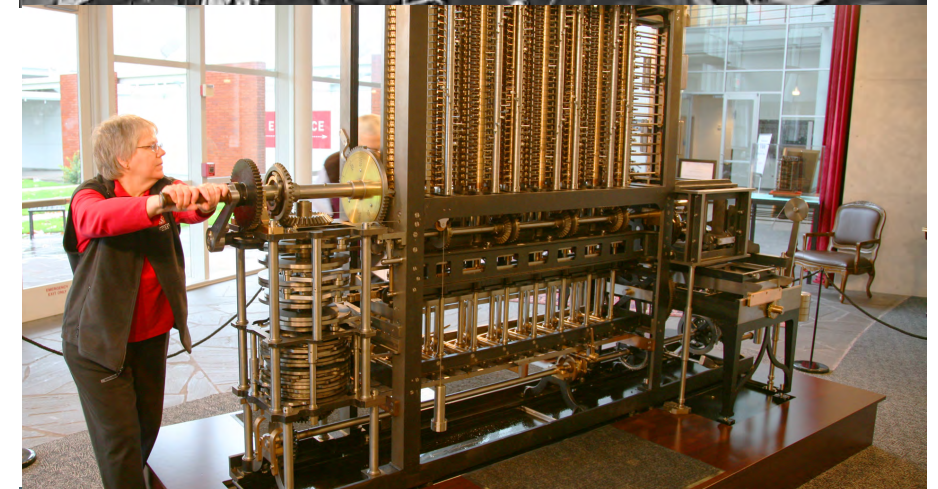
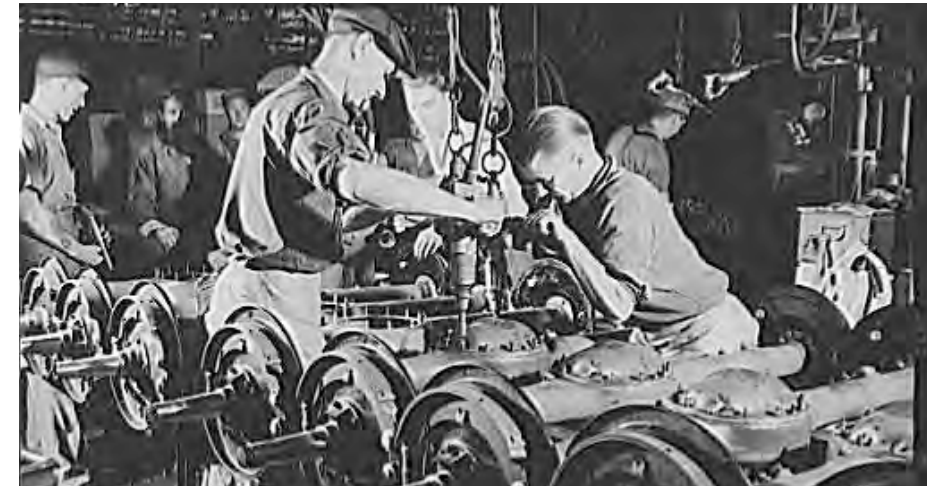
Shifting from an information / messaging model to a conversation model will be difficult.

This is because systemic change is difficult.

There are many barriers to change

- current processes and plans
- current thinking, beliefs, hidden paradigms
- current spending patterns
- current expectations
- current desires.

These barriers must be managed through a conversation about personal fears, social roles, and a future in which individual self-interest is valued and protected.



Communication vs. conversation

	communication	conversation
theory	information theory	conversation theory
focus	reliability of channel	reliability of understanding
atom	message	distinction
molecule	message repertoire	coherence
objective + metric	correctness of message	degree of agreement
strength	disambiguating	evolving knowledge
limitation	not about new messages	takes effort to quantify