### FIW Panel on New Features

#### Asymmetric Demand: Pragmatic vs Semantic Interaction

Prof. B. Cohen City University and Boxer Research Ltd





We need to shift away form the notion of technology managing information and toward the idea of technology as a medium of relationships.

Michael Schrage, MIT Media Lab.

... creating features that are sensitive to the user's place in the structure of the business and in his/her current situation.

... able to facilitate the 'informal' activities of an enterprise as well as in the creating of ad hoc collaborations. It is these informal and ad hoc services which have been shown to be the most valuable in the operation of a business.

... features that improve how a business operates by improving the inter-personal relationships such as trust that determine the effectiveness of work in the enterprise.

Tom Gray, GR consultants





## The Customer is Always Wrong ...

In every account of the practice of systems analysis, the analyst reveals his frustration that the client describes how the enterprise is supposed to work but hides how it *really* works (the "power politics"). The *espoused theory* is always inconsistent with the *theory in use*.





### Semantics and Pragmatics

#### Semantics of the service

behavioural specification expressed by the service provider as a formal model.

#### Pragmatics of the context-of-use

anticipation of satisfaction of demand expressed by the actor-client as a value ladder





# **Asymmetric Demand**

#### Symmetry

the supplier constructs the client's reality Traditionally, telecoms 'features' have been described more in terms of network behaviours than of demand situations

#### Asymmetry

Clients are *embodied actors* whose discourses (including their descriptions of demand) are determined by their **semantic formations** 





### Actors are not Agents

# The *semantic formation* of an actor comprises lexis, syntax and semantics

which are denotational and standardisable

and

#### pragmatics

which are anticipatory and particular to the actor's context-of-use

#### Agents are not embodied

Negotiation between agents in open systems requires their composition with their actors' pragmatics *There is no Universal Ontology* 





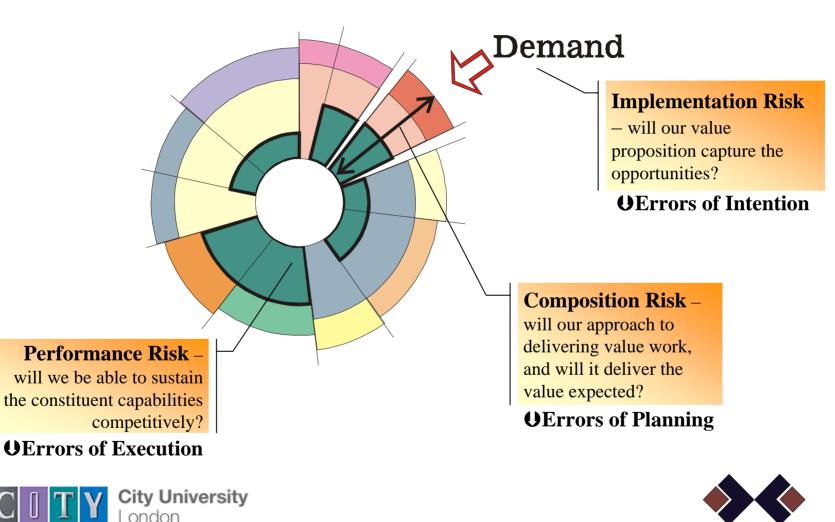
## Asymmetry Rising

Digitisation Globalisation The Semantic Net Agents in Open Systems Asymmetric Warfare Systems of Systems **Relational vs Positional stance** Managerial vs Distributive Capitalism





### The Risks of Asymmetry



BRL

## Intervention on Risk

The resolution of asymmetric demand is an intervention in the semantic formations of both the suppliers' and their clients' actors which is strategic in scope, complex in structure and **specific** in its effects on how the enterprises *really* work. It needs the support of new and powerful **computational tools** that complement, but do not replace, those for service specification, design and composition.





#### BRL's PAN Toolset

Elicits each actor's semantic formation as a **triply articulated graph** 

expressing the actor's relational models ofexistential behaviour:processes and eventsdeontic organisation:transactions and synchronisationsreferential value:drivers and demand situations

**Composing** these graphs reveals **'holes'** in the enterprise that are symptoms of the **risks** induced by asymmetric demand.

The location and severity of risks are measured and displayed to the actor using **simplicial complex landscapes** extracted from a **stratified analysis** of the relations between supply and demand. Their repair changes the granularity and relational structure so that the actors' **ontologies** are **composable**.



