

The Double Challenge: meaning and motivation in a large system

Philip Boxer

June 20th 2008



Agenda

Introduction

- The case study

The Double Challenge

- The two axes
- Encountering the two axes as dilemmas
- The implications for leadership

What this means for us as consultants

- Enabling the client to deal with turbulence
- The ethic involved



The Case

The Federal Wildland Fire Service

- The presenting problems:
 - What do we do with proliferating numbers of software tools and systems?
 - How do we deal with the escalating costs associated with current approaches to wildland fire management?
 - How do we factor into this the impact of climate change?
 - What forms of governance are needed to align the tools and systems with the (socio-technical) systems environment in which we are working?

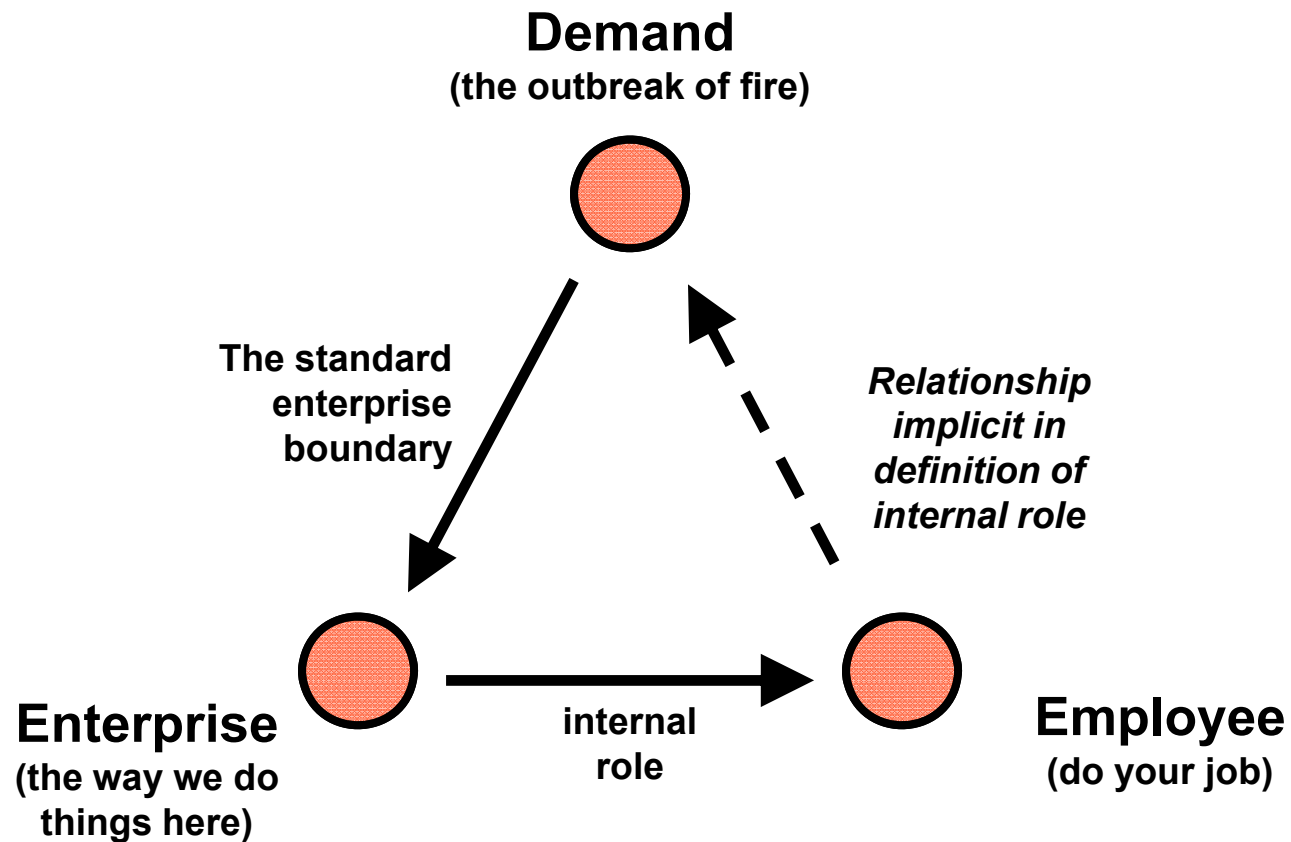




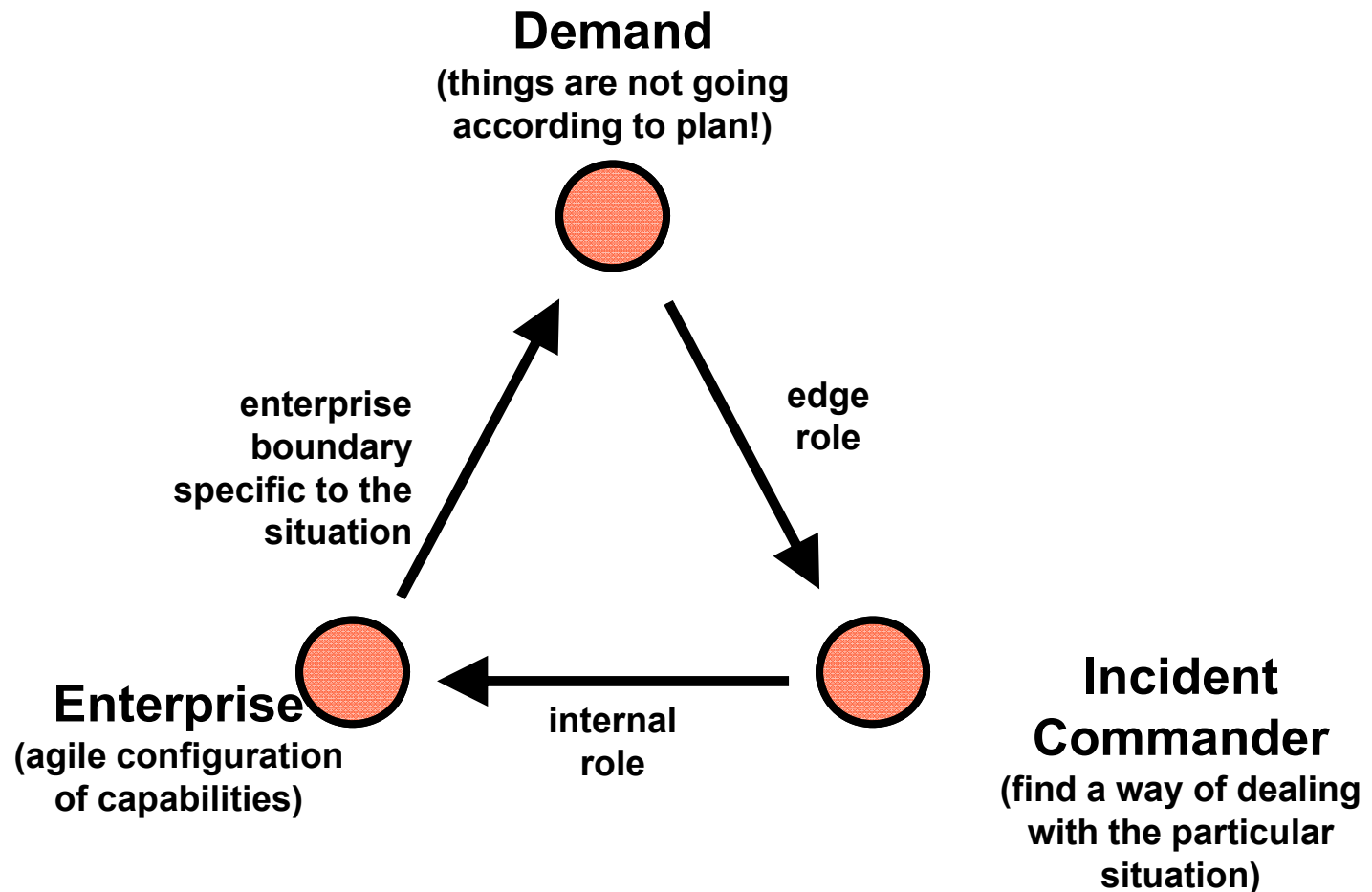
The Double Challenge at the Level of the Individual



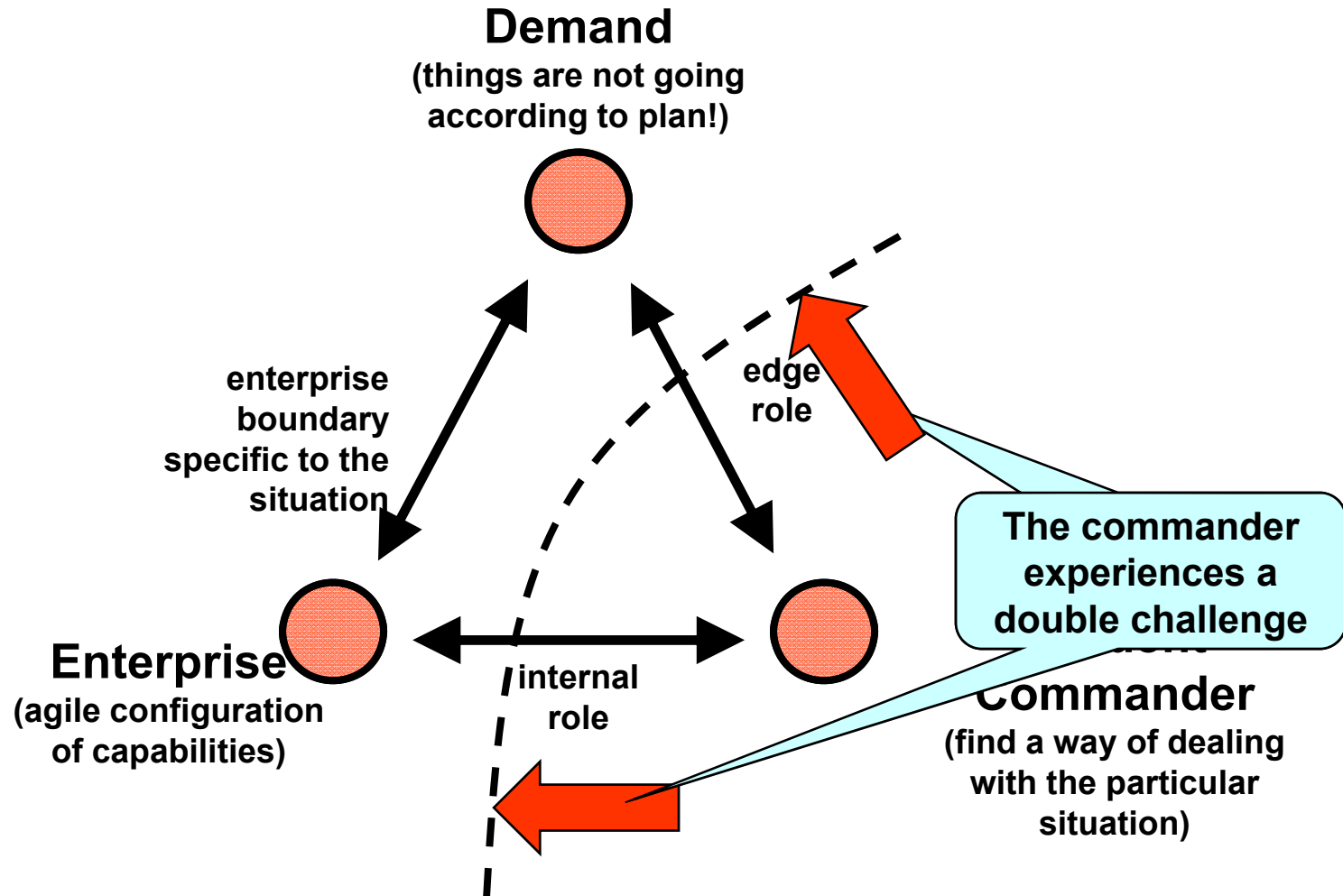
The Centre-Driven Response (anti-clockwise)



The Edge-Driven Response (clockwise)



The Double Challenge at the Level of the Individual (anti-clockwise and clockwise)





The Double Challenge at the Level of the Enterprise



Three Views of the Relationship to Demand

Driven by the anticipated long term experience-on-the-ground

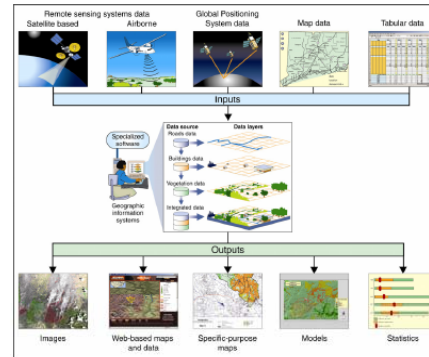
Experience-based View



How do we draw upon the other two views in support of *generating desired long term operational effects through the life of the ecosystem.*

Solution-driven

Solution-centric View



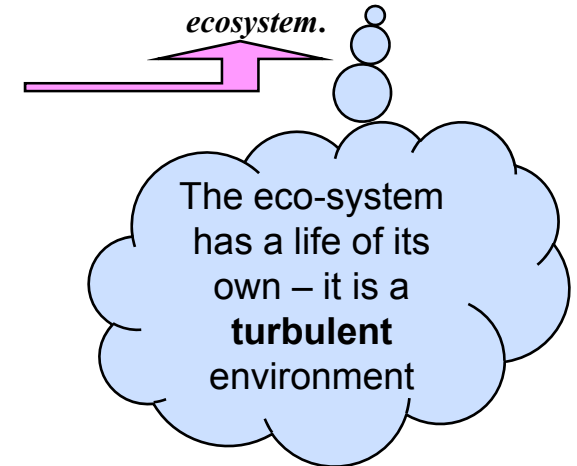
How do we get all the services working together in such a way that the *right capabilities and information* can be put in front of the *right decision-makers* at the *right time* to deliver a solution?

Service-driven

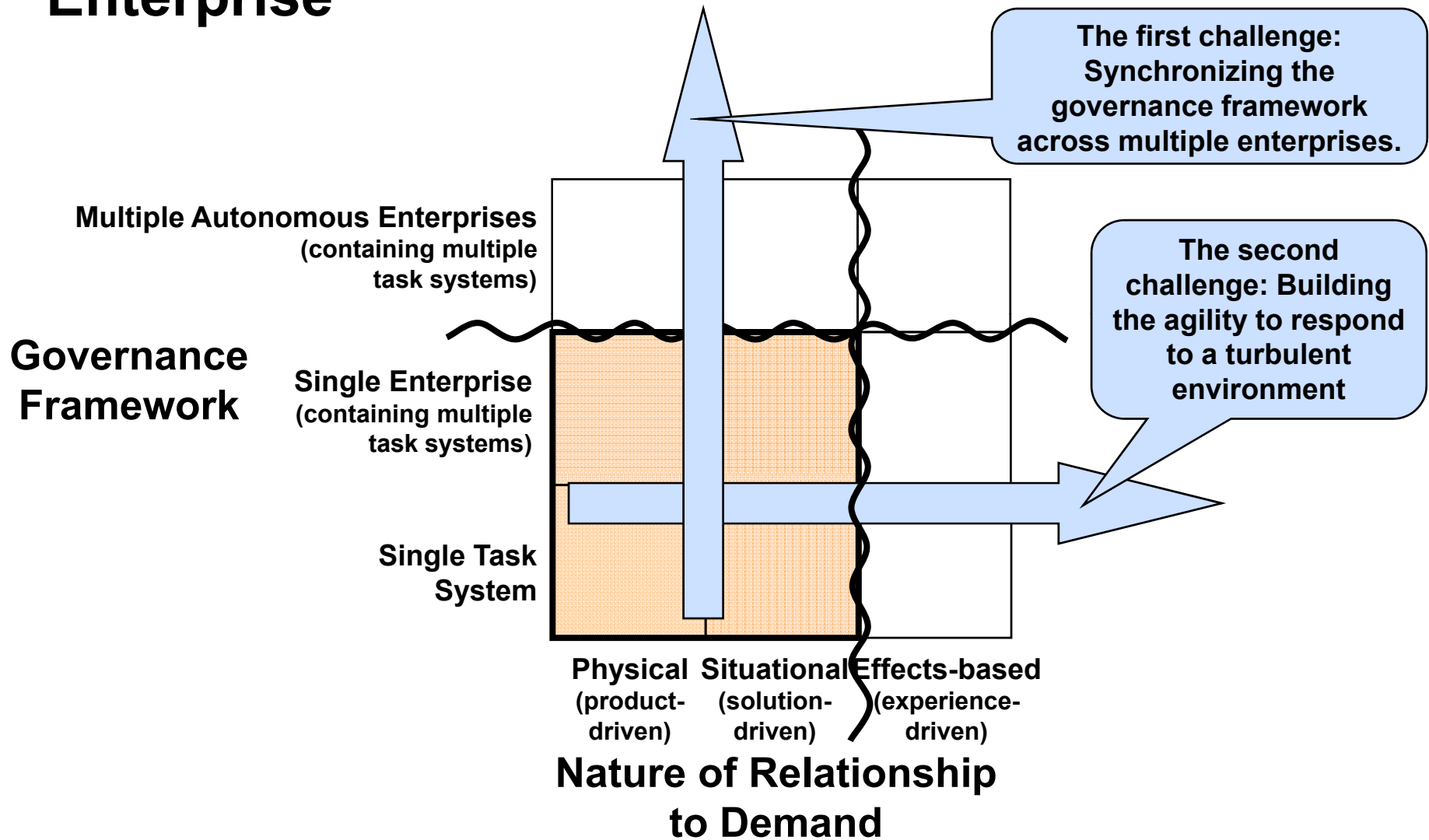
Product-centric View



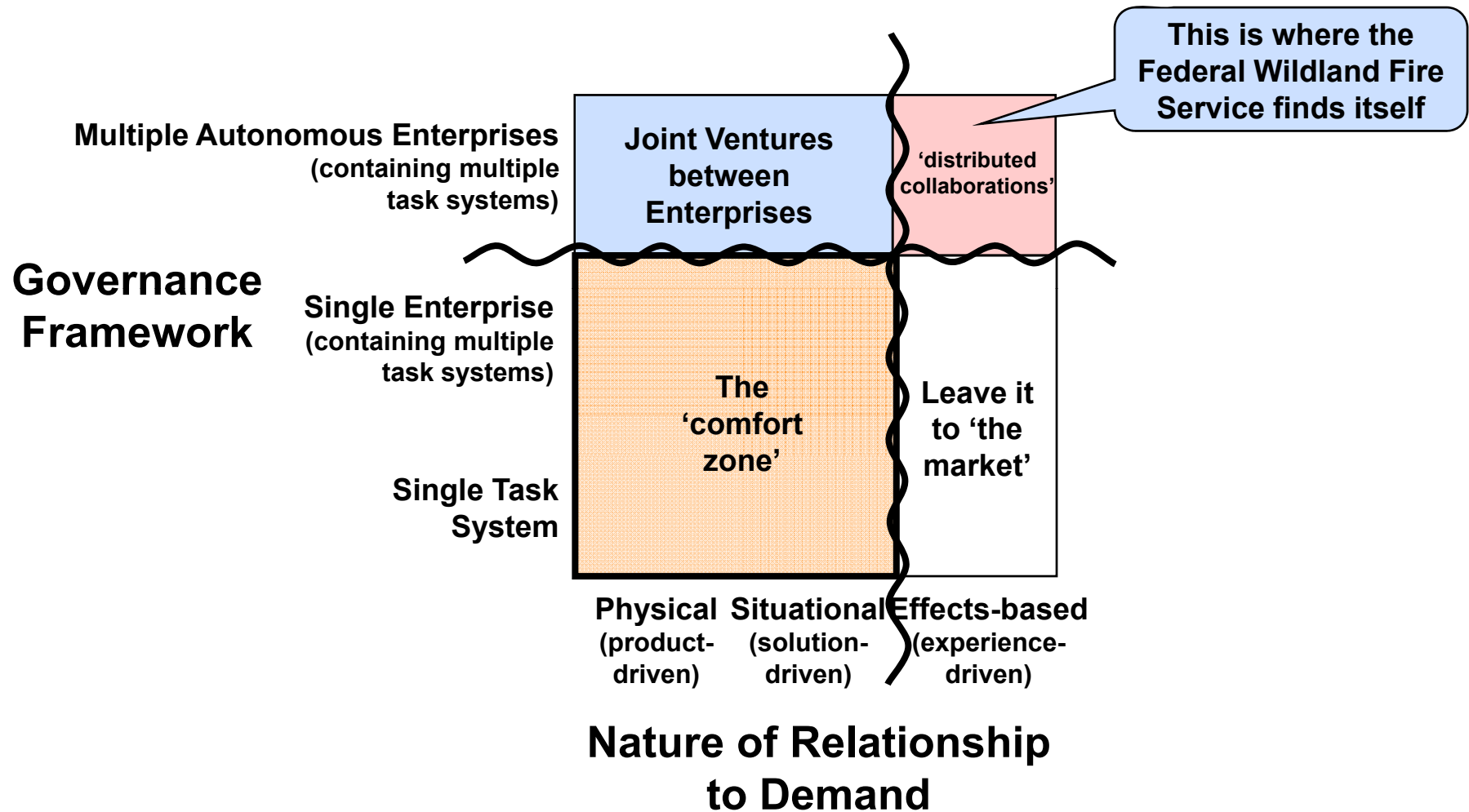
How do we get the equipment and people with all the *relevant support* in the *right place* at the *right time* and *keep it there*?



The Double Challenge at the level of the Enterprise



Responses to the Double Challenge

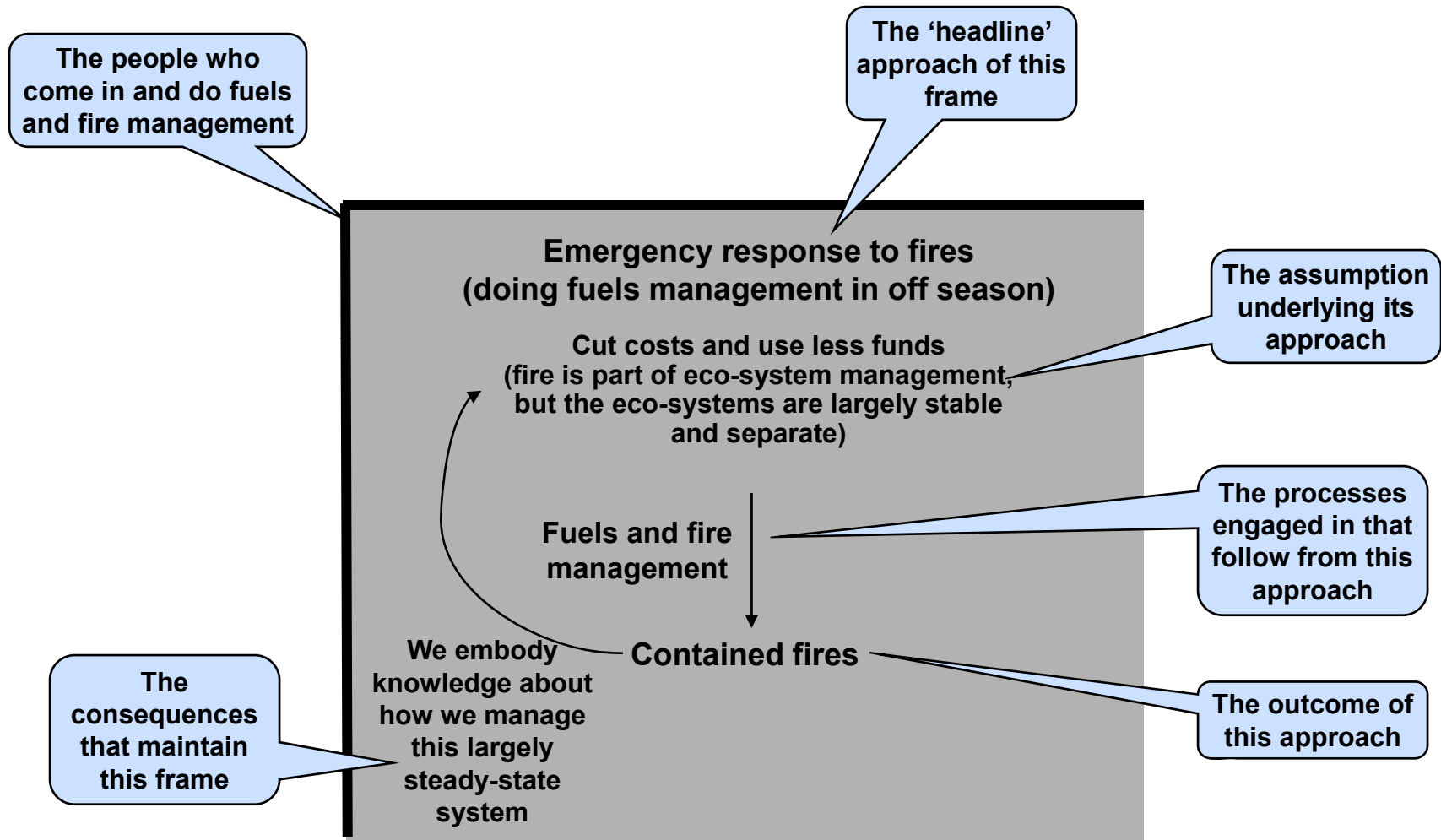




Meaning and Motivation

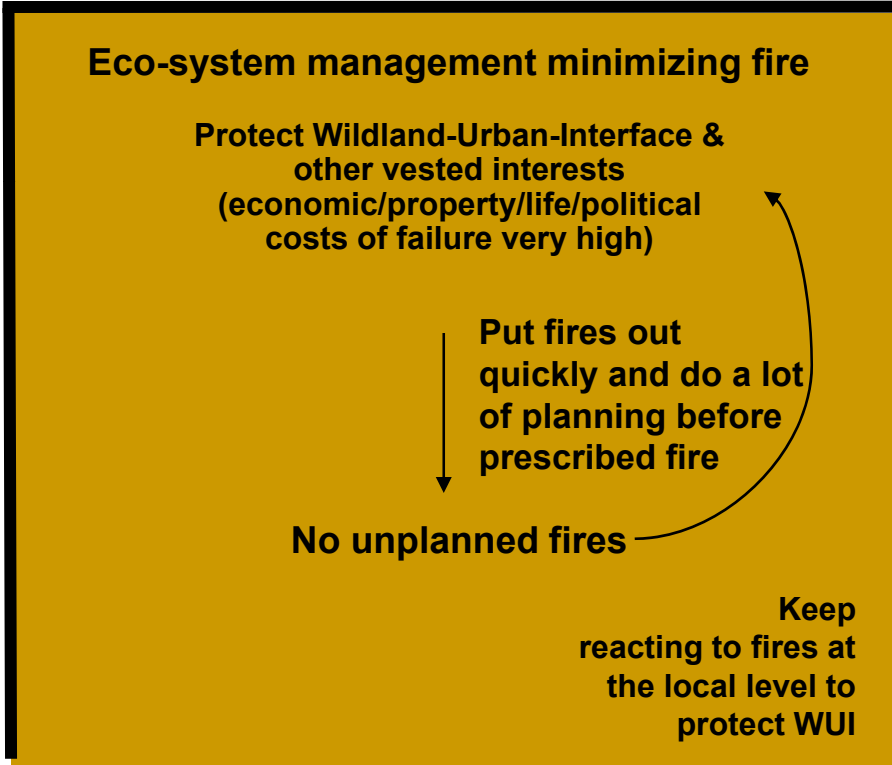


Suppressing Fires



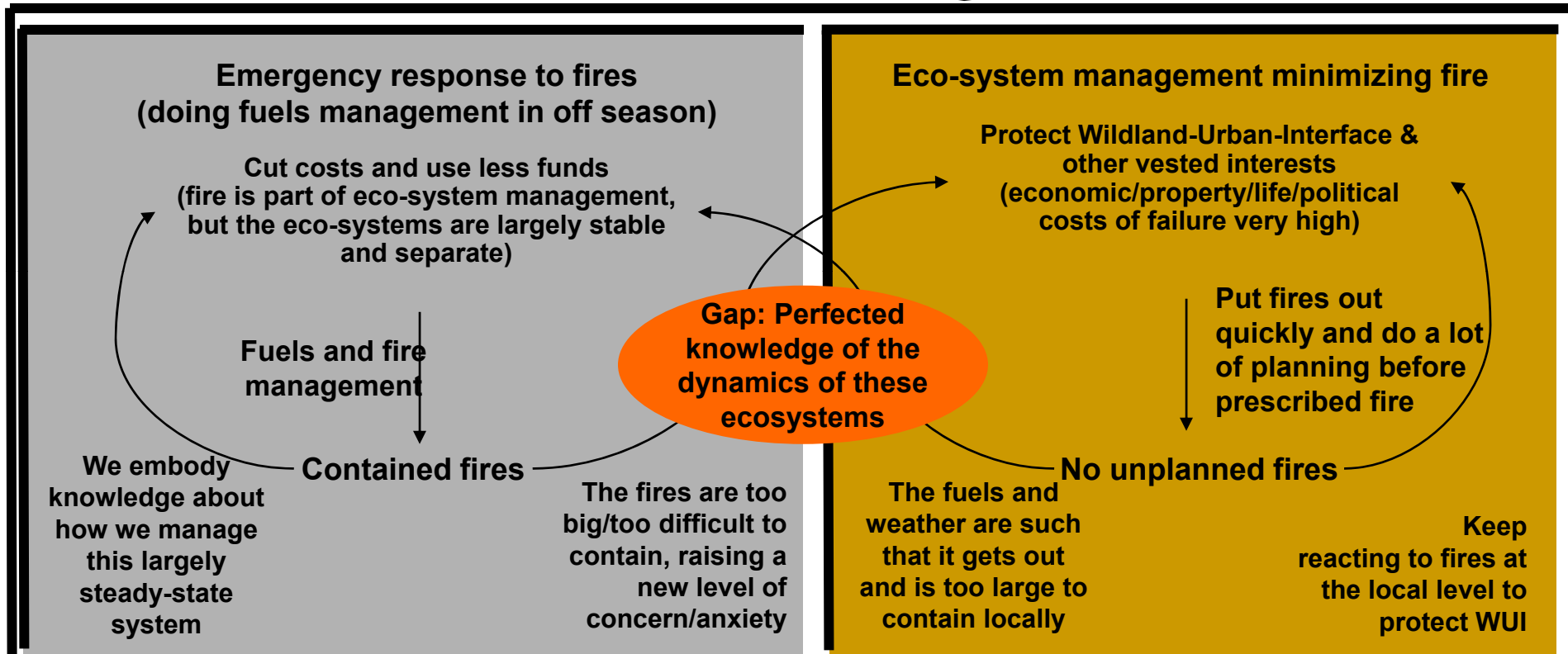
Minimizing Fires

The people who do planning



Dilemma 1 – planning vs emergency response

Hierarchy can be built in this case that holds this dilemma

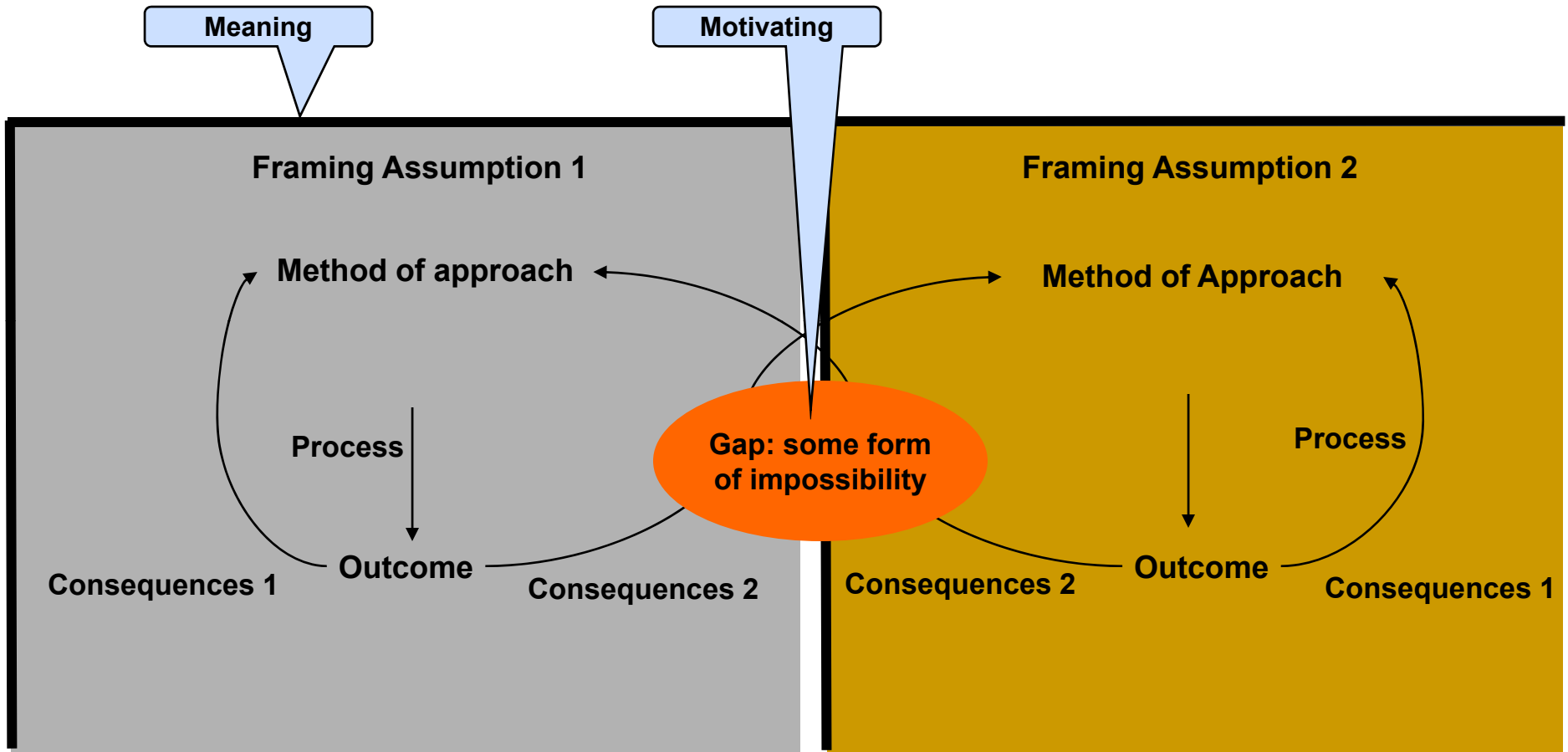


The dilemma is being held by the larger enterprise context

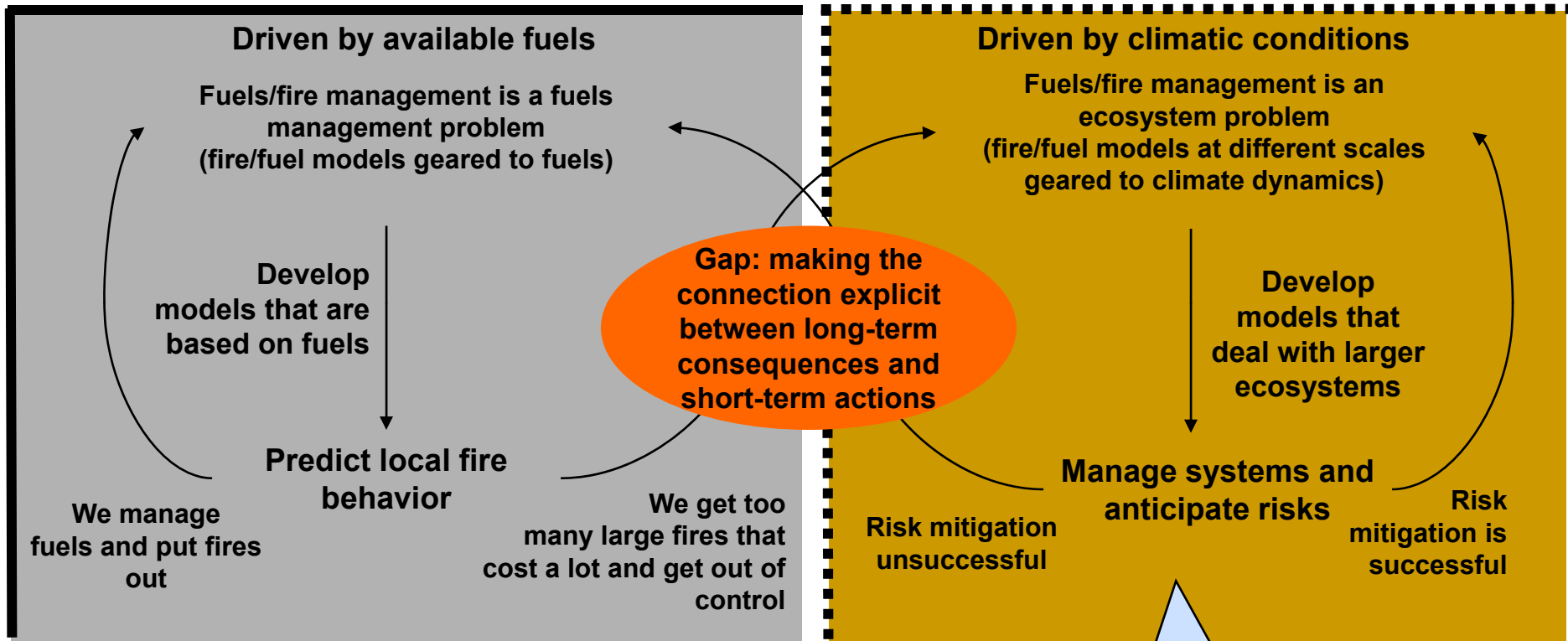
Emphasis is being forced to the right by population movement, size of fires, and loss of 'fudge' know-how compensating for poor models



Analysing Dilemmas in terms of Meaning and Motivation



Dilemma 2 – local vs large-scale fuels/fire management

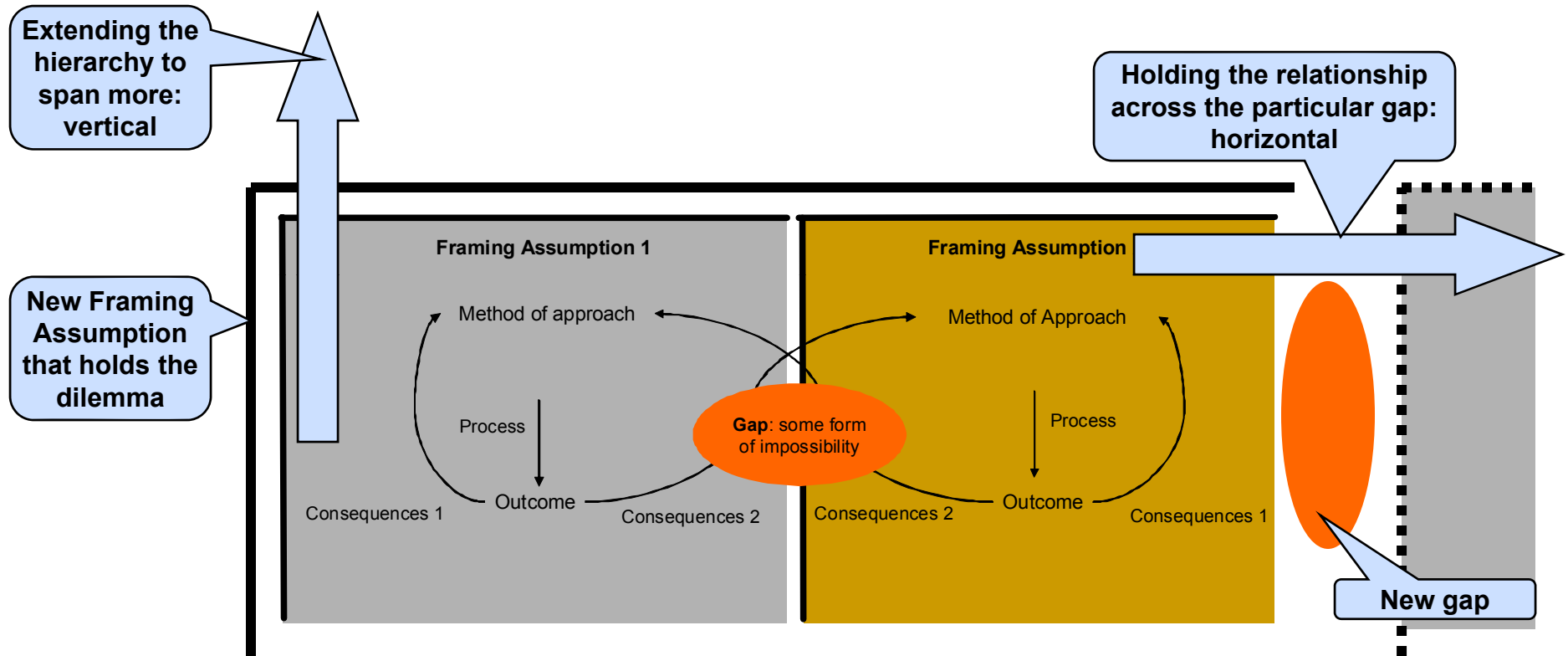


Emphasis is being forced to the right by number of fires getting large/out-of-control with the associated political/economic costs

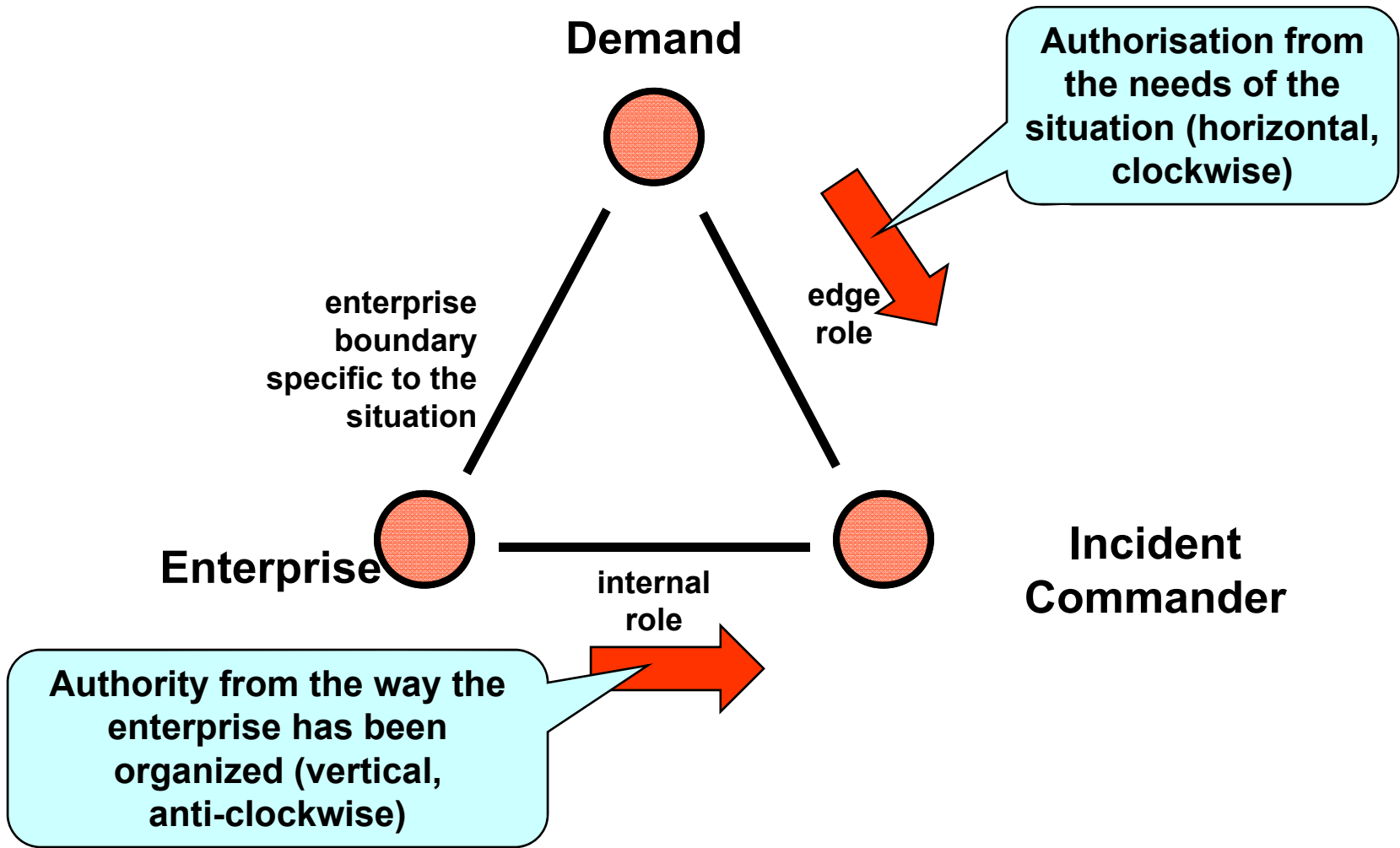
This side of the dilemma is not really being held as an explicit agenda in its own right



The Two Axes of Meaning



Implications for Leadership

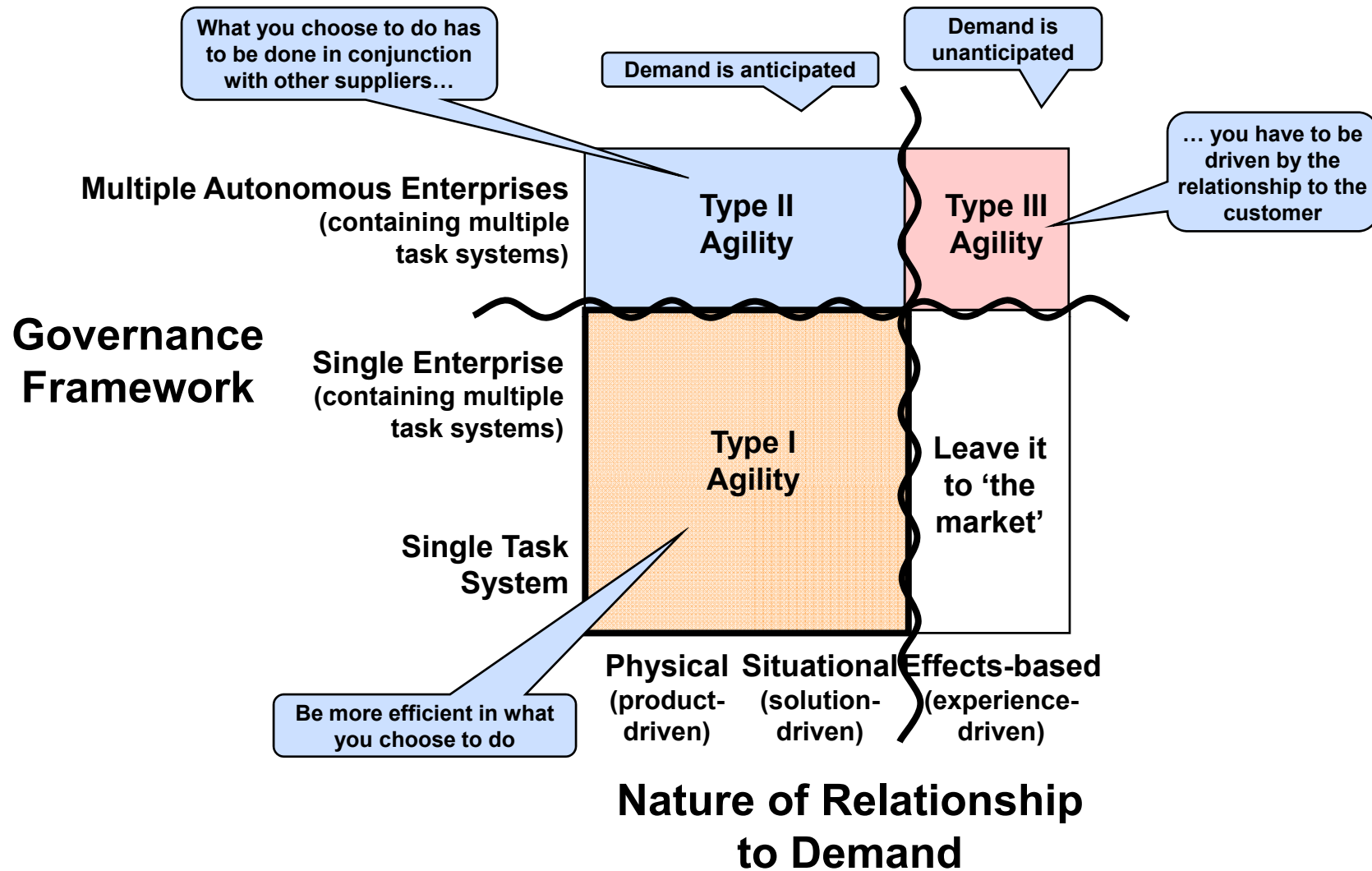




The Double Challenge Requires Us to Work Reflexively



Enabling the Client to Deal with Turbulence



Type III Agility means Working Reflexively

The Client System:

- To work reflexively is to examine the frame through which the client system is making sense of the problem being presented by its demand environment.
- To accept this challenge is to put into question that frame, rooted in the way the client system does business.
- Now the client system's identity is at stake because it is committed to looking for what is in its own blind spot.
- It is faced with the challenge of how it recognizes what it had not seen before.

The Consultant:

- To work reflexively is to examine the frame through which I am making sense of the problem being presented by my client system.
- To accept this challenge is to put into question the ideology that is rooted in my way of being, that is, rooted in my own unconscious phantasy.
- Now I am personally at stake because I am committed to looking for what is in my own blind spot.
- I am faced with the challenge of how I recognize what I have never seen before.





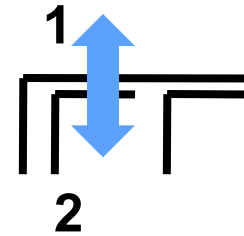
In Conclusion



Type III Agility Means Tripartite Leadership

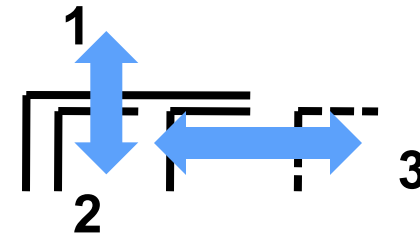
In Bipartite Leadership we have leadership organized around the vertical axis ('authority'):

1. Those at the top of the organisation (leaders), and
2. Those working within the organisation (professionals/unions)



In Tripartite leadership we must add to this a horizontal axis ('authorization'):

3. Those representing the interests of the customers, patients, citizens etc (clinicians...)



In the case, those representing the interests of the horizontal axis were the incident commanders who had the job of mitigating the risks to the local community.





Contact Information



Contact Information

Philip Boxer

Integration of Software-Intensive Systems Initiative
Software Engineering Institute

Email: pboxer@sei.cmu.edu

Mail:
Software Engineering Institute
4500 Fifth Avenue
Pittsburgh, PA 15213-2612
USA

