



Business Architecture

IT4350 - Information Systems
Architecture and Applications

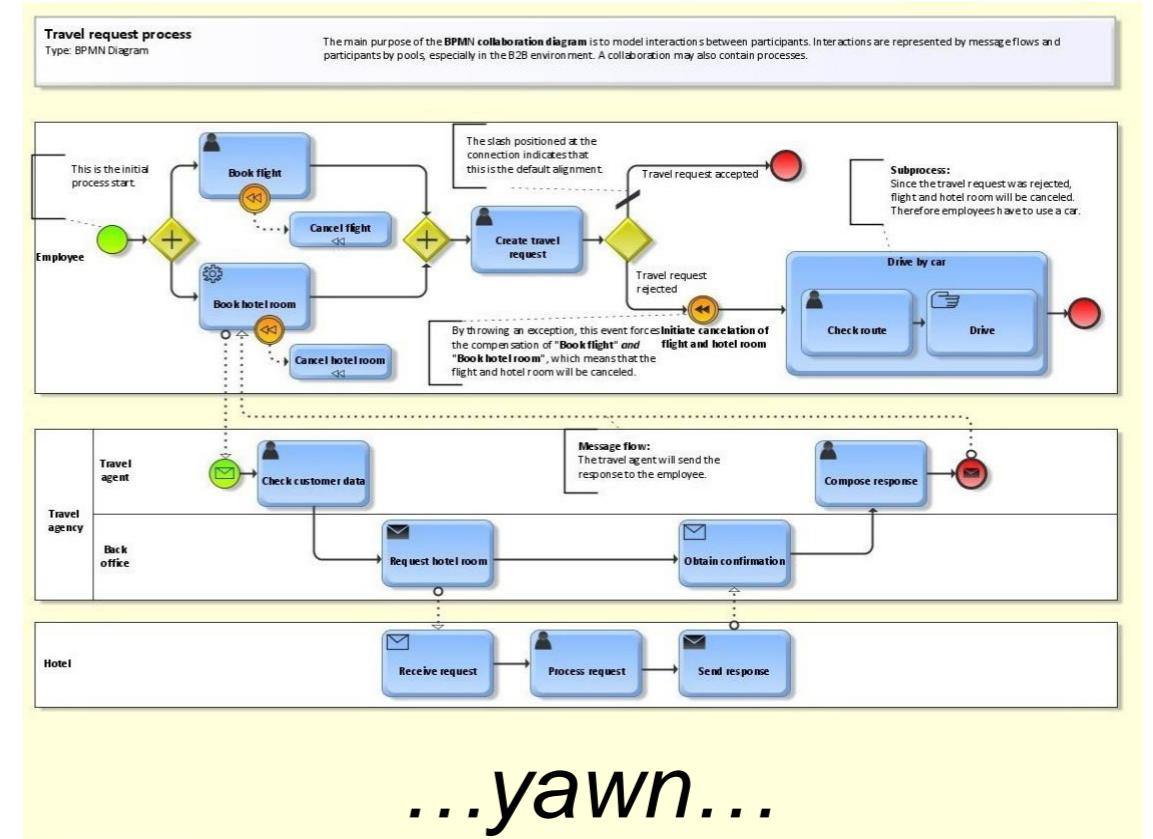
Dr. Nguyen Binh Minh

1

Business-architecture?
what's that...?

2

It's the architecture of
‘stuff what business does’



What name in your system?

Typical UK-style name-structure for database:

- Title** (mandatory: select from picklist)
- Forename** (mandatory: 30 characters max)
- Middle-name** (optional: 30 characters max)
- Surname** (mandatory: 30 characters max)
- Suffix** (optional: select from picklist)

Easy, right? – well, let's take a real example...

What name in your system?

UK-style name:

- Mr Pablo Diego Ruiz



What name in your system?



UK-style name:

- Mr Pablo Diego Ruiz

Full legal birth-name:

- Pablo Diego José Francisco de Paula Juan Nepomuceno María de los Remedios Cipriano de la Santísima Trinidad Ruiz y Picasso

What name in your system?



UK-style name:

- Mr Pablo Diego Ruiz

Full legal birth-name:

- Pablo Diego José Francisco de Paula Juan Nepomuceno María de los Remedios Cipriano de la Santísima Trinidad Ruiz y Picasso

You probably know him as:



9

Driver's licence, please?

Real simple, right?
The same for
everyone, surely?

[Hensel twins' driver-licences >>](#)

*Hmm... maybe
not so simple
after all?*

10



Driver's licence, please?

In the car: Two drivers behind the wheel, each legally liable *On the flight:* One ticket, one seat, two passengers, two passports



11



12

“Whatever theory you have,
there’ll always be something
that **doesn’t fit**”

13

So how do we **find** these
‘things that don’t fit’?

- and how do we **design** for them, too...

14

Short answer:
Raid the kids' toy-box!



15



16



17



18



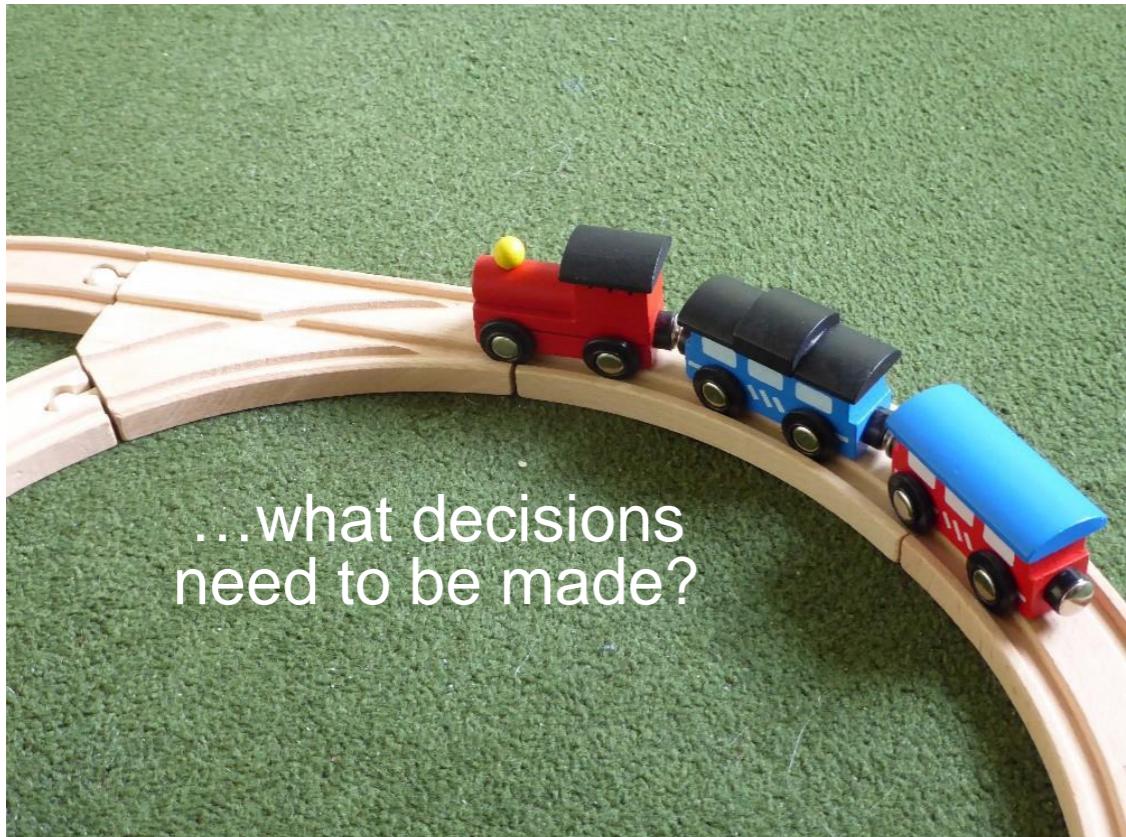
...how do those uses intersect?

19



...how might those uses conflict?

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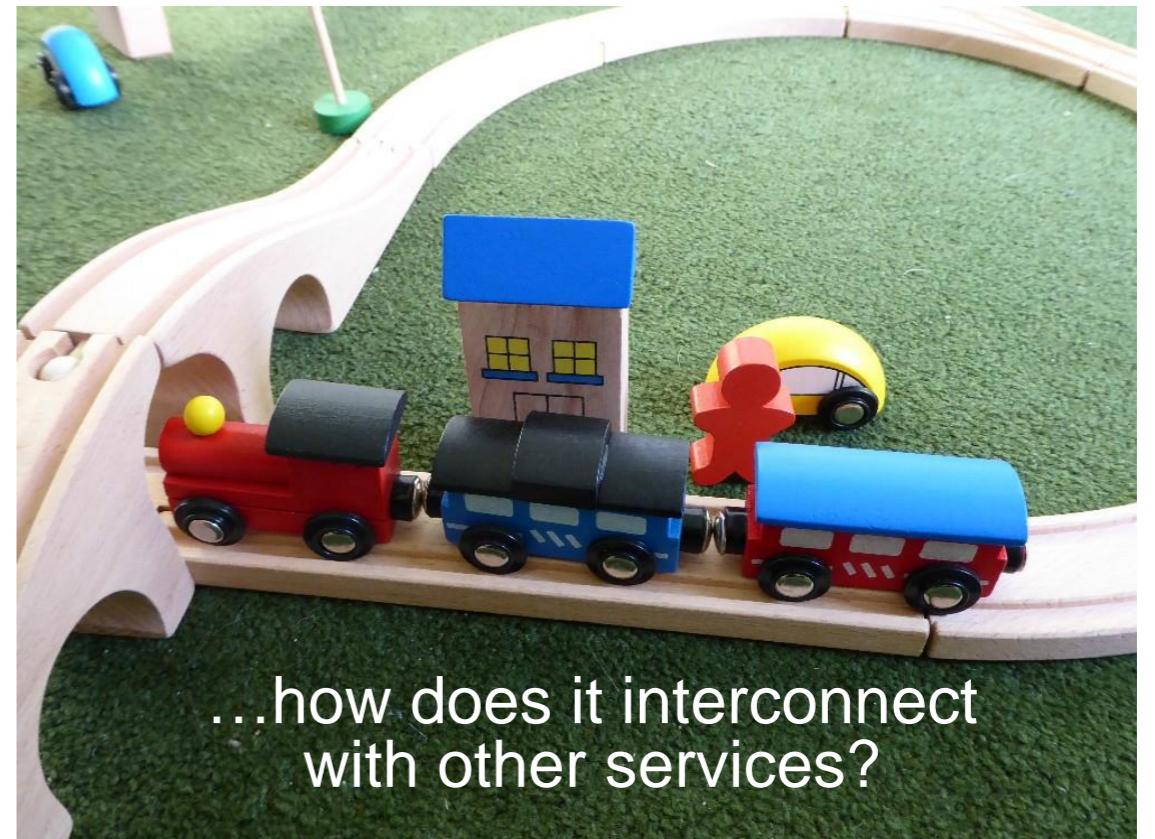


22



...what infrastructure
tolerances do you need?

23



...how does it interconnect
with other services?

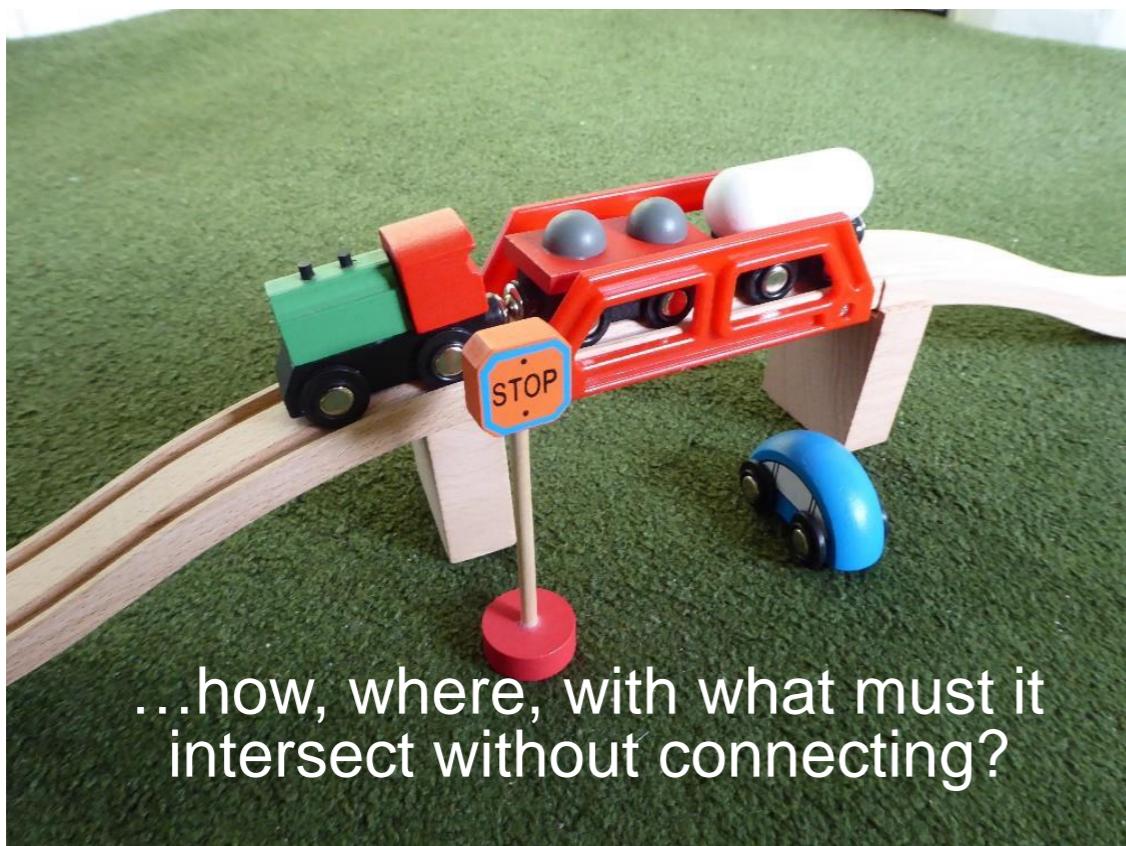
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...how, where, with what must it intersect without connecting?

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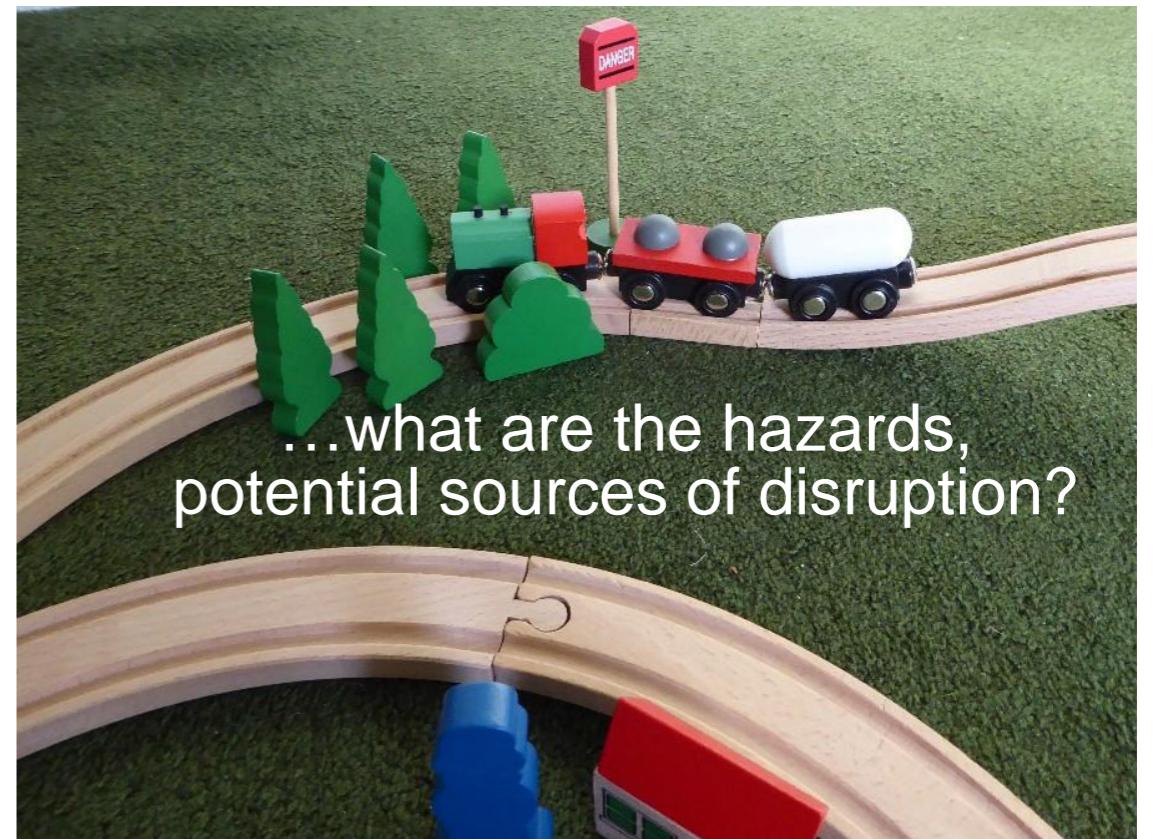
...how might others impact your infrastructure?

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...what impacts could that have on service-delivery?

29



...what are the hazards,
potential sources of disruption?

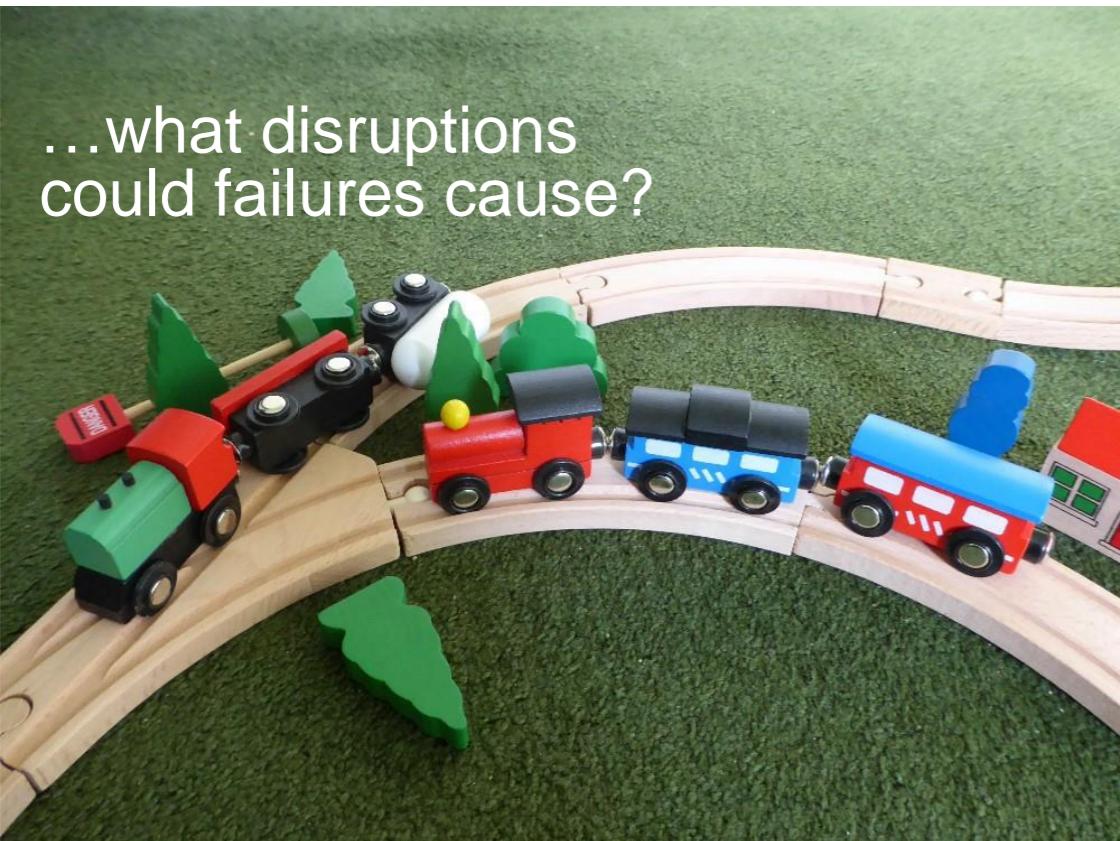
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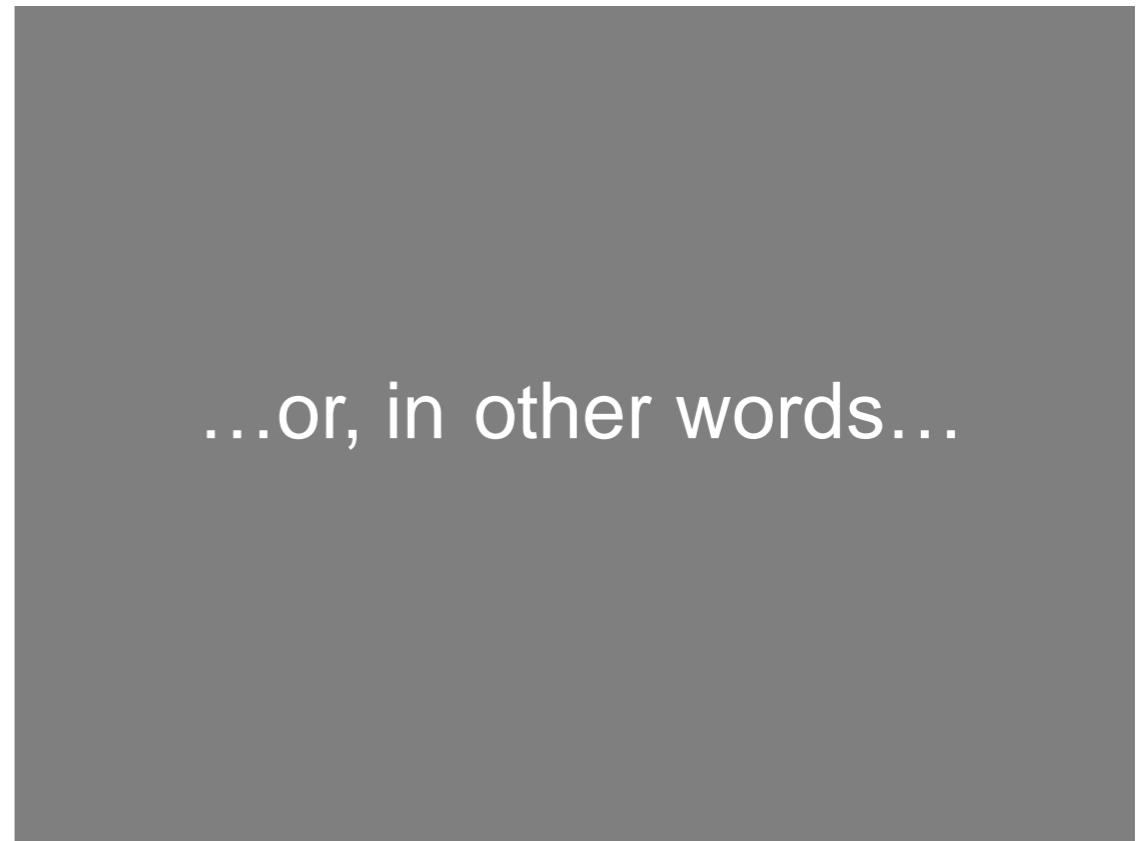
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...or, in other words...

34

...context, context,
context!

35

But where does
context come from?

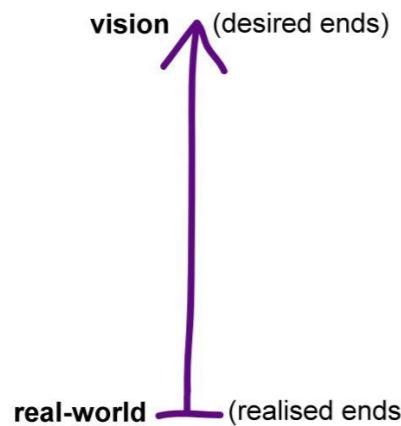
- *and why does anything happen?*

(in business, anyway...)

36

Why anything happens

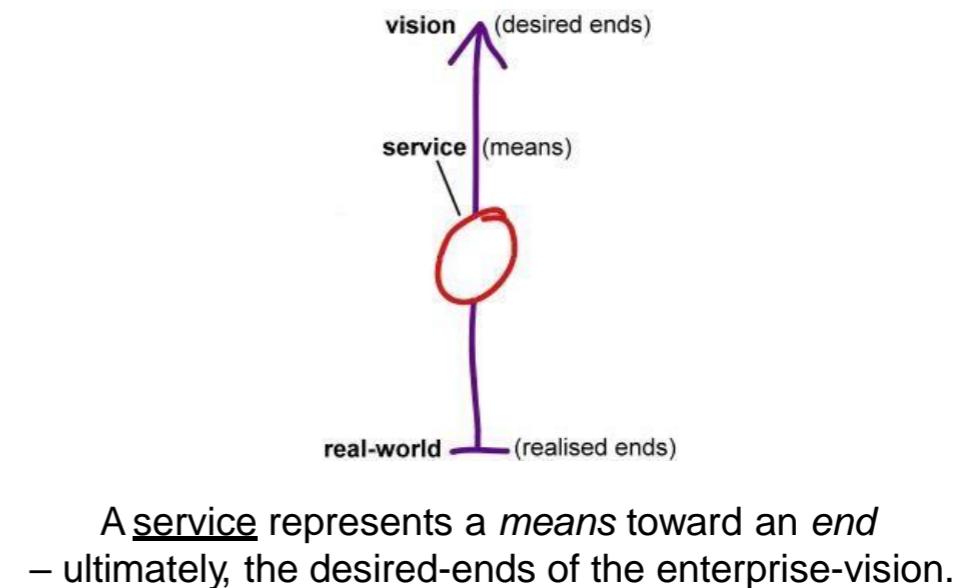
A tension exists between what is, and what we want.



The vision describes the desired-ends for action;
values guide action, describing how success would feel.

37

The nature of service

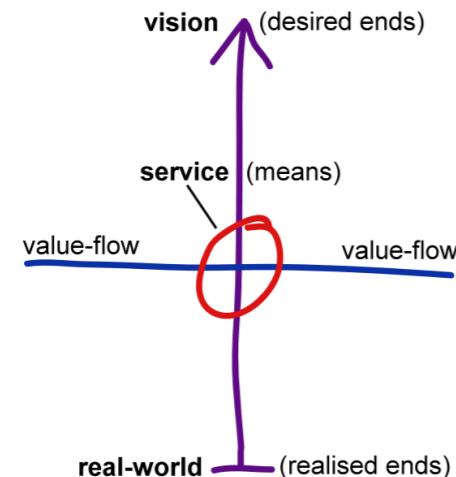


A service represents a *means* toward an *end*
– ultimately, the desired-ends of the enterprise-vision.

38

19

Relations between services



Services exchange value with each other, to help each service reach toward their respective vision and outcome.

Why architecture?

“We create an architecture
for an organisation,
but about an enterprise.”

Tom Graves, *Mapping the Enterprise*, Tetradian, 2010

Organisation aligns with *structure*, enterprise with *story*.
We need a balance of both for the architecture to work.

What architecture?

“An *organisation* is bounded by rules, roles and responsibilities; an *enterprise* is bounded by vision, values and commitments.”

Tom Graves, *Mapping the Enterprise*, Tetradian, 2010

Organisation aligns with *structure*, enterprise with *story*. We need a balance of both for the architecture to work.

Whose story?



If the organisation says it ‘is’ the enterprise, there’s no shared-story - and often, no story at all.

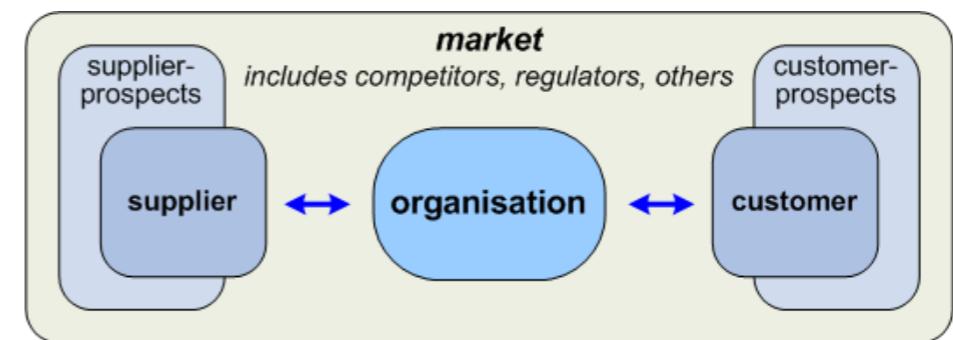
Whose story?



The minimum real enterprise is the supply-chain
- a story of shared ***interactions*** and transactions.

43

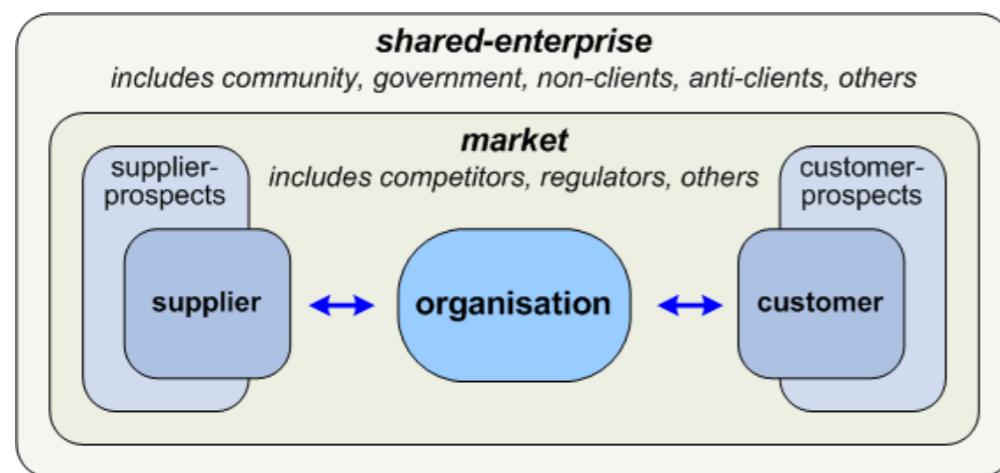
Whose story?



The organisation and enterprise of the supply-chain take place within a broader organisation of the market.

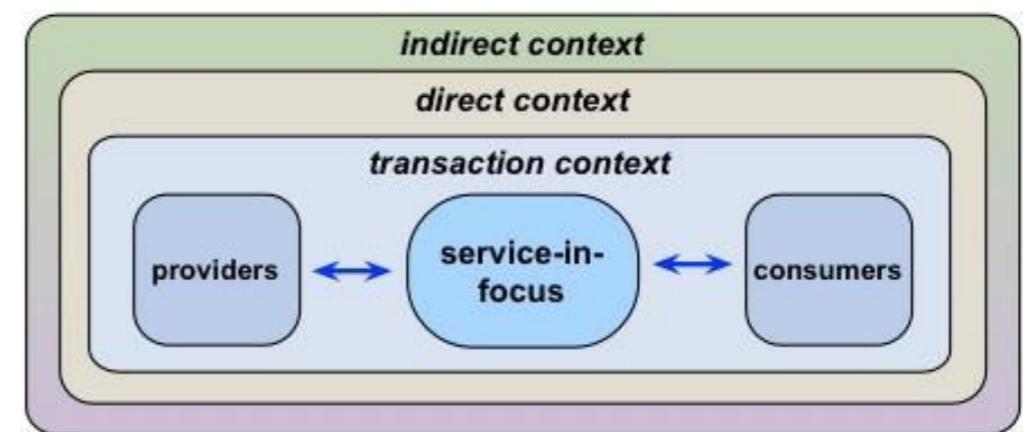
44

Whose story?



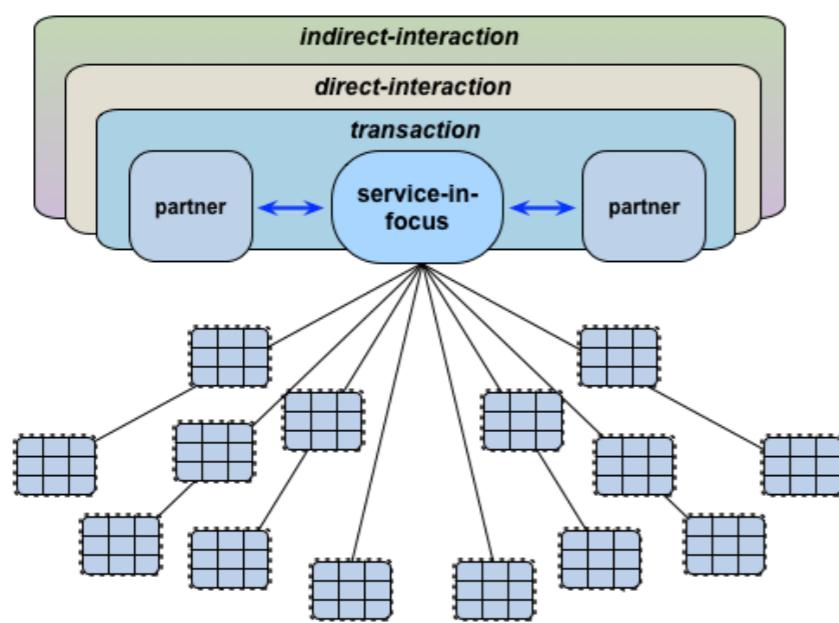
The market itself exists within a context of 'intangible' interactions with the broader shared-enterprise story.

Whose story?



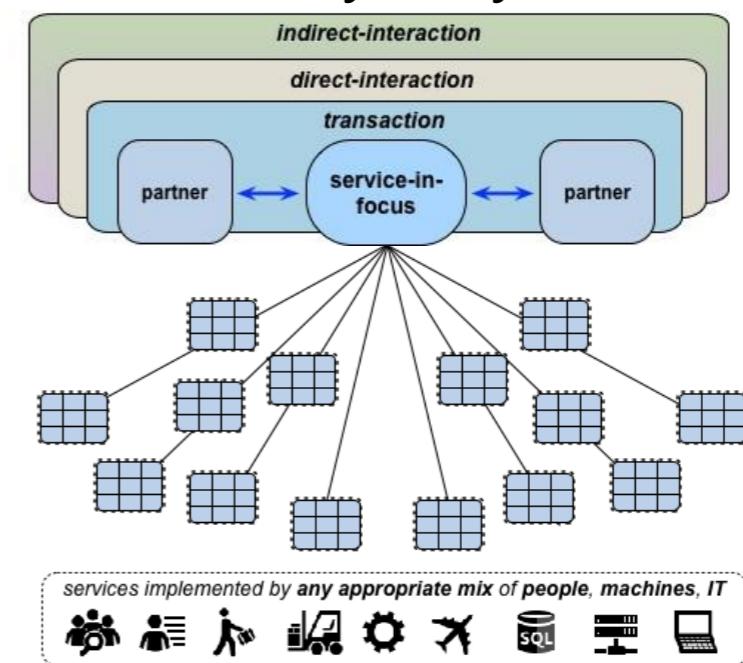
The story is not solely at the whole-of-business level
- we can generalise it to any type or level of context

Stories within stories...



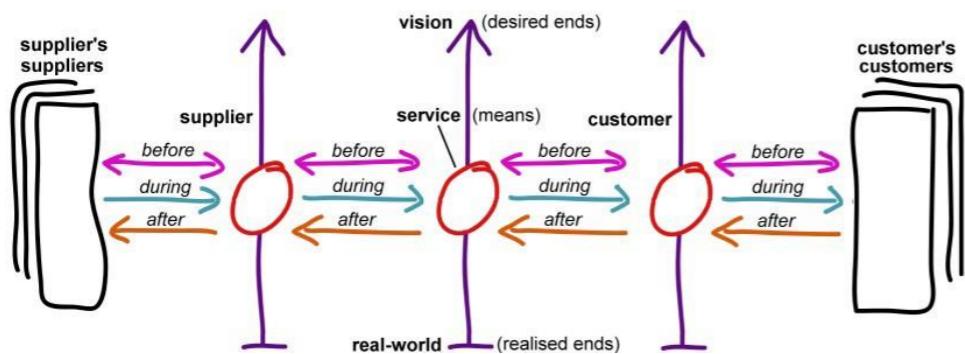
47

enacted in any way we need...



48

Supply-chain or value-web



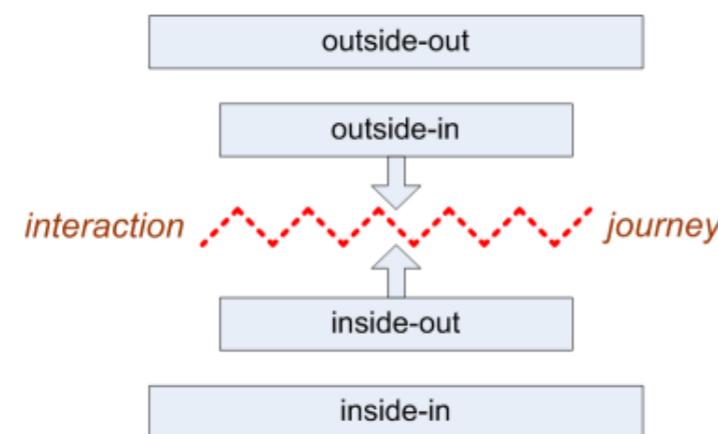
Services link together in chains or webs, as structured and/or unstructured processes, to deliver more complex and versatile services or ***stories***

...which brings us to...

a matter
of perspective!

- yeah, which way we look at things does kinda matter here...

Perspectives and journeys



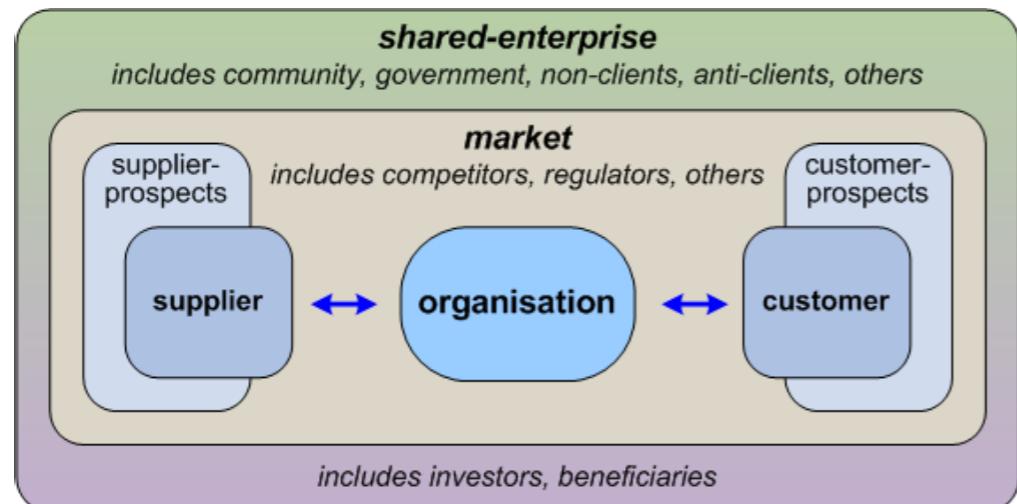
Service-delivery is a journey of interactions where '**inside-out**' (the *organisation's* perspective) touches '**outside-in**' (the *customer's / supplier's* perspective)

51



52

Whose story?



Every service has its own myriad of **stakeholders**

53

Who are the stakeholders?



A **stakeholder** is anyone who can wield a sharp-pointed **stake** in our direction...

(*Hint:* there are a lot more of them than we might at first think...)

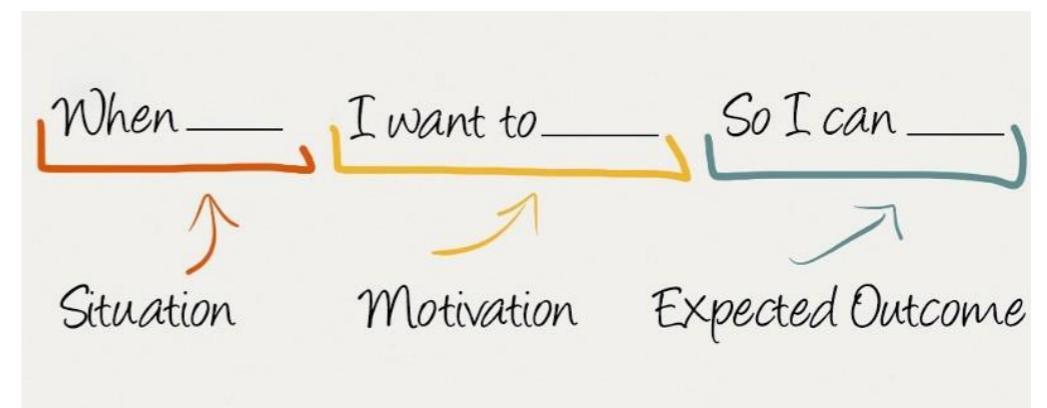
54

The role of narrative:

Narrative/story helps us to identify what needs to happen - including the exceptions and uniquenesses...

55

Structuring a story-fragment...



Alan Klement: Replacing ‘User-Story’ with ‘Job-Story’

<http://alanklement.blogspot.co.uk/2013/09/replacing-user-story-with-job-story.html>

56



57



58

...will **User-Story** or **Job-Story** be enough for all of this?

Short-answer:
useful, no doubt, but probably
not enough on their own
- *we're going to need a broader approach...*

The usual architecture view



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A narrative-oriented view



61

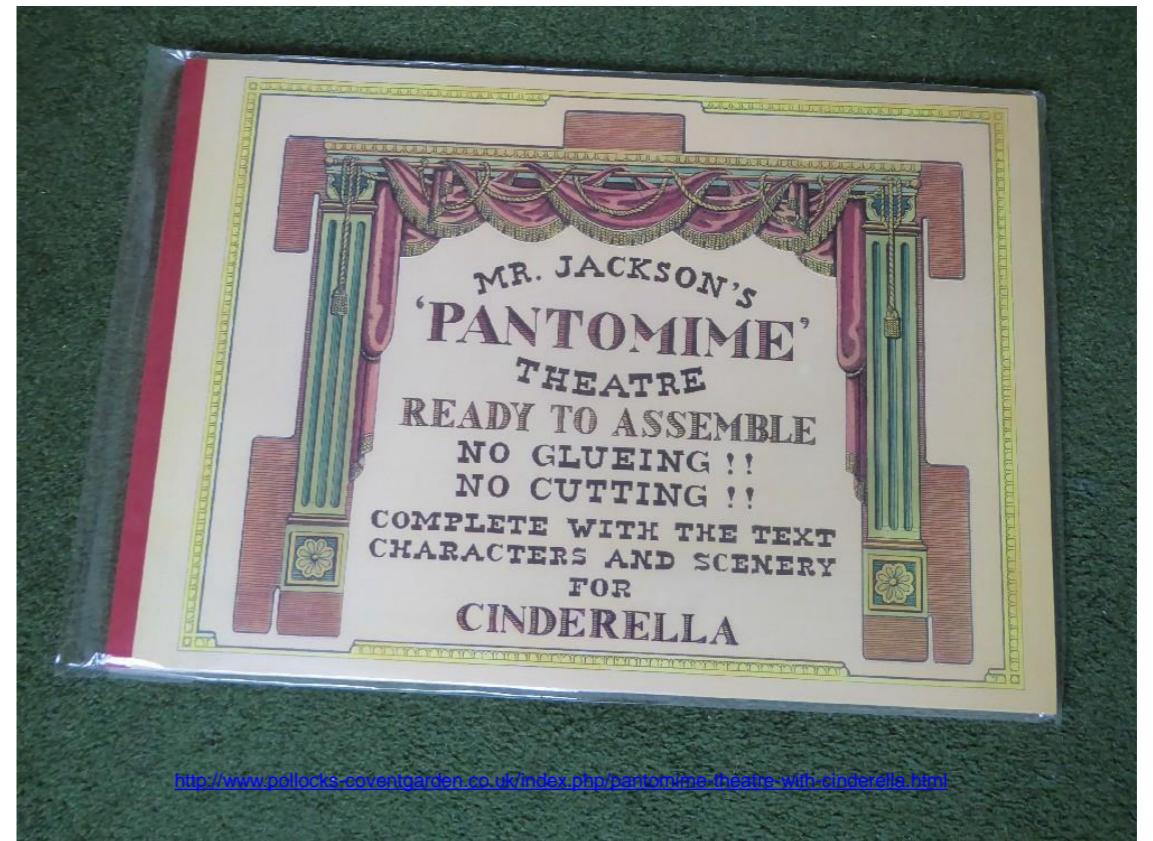
So how to explore all this?

62

Short answer:
Back to the toy-box!

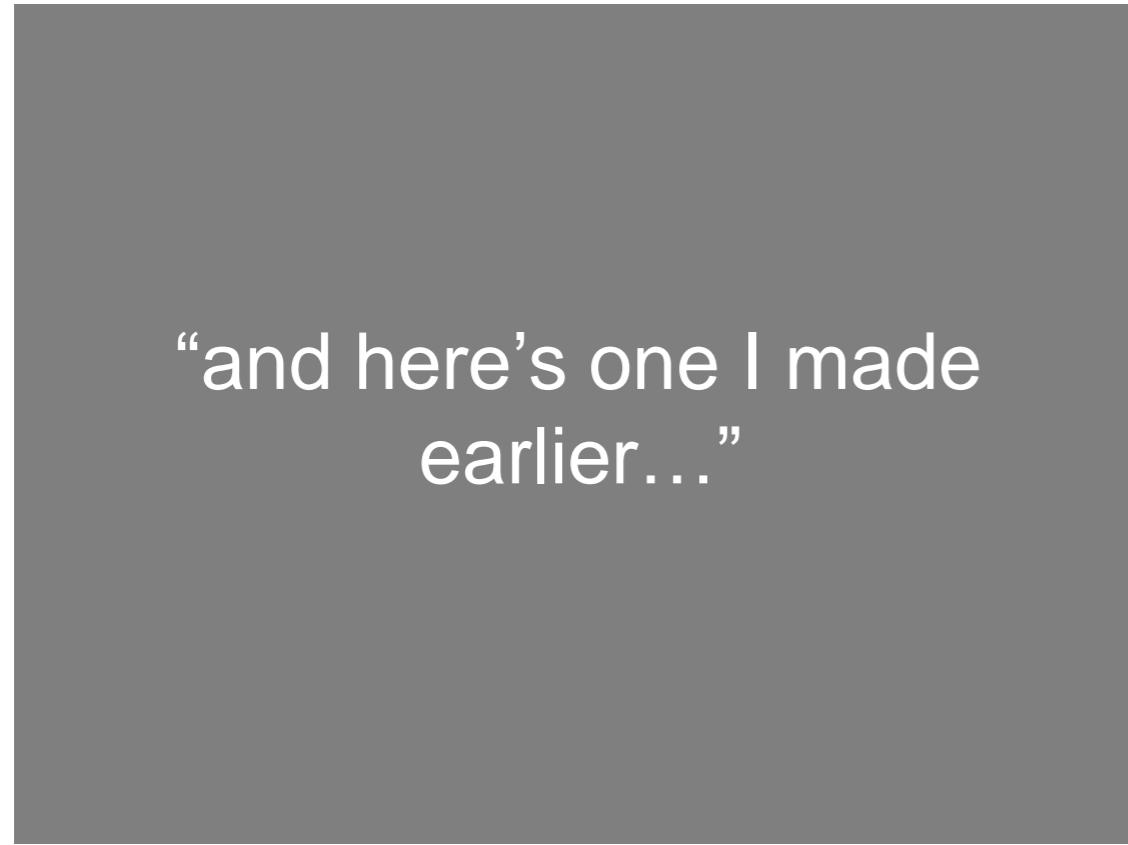


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“and here’s one I made earlier...”



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66



...the architect as hero?

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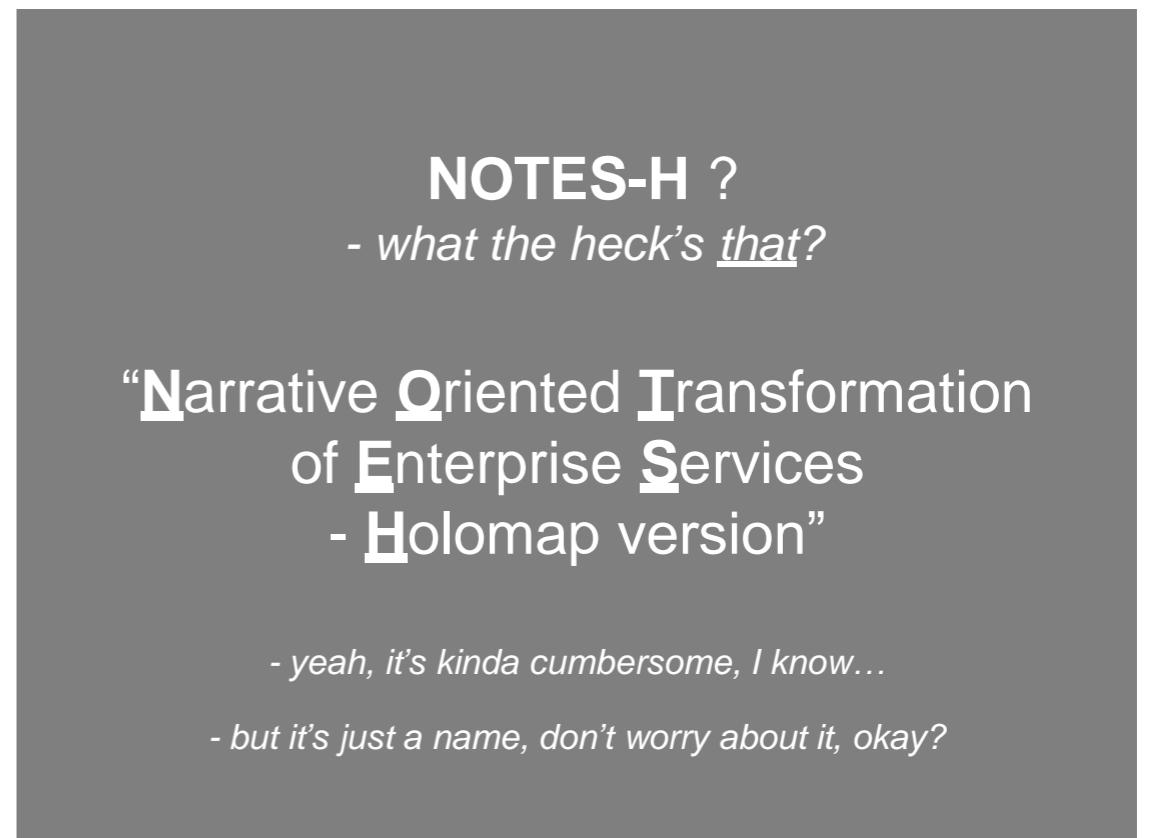
Let's use
a visual cheat-sheet
to help us...

- you could call it a *Canvas*, if you like...

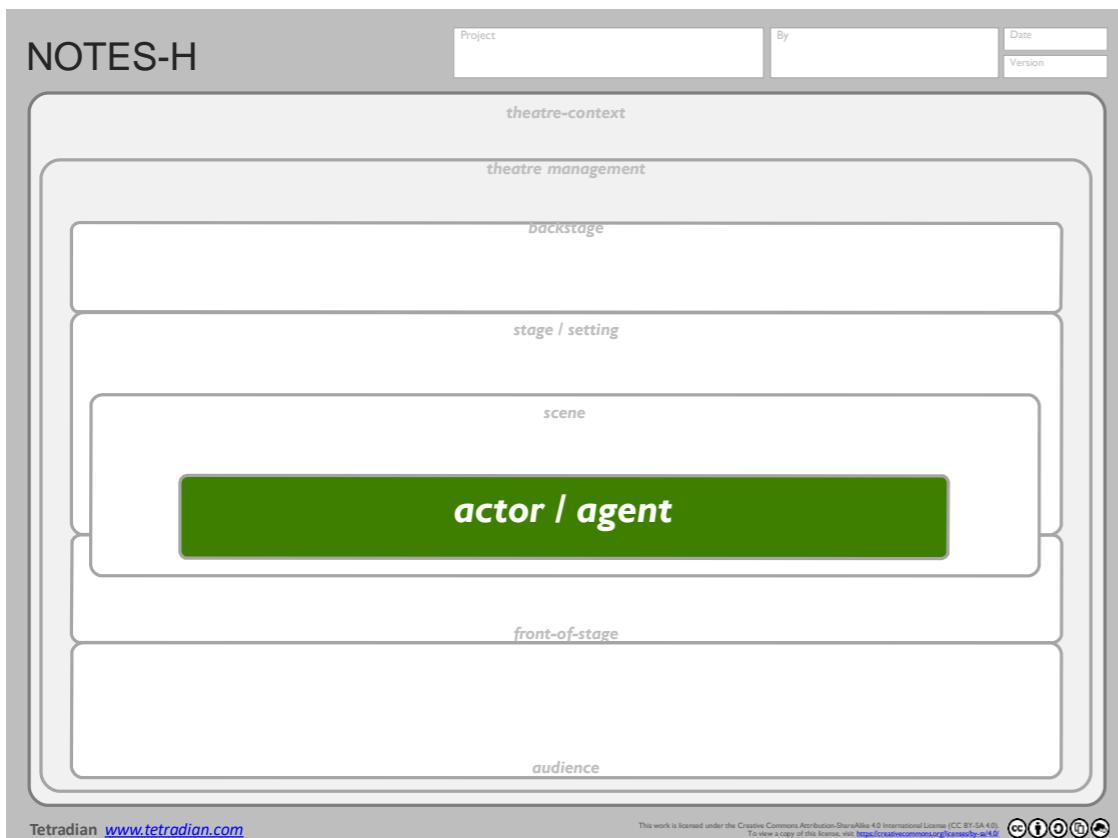
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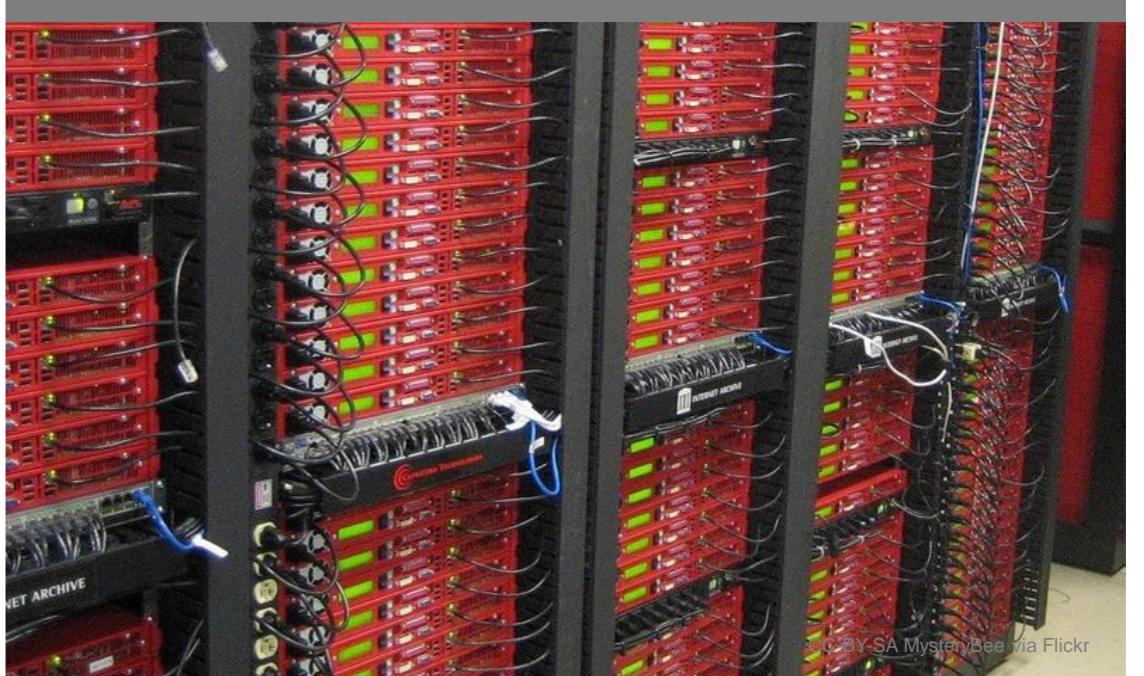
...who are the actors? – everyone!



CC-BY Mike Babcock via Flickr

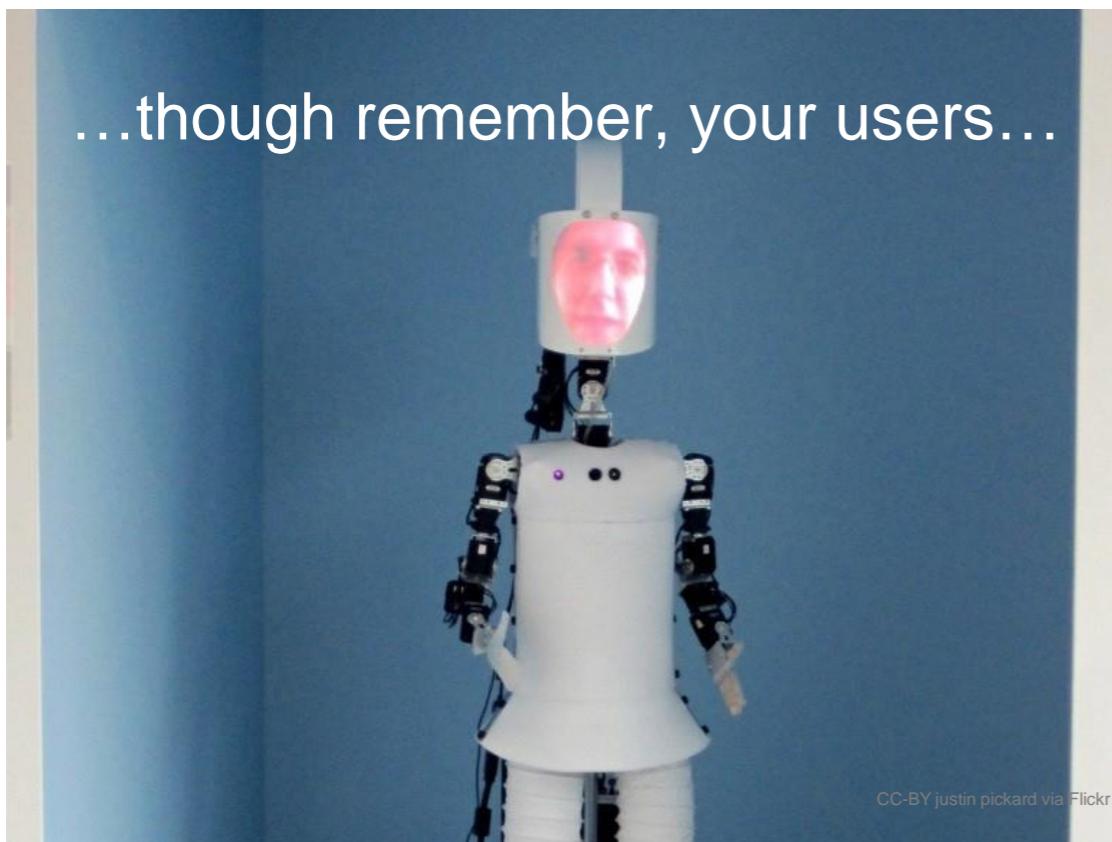
73

Machines may be actors (agents)...



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...though remember, your users...

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...are people,
not machines!

CC-BY andre uis via Flickr

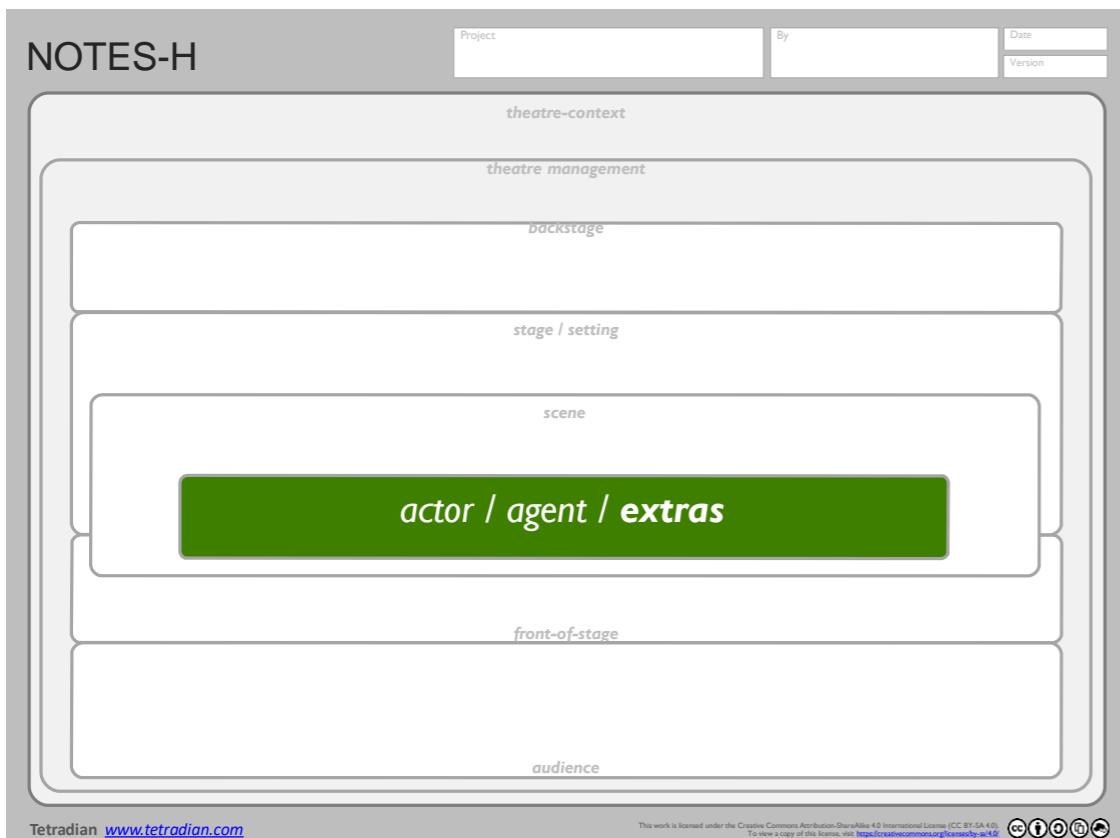
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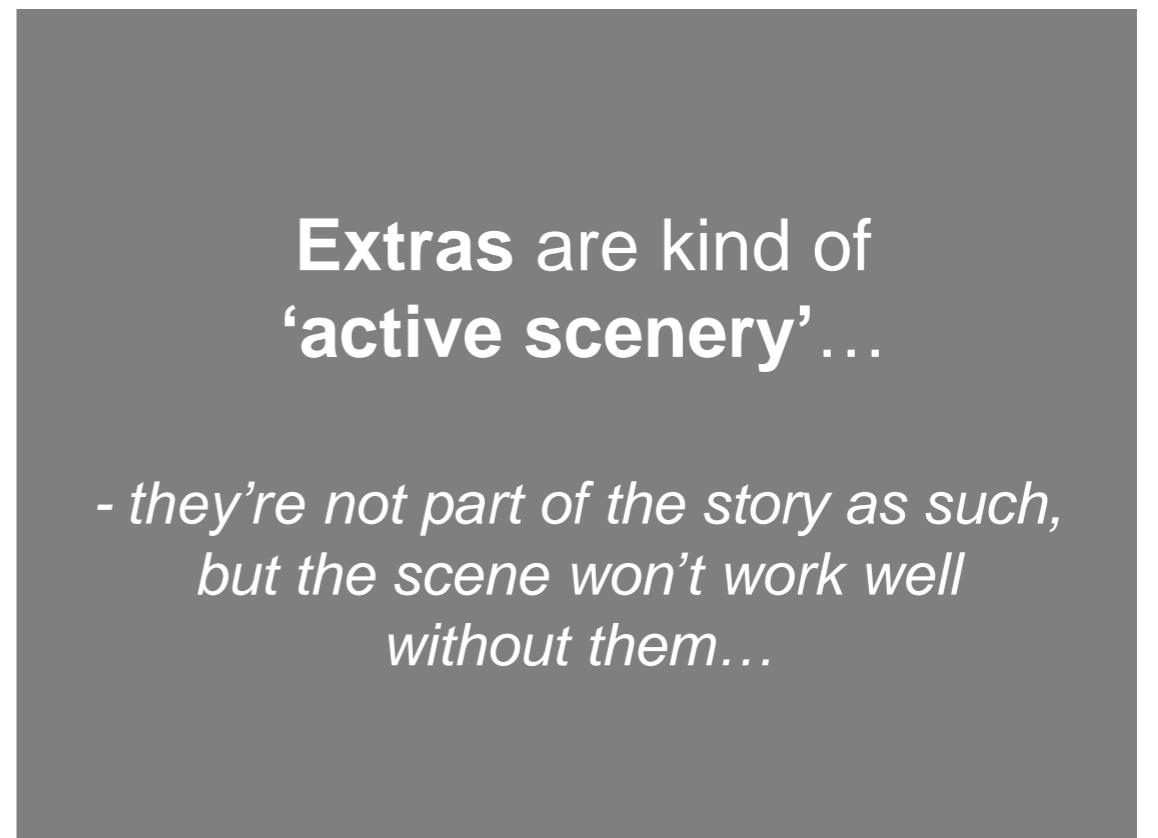
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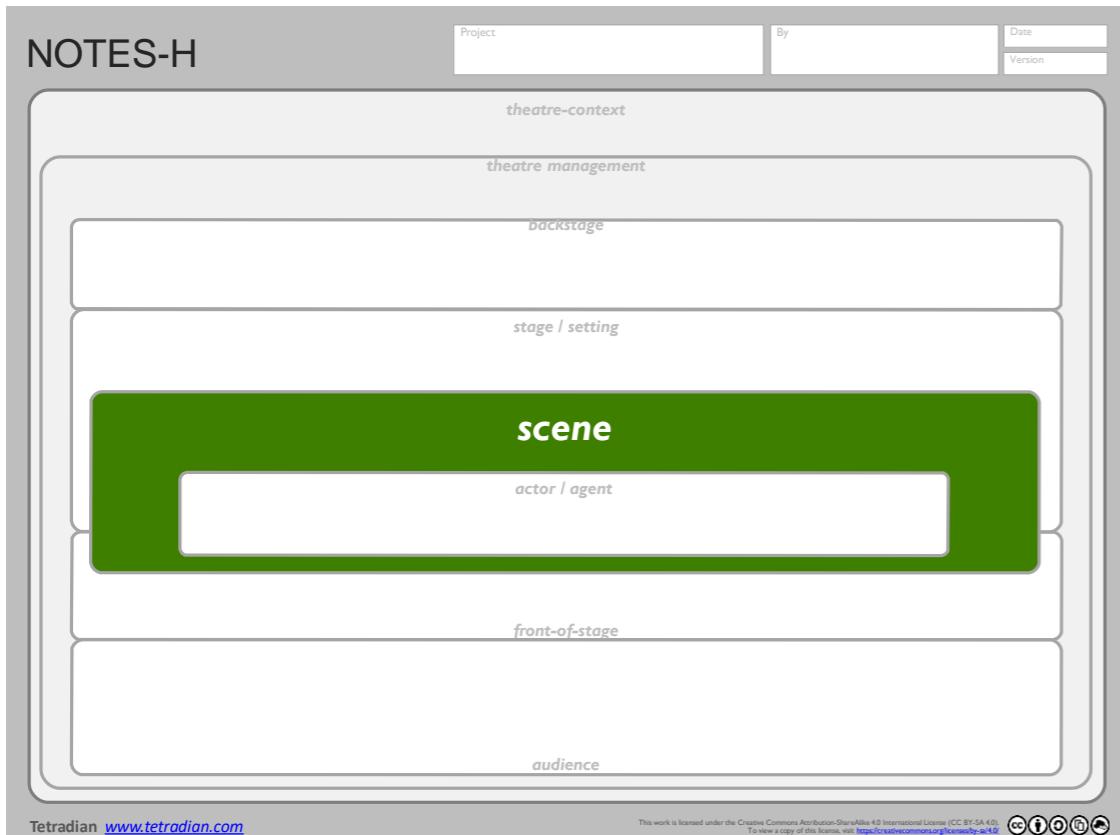
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81



82



Process as story

“Each traverse through a business-process is a *self-contained story* with its own actors, actions and events”

Tom Graves, *The Enterprise As Story*, Tetradian, 2012

Each segment of a story
is a **scene**...

*- each scene should have
a distinct **begin**, **middle**, **end**
and **outcome**...*

85

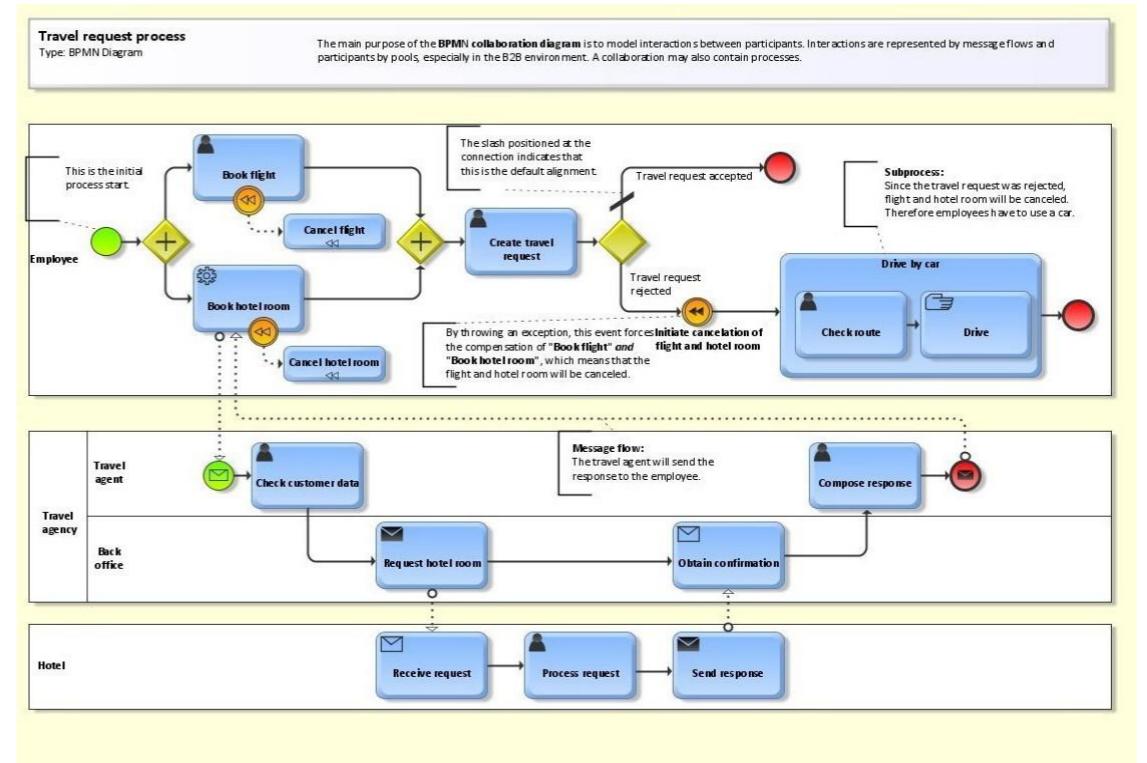


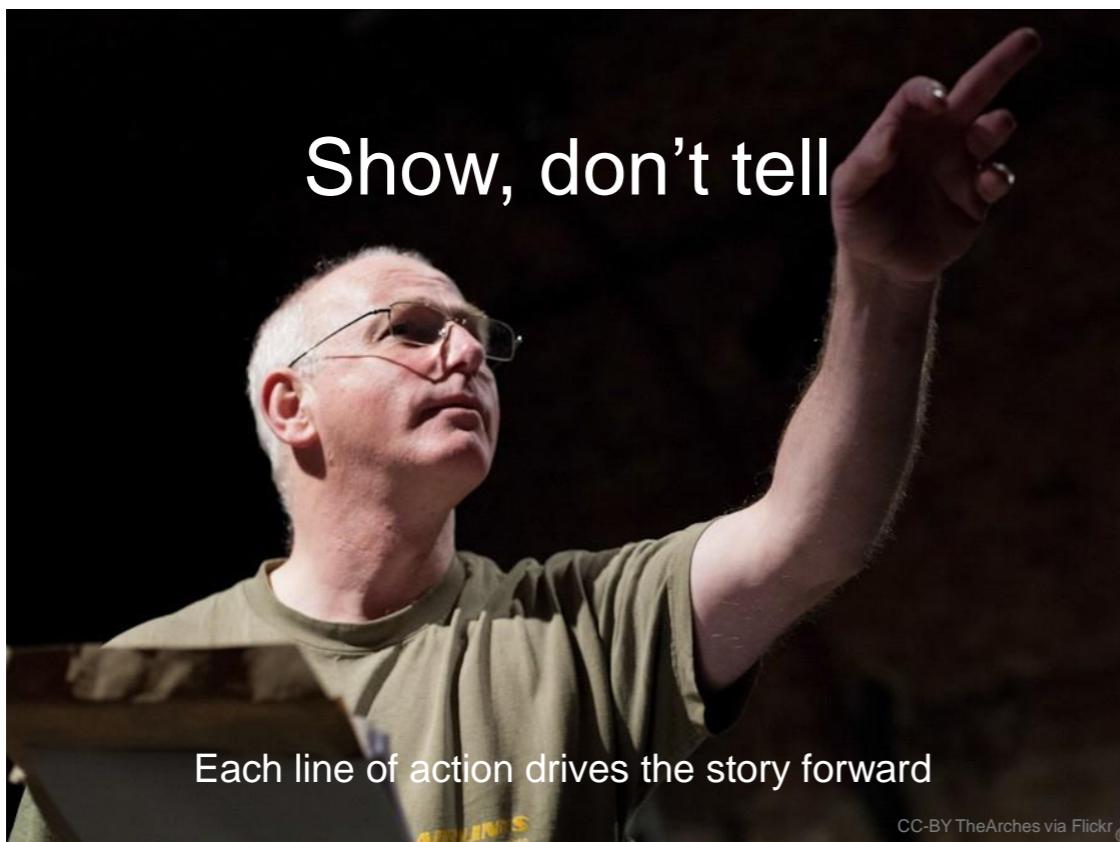
86

Scenes in the story



Split story into identifiable scenes, with begin, middle, end

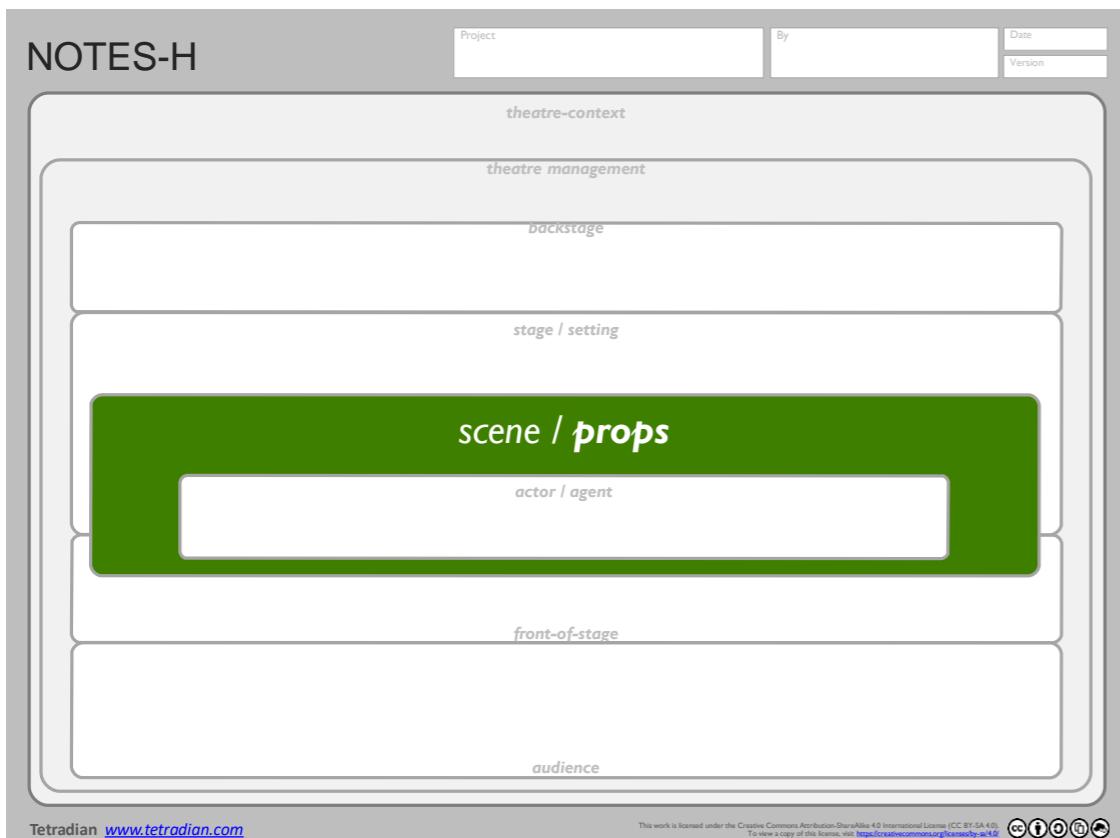




89



90



91



...what props do we need?

92

The role of props

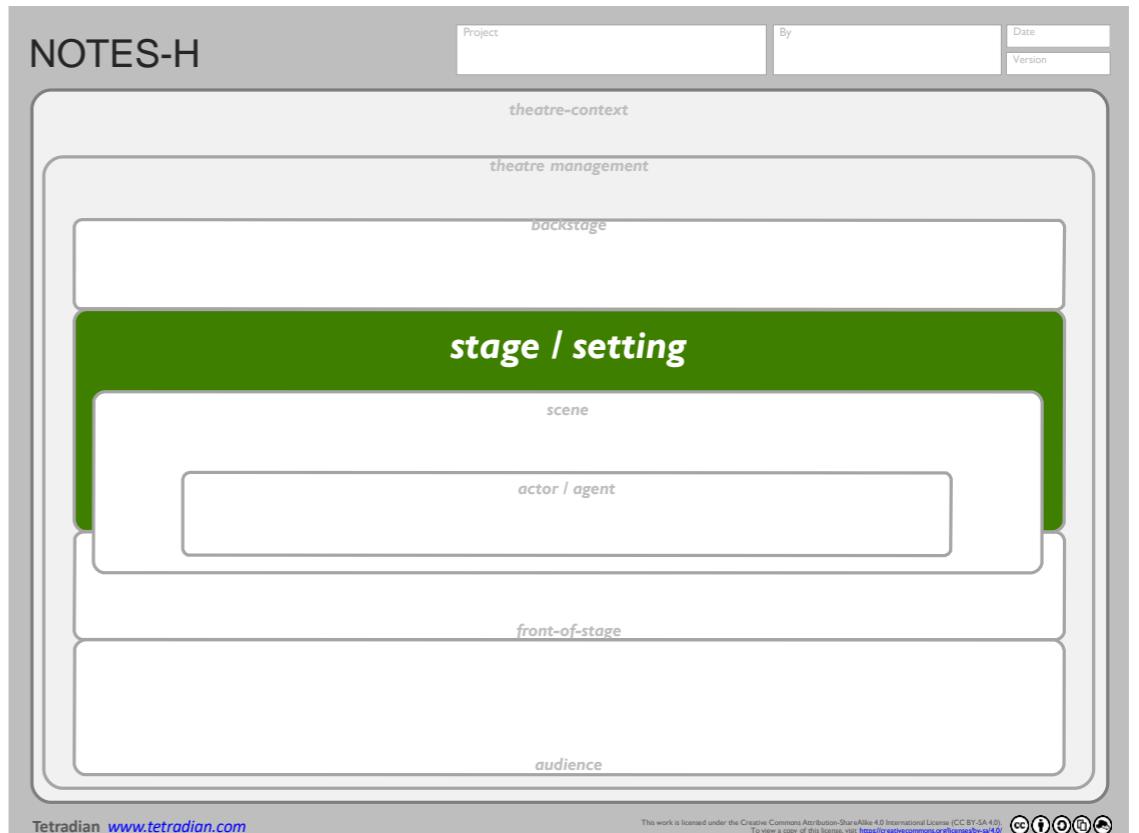


Each item has its place, and drives the story onward



93

NOTES-H



94



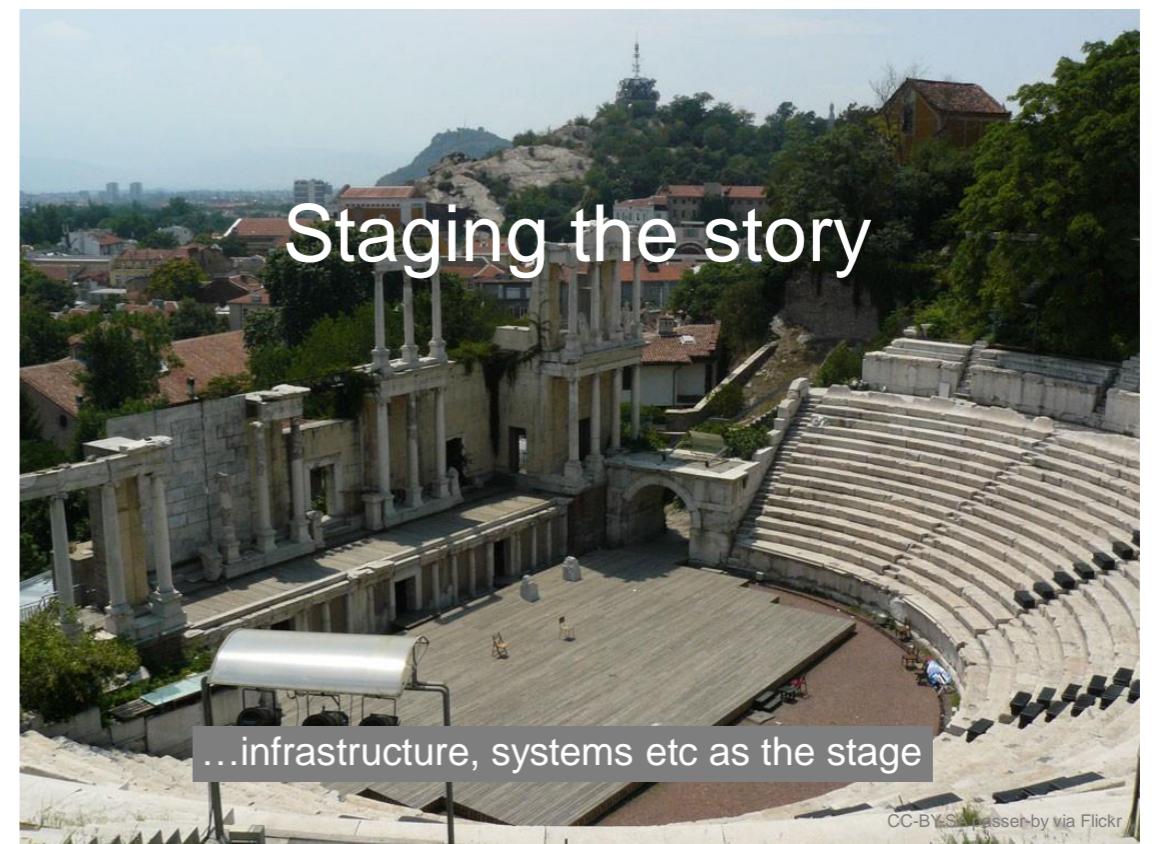
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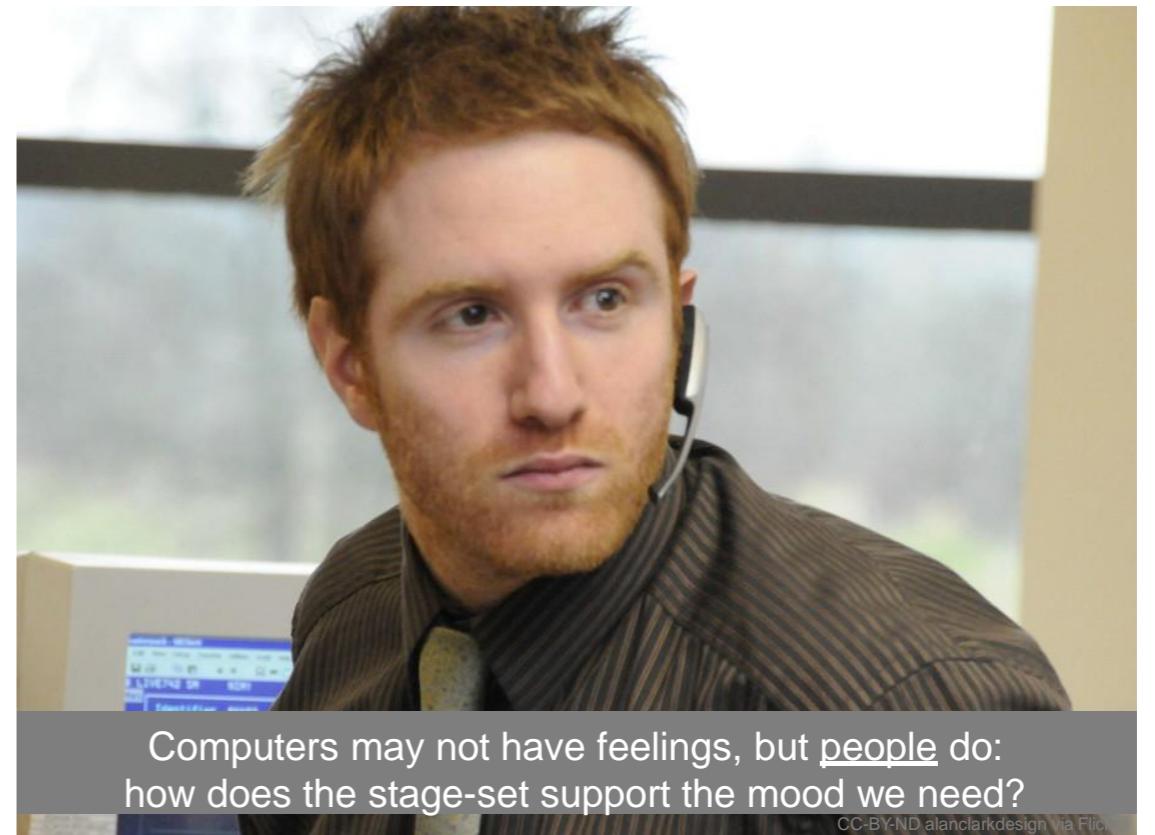
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101



102



Computers may not have feelings, but people do:
how does the stage-set support the mood we need?

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103

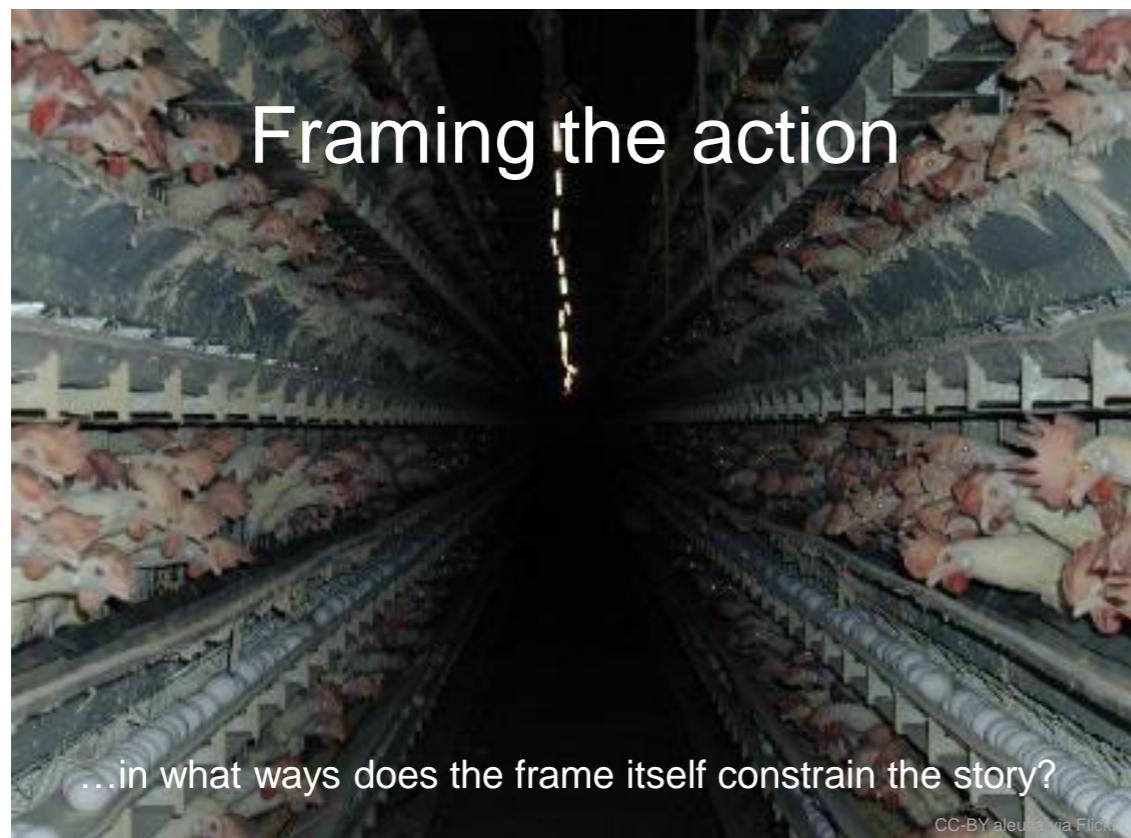


Framing the action

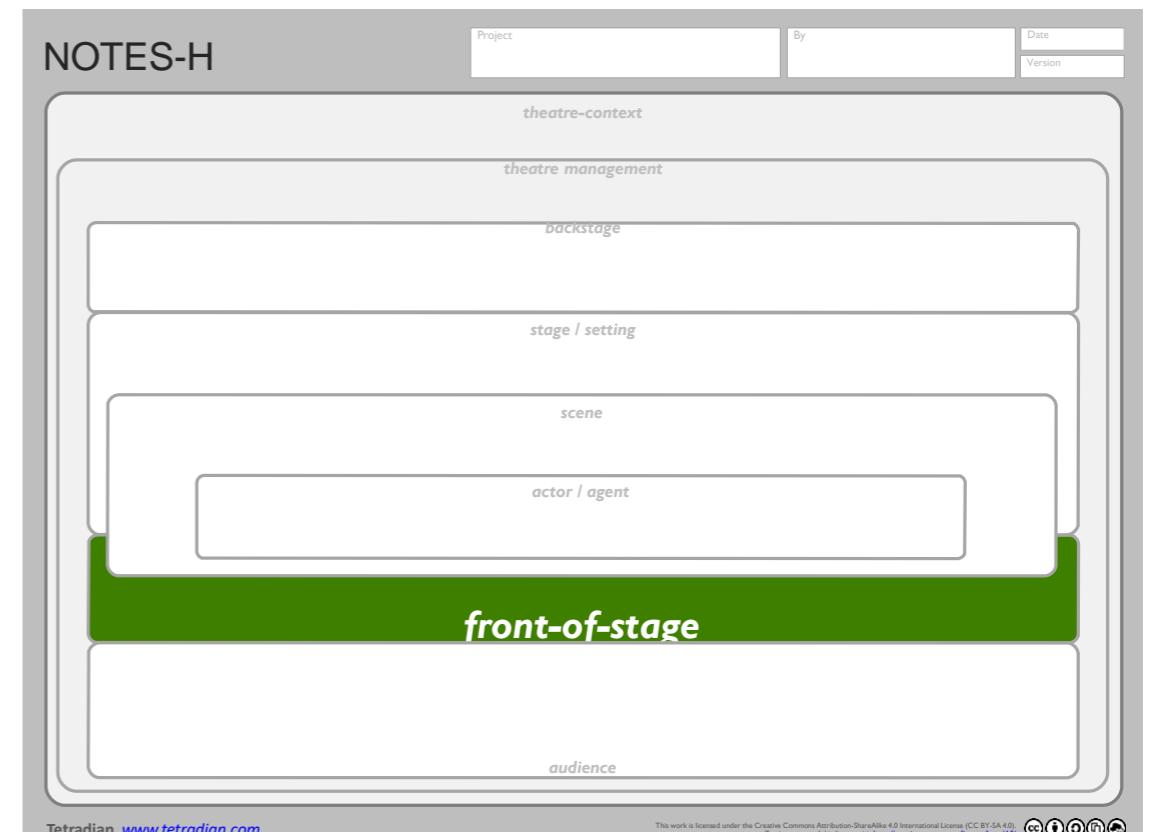
...in what ways does the frame itself constrain the story?

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104



105



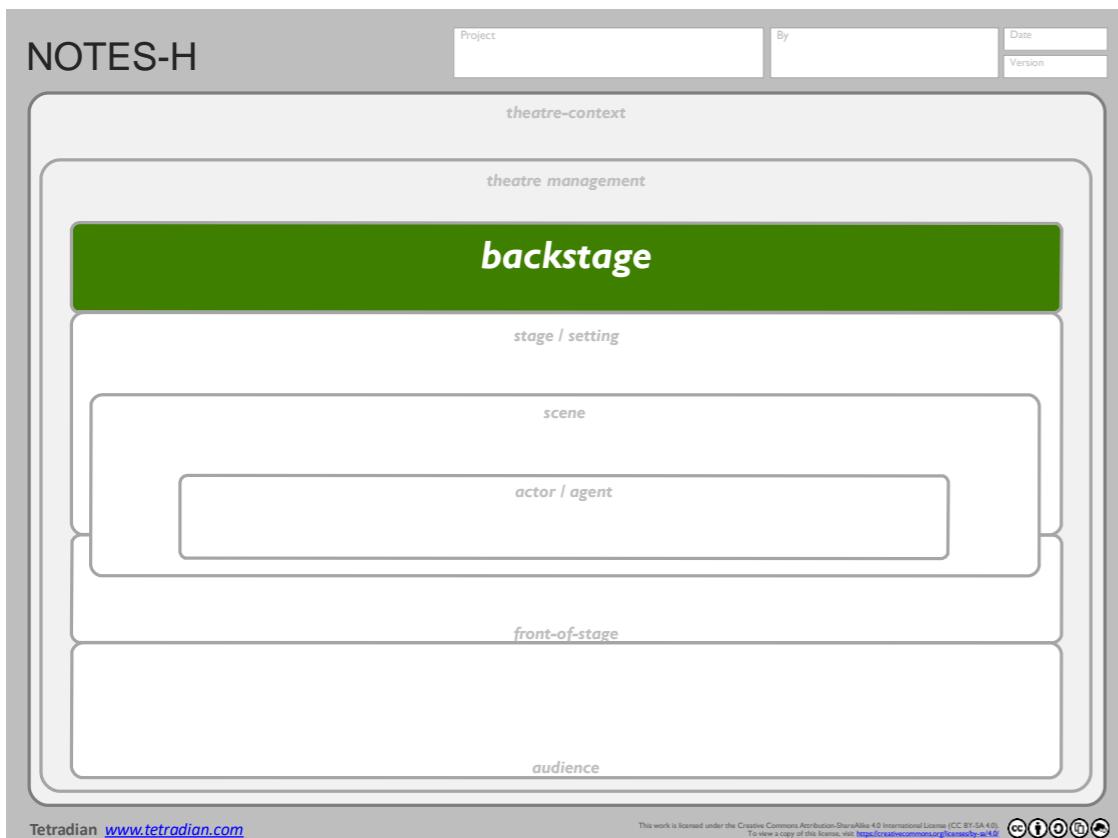
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107



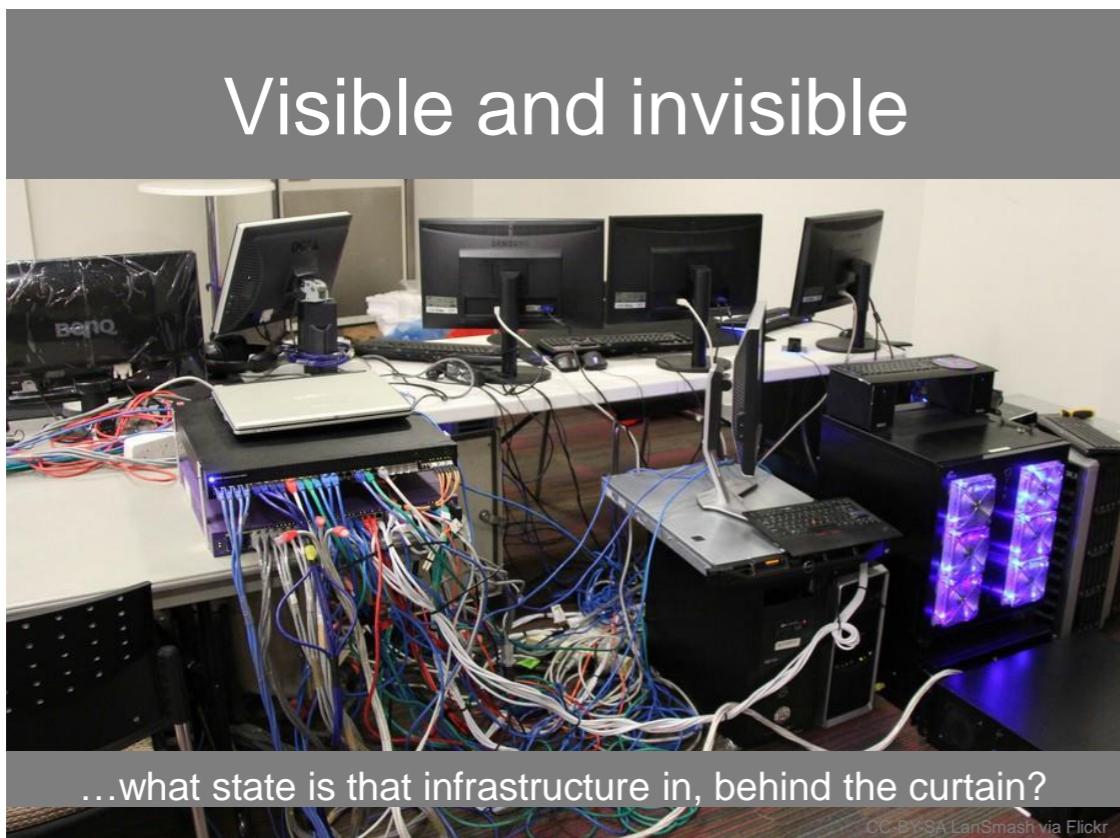
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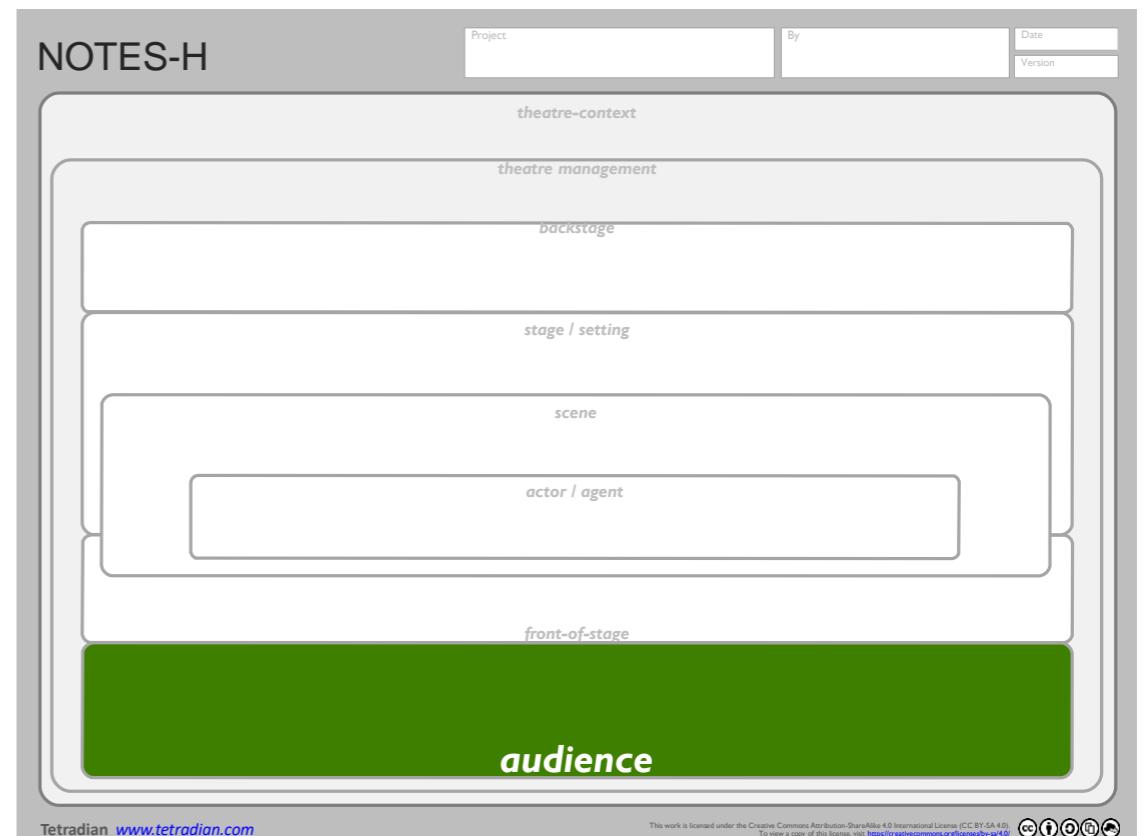
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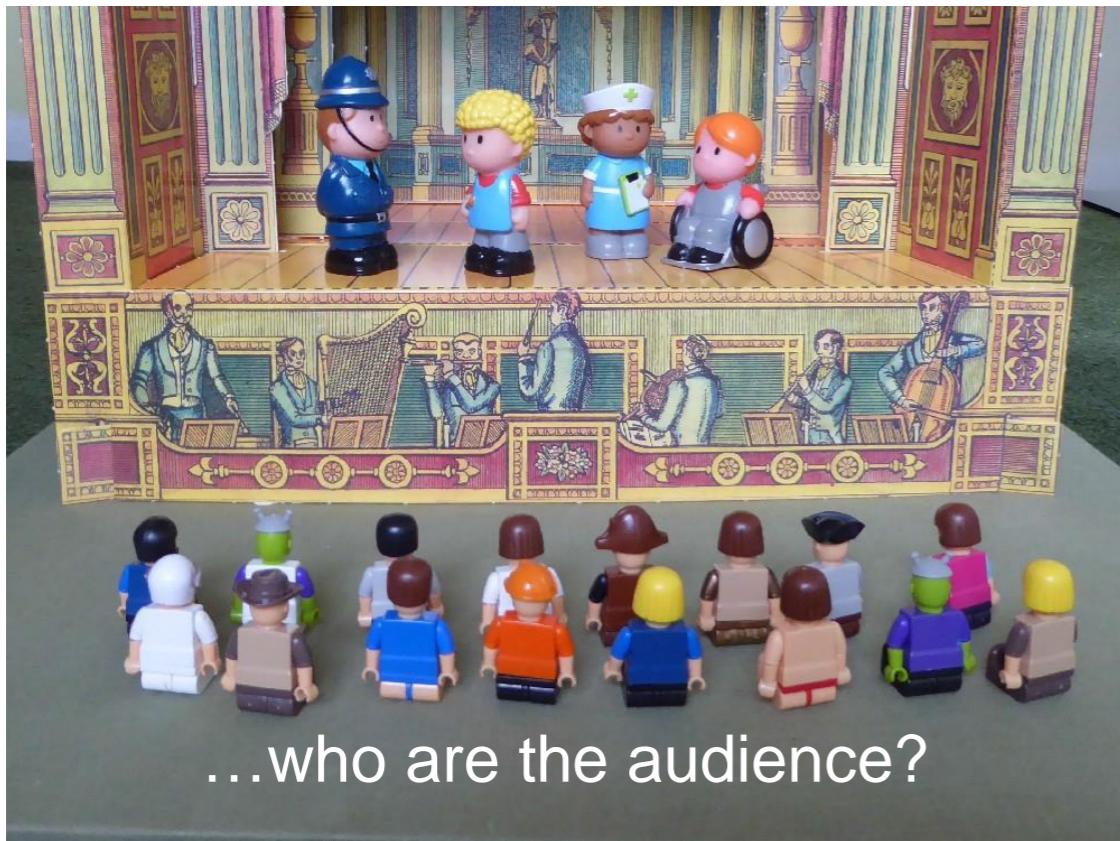
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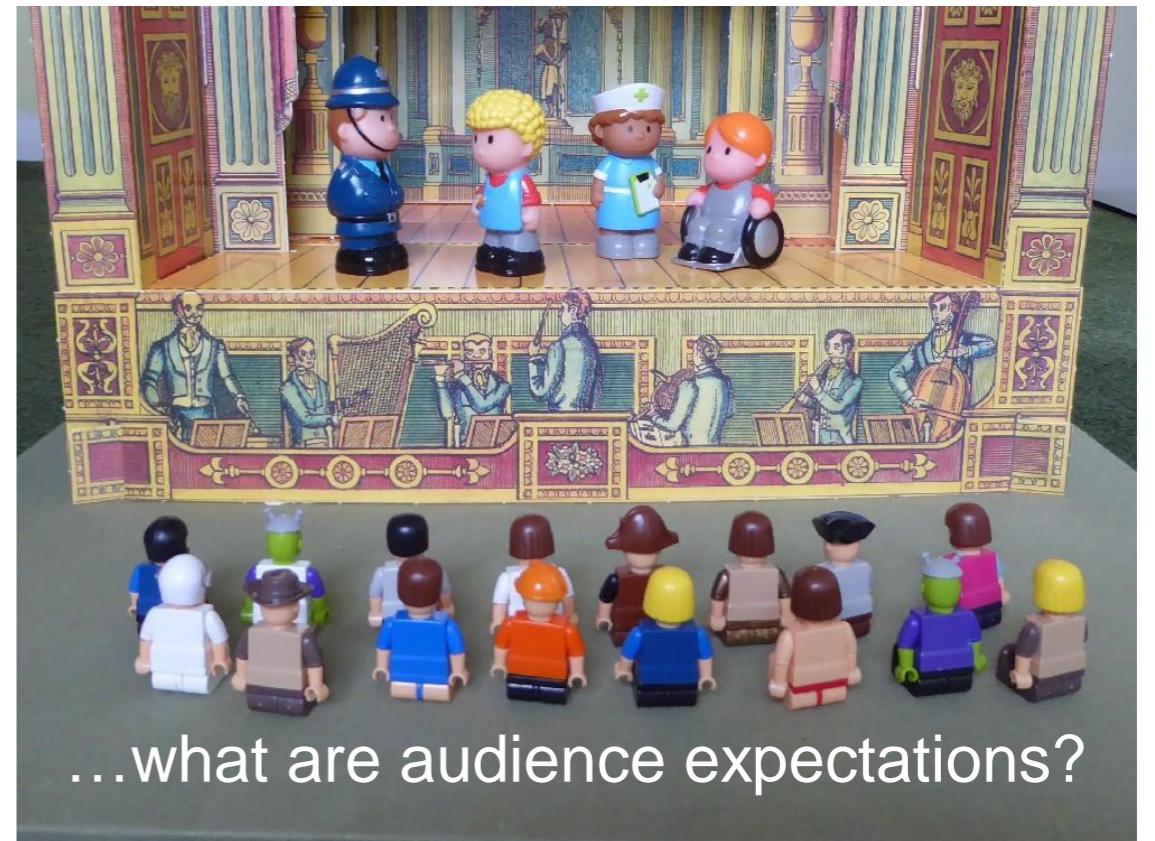
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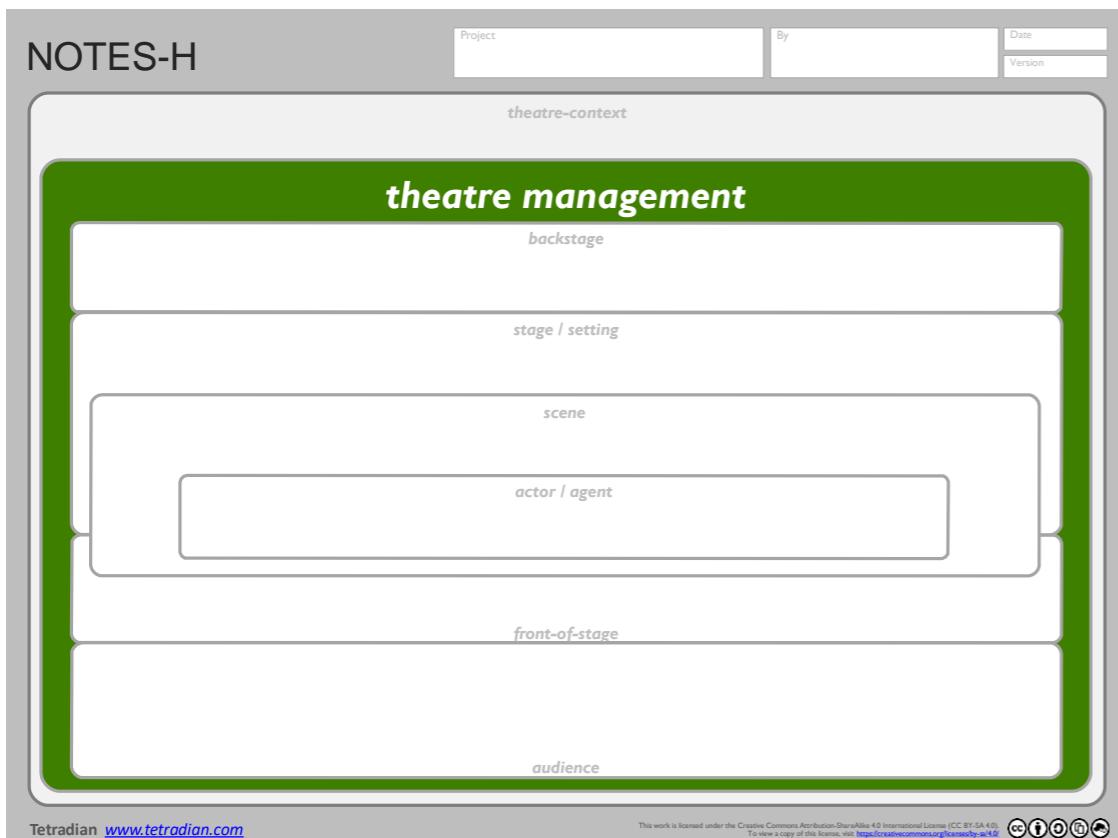
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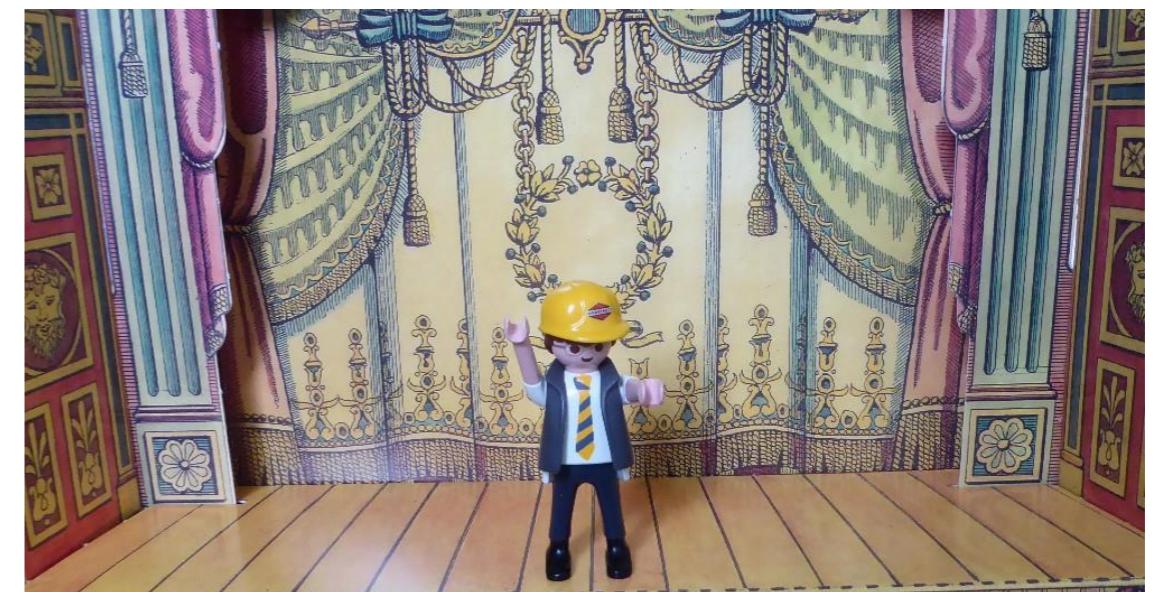
113



114



115



...who manages the theatre?

116



117



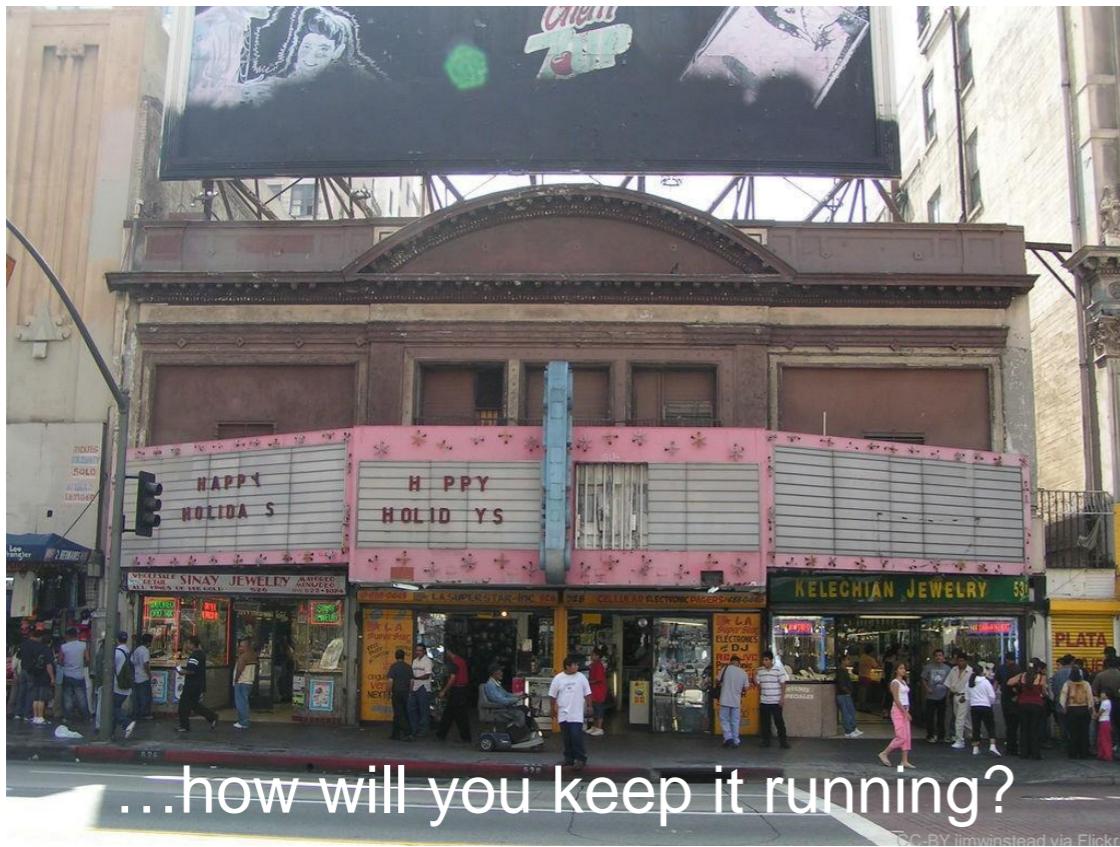
118



119



120



121

NOTES-H

Project	By	Date
		Version
theatre-context		
theatre management		
backstage		
stage / setting		
scene		
actor / agent		
front-of-stage		
audience		

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122



123



124



125

NOTES-H

Project	By	Date
		Version
theatre-context		
theatre management		
backstage		
stage / setting		
scene / props		
actor / agent / extras		
front-of-stage		
audience		

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126



127

In short...

Context, context, context...

***...we must pay attention
to the story as a whole!***

- not just the easy bits...

128

Practical:

**Use the NOTES checklist
to assess the story
and its context**

*What are the respective
needs, trade-offs, drivers?*

Identify what is needed to balance the
relations and priorities of all stakeholders.

129



130



131

“The world* is made of stories”

- The enterprise is a story – an overarching **theme**
- Enterprise as an ongoing story of **relations** between *people* – the **actors** of the story
- Enterprise-story comprised of many smaller stories – the **scenes** or story-lines (aka ‘processes’)
- Enterprise-story takes place in a setting – the **stage** and its context, location, props etc
- **Stories thrive on tension**, conflict and uncertainty – whereas machines generally don’t...

*“the world” including – perhaps especially – the business-world...

132

Thank you!