

How to do HumanOps



DevOpsDays Amsterdam June 2017
David Mytton, CEO, Server Density



HumanOps

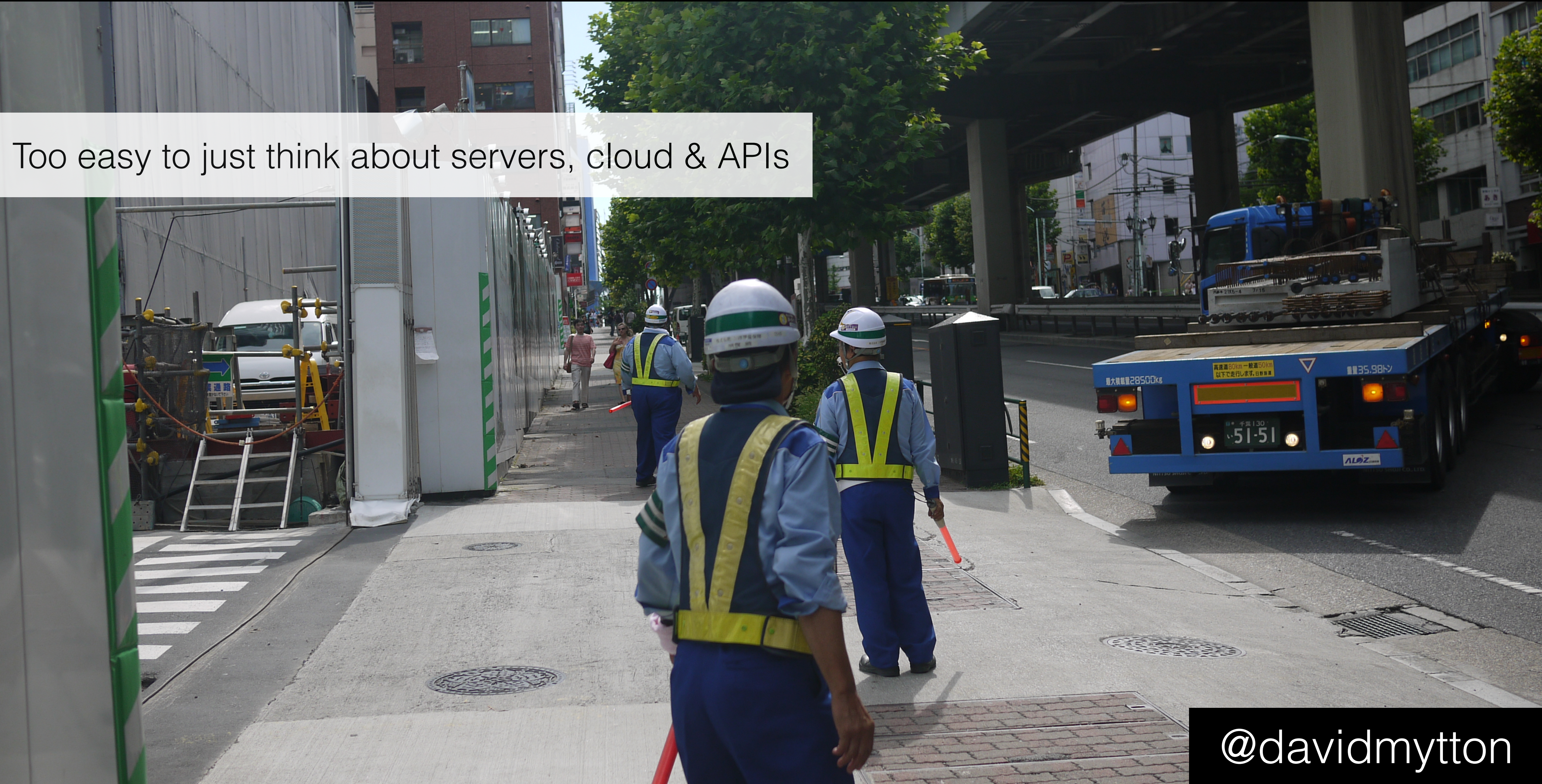
1. Humans build and fix systems



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Too easy to just think about servers, cloud & APIs



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Running operations necessarily involves humans



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Think about how humans are involved from the beginning

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1. Humans build and fix systems

How can the system be automated?



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How can the system be automated?

What alerts should involve humans?



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1. Humans build and fix systems

How can the system be automated?

What alerts should involve humans?

How does human involvement get reported?

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2. Humans get tired and stressed, they feel happy and sad



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Machines reliably execute tasks without getting tired

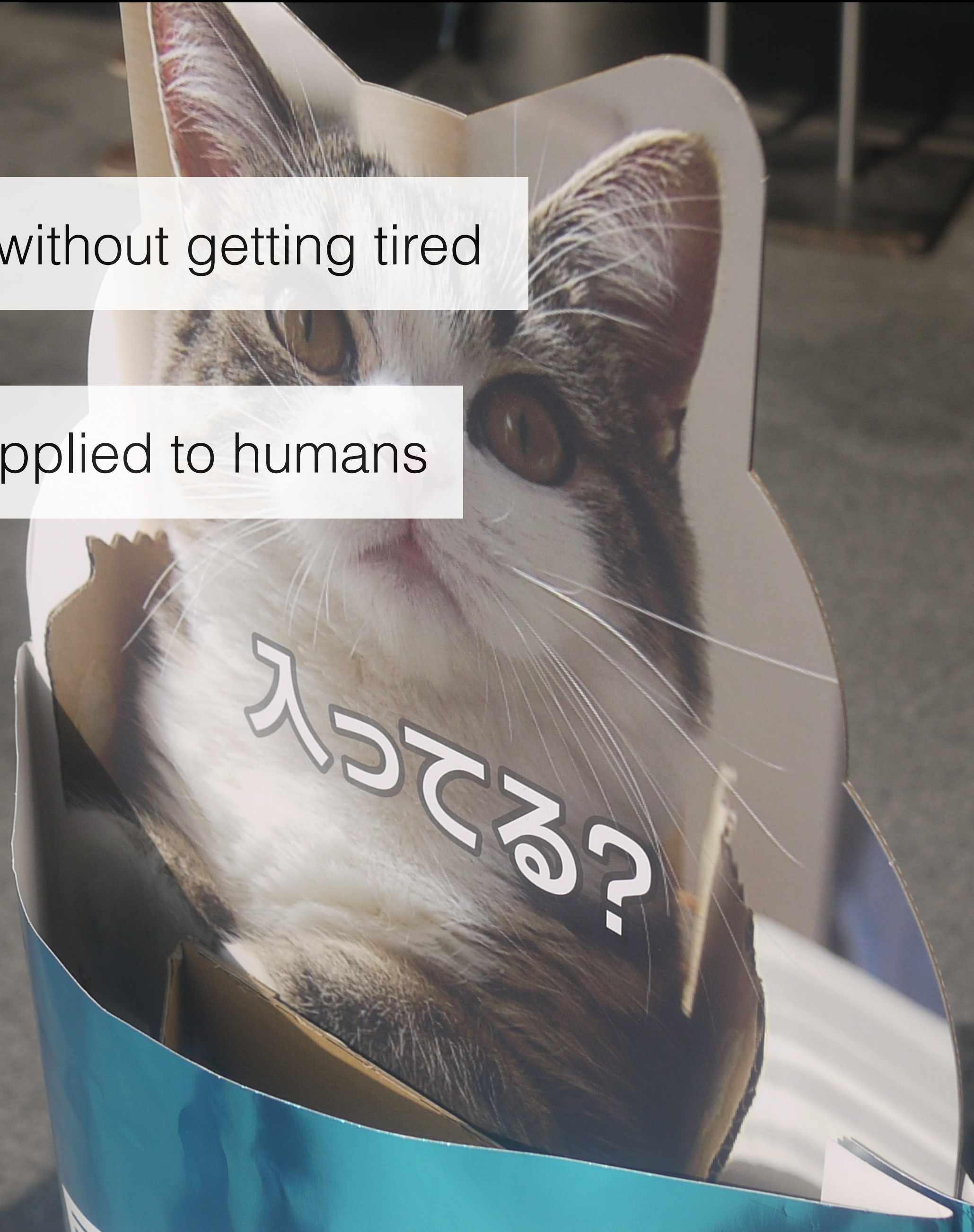


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Computers don't make mistakes - human error is a symptom not a cause

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Training & simulations

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3. Systems don't have feelings (yet), only SLAs



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SLAs are a standard way to define expectations



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SLAs are a standard way to define expectations

Use SLAs to determine if systems are operating normally



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4. Humans need to switch off and on again



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Computers can run constantly for a long time



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Humans need rest after 1.5 - 2 hours sustained work



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On-call roles: primary & secondary with different response SLAs

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On-call roles: primary & secondary with different response SLAs

On-call recovery day off applied automatically

5. Wellbeing of human operators impacts the wellbeing of systems



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Time off sounds very nice, but it has real business impact



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But if your humans are happier and well rested, they make better decisions

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System failures cause loss of revenue and damage to reputation

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6. Alert fatigue == Human fatigue



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Too many alerts = alert fatigue



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UK Health & Safety Executive: Rule based mistake



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Alerts must be actionable



7. Automate. Escalate to a human as a last resort



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Alerts should only reach a human when the system can't fix itself



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Should be part of original system design - hard to implement after the fact

8. Document everything. Train everyone



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Checklists & runbooks are crucial



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Training and simulations will reveal flaws



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Up to date documentation, easily searchable



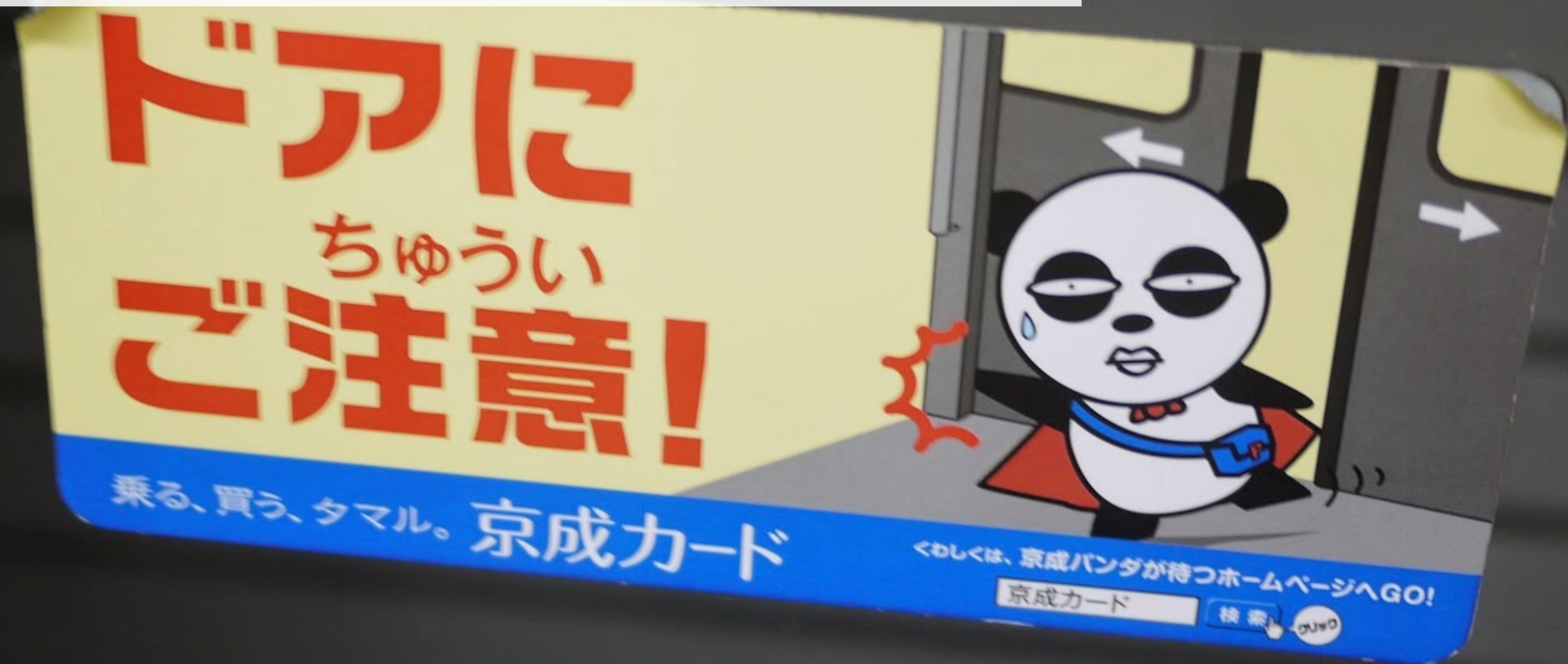
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9. Kill the shame game



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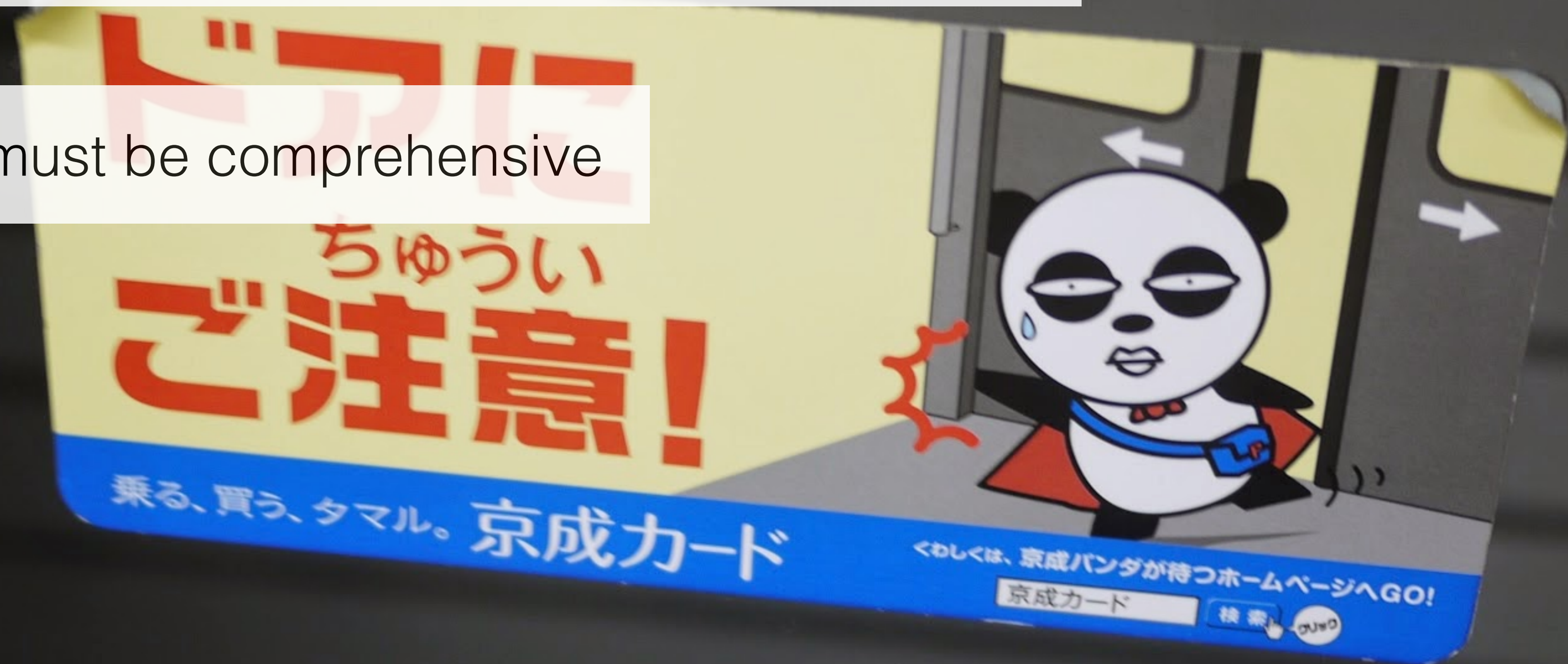
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Nobody is perfect. Everyone breaks production at least once!

Root cause analysis must be comprehensive

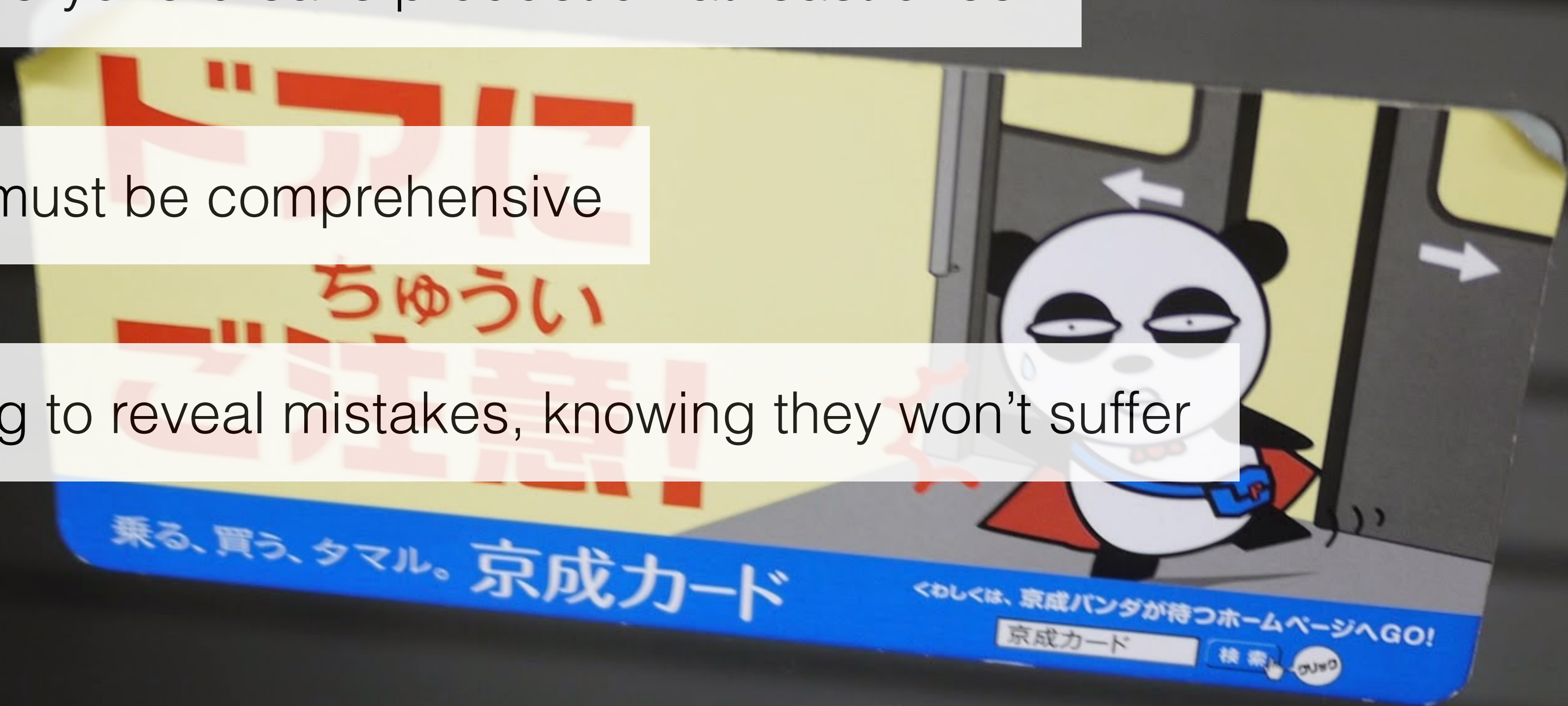


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People must be willing to reveal mistakes, knowing they won't suffer



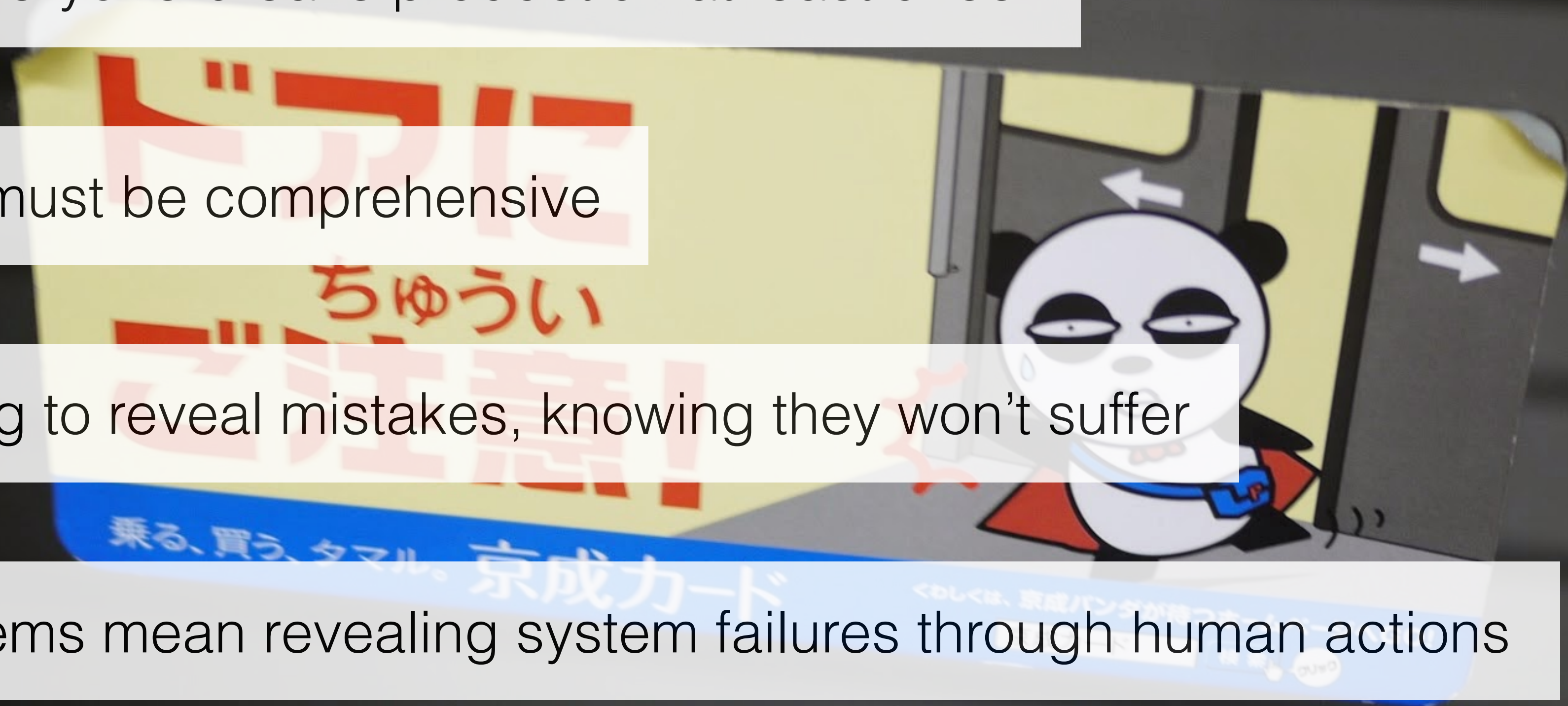
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Nobody is perfect. Everyone breaks production at least once!

Root cause analysis must be comprehensive

People must be willing to reveal mistakes, knowing they won't suffer

Blameless post-mortems mean revealing system failures through human actions



10. Human issues are system issues

Ltd.Exp.: Kita-senju
16:12dep.
Date: 14 May(Today)
Train: Ltd.Exp. Kinu125
Number: Adult 1 / Child 0
Total 820yen

⇒ Shin-kanuma
Ordinary seat
Window seat

Amount Purchased

¥820

Amount Inserted

¥2872

Balance on card

¥2052

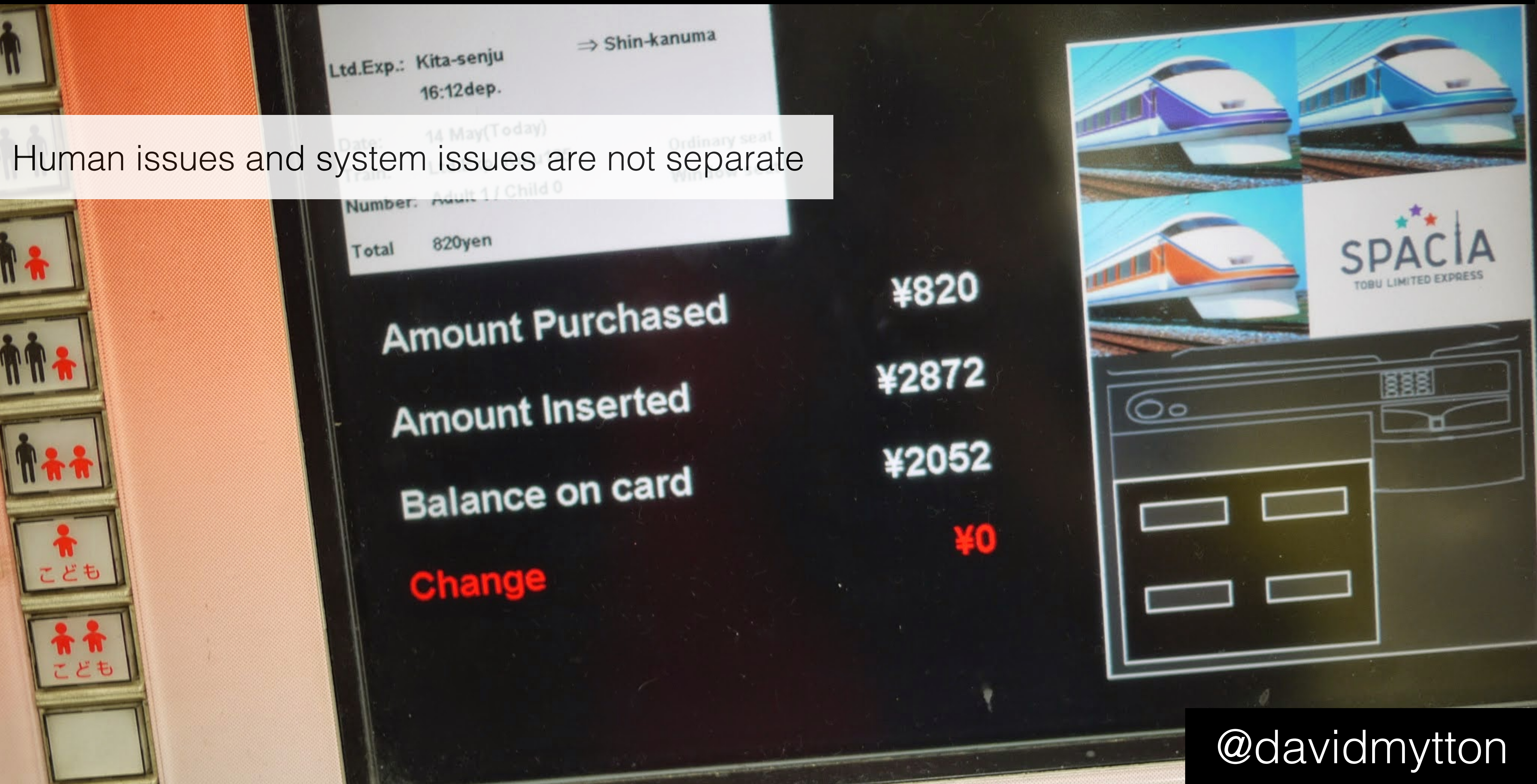
Change

¥0



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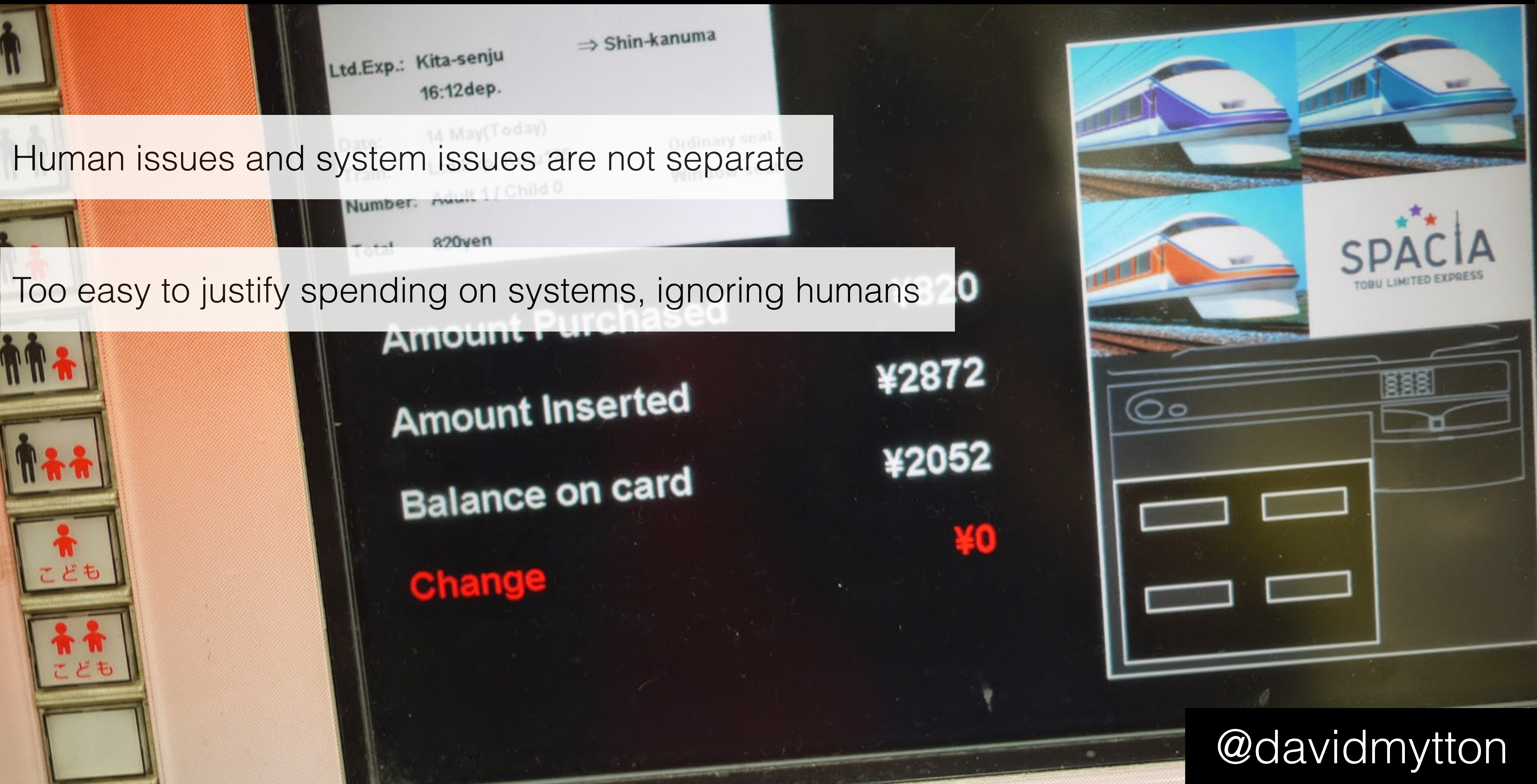
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Too easy to justify spending on systems, ignoring humans

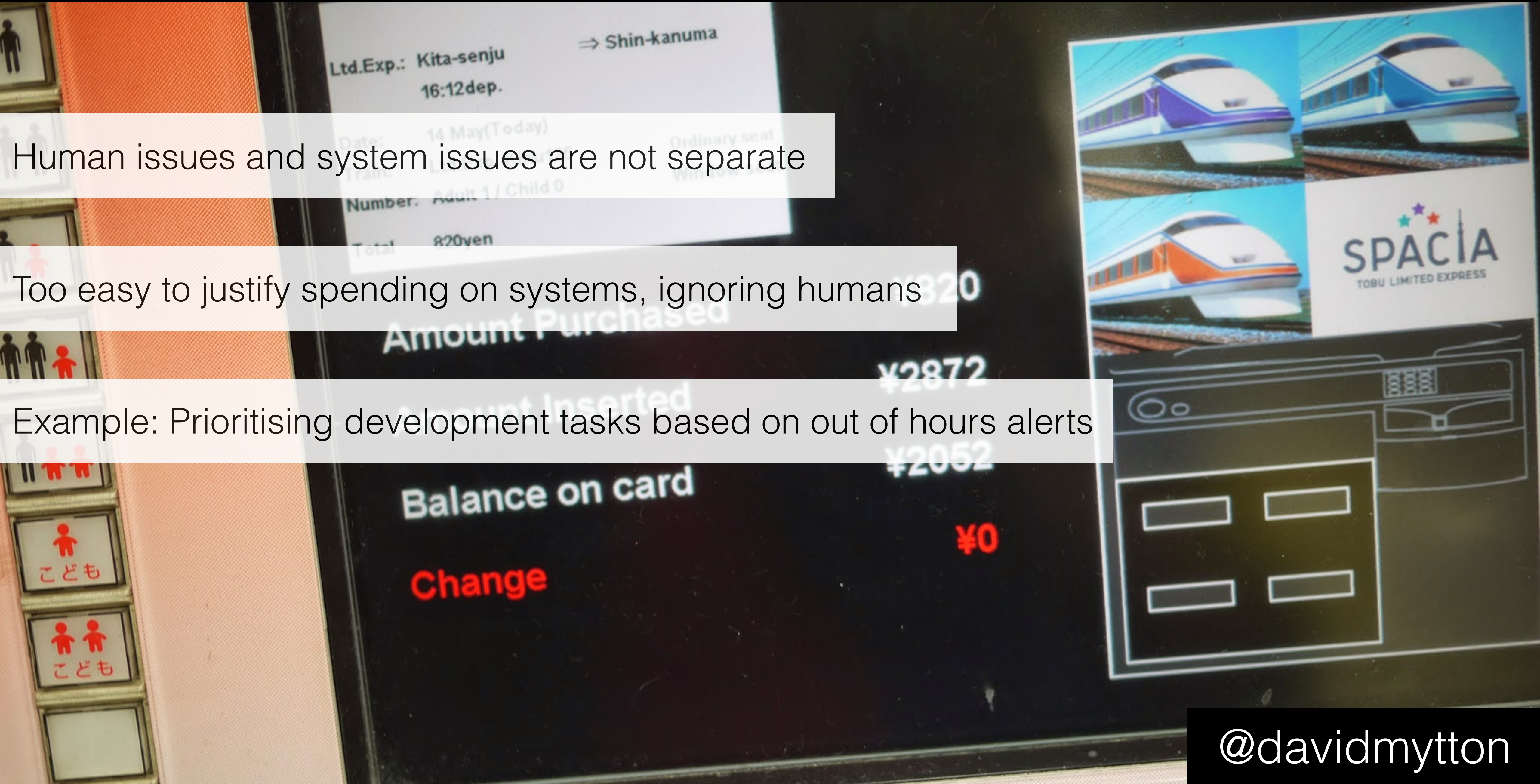


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Too easy to justify spending on systems, ignoring humans

Example: Prioritising development tasks based on out of hours alerts



11. Human health impacts business health



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Human health is directly related to business health



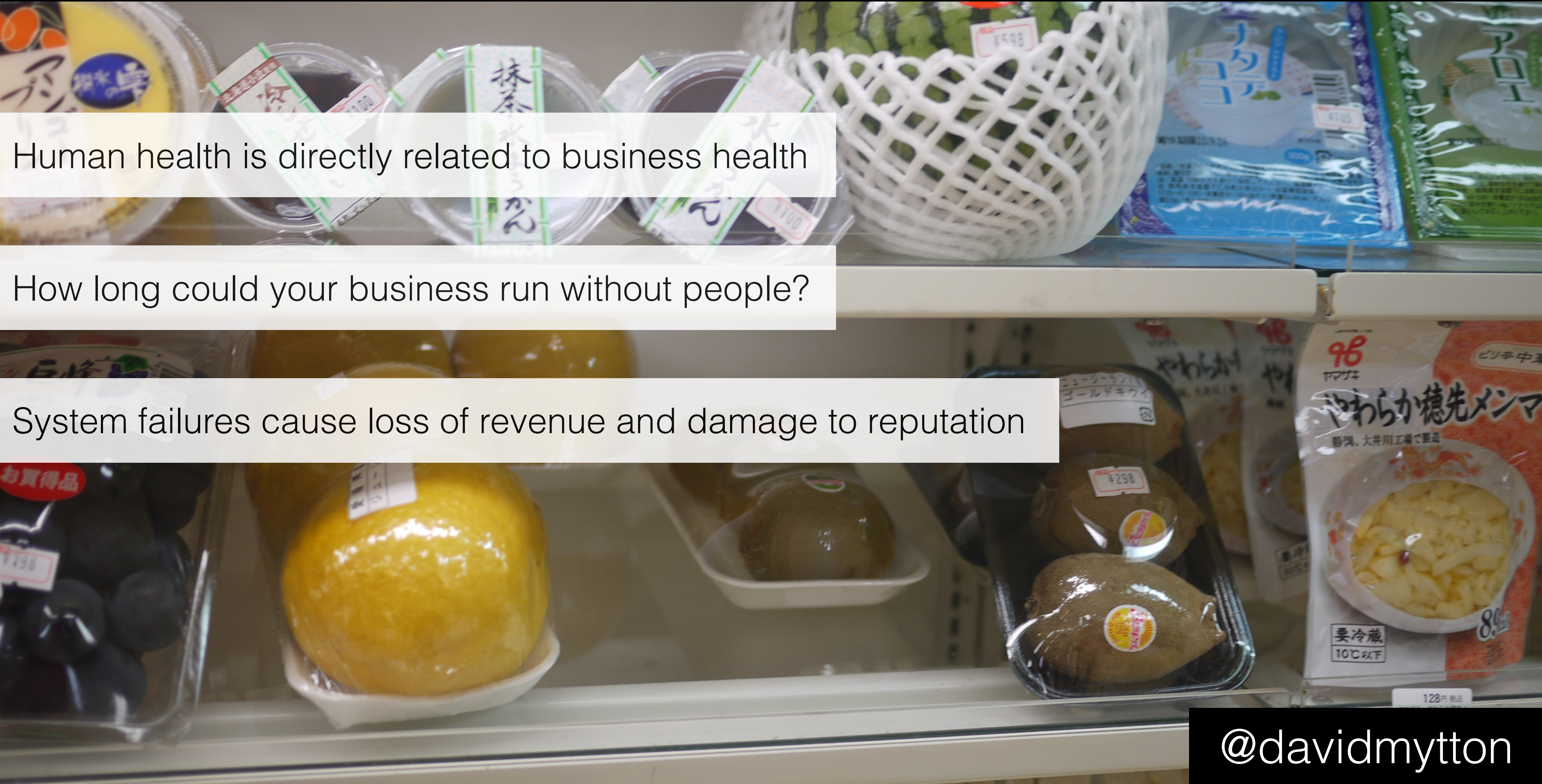
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Looking after your team is just good business

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Humans & systems are the same in terms of level of impact



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But why do we run businesses?

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But why do we run businesses?

... to provide a service to others...

... to earn a living...

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Humans & systems are the same in terms of level of impact

But why do we run businesses?

... to provide a service to others...

... to earn a living...

... to enjoy a lifestyle...

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Improving life for your team is easy to justify - hiring & retaining



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Poor working environment, being woken up, blame...

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...increasing stress, health impacts, illness...

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Many organisations unintentionally impact health

This is an unacceptable cost of business success!

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HumanOps

www.humanops.com

ありがとうございます

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