

Enterprise Architecture and Industry Disruption

Preparing and planning for possible downstream technology change.

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**Enterprise Architecture
Specialist Group**

5th Annual Conference
Thursday 29th September 2022
London, UK

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Question

Enterprise Architects adopt crystal gazing & other forecast techniques to help paint a 'vivid' picture of a future model for their organization which drives both the demand and management for technology systems.

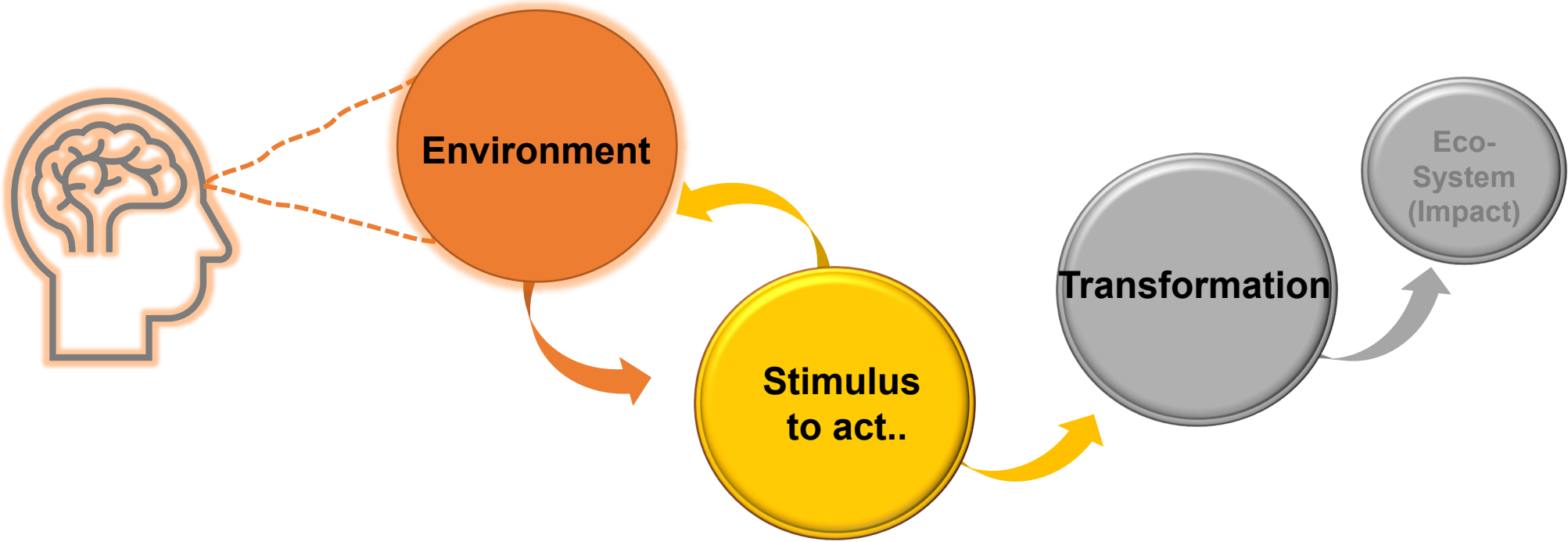
However, if a sudden storm or 'disruption' occurs, these plans become obsolete quick and the ecosystem can face unplanned change.



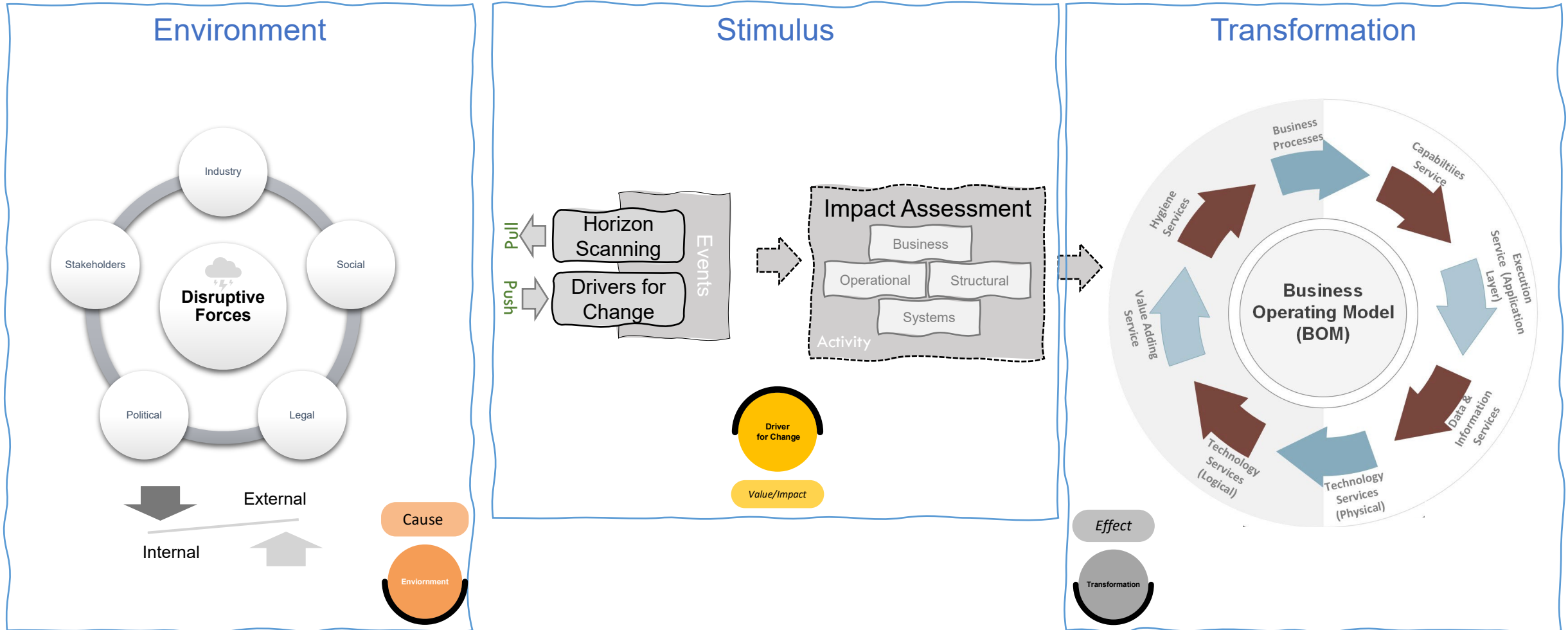
How can we, as Enterprise Architects, address disruption for a sudden operational shock or one on the horizon?

sudden operational shock or one on the horizon?

Technology Capability Alignment...



Pattern Expanded

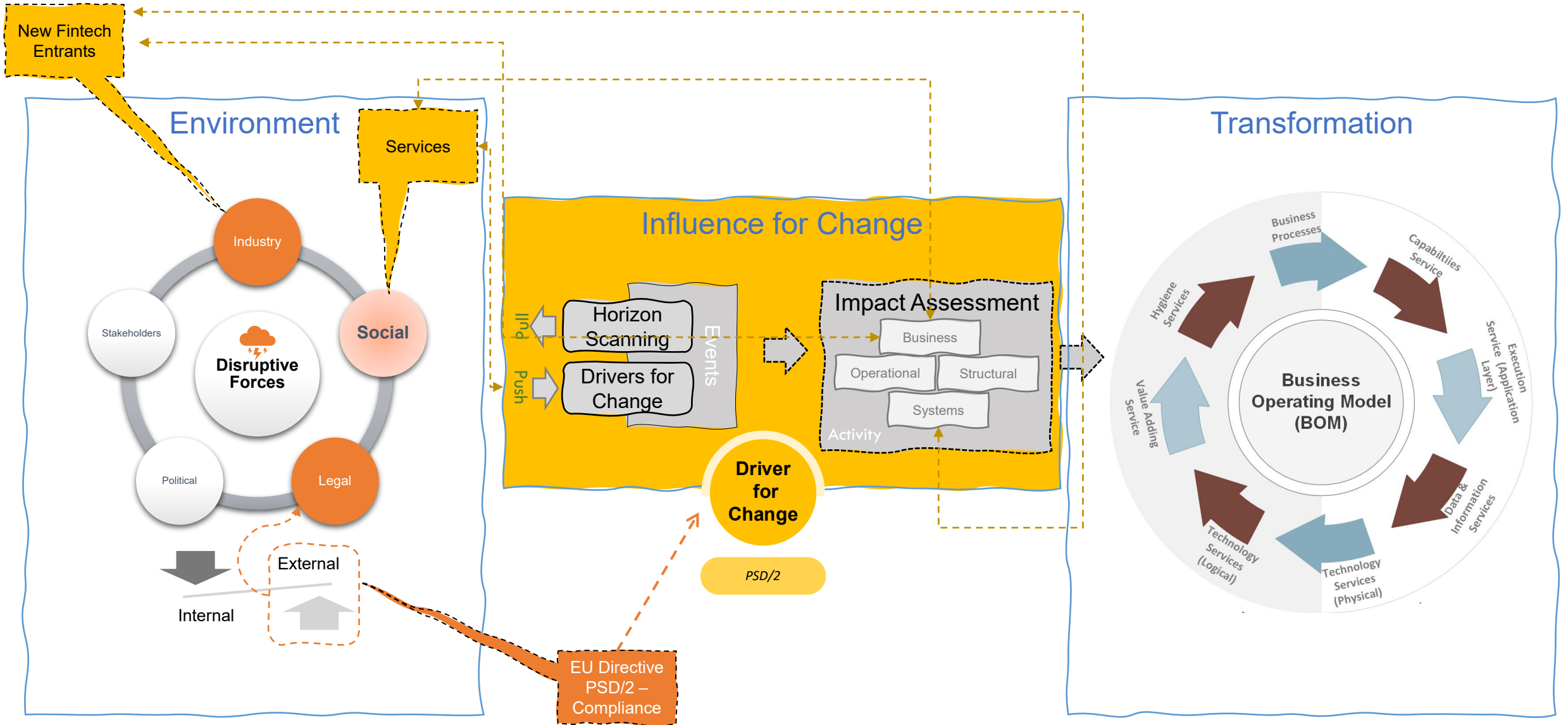


Disruptive Forces

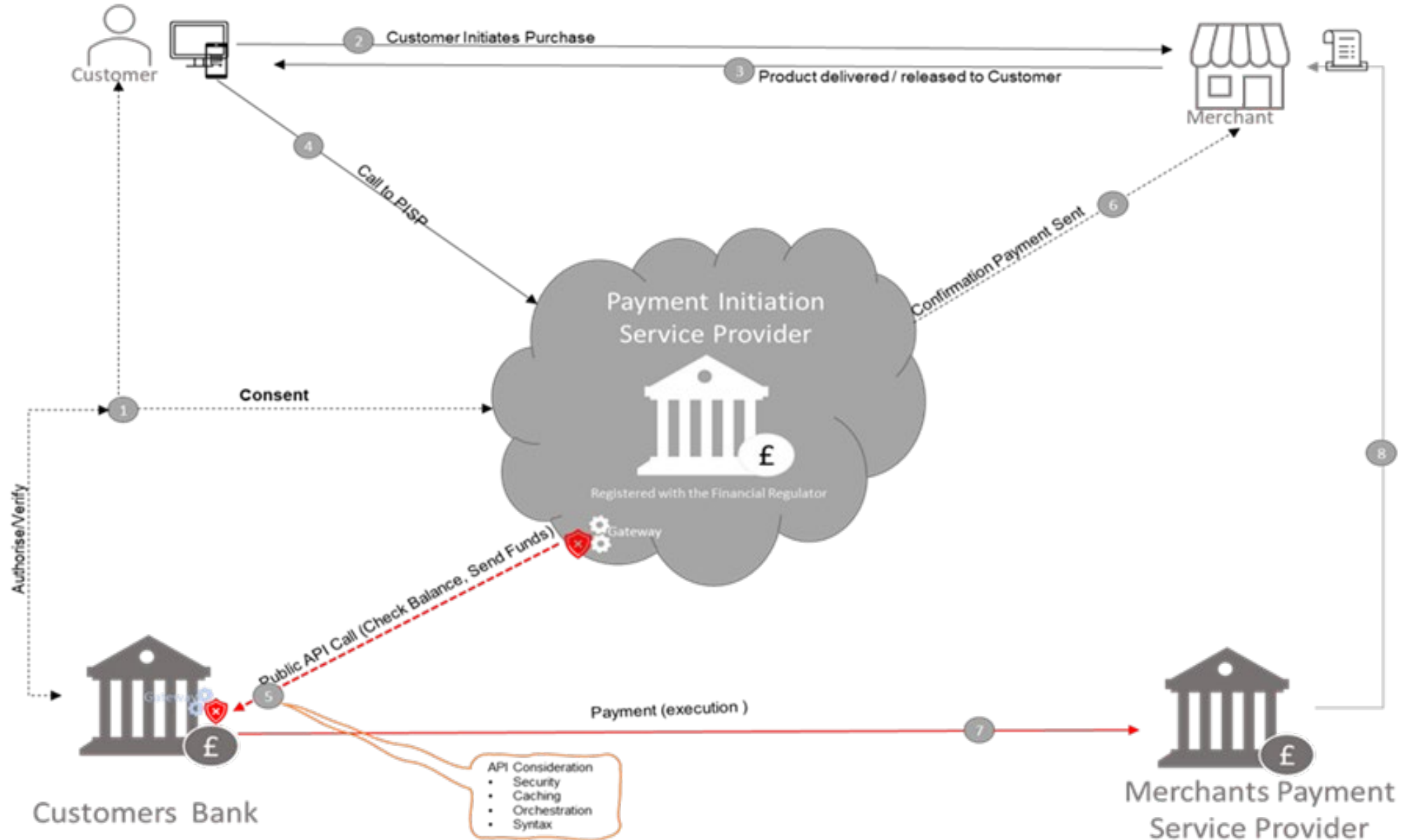


- The Covid Pandemic
 - Shift to 'Keeping the lights on',
 - Efficiency & Cost drivers (Squeezing Assets)
 - Introduction of new Channels for service provision
 - etc
- Regulatory
 - European Directive (EU) 2015/2366
 - The Payment Services Directive Two (**PSD2**) was a piece of legislation designed to force providers of payment services to **improve customer authentication** processes and to increase **third-party involvement**.
 - Strong Customer Authentication (SCA) was mandated under PSD2 and required for all European e-commerce transactions
 - PSD-2 is having major impact on established companies operating in the financial sector, with the intent to further secure payments and drive the unification of transactions via elevation of **Application Program Interfaces** (APIs) supported by the '**Open Banking**' initiative where there is a focus on securely exchanging data by *connecting* banks, third parties and technical providers under one interconnected technical ecosystem.
 - At the heart of the new model is the important concept of '**trust and consent**' which must be *given, obtained, revoked, validated and time stamped* for the new models to work.
 - Note : In the UK PSD2 is largely implemented through the Payment Services Regulations 2017, which was published by HM Treasury in the UK.

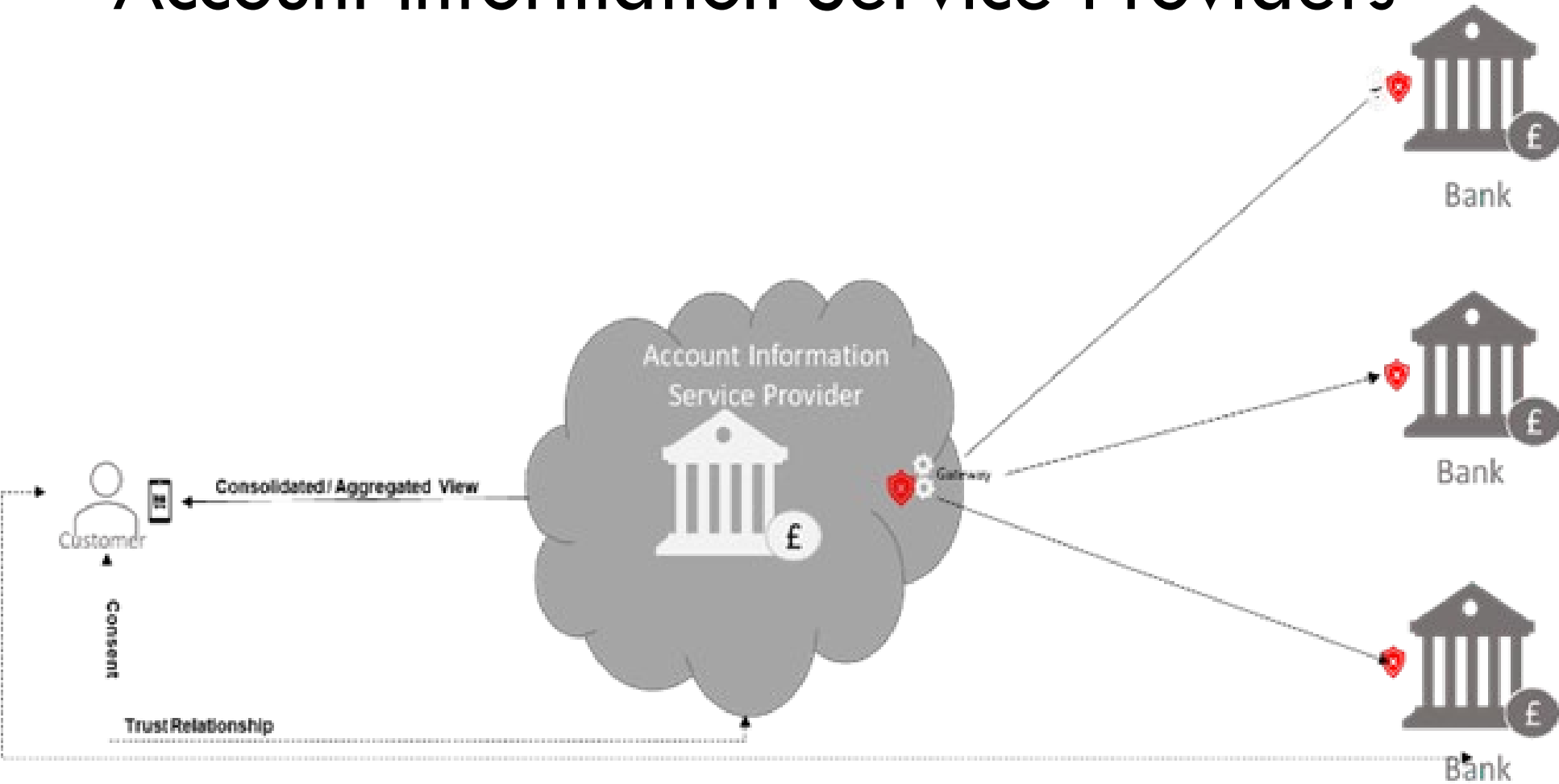
Disruptive elements



Payment Service Providers



Account Information Service Providers



Eco System Impact



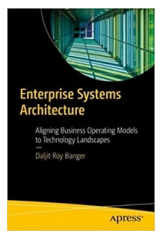
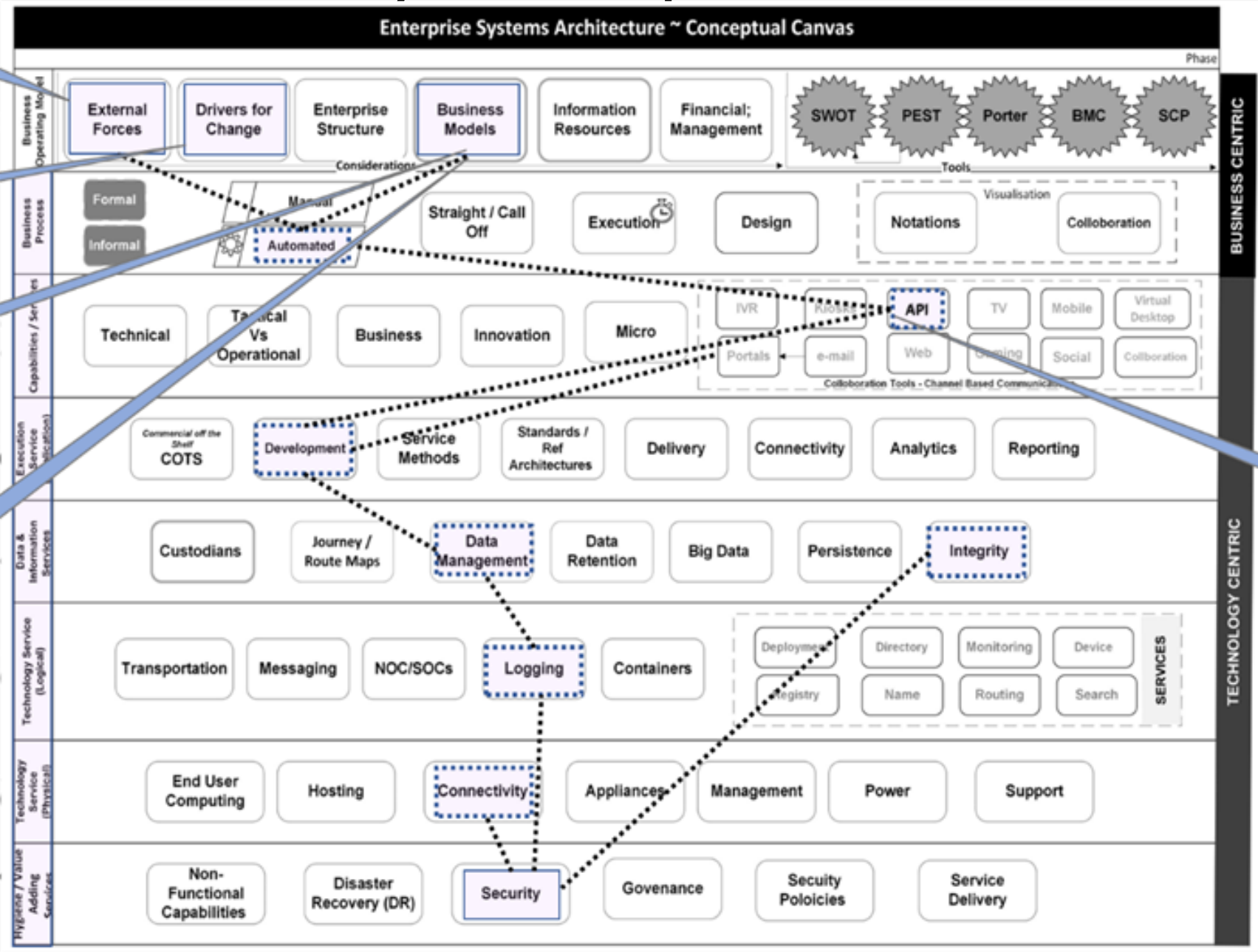
PSD2 - Regulation for electronic payment services.

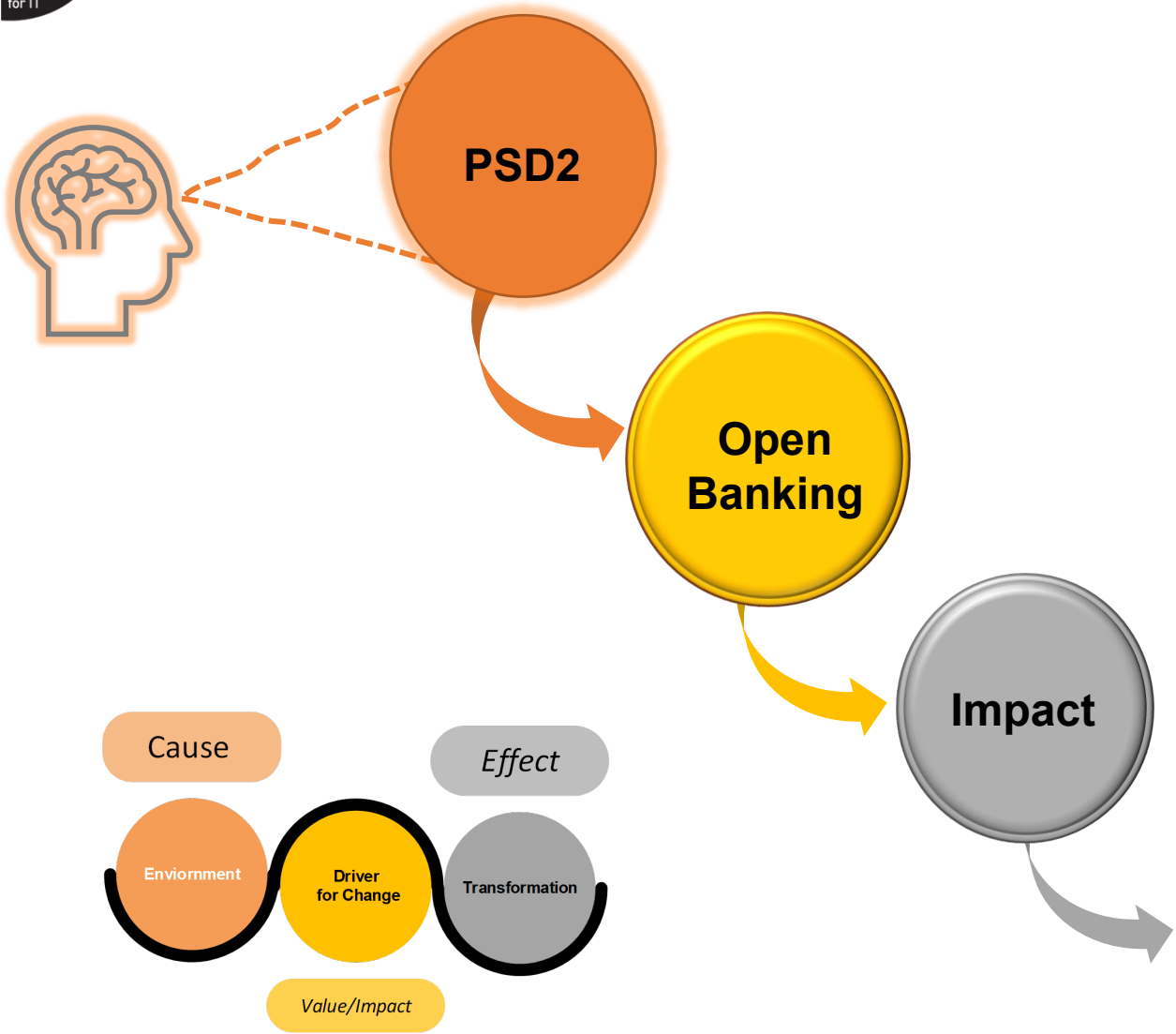
Regulators

Opportunities

New Entrants

Standard





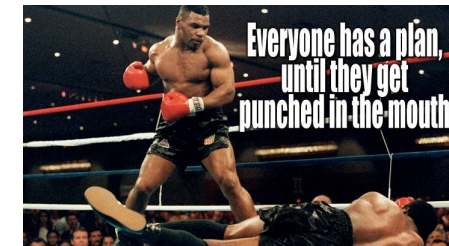
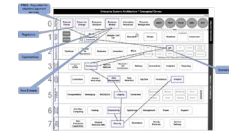
Layer	Impact and potential areas for initial architectural assessment
0	<ul style="list-style-type: none"> The External Force is the PSD-2 EU Regulation Driver for Change is the Regulation and the demands of the regulator The Business Model provides new opportunities but also the threat of new <i>tech savvy</i> entrants to the market
1	<ul style="list-style-type: none"> A major impact would be the automation of existing or new business processes to accommodate the workflow around the use of 'Open APIs'
2	<ul style="list-style-type: none"> The obvious impact is seen from or on the API ecosystem and drive for standards The impact on the Channels e.g., websites / payment methods services Communication channels such as email for notifications may also need to be factored
3	<ul style="list-style-type: none"> Development Effort for the creation or extension of existing systems for the support of the API ecosystem
4	<ul style="list-style-type: none"> Data Management is fundamental with regards to both processing and retention of all transactional data. Integrity is an important variable for all transactions during the data life cycle
5	<ul style="list-style-type: none"> Logging will not only apply to transactional audit but also session info (source/destination/duration/device/info etc)
6	<ul style="list-style-type: none"> Connectivity between end points will require attention and possible whitelisting between sites may need consideration
7	<p>As this is a major operating model transformation then it would be prudent to consider all elements at this layer with a emphasis on Security</p>

Question - Tips

How can we, as Enterprise Architects, address disruption for a sudden operational shock or one on the horizon?

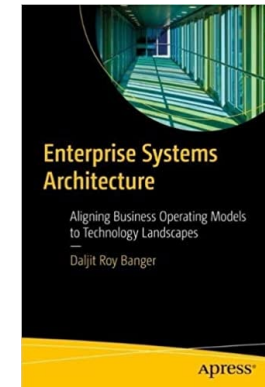
for a sudden operational shock or one on the horizon?

- Constant horizon scanning (Business / Technical) Appreciate the elasticity of your capabilities and services.
- Understand your stack – map impact variables to define potential work package.
- **Be Prepared** for the next shock...
 - learn from recent events (*Pandemics, Wars, Political Madness*)



Useful URLs

- PSD/2 EU Regulation - [Payment services \(PSD 2\) - Directive \(EU\) 2015/2366 | European Commission \(europa.eu\)](#)
- UK FCA Registrar – Approved Account Information & Payments Initiation Service Providers - [Account Information & Payment Initiation Service Providers \(fca.org.uk\)](#)
- PSD/2 PDF English Version - [Directive \(EU\) 2015/ of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation \(EU\) No 1093/2010, and repealing Directive 2007/64/EC \(europa.eu\)](#)
- UK Payment Services Regulations 2017 - [The Payment Services Regulations 2017 \(legislation.gov.uk\)](#)
- Enterprise Systems Architecture: Aligning Business Operating Models to Technology Landscapes (Paperback) - [Enterprise Systems Architecture: Aligning Business Operating Models to Technology Landscapes: Amazon.co.uk: Banger, Daljit Roy: 9781484286456: Books](#)



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Questions....

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