Situational Awareness

@swardley

https://leadingedgeforum.com/

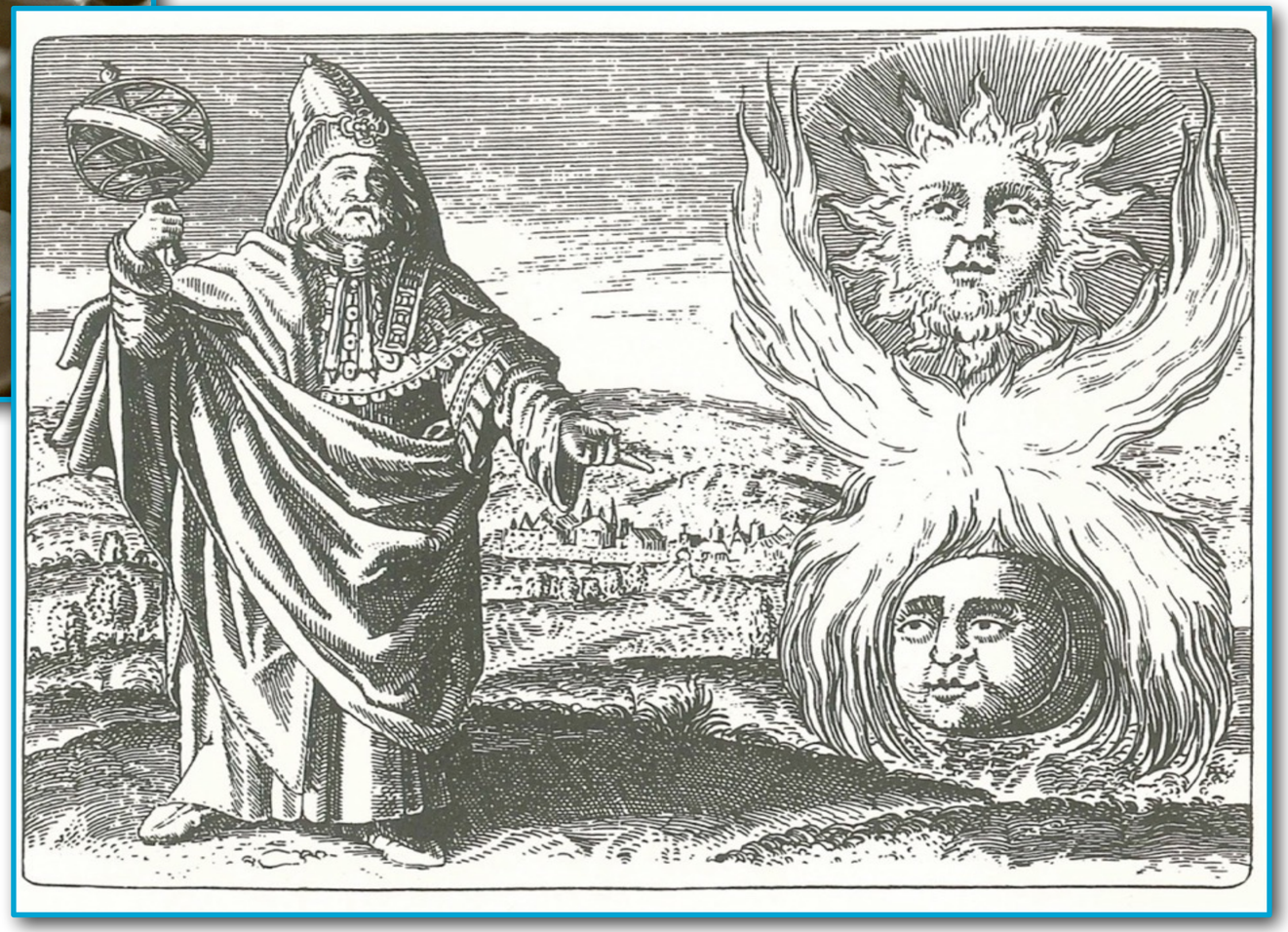
LEADING EDGE FORUM

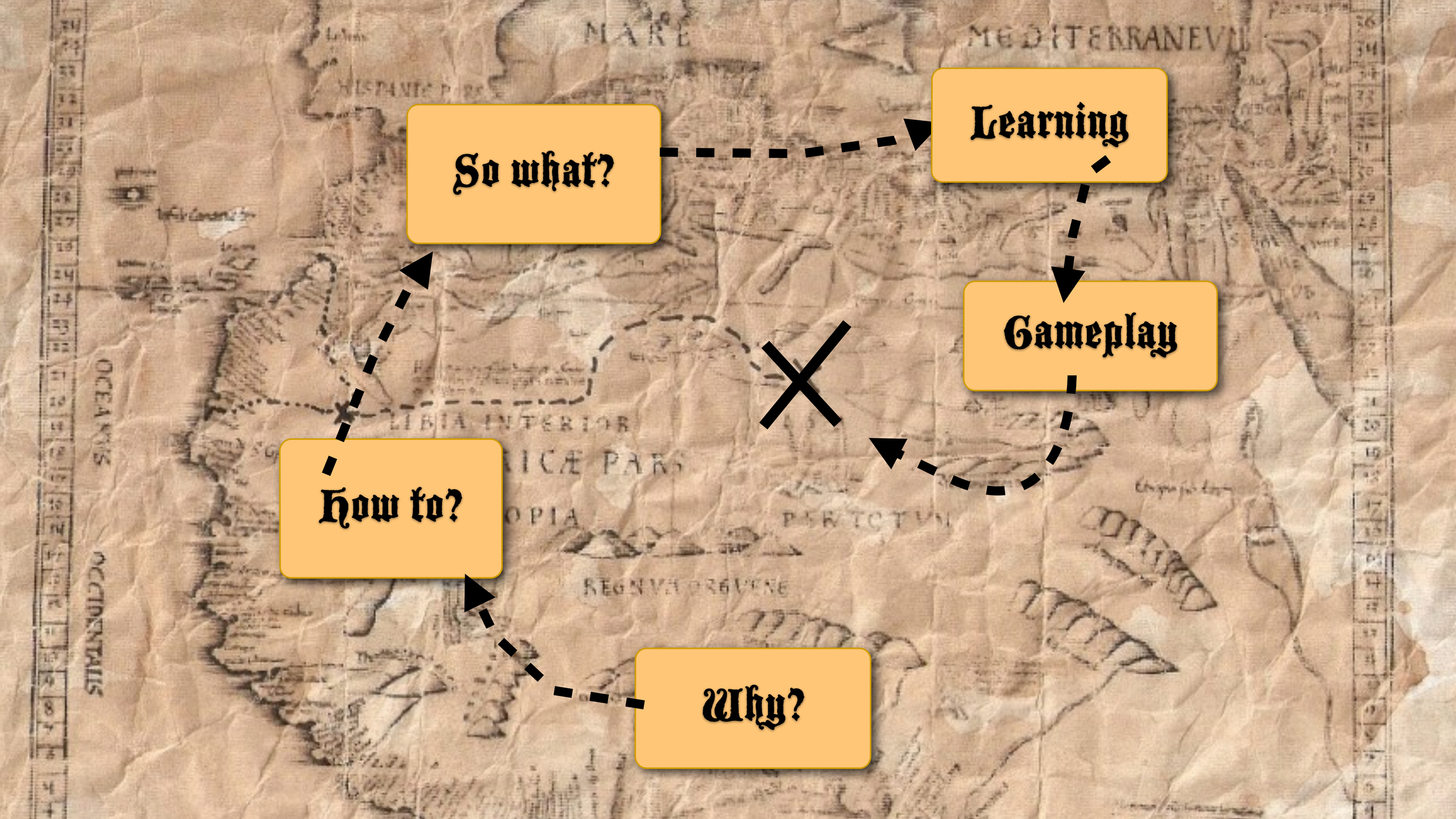
May, 2015 | Simon Wardley

Question

Will **Big Data** improve your company **strategy**?

Versus

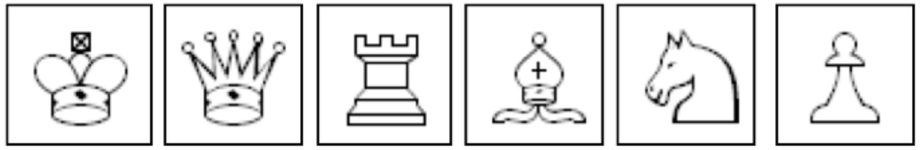



So what?
Learning
Gameplay
How to?
Why?

Two Examples

Chess World
Thermopylae

White



Pawn (w), Pawn (b), Pawn (w), Queen (b), Pawn (w), Queen (b) ...

Black

Pawn (w), Pawn (b), Pawn (w), Queen (b), Pawn (w), Queen (b) ...

Pawn(w), Pawn(b), Pawn(w), Queen(b), Pawn(w), Queen(b), Bishop(w), Knight(b), Queen(w), Pawn(b), Rook(w), Bishop(b), Knight(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Queen(w), King(b), Pawn(w), Bishop(b), Rook(w), Pawn (b), Queen(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Queen(w), King(b), **Knight**(w), Pawn(b), **Rook**(w), Bishop(b), **Pawn**(w), Pawn(b), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Pawn(w), Pawn(b), Queen(w), King(b), Queen(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Rook(b),Pawn(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Knight(b),King(w), Knight(b), Pawn(w), Queen(b), Knight(w), Pawn(b), Rook(w), Rook(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Rook(w), Knight(b), Pawn(w), King(b), Pawn(w), Bishop(b), Rook(w), Pawn (b), Queen(w), Knight(b), Pawn(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Queen(w), King(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Pawn(w), Pawn(b), Queen(w), King(b), Queen(w), Pawn(b), Knight(w), Knight(b), Knight(w), Pawn(b), Rook(w), Rook(b),Pawn(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Knight(w), Pawn(b), Rook(w), Rook(b),Pawn(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Knight(b), King(w), Knight(b), Pawn(w), Queen(b), Knight(w), Pawn(b), Rook(w), Rook(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Queen(w) ... **WINS**

"*sequence of success*"

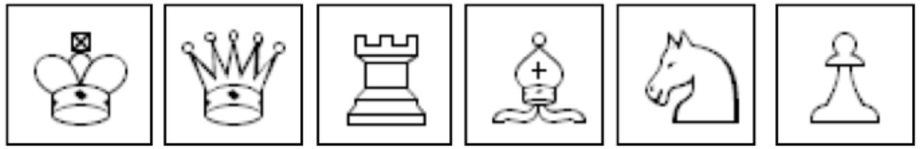
Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Pawn(w), Pawn(b), Queen(w), King(b), Queen(w), Pawn(b), Knight(w), Knight(b), Knight(w), Pawn(b), Rook(w), Rook(b),Pawn(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Knight(w), Pawn(b), Rook(w), Rook(b),Pawn(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Knight(b), King(w), Knight(b), Pawn(w), Queen(b), Knight(w), Pawn(b), Rook(w), Rook(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Queen(w) , Pawn(w), Pawn(b), Pawn(w), Queen(b), Pawn(w), Queen(b), Bishop(w), Knight(b), Queen(w), Pawn(b), Rook(w), Bishop(b), Knight(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Queen(w), King(b), Pawn(w), Bishop(b), Rook(w), Pawn (b), Queen(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Queen(w), King(b), **Knight**(w), Knight(b), **Rook**(w), Queen(b), **Pawn**(w), Pawn(b), Pawn(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), King(b), Queen(w), Pawn(b), Knight(w), Knight(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Pawn(w), Pawn(b), Queen(w), King(b), Queen(w), Pawn(b), Knight(w), Knight(b), Knight(w), Pawn(b), Rook(w), Rook(b),Pawn(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Knight(b),King(w), Knight(b), Pawn(w), Queen(b), Knight(w), Pawn(b), Rook(w), Rook(b), Rook(w), Knight(b), Pawn(w), Pawn(b), Queen(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Knight(b), Pawn(w), King(b), Pawn(w), Bishop(b), Rook(w), Pawn (b), Queen(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Queen(w), Knight(b), Pawn(w), Knight(b), Pawn(w), Pawn(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Queen(w), King(b), Knight(w), Pawn(b), Rook(w), Bishop(b), Pawn(w), Pawn(b), Pawn(w), Knight(b), Queen(w), ... **WINS**

Backward Causality

If player A does B and is successful then …

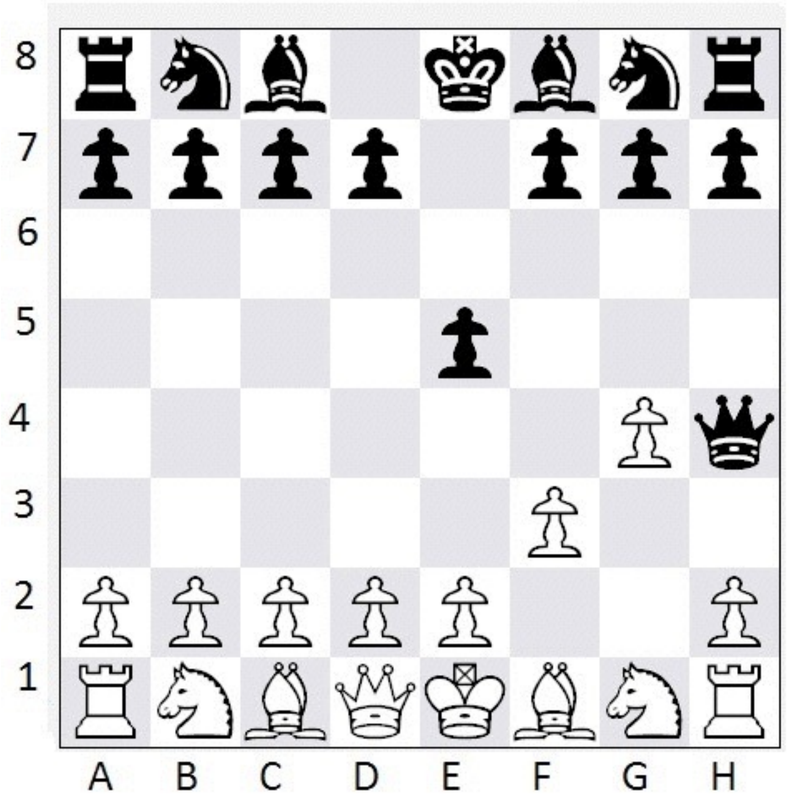
If I do B, I also will be successful!

White



Pawn (w), Pawn (b), Pawn (w),
Queen (b) ... LOSE.

Black

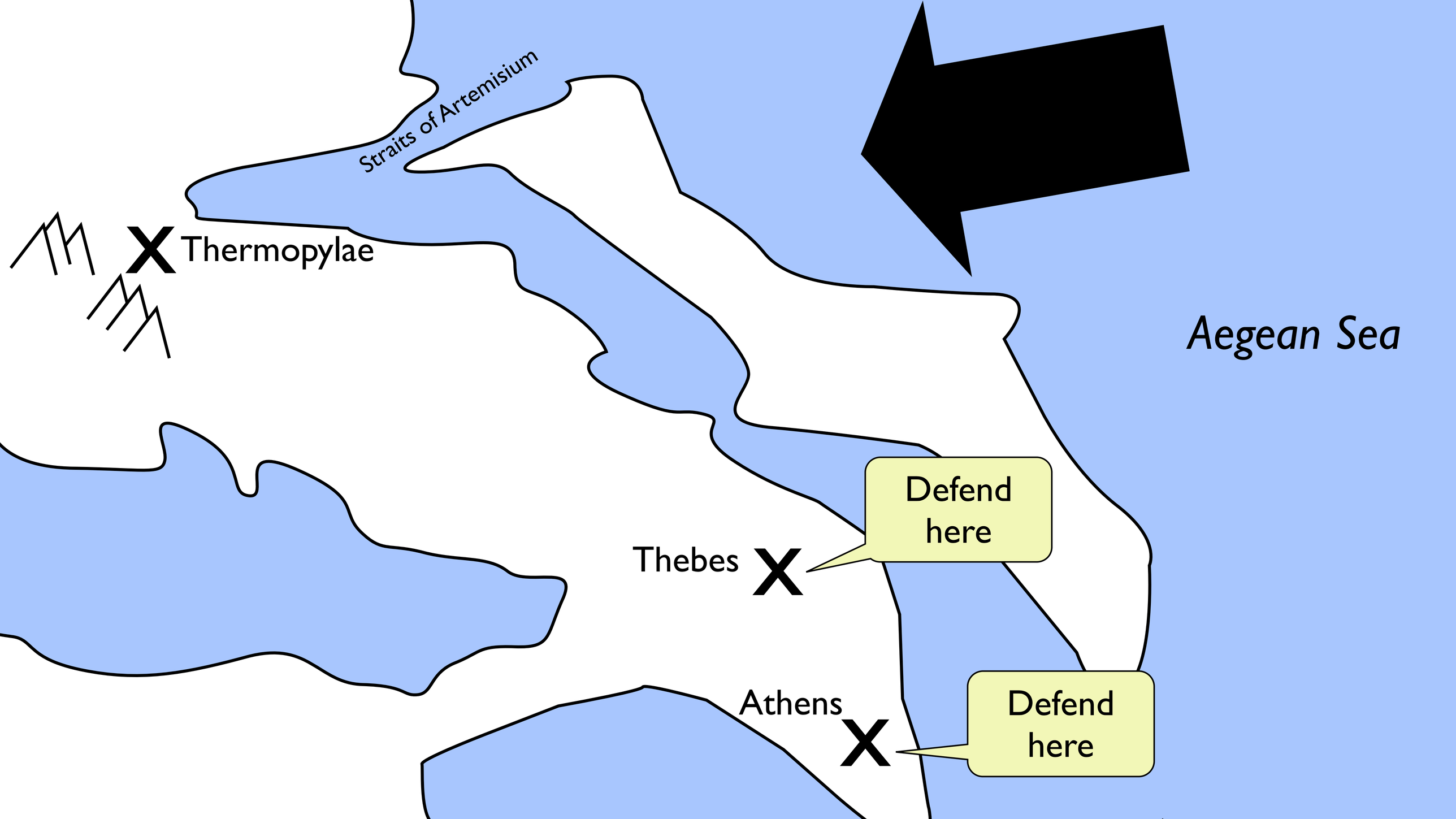


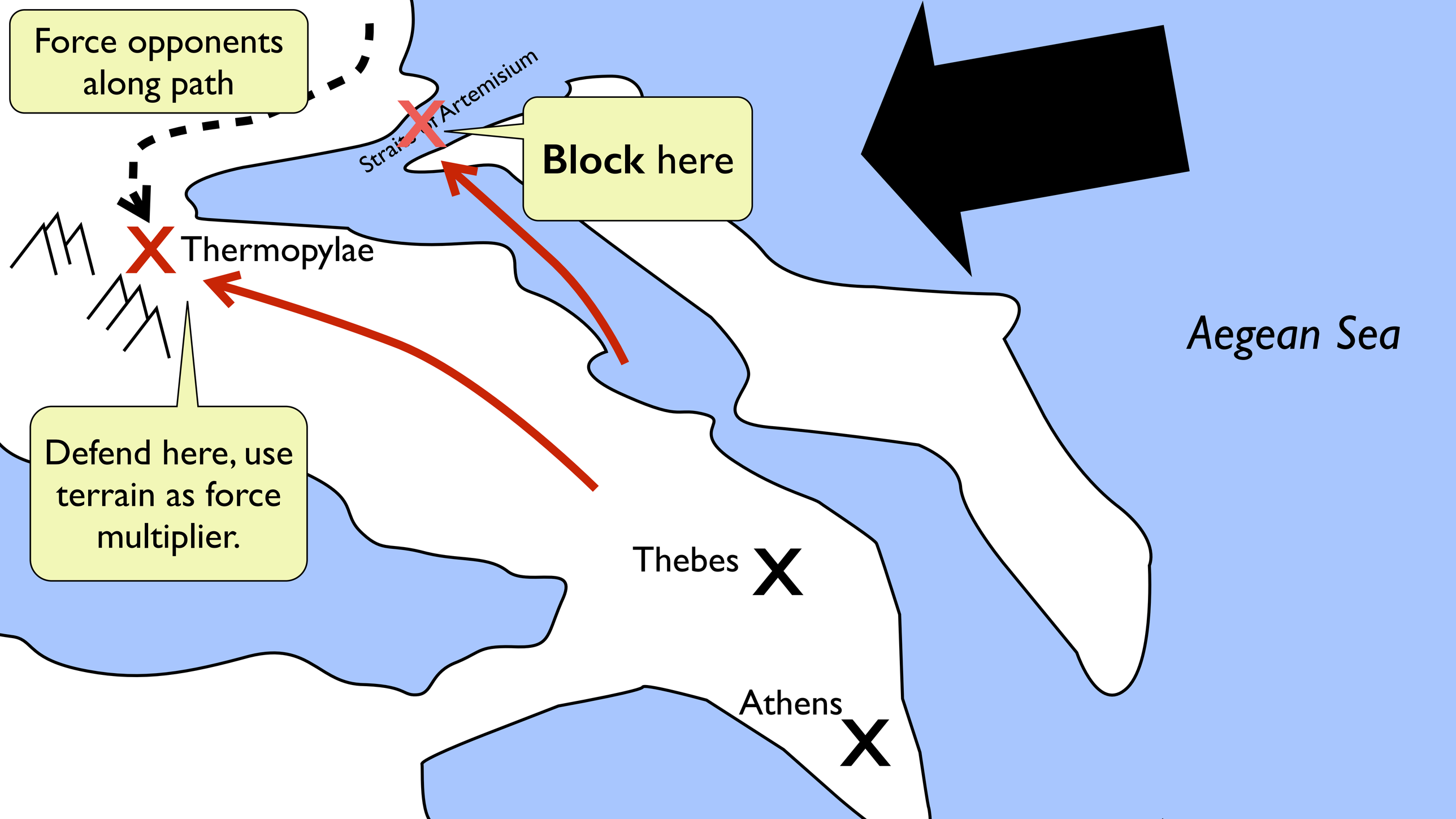
f3, e5, g4, Qh4 ...WIN.

Themistocles

524 - 429BC

Politician & General


Straits of Artemisium
Thermopylae
Aegean Sea
Thebes
Defend here
Athens
Defend here


Force opponents along path
Artemisium
Block here
Thermopylae
Defend here, use terrain as force multiplier.
Aegean Sea
Thebes
Athens

Strengths

A well trained Spartan army

A high level of motivation not to become a Persian slave

Weaknesses

The Ephors might stop the Spartans turning up

A lot of Persians ARE turning up

Opportunities

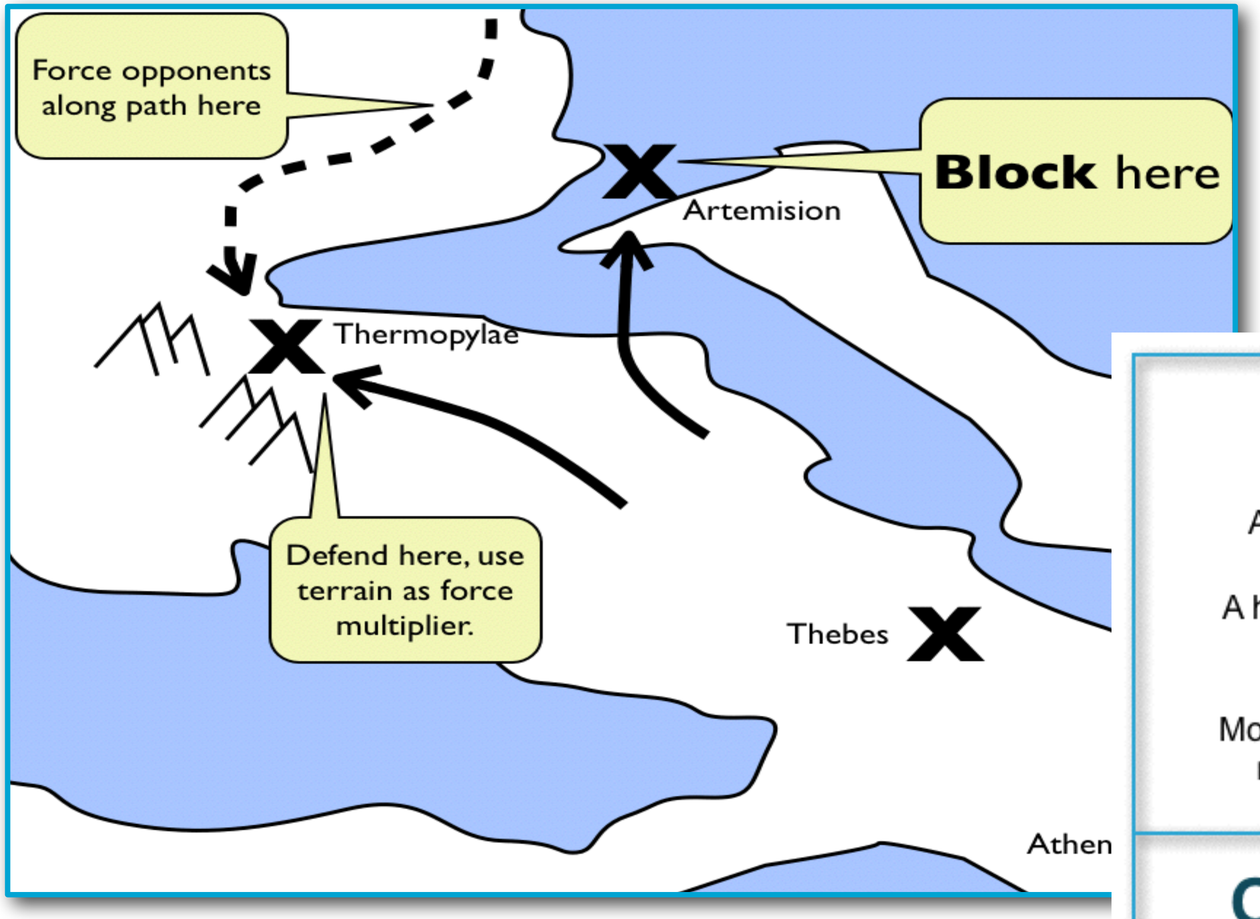
Get rid of the Persians

Get rid of the Spartans

Threats

Persians get rid of us

The Oracle says a really dodgy film might be produced over 2,000 years later



Versus

Strengths

A well trained Spartan army

A high level of motivation not to become a Persian slave

Most of the Persian army are mercenaries and slaves

Weaknesses

The rest of the Greeks aren't well trained

The Ephors might stop the Spartans turning up

A truck load of Persians ARE turning up

Opportunities

Get rid of the Persians

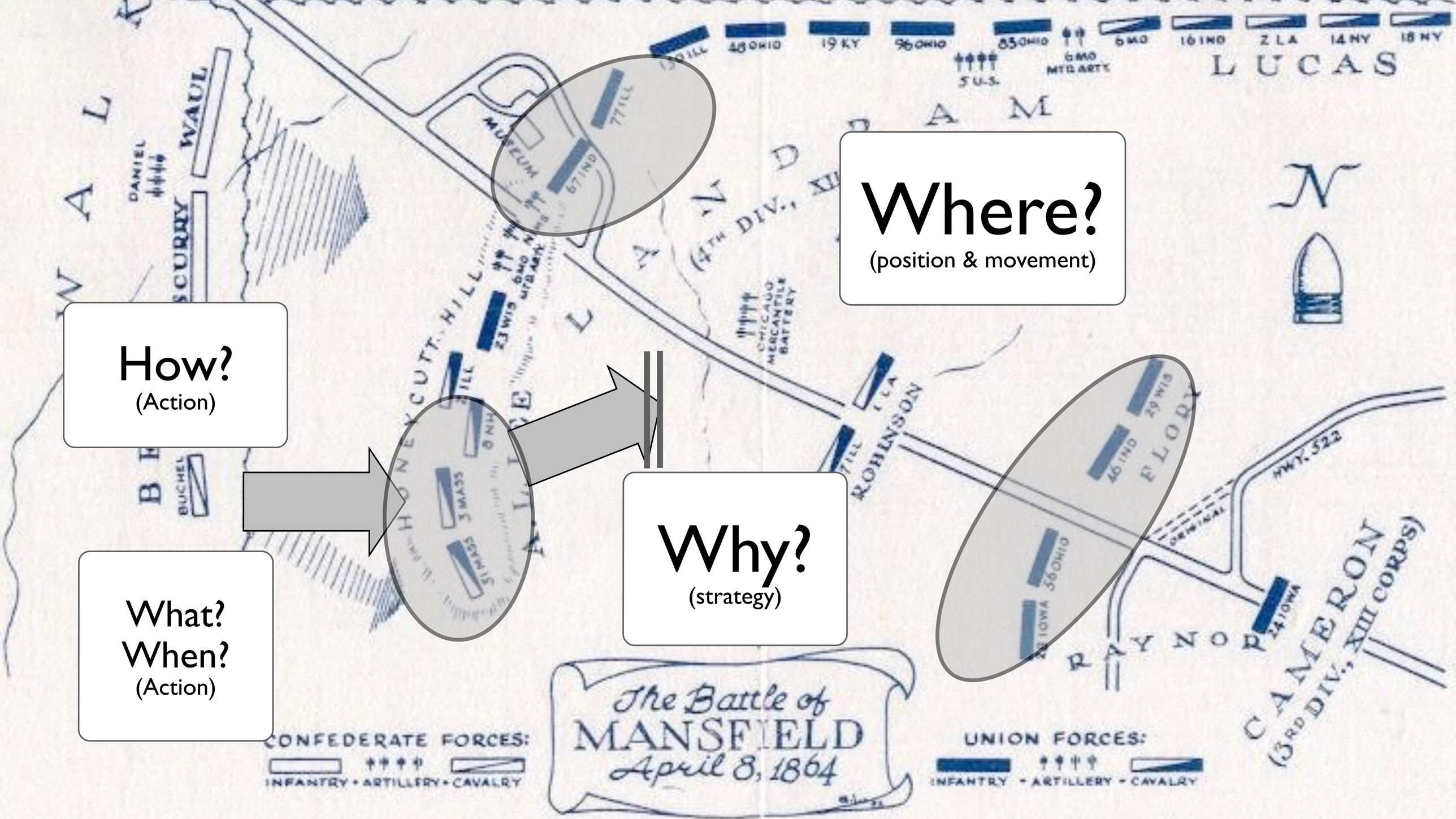
Get rid of the Spartans

Become a Legend

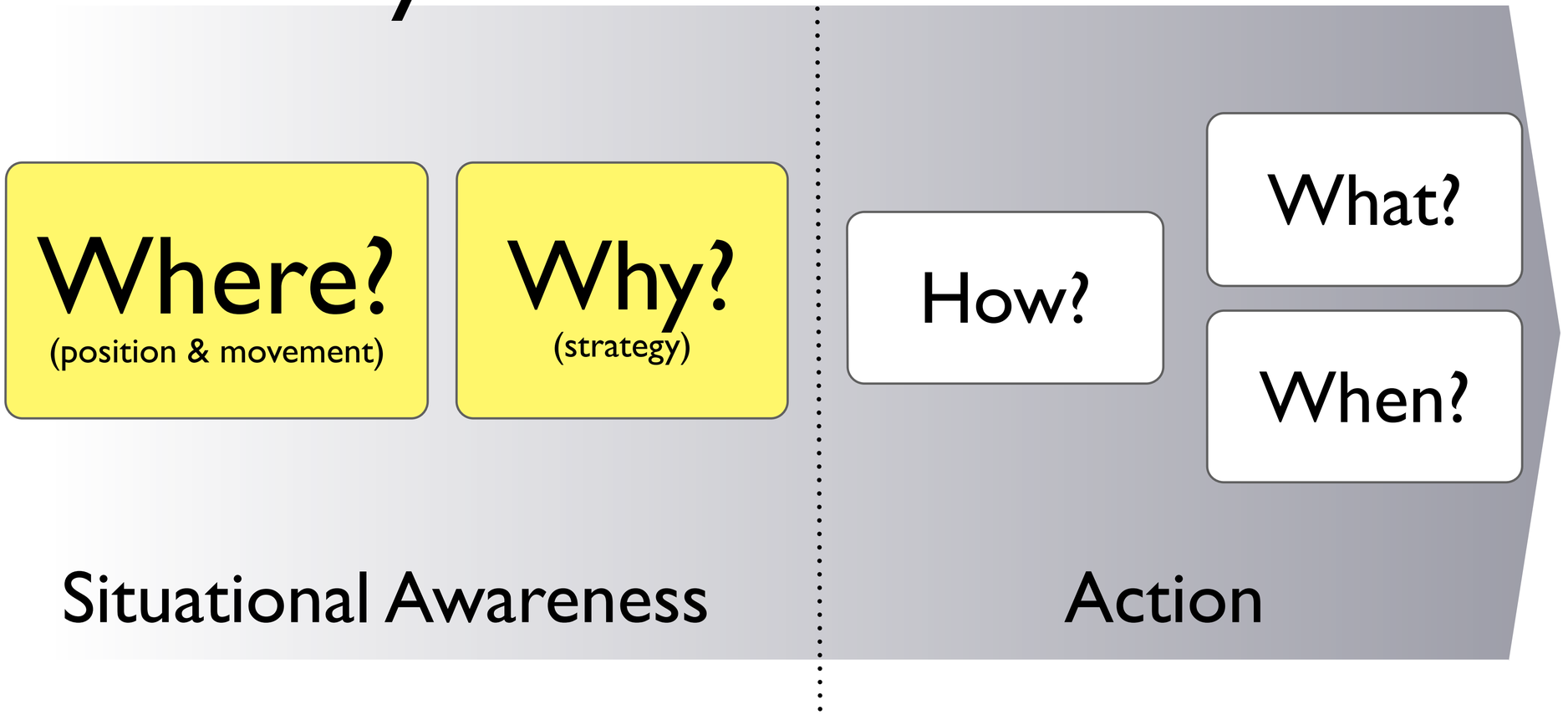
Threats

Persians get rid of us

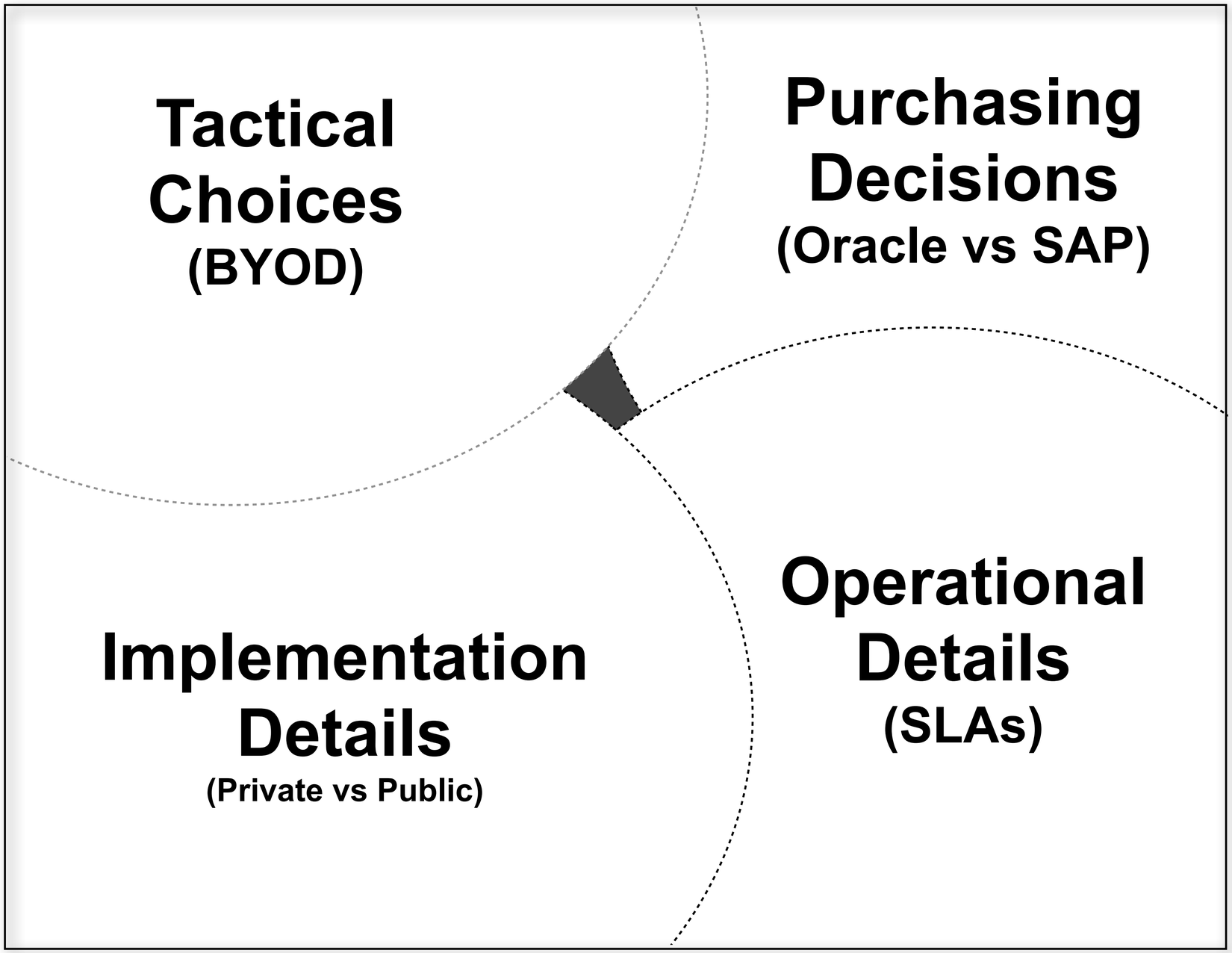
The Oracle says a really dodgy film might be produced over 2,000 years later

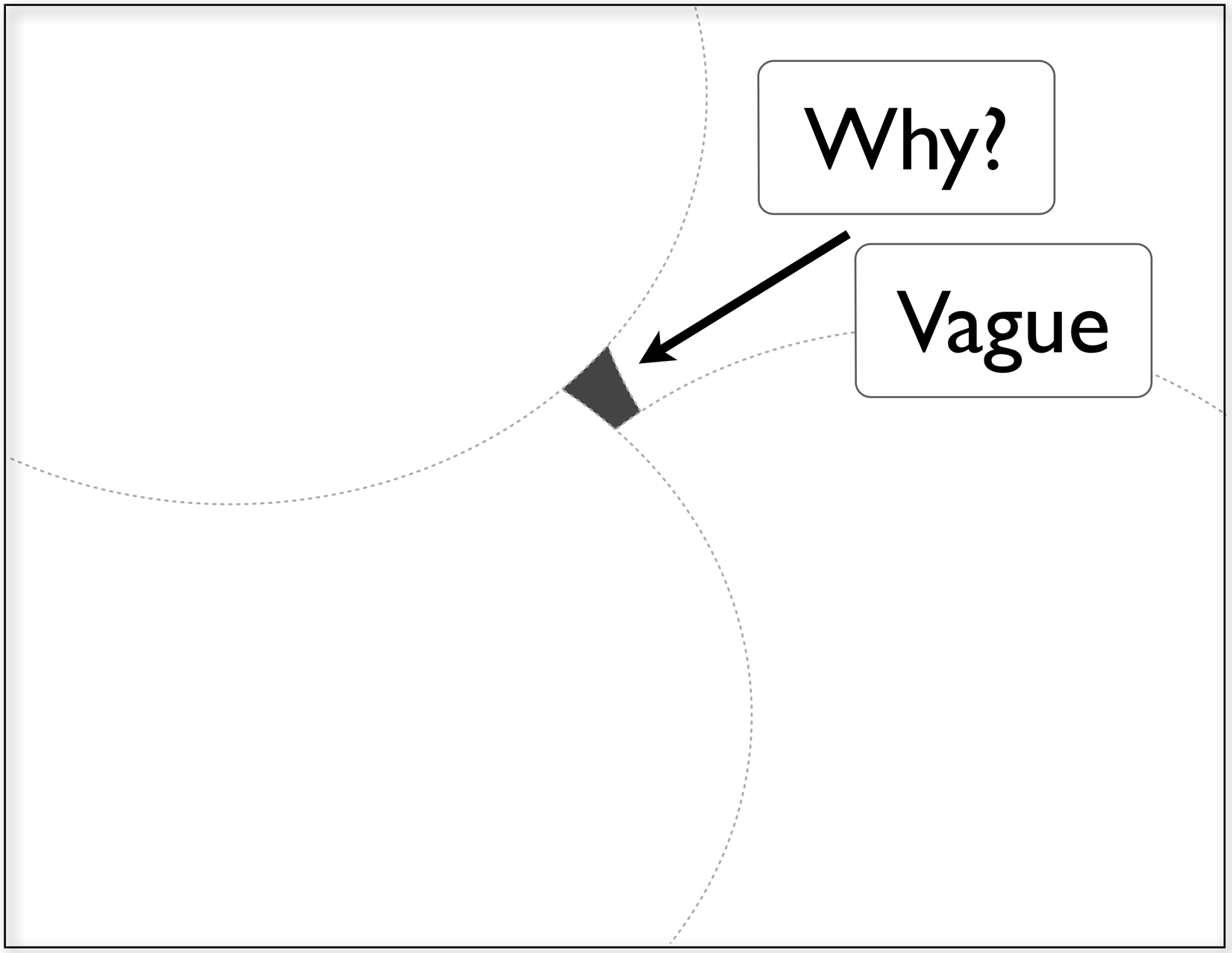

Where?
(position & movement)
How?
(Action)
What?
When?
(Action)
Why?
(strategy)
The Battle of
MANSFIELD
April 8, 1864
CONFEDERATE FORCES:
INFANTRY • ARTILLERY • CAVALRY
UNION FORCES:
INFANTRY • ARTILLERY • CAVALRY
LUCAS
CAMERON
(3RD DIV., XIII CORPS)
ROBINSON
CHICAGO MERCANTILE BATTERY
HONEYCUTT HILL
WAUL
DANIEL
SCURRY
BUCHEL
MUSEUM
HWY. 522
ORIGINAL

In Military ...


Where?
(position & movement)
Why?
(strategy)
How?
What?
When?
Situational Awareness
Action

STRATEGY


Tactical Choices
(BYOD)
Purchasing Decisions
(Oracle vs SAP)
Implementation Details
(Private vs Public)
Operational Details
(SLAs)


Why?
Vague

The Realities of Decision-Making with Big Data

By B2B Insights Contributor

Tweet 6 +1 3 Like 3 Share 2

A survey by the SAS Institute found that 67% of companies are now using big data in order to gain an edge over their competitors. Their use of analytics has enabled 46% to streamline operations, 36% to identify target customers, and 29% to evaluate employees.

Your business's software systems already collect vast amounts of data, and these tools are fully capable of parsing this data into meaningful, useful, and actionable information. Are you utilizing all the information you have at your fingertips in order to make better decisions?

Using Big Data in Sales

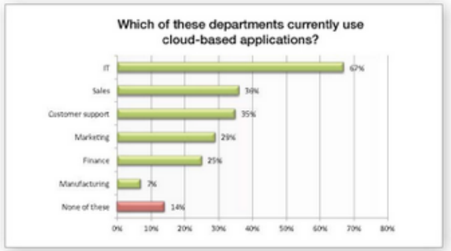
Your business's POS software system is a natural repository for big data. Think of all the numbers you can pull from your system: what you're selling, how much you're selling it for, who you're selling it to, and when you sell the most. You can pull sales information for the past year, the past month, or the past three days. The things you can do with this information include:

Survey: CIOs Bullish on Cloud Benefits, But Worry About SaaS Data Silos

CIOs continue to grow more and more bullish about cloud solutions, with a whopping 92% saying that cloud provides business benefits, according to a recent survey. Nonetheless, IT execs remain concerned over how to avoid SaaS-based data silos. The survey was conducted by Dimensional Research and commissioned by Host Analytics.

by Vance McCarthy

Tags: analytics, BI, cloud, data, Host Analytics, integration, SaaS, survey,



CIOs continue to grow more and more bullish about cloud solutions, with a whopping 92% saying that cloud provides business benefits, according to a recent survey. Nonetheless, IT execs remain concerned over how to avoid SaaS-based data silos. The survey was conducted by Dimensional Research and commissioned by Host Analytics.

The Host Analytics/Dimensional survey queried some 350 CIOs and IT executives on attitudes, trends and challenges pertaining to cloud adoption.

Among the sunnier findings for cloud advocates are these results from CIOs and IT executives:

- 92% said the adoption of cloud technologies is good for business
- 67% said cloud technologies help IT deliver better systems for less money
- 62% said SaaS applications give business stakeholders more ownership of key applications
- Cloud is gaining a foothold across many corporate departments, including IT (67%), sales (36%), and customer support (35%)

7 Steps For a Successful Social Media Strategy

By Nick Shin

Published July 21, 2010 Print

According to the 2010 Social Media Marketing Report , 67% of marketers plan to **increase their use of social media channels including blogs, Twitter, and Facebook.**

1,287 Tweet

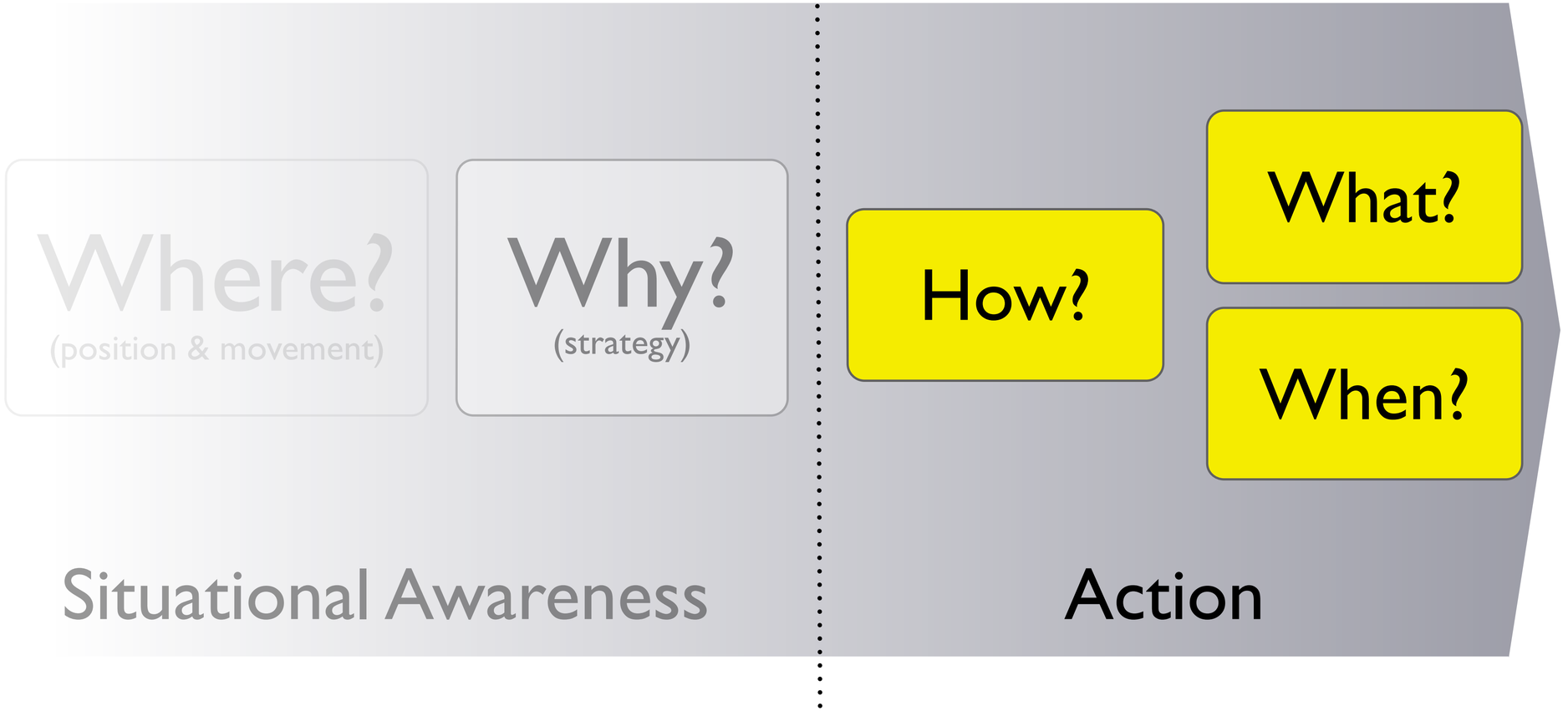
As more companies integrate social media into their marketing and communications plans, emphasis needs to be on **creating a social media strategy**. Without a strategy, you'll undoubtedly be sucked into a social media time sink.

Everyone else is!
67% of successful companies do ...

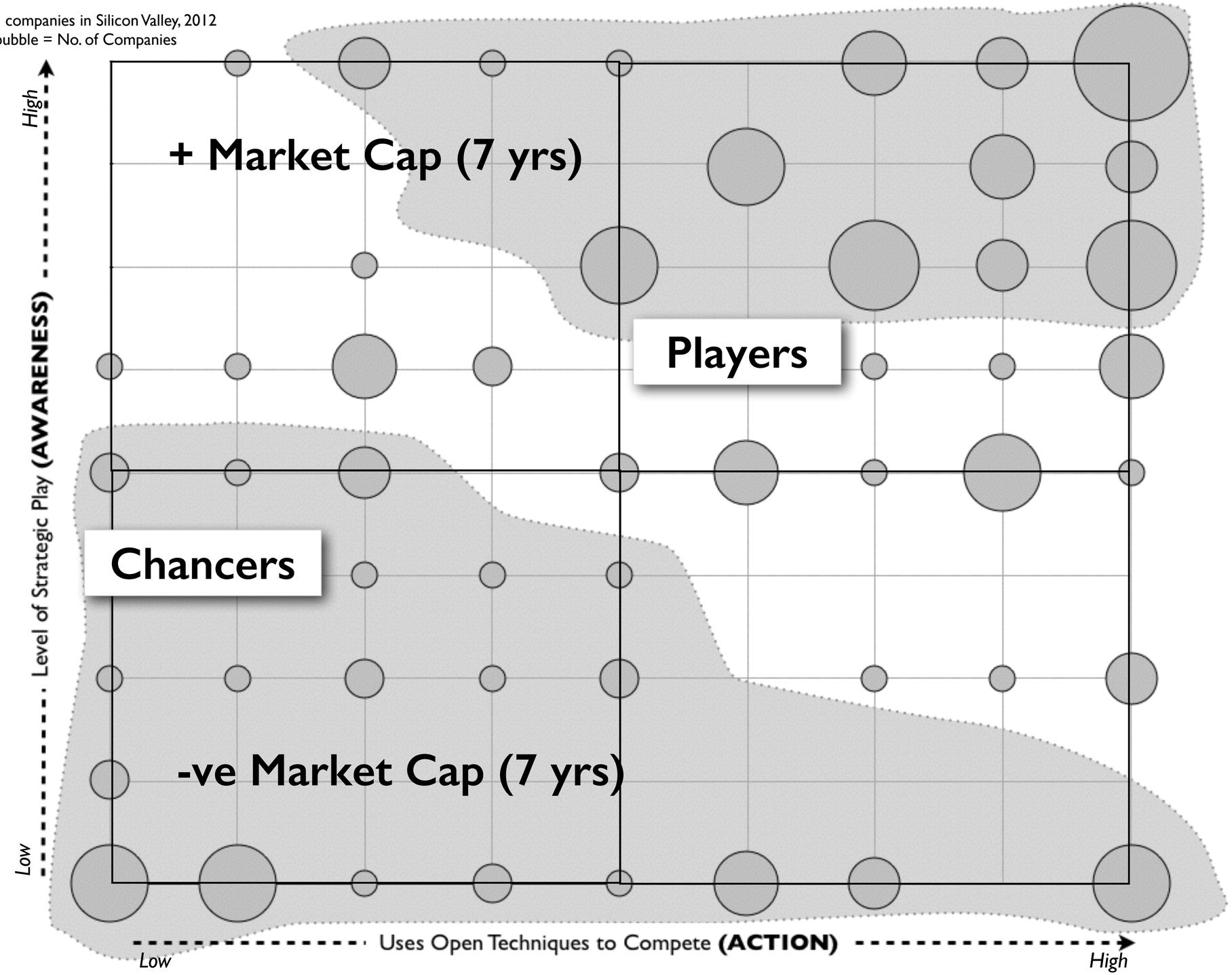
Our strategy is sustainable. We will lead a collaborative effort of the market through our use of growth and social media to build a competitive advantage. By being both open and digital first, our disruptive approach will drive revolution throughout the organization. Synergies between our insight from data and big data will enable us to capture the upside by becoming networked in an innovative world. These transformations combined with platform due to our data leaders will create an ecosystem through internet of things and leaders.

http://strategy-madlibs.herokuapp.com/
by Bill West

In Business ...


Where?
(position & movement)
Why?
(strategy)
How?
What?
When?
Situational Awareness
Action

160 Hi-Tech companies in Silicon Valley, 2012
Size of the bubble = No. of Companies



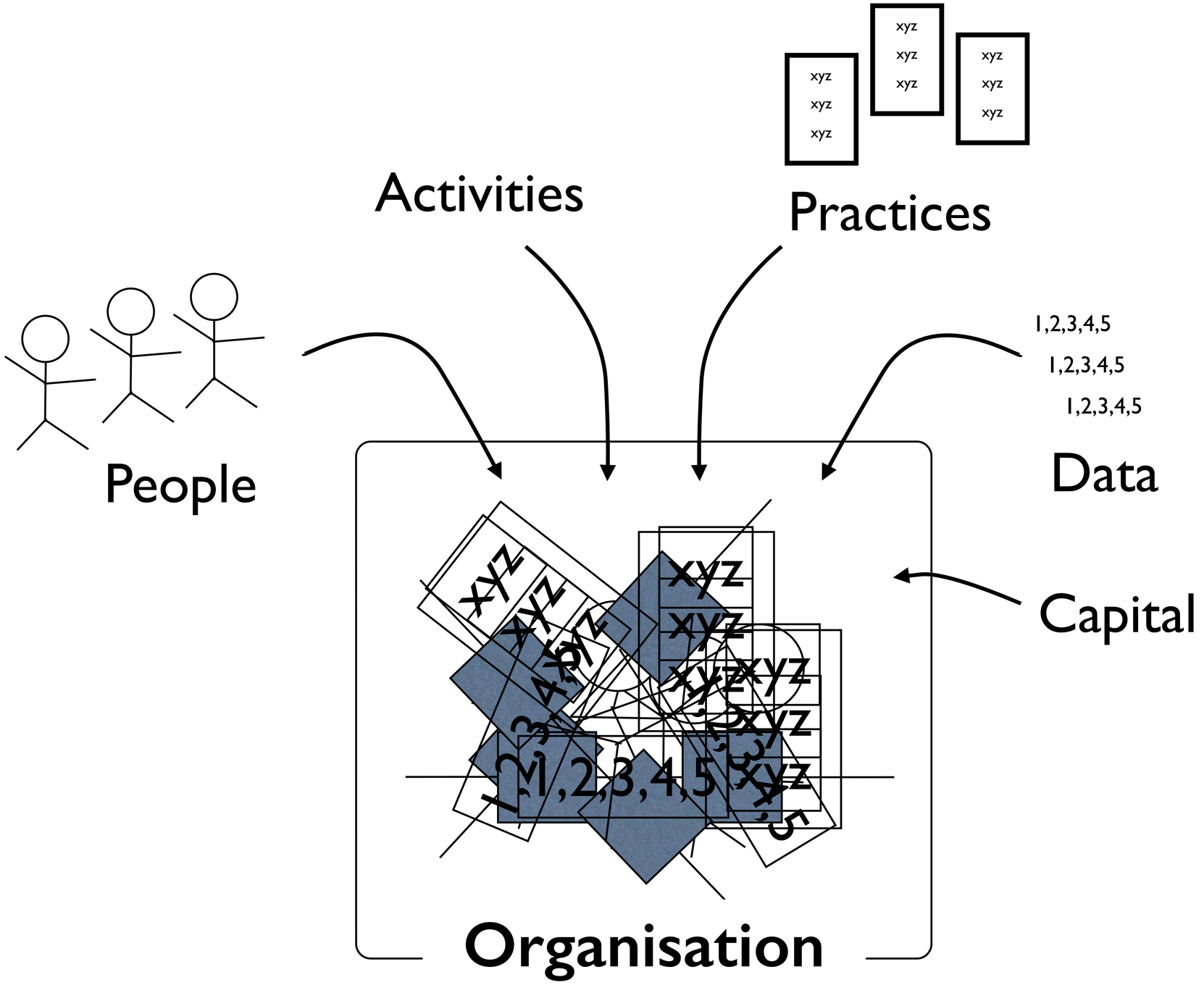
NB

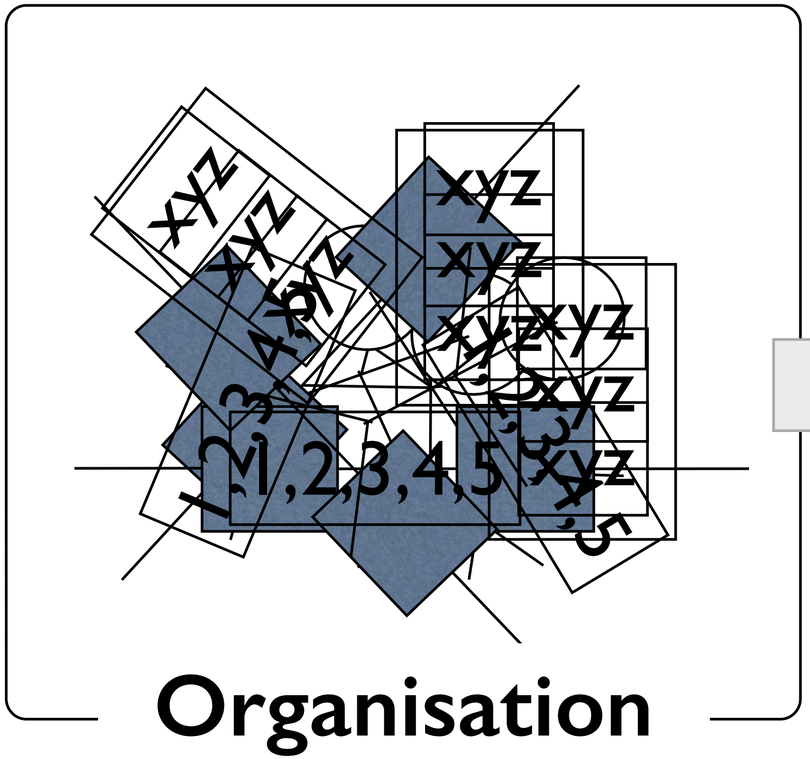
97% of execs consider strategy to be critical to future success

Most business strategy is a tyranny of
action over
situational awareness

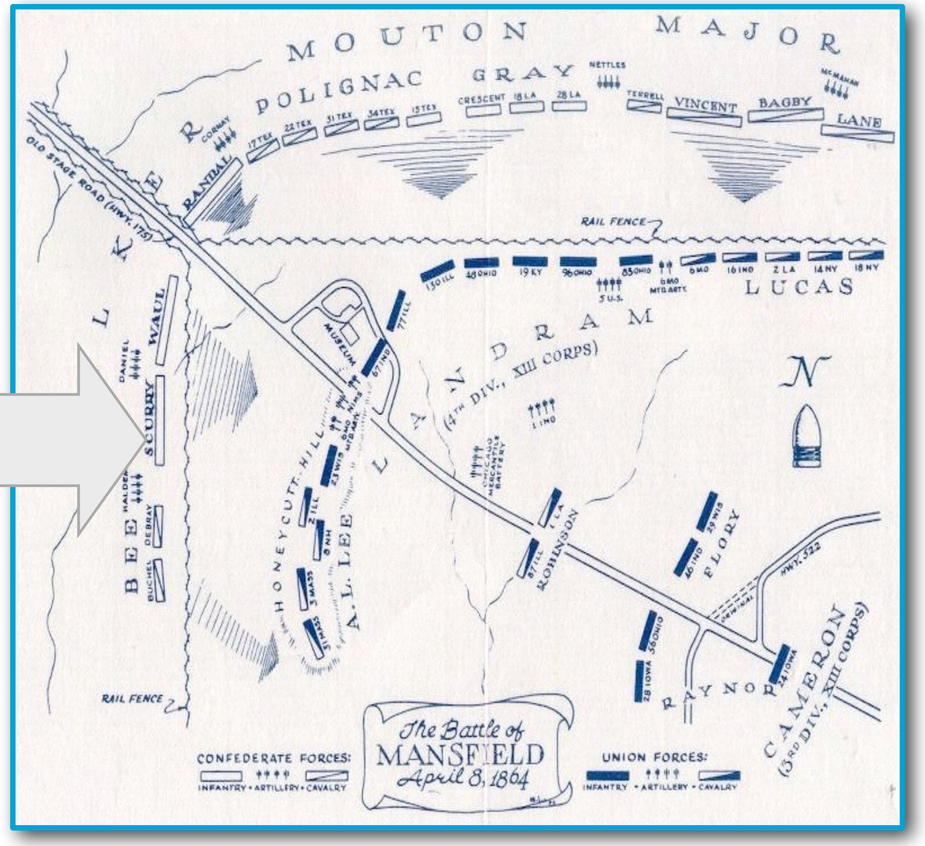
Lack of situational awareness has a **negative** impact on outcome.

How to?
Why?

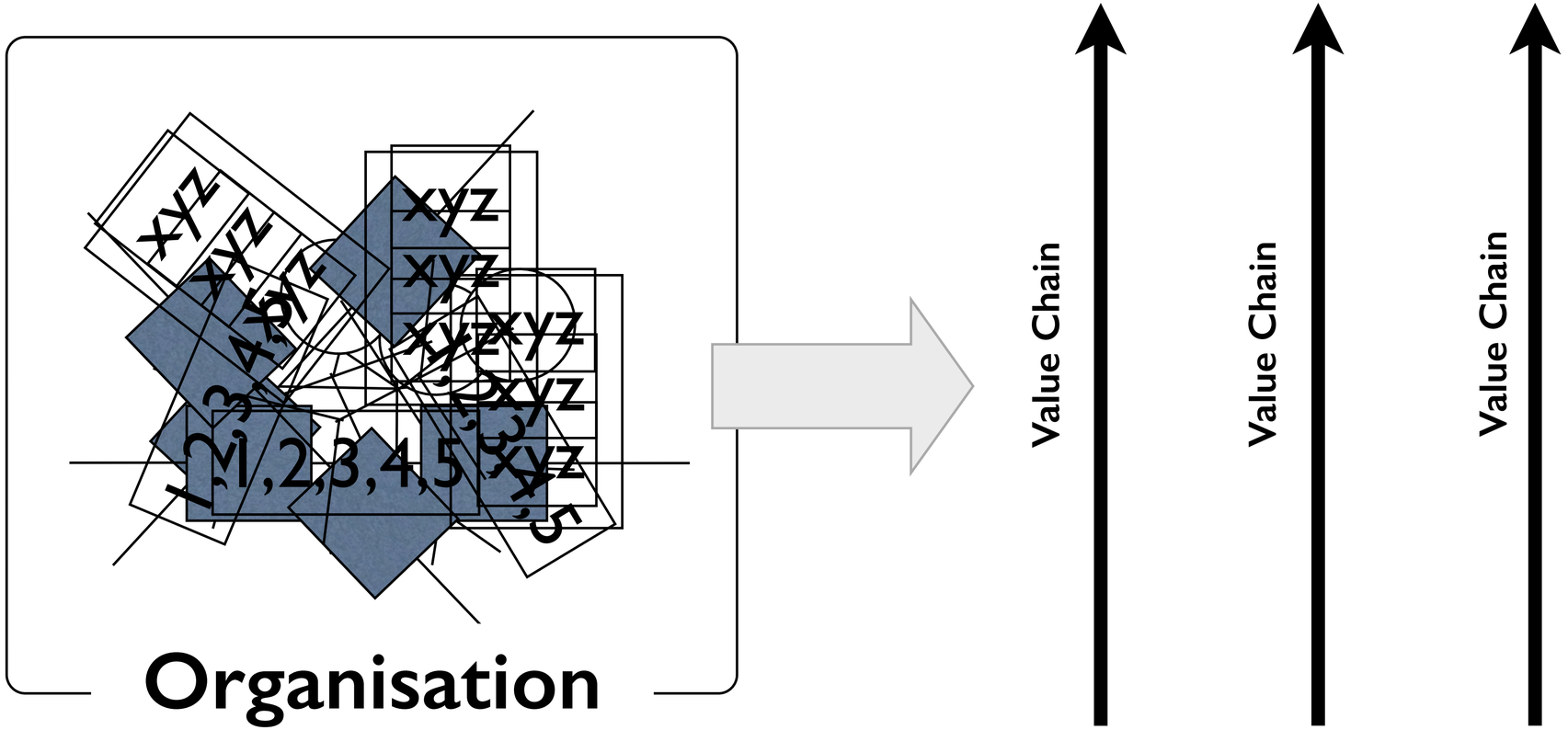

xyz
xyz
xyz
xyz
xyz
xyz
xyz
xyz
xyz
Practices
Activities
People
1,2,3,4,5
1,2,3,4,5
1,2,3,4,5
Data
Capital
Organisation

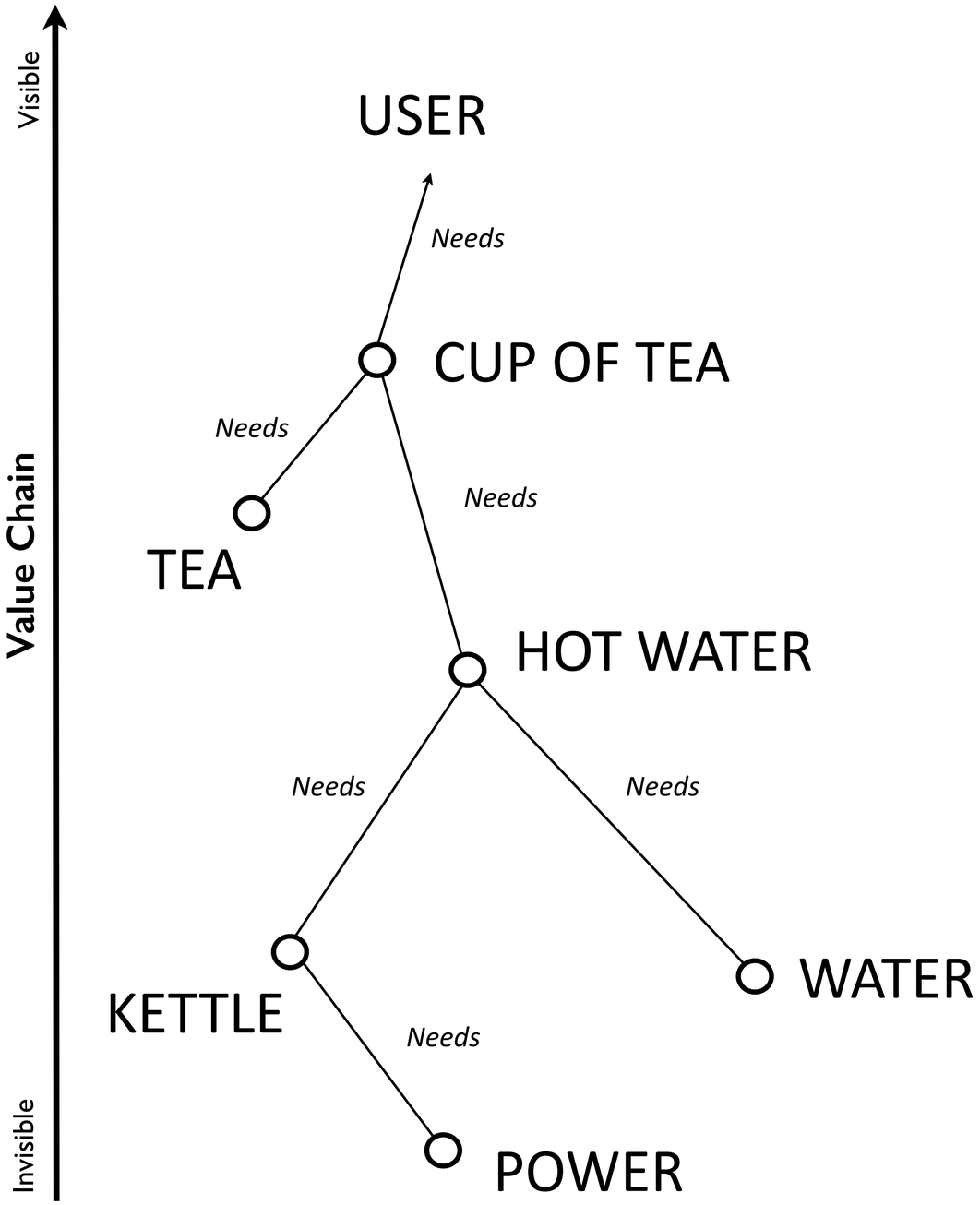


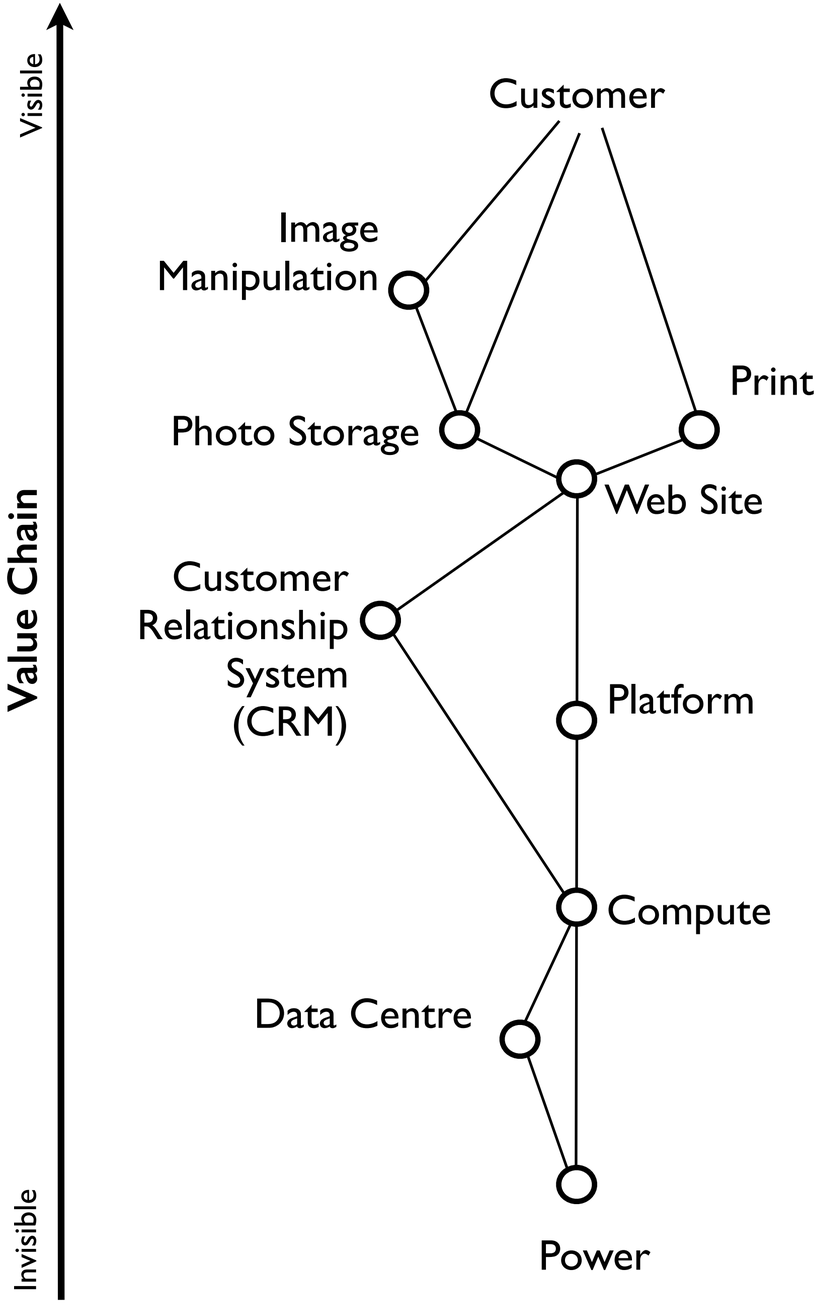
Organisation



Map


xyz
1,2,3,4,5
Organisation
Value Chain
Value Chain
Value Chain


Visible
Value Chain
Invisible
USER
Needs
CUP OF TEA
Needs
Needs
TEA
HOT WATER
Needs
Needs
KETTLE
WATER
Needs
POWER


Visible
Value Chain
Invisible
Customer
Image Manipulation
Print
Photo Storage
Web Site
Customer Relationship System (CRM)
Platform
Compute
Data Centre
Power

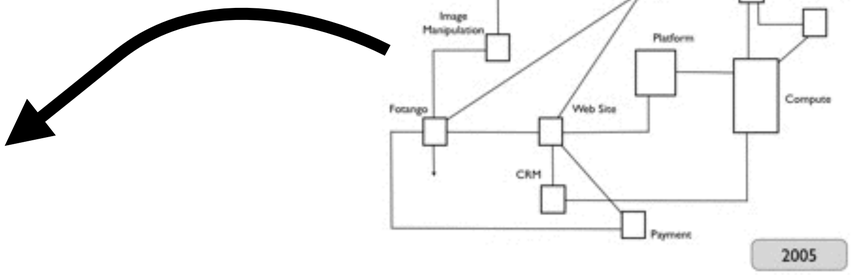
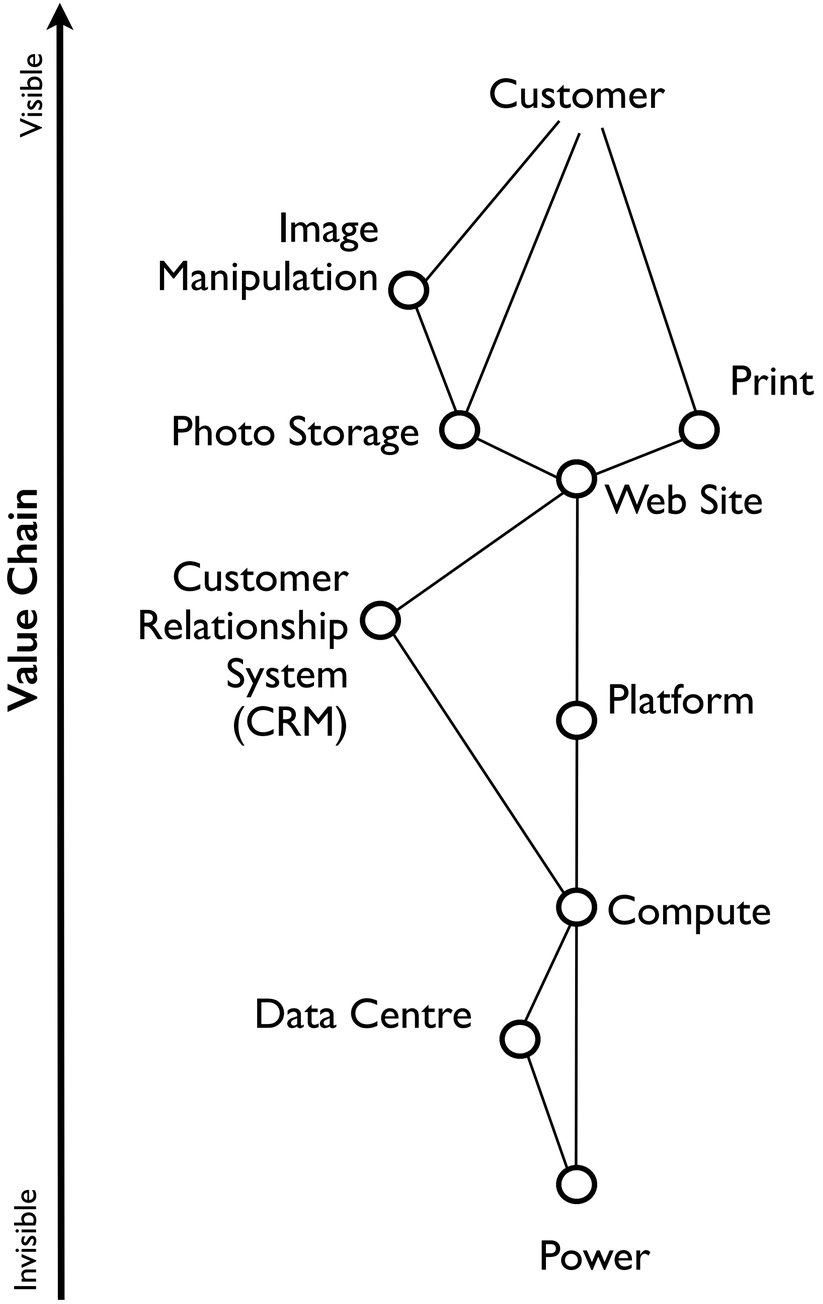
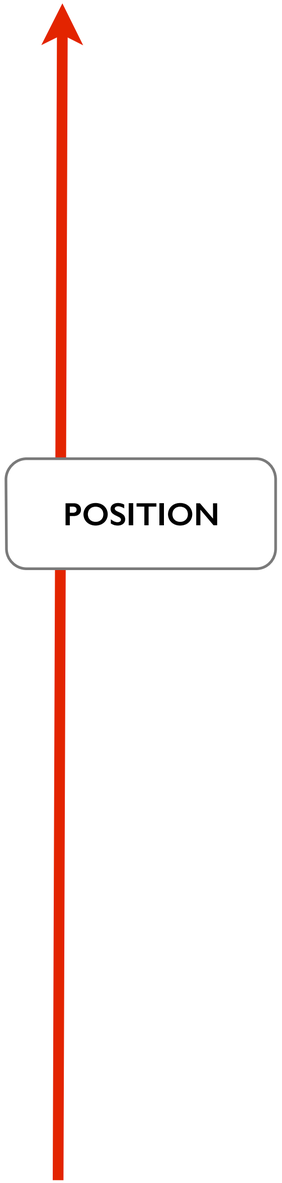


Photo Storage
Power
Data Centre
Image Manipulation
Platform
Compute
Fotango
Web Site
CRM
Payment
2005





BUT
No **movement**

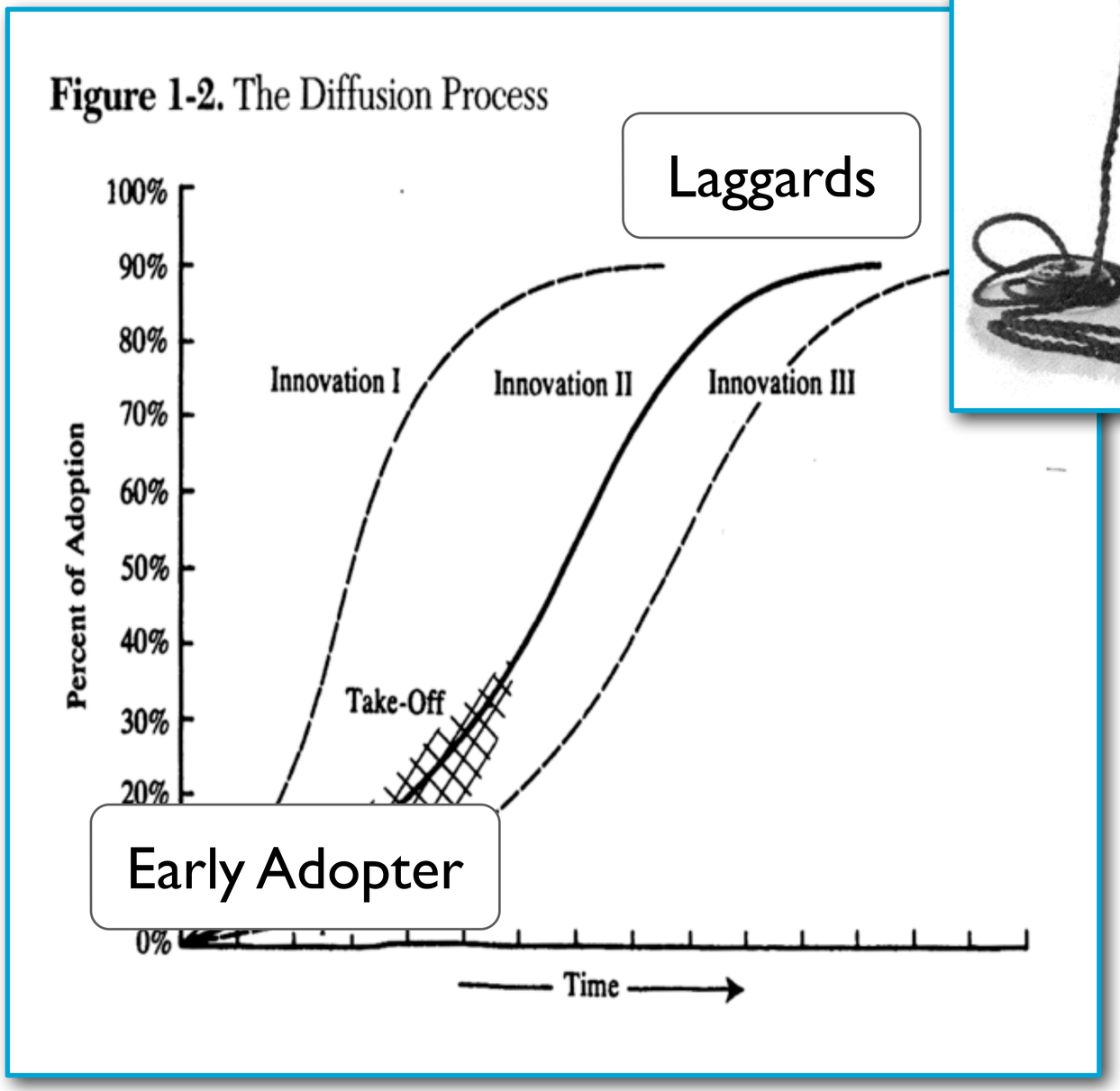


Figure 1-2. The Diffusion Process
Laggards
Innovation I
Innovation II
Innovation III
Take-Off
Early Adopter
Percent of Adoption
100%
90%
80%
70%
60%
50%
40%
30%
20%
0%
Time

RIKSTELEFON

RIKSTELEFON

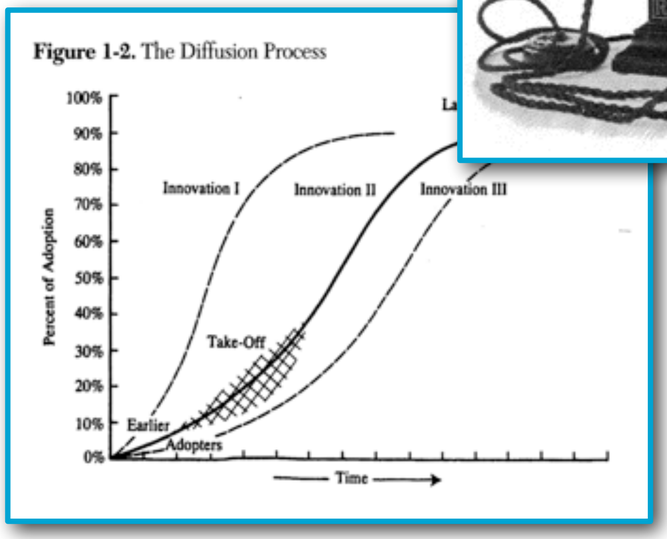


Figure 1-2. The Diffusion Process
Percent of Adoption
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Innovation I
Innovation II
Innovation III
Take-Off
Earlier
Adopters
Time

Evolve

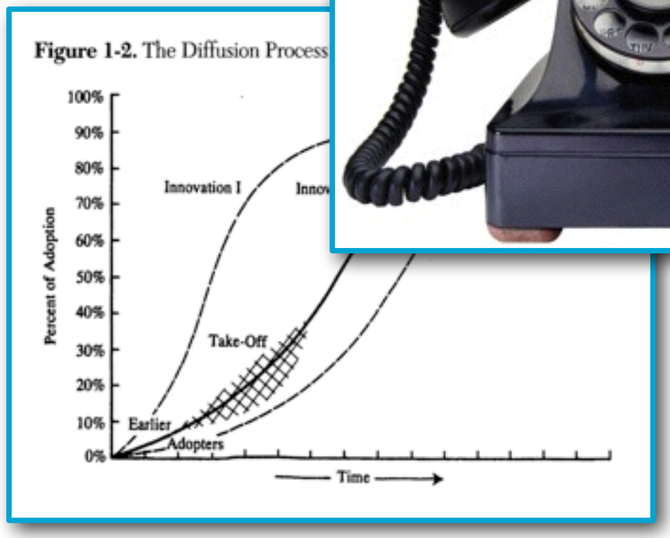
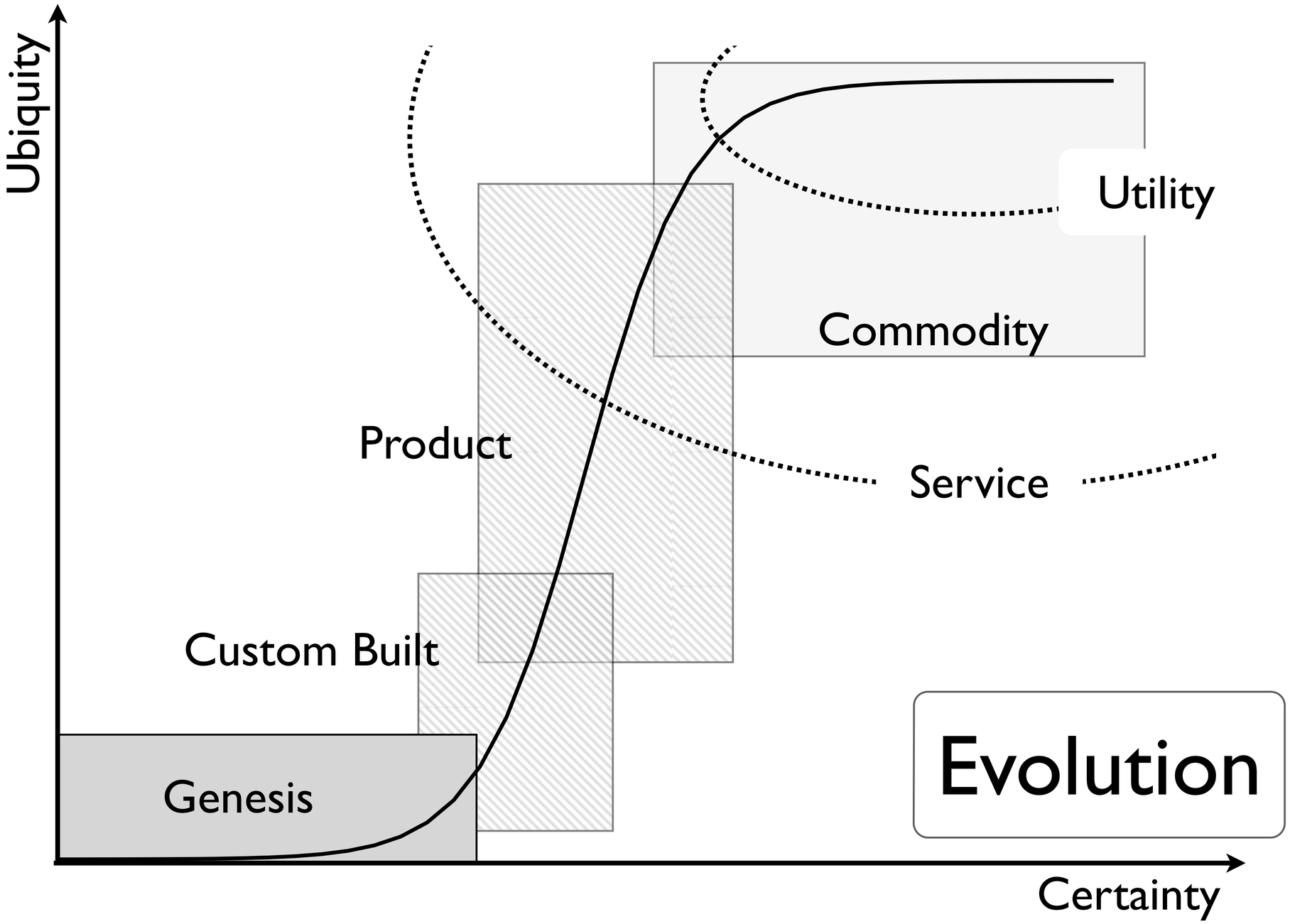
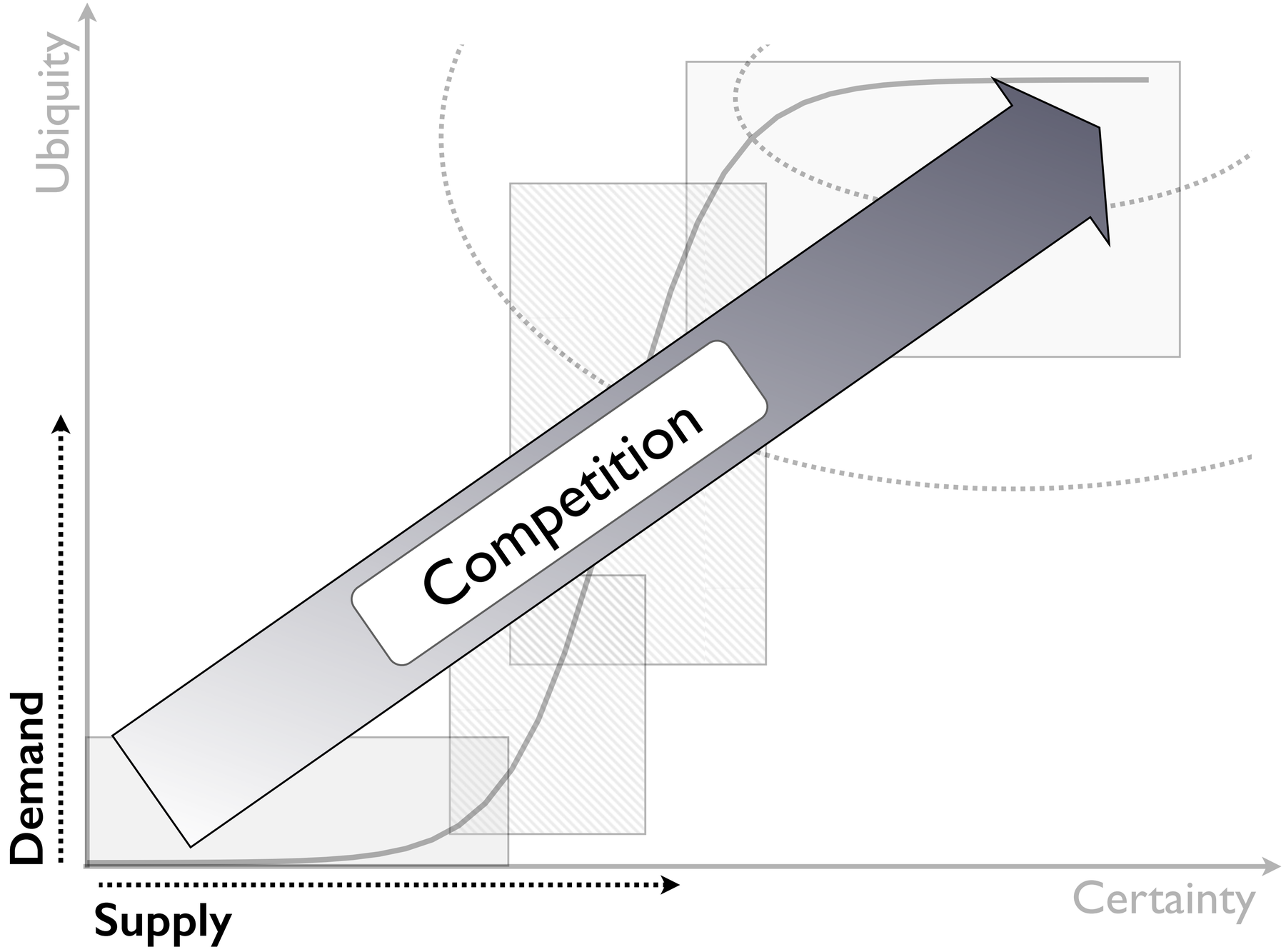
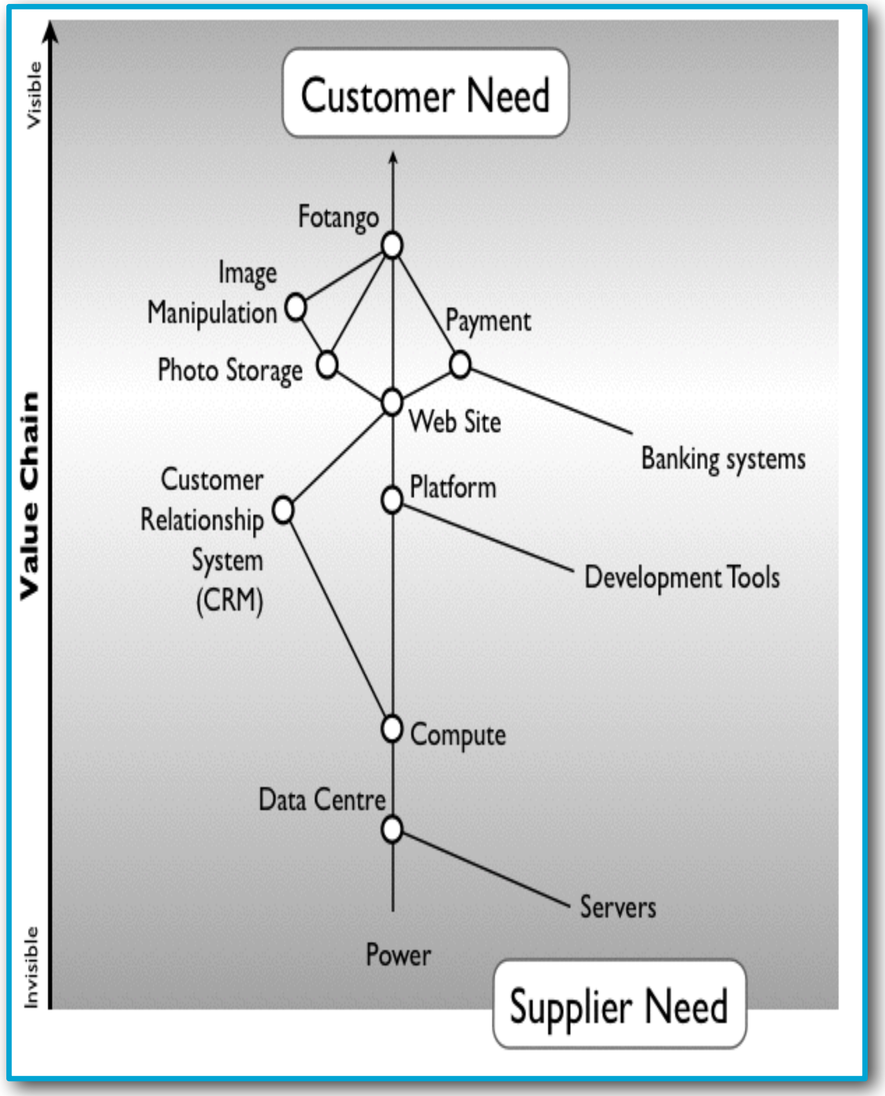


Figure 1-2. The Diffusion Process
Percent of Adoption
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Innovation I
Take-Off
Earlier
Adopters
Time

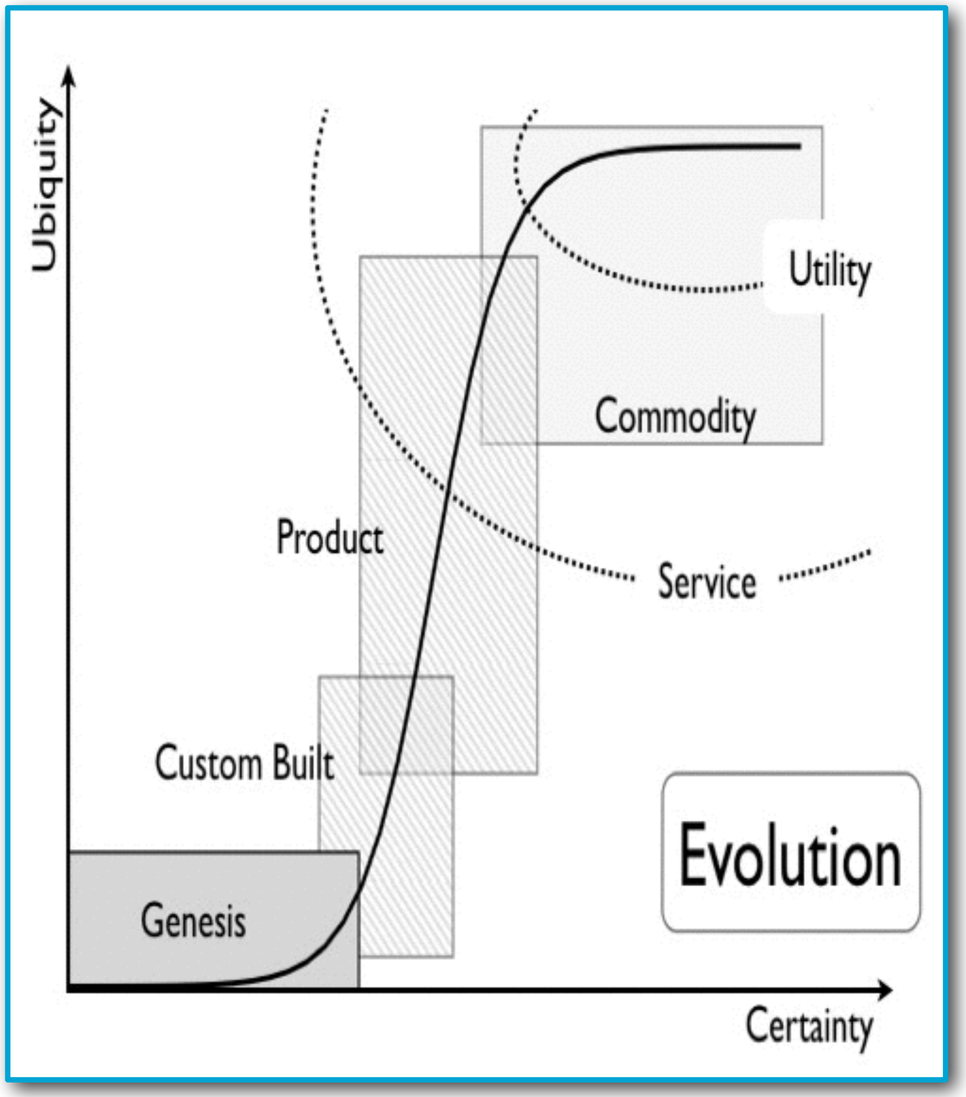

Ubiquity
Utility
Commodity
Product
Service
Custom Built
Genesis
Evolution
Certainty

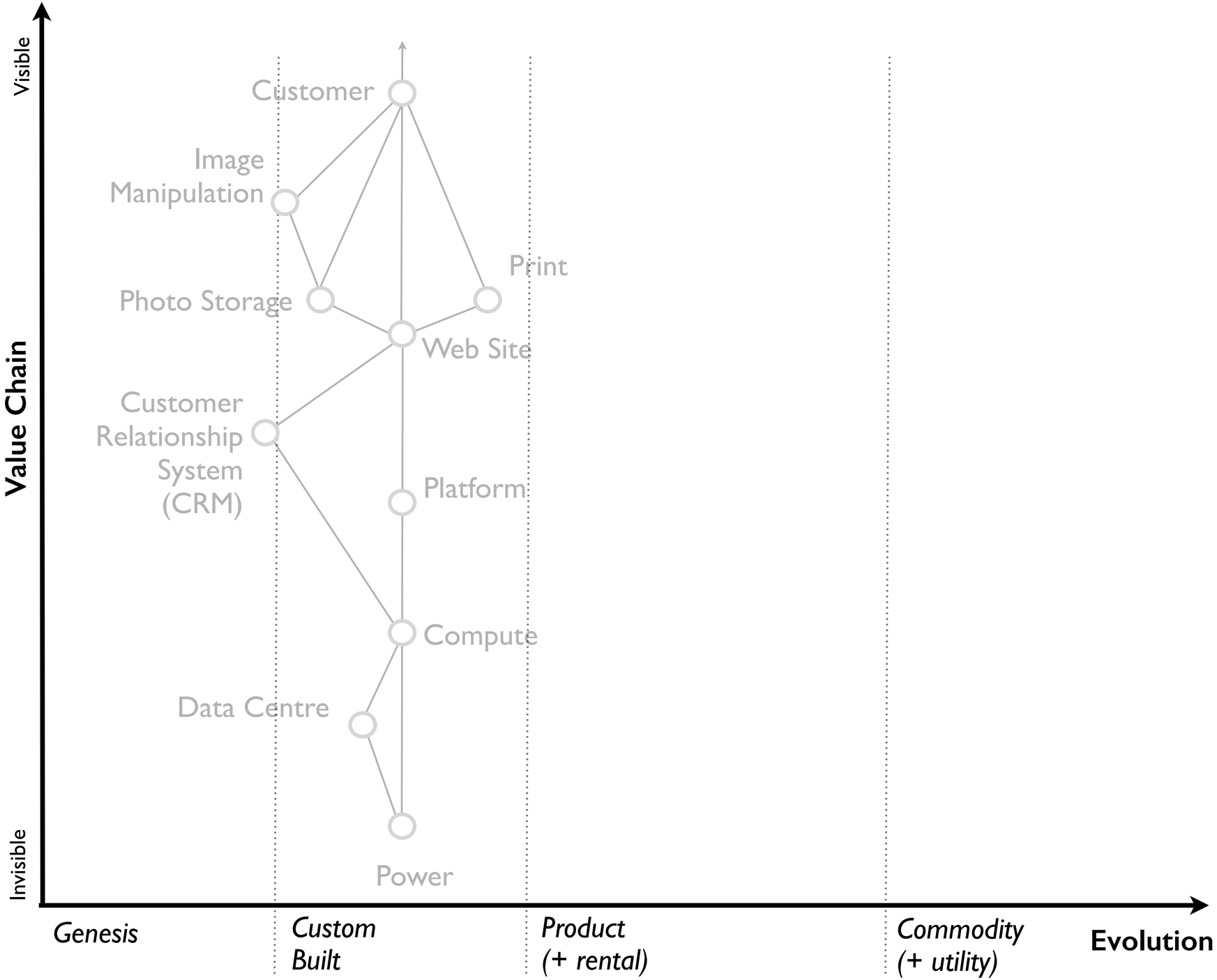

Ubiquity
Competition
Demand
Supply
Certainty

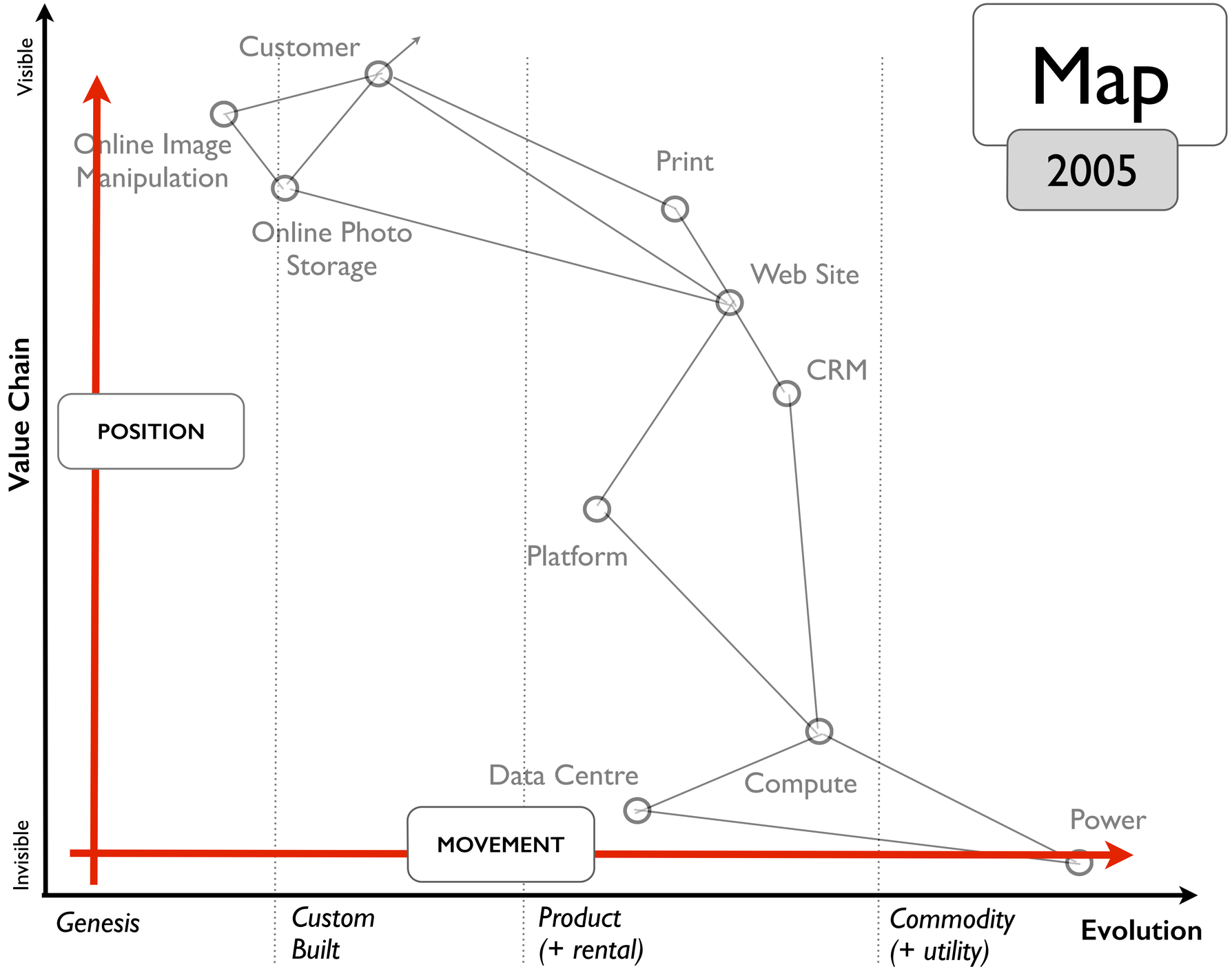
Value Chain
(describes organisation)

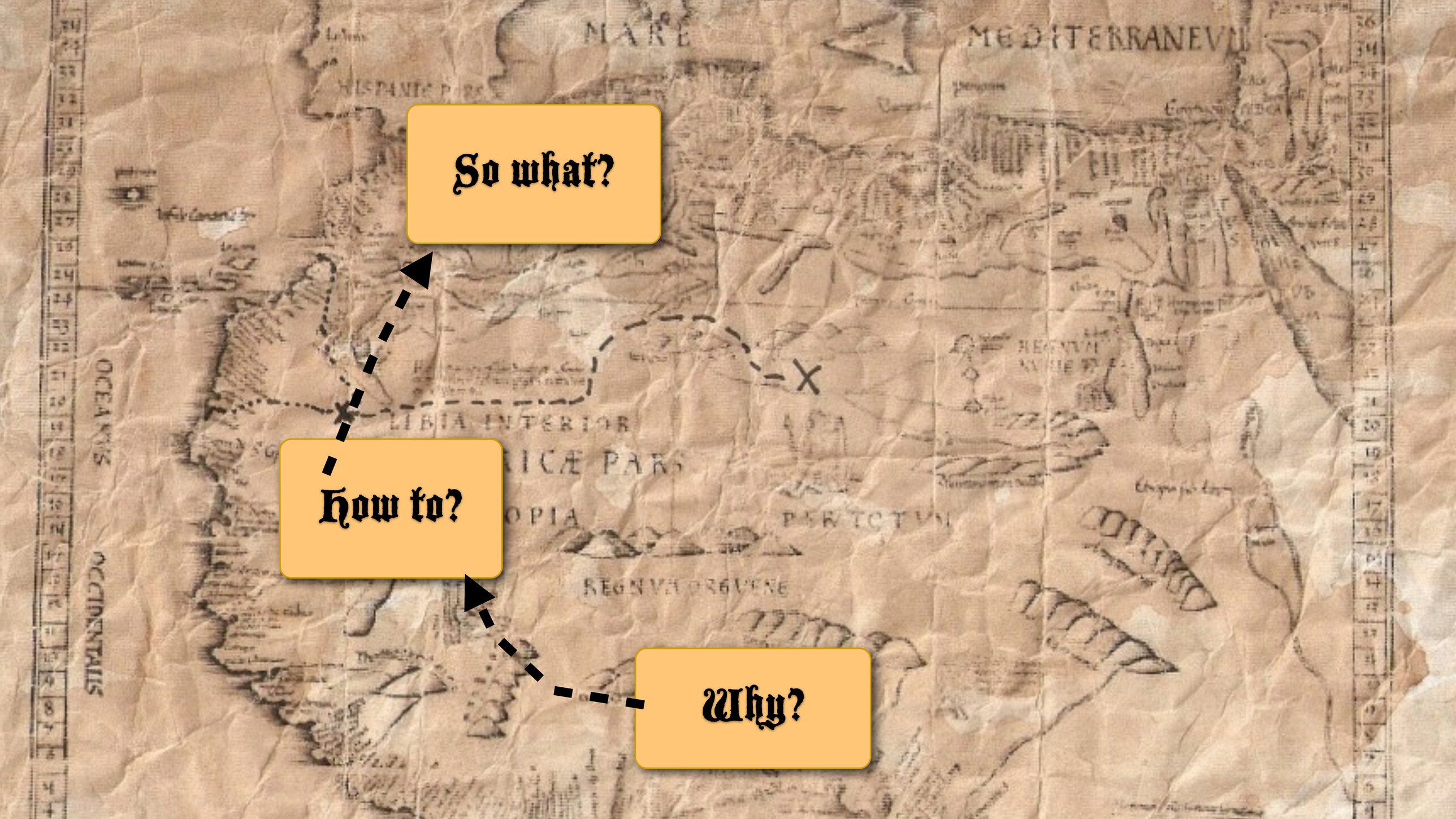


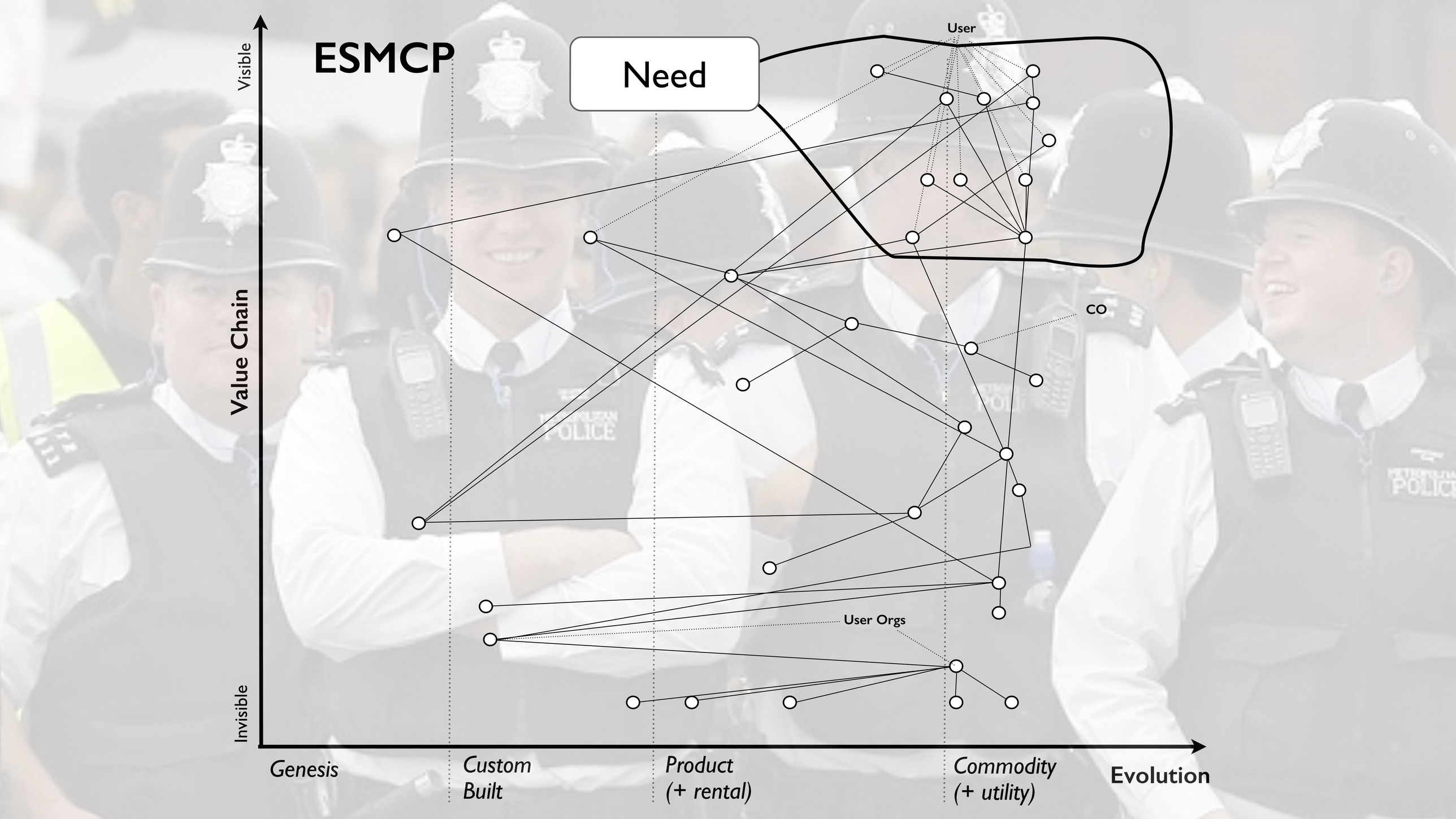
Evolution
(describes change)

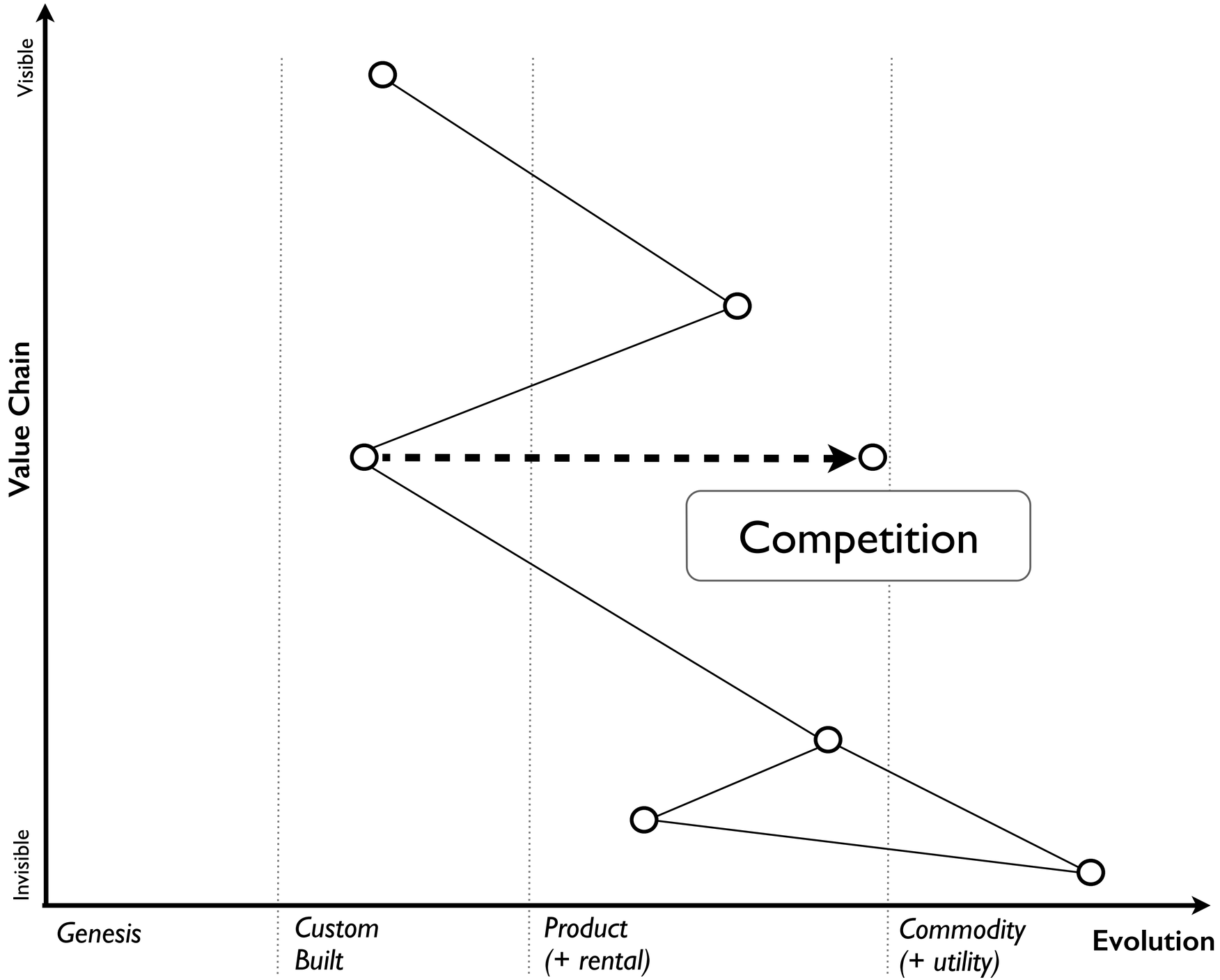


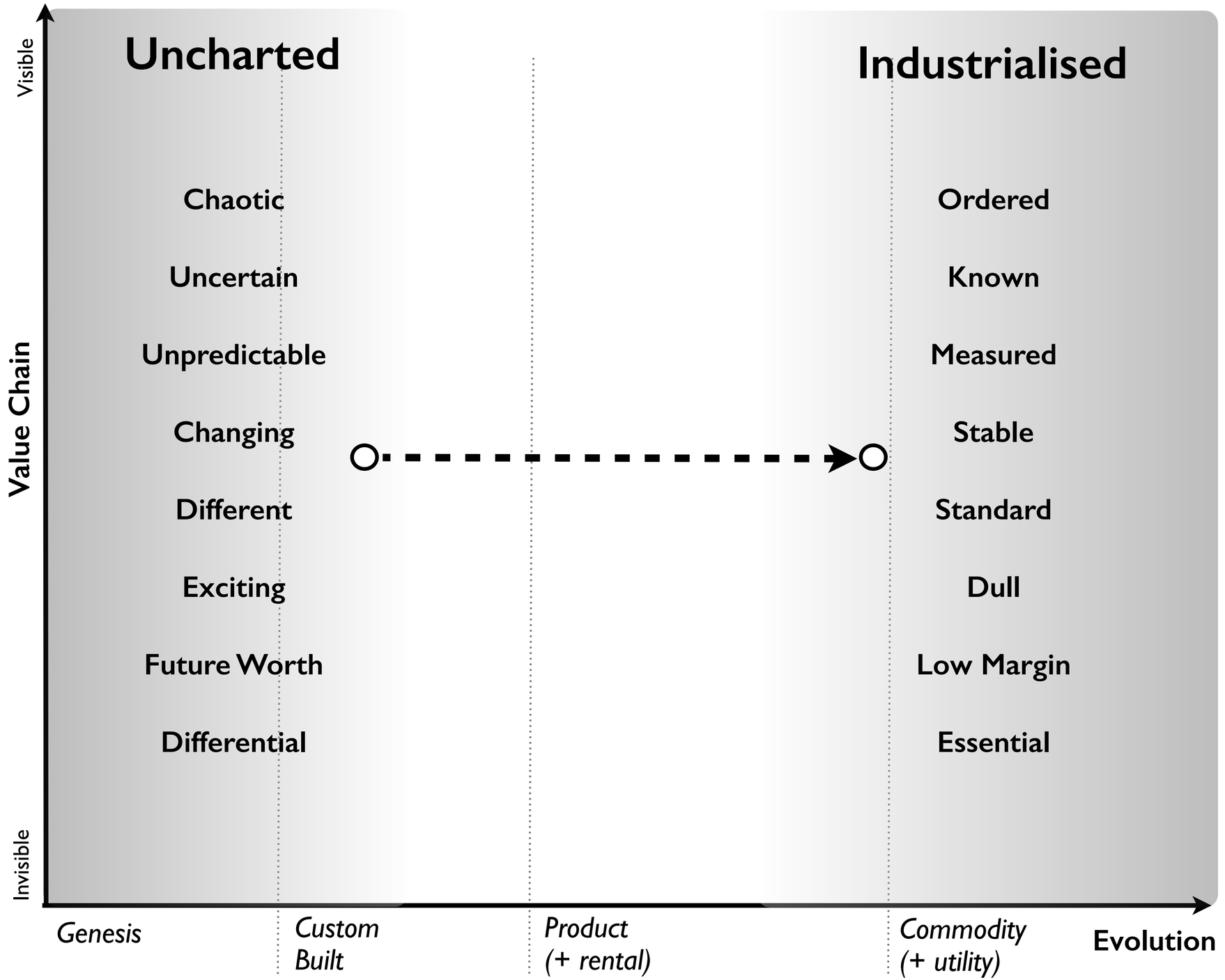

Visible
Value Chain
Invisible
Customer
Image Manipulation
Print
Photo Storage
Web Site
Customer Relationship System (CRM)
Platform
Compute
Data Centre
Power
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

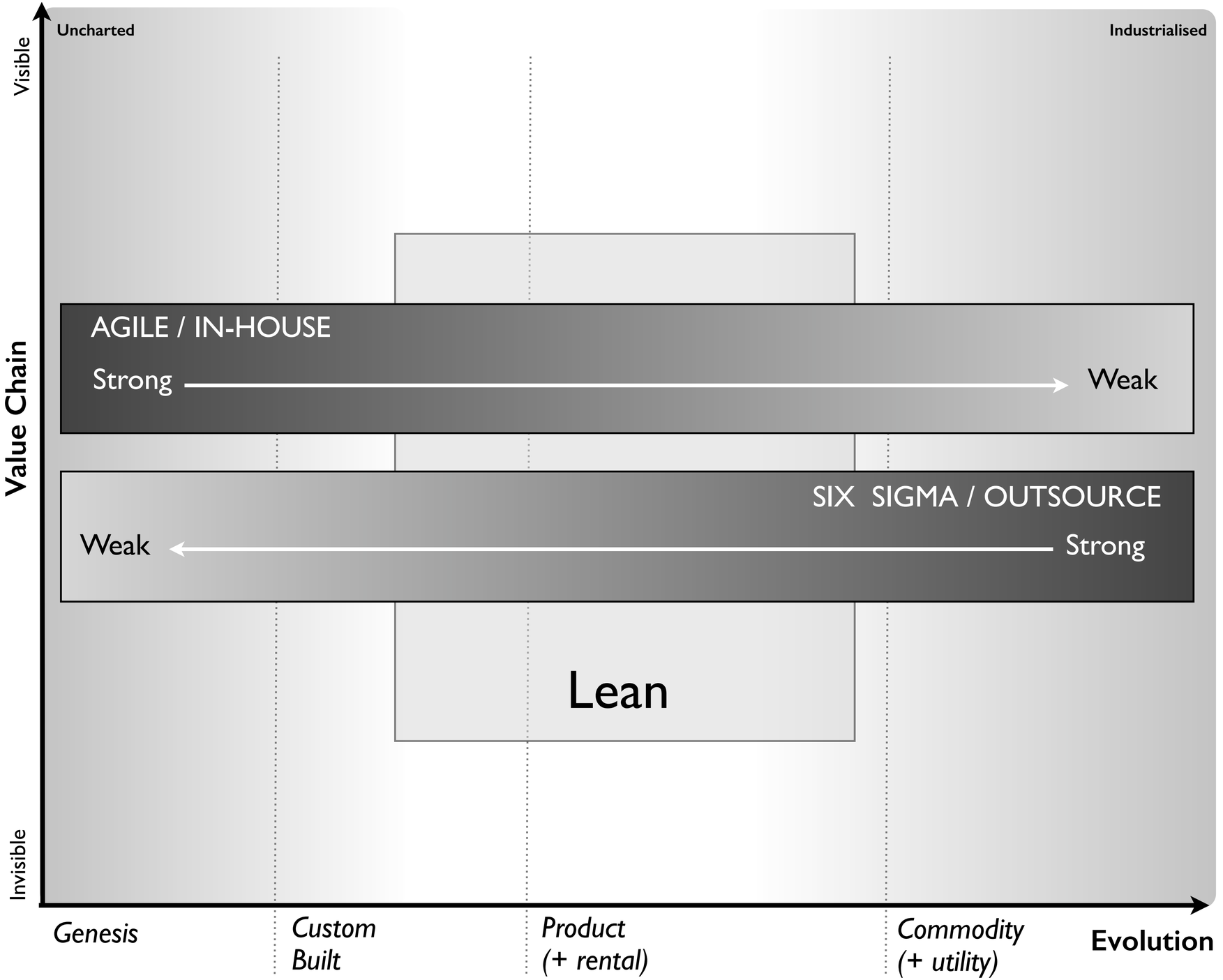

Map
2005
Visible
Invisible
Value Chain
Customer
Online Image Manipulation
Online Photo Storage
Print
Web Site
CRM
Platform
Data Centre
Compute
Power
POSITION
MOVEMENT
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

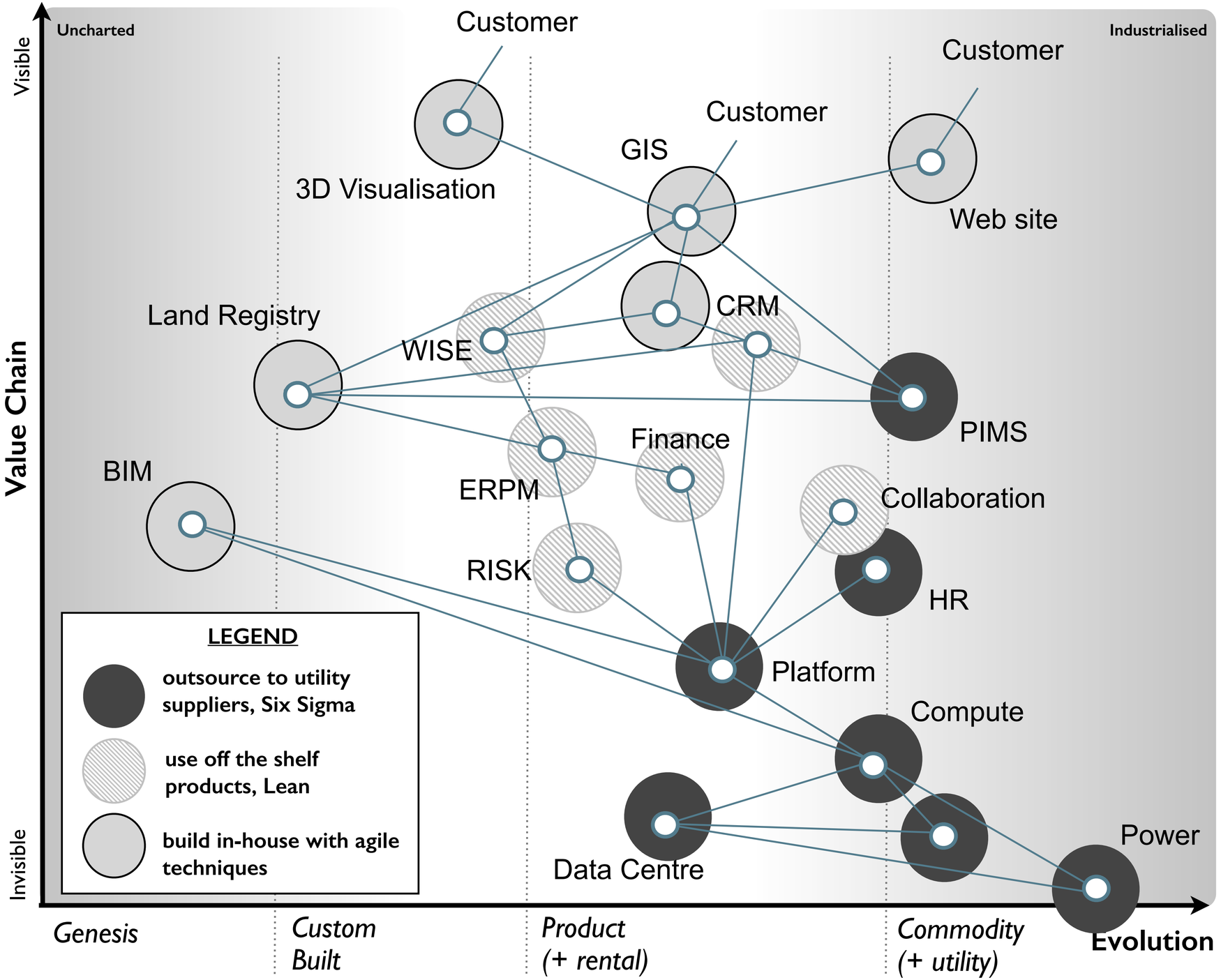

So what?
How to?
Why?

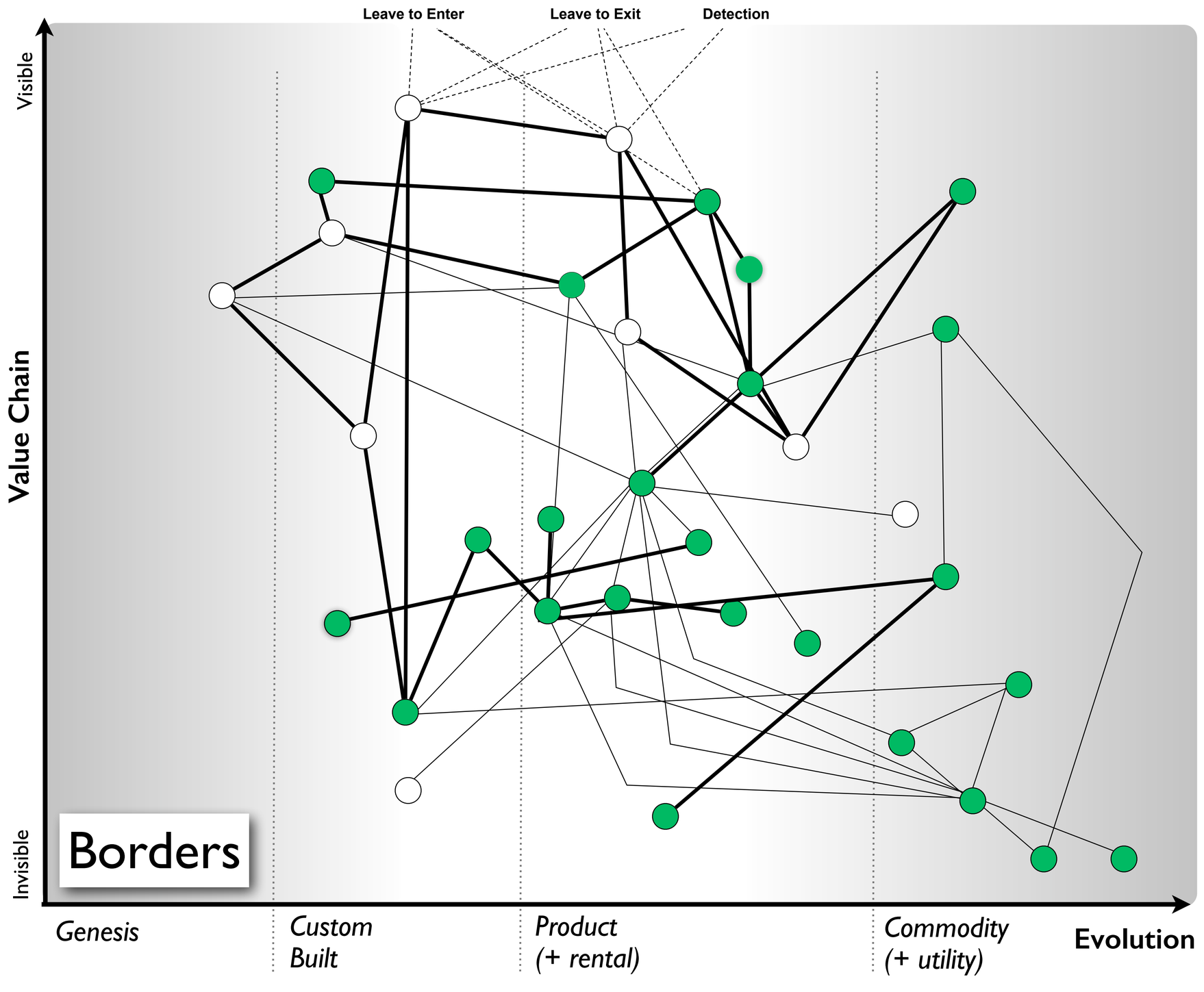

ESMCP
Need
User
CO
User Orgs
Visible
Value Chain
Invisible
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution

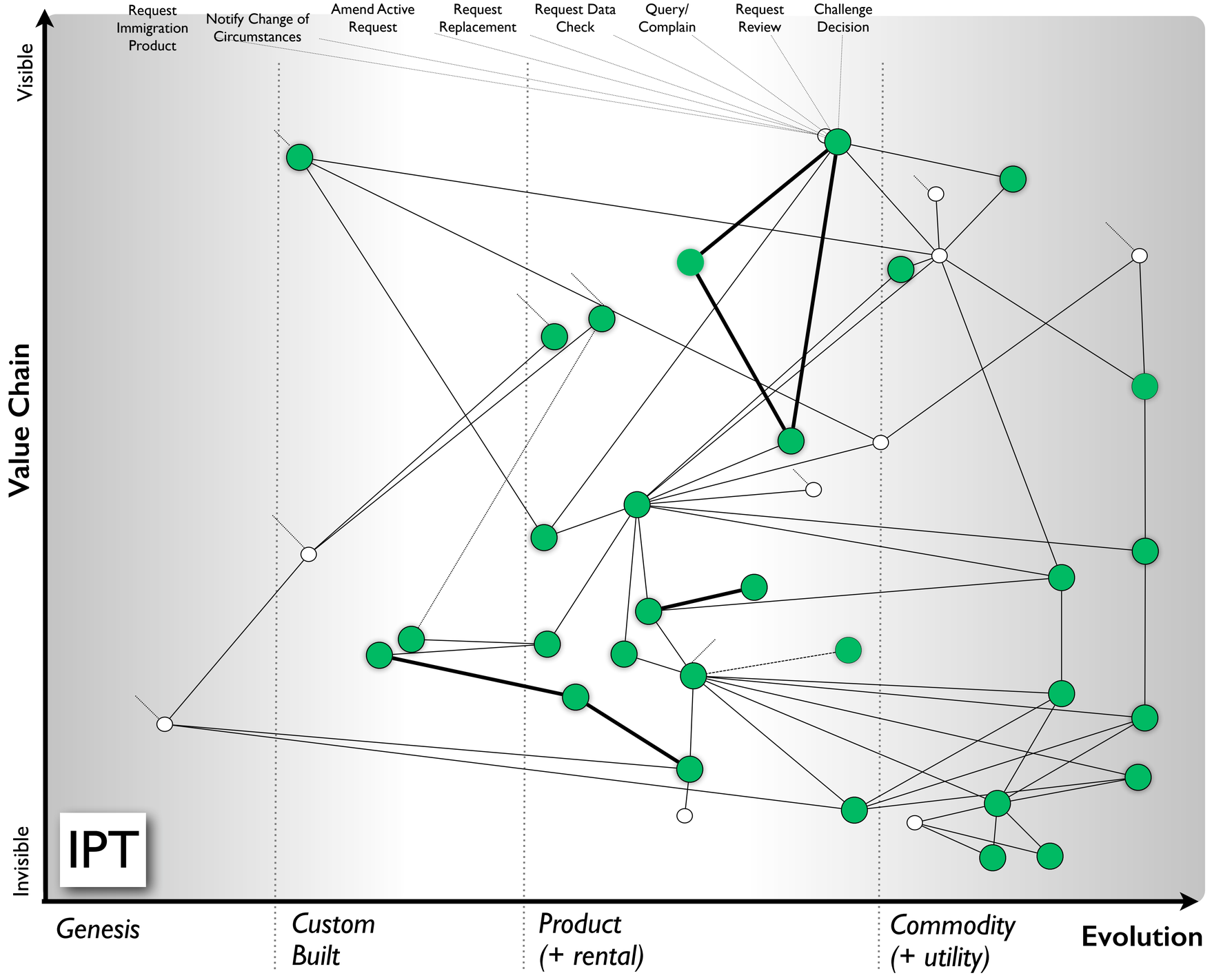

Visible
Value Chain
Invisible
Competition
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution

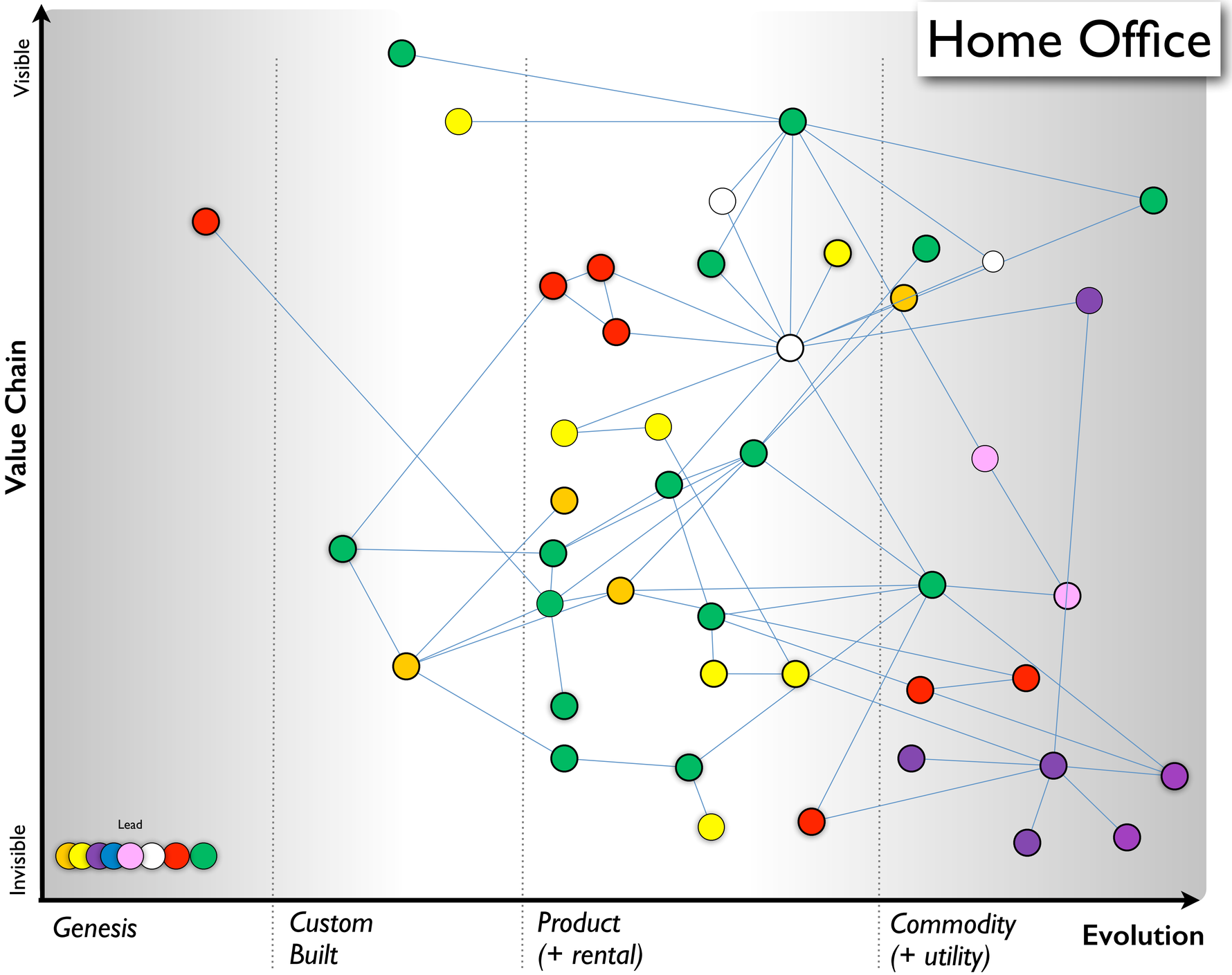

Uncharted
Industrialised
Visible
Invisible
Value Chain
Chaotic
Uncertain
Unpredictable
Changing
Different
Exciting
Future Worth
Differential
Ordered
Known
Measured
Stable
Standard
Dull
Low Margin
Essential
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution


Uncharted
Industrialised
Visible
Value Chain
Invisible
AGILE / IN-HOUSE
Strong
Weak
SIX SIGMA / OUTSOURCE
Weak
Strong
Lean
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution


Uncharted
Industrialised
Visible
Invisible
Value Chain
Customer
3D Visualisation
Customer
GIS
Customer
Web site
Land Registry
WISE
CRM
PIMS
Finance
BIM
ERPM
Collaboration
RISK
HR
Platform
Compute
Data Centre
Power
LEGEND
outsource to utility suppliers, Six Sigma
use off the shelf products, Lean
build in-house with agile techniques
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

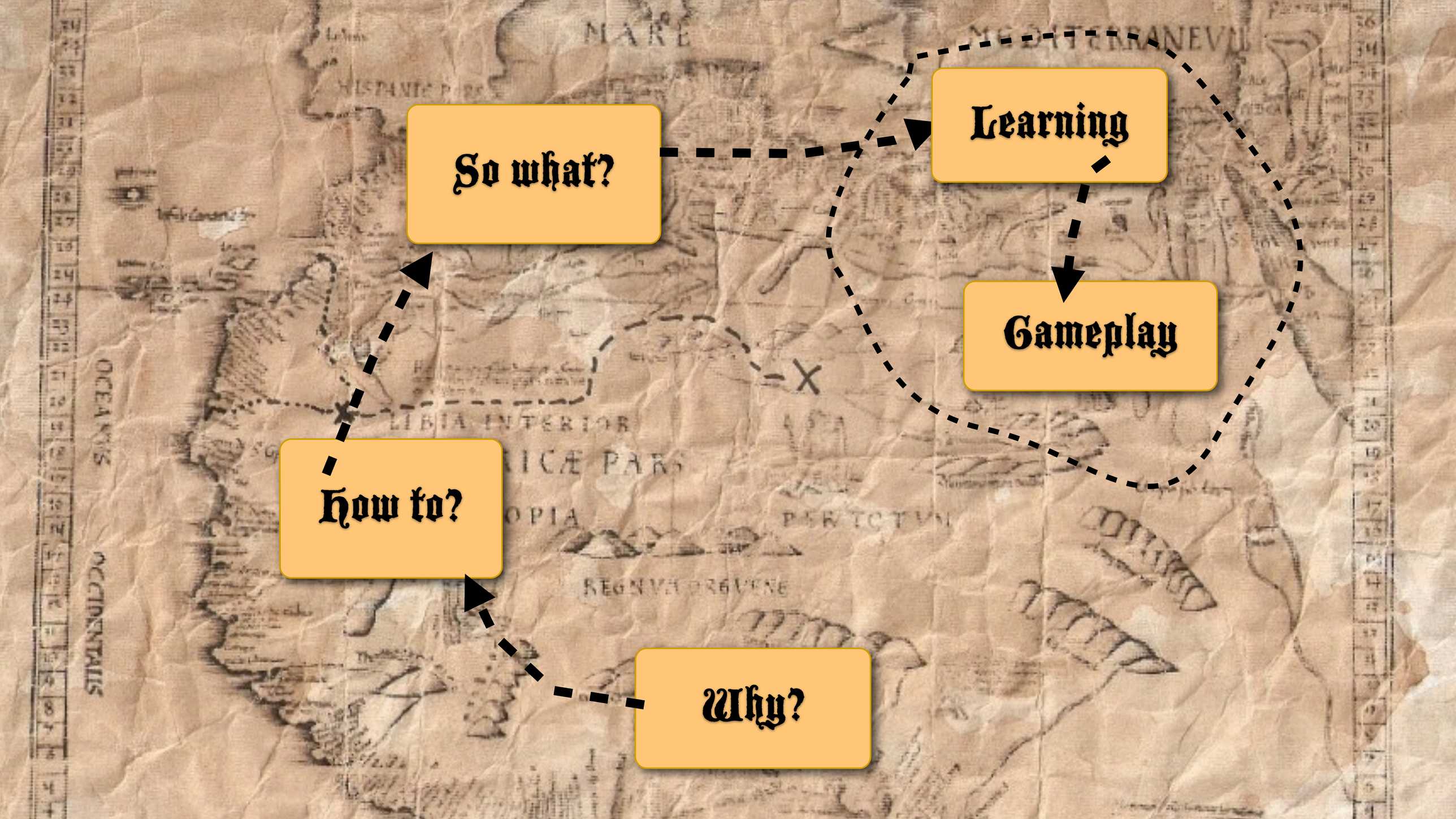

Leave to Enter
Leave to Exit
Detection
Visible
Value Chain
Invisible
Borders
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution

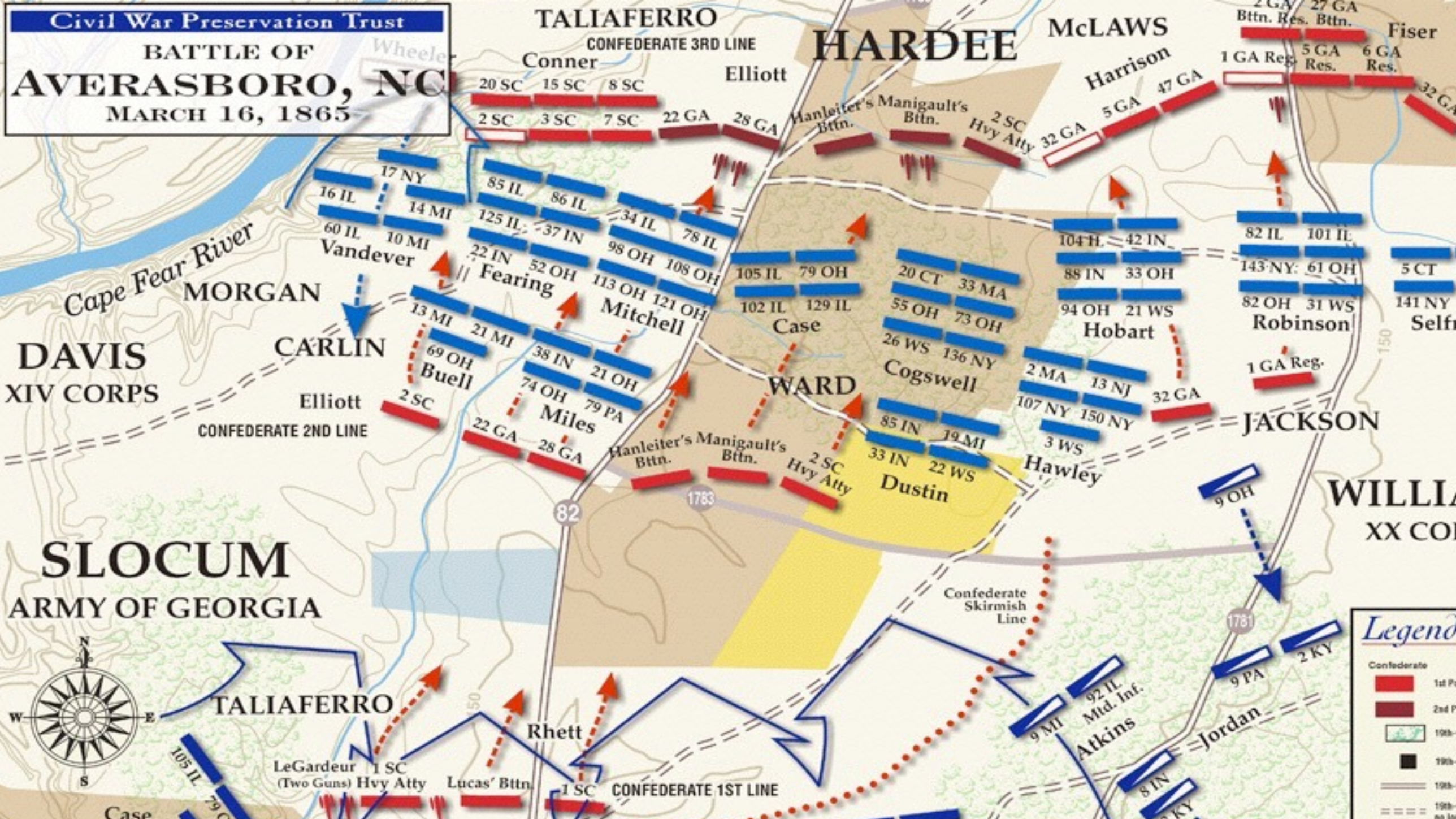

Request Immigration Product
Notify Change of Circumstances
Amend Active Request
Request Replacement
Request Data Check
Query/ Complain
Request Review
Challenge Decision
Visible
Value Chain
Invisible
IPT
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution


Home Office
Visible
Value Chain
Invisible
Lead
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution

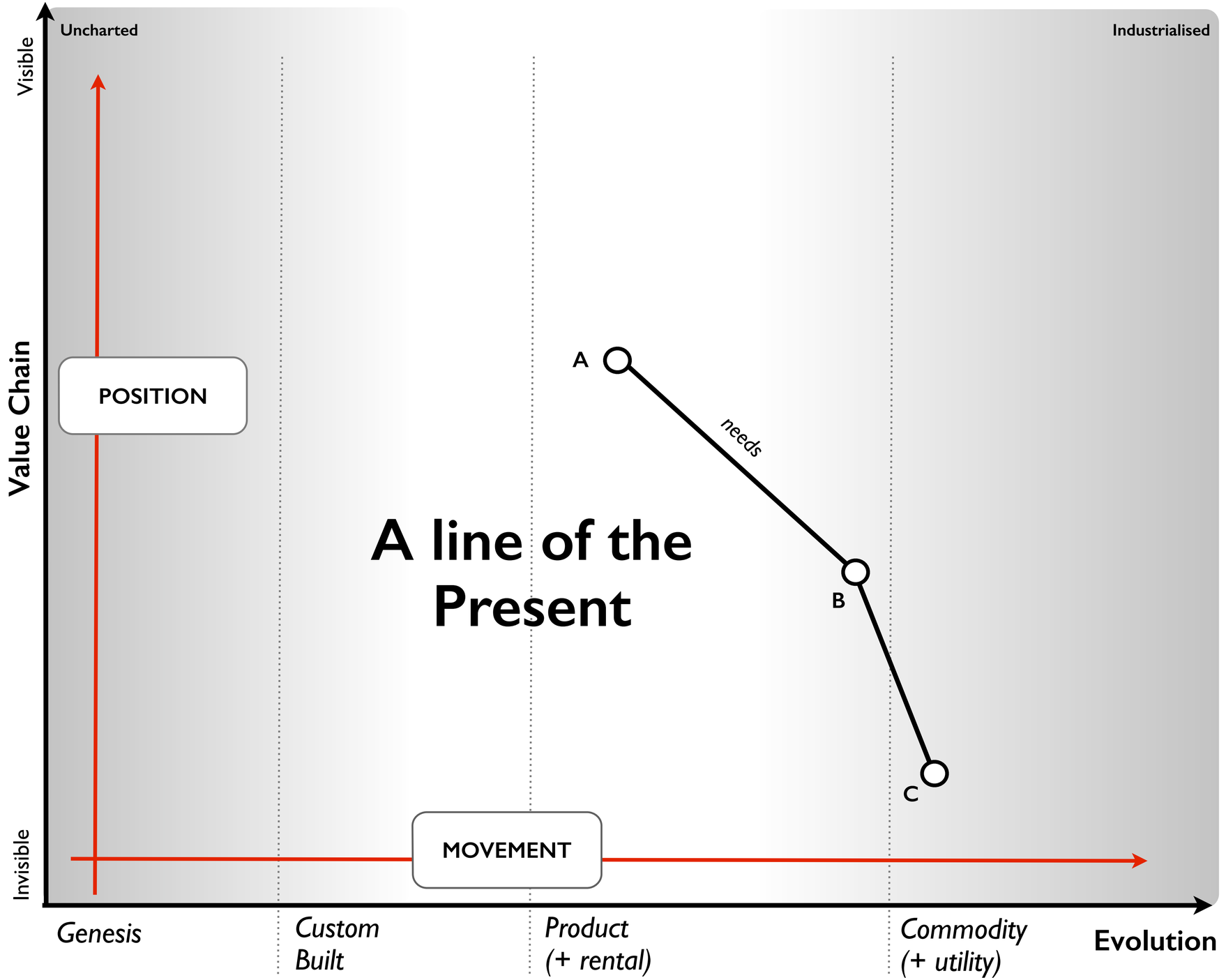
IT Weapons of Mass Duplication

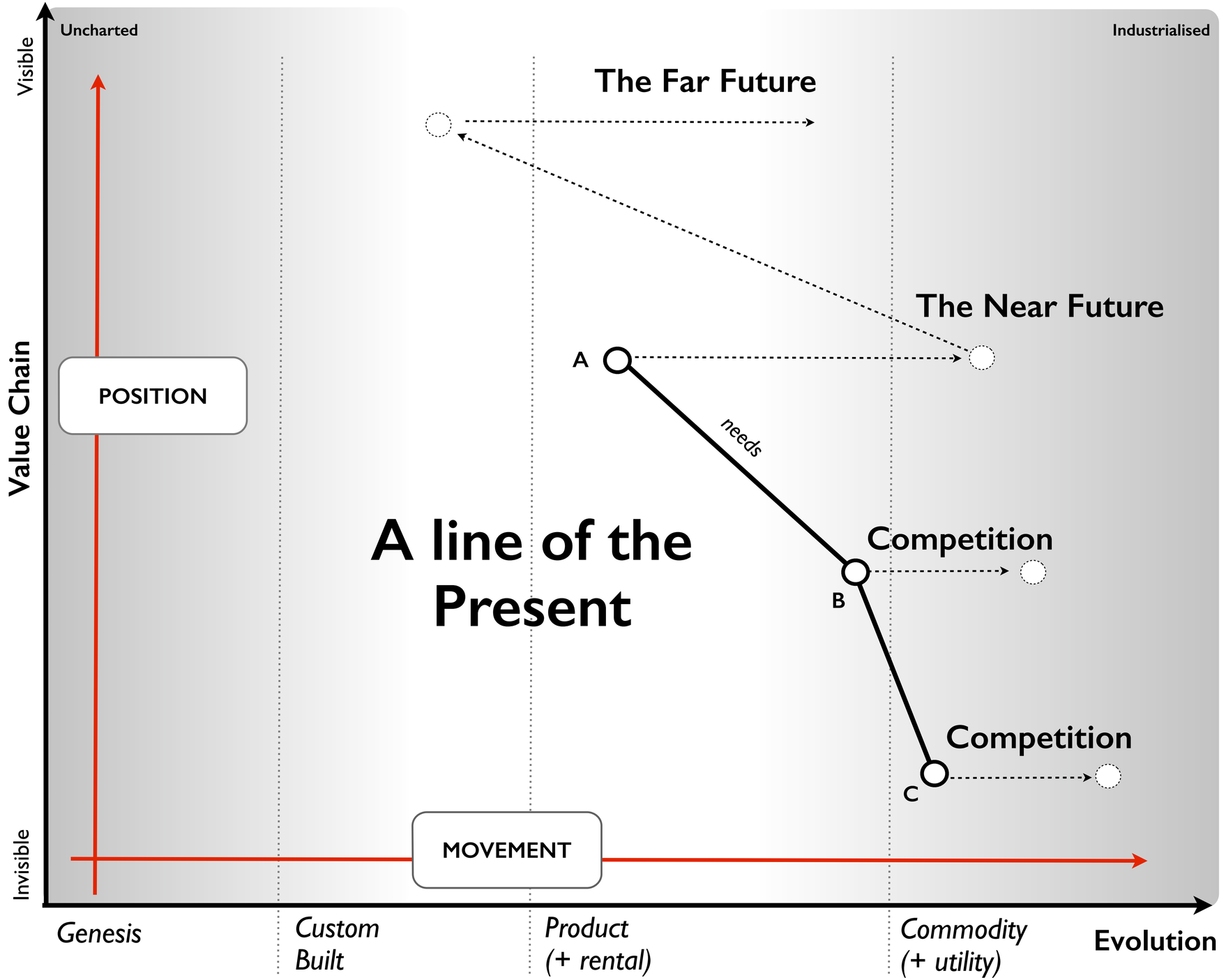
Number of Duplicate Efforts in a single Organisation	Technology Space	Industry
380	ERP system	Global Corporate
170 *unverified*	Cloud projects	Global Technology Vendor
118	Workflow systems	Government
22	Rules Engines	European Corporate
14	CRM system	Bank
6	General Rule of Thumb	Everywhere

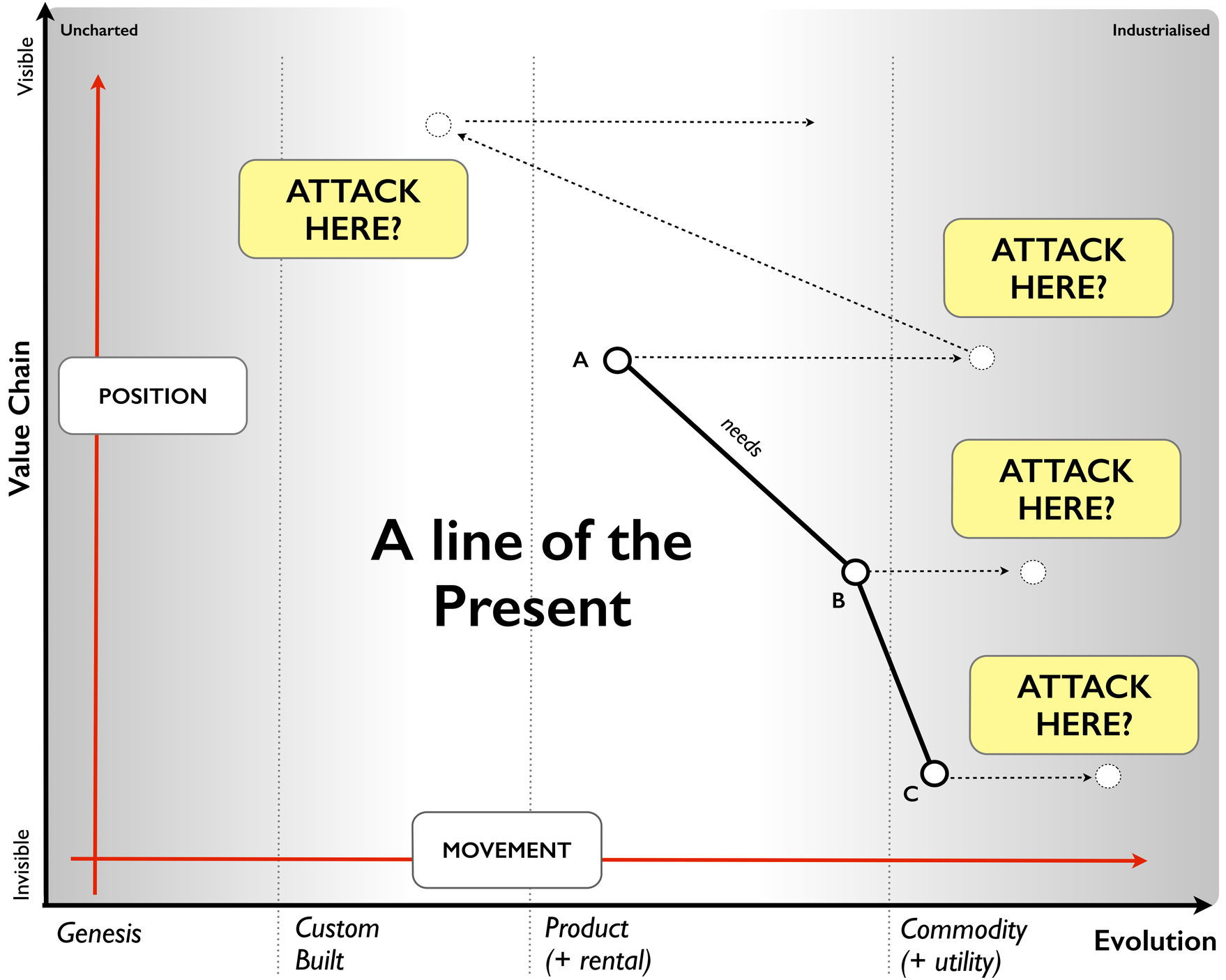

So what?
Learning
Gameplay
How to?
Why?

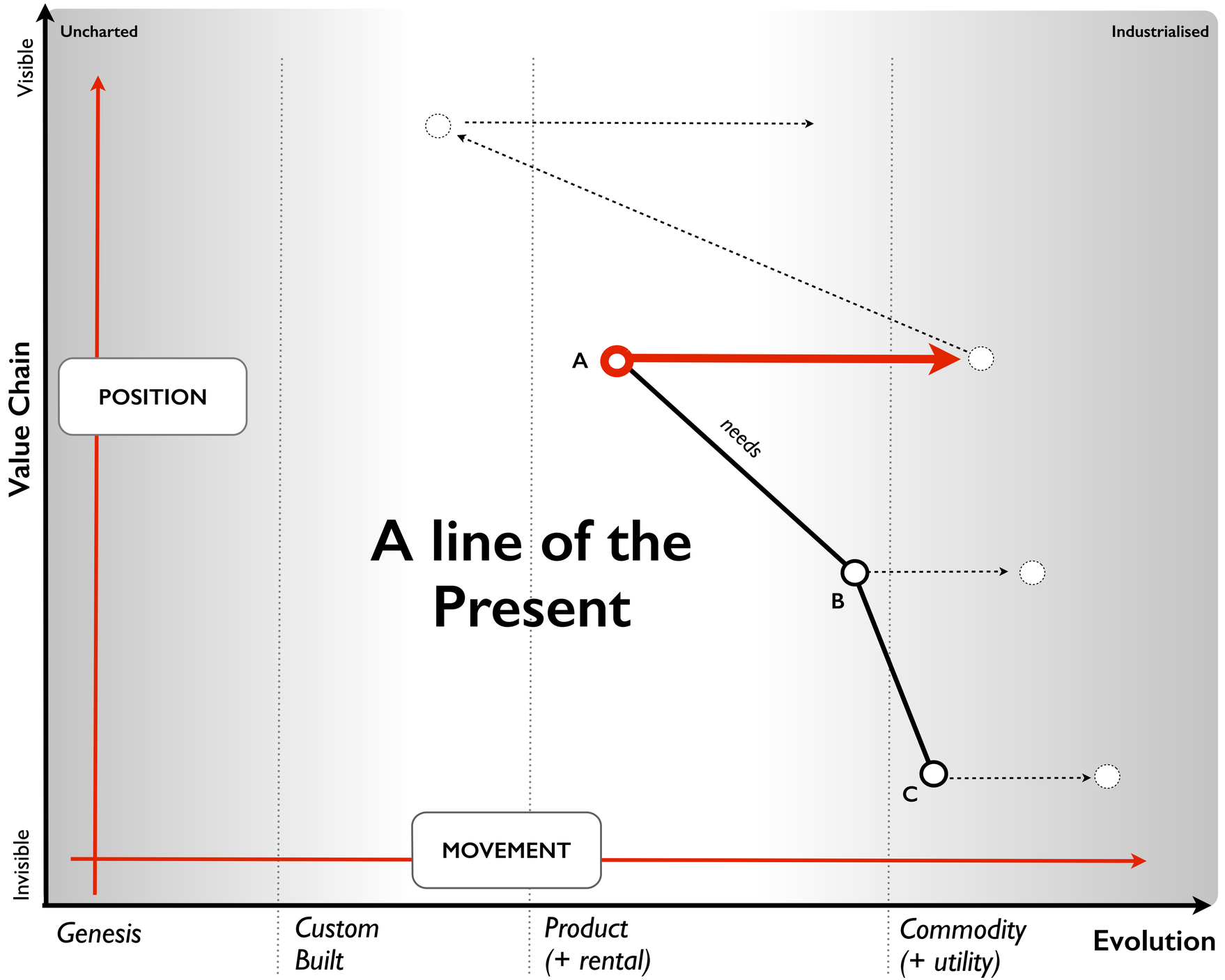


Civil War Preservation Trust
BATTLE OF
AVERASBORO, NC
MARCH 16, 1865
TALIAFERRO
CONFEDERATE 3RD LINE
HARDEE
McLAWS
Conner
Elliott
Harrison
Fiser
Wheeler
20 SC
15 SC
8 SC
2 SC
3 SC
7 SC
22 GA
28 GA
Hanleiter's Bttn.
Manigault's Bttn.
2 SC Hvy Atty
32 GA
5 GA
47 GA
1 GA Reg.
5 GA Res.
6 GA Res.
2 GA Bttn. Res.
27 GA Bttn.
32 GA
17 NY
16 IL
14 MI
60 IL
10 MI
Vandever
85 IL
86 IL
125 IL
37 IN
22 IN
52 OH
Fearing
34 IL
78 IL
98 OH
108 OH
113 OH
121 OH
Mitchell
Cape Fear River
MORGAN
CARLIN
DAVIS
XIV CORPS
13 MI
21 MI
69 OH
Buell
38 IN
21 OH
74 OH
79 PA
Miles
Elliott
CONFEDERATE 2ND LINE
2 SC
22 GA
28 GA
105 IL
79 OH
102 IL
129 IL
Case
20 CT
33 MA
55 OH
73 OH
26 WS
136 NY
Cogswell
WARD
85 IN
19 MI
33 IN
22 WS
Dustin
104 IL
42 IN
88 IN
33 OH
94 OH
21 WS
Hobart
2 MA
13 NJ
107 NY
150 NY
3 WS
Hawley
32 GA
82 IL
101 IL
143 NY
61 OH
82 OH
31 WS
Robinson
5 CT
141 NY
1 GA Reg.
JACKSON
9 OH
WILLIA
XX CO
82
1783
1781
150
SLOCUM
ARMY OF GEORGIA
Confederate Skirmish Line
N
W
E
S
TALIAFERRO
Rhett
105 IL
LeGardeur (Two Guns)
1 SC Hvy Atty
Lucas' Bttn.
1 SC
CONFEDERATE 1ST LINE
Case
9 MI
92 IL Mtd. Inf.
Atkins
9 PA
2 KY
Jordan
8 IN
Legend
Confederate


Uncharted
Industrialised
Visible
Value Chain
Invisible
POSITION
A
needs
B
C
A line of the Present
MOVEMENT
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

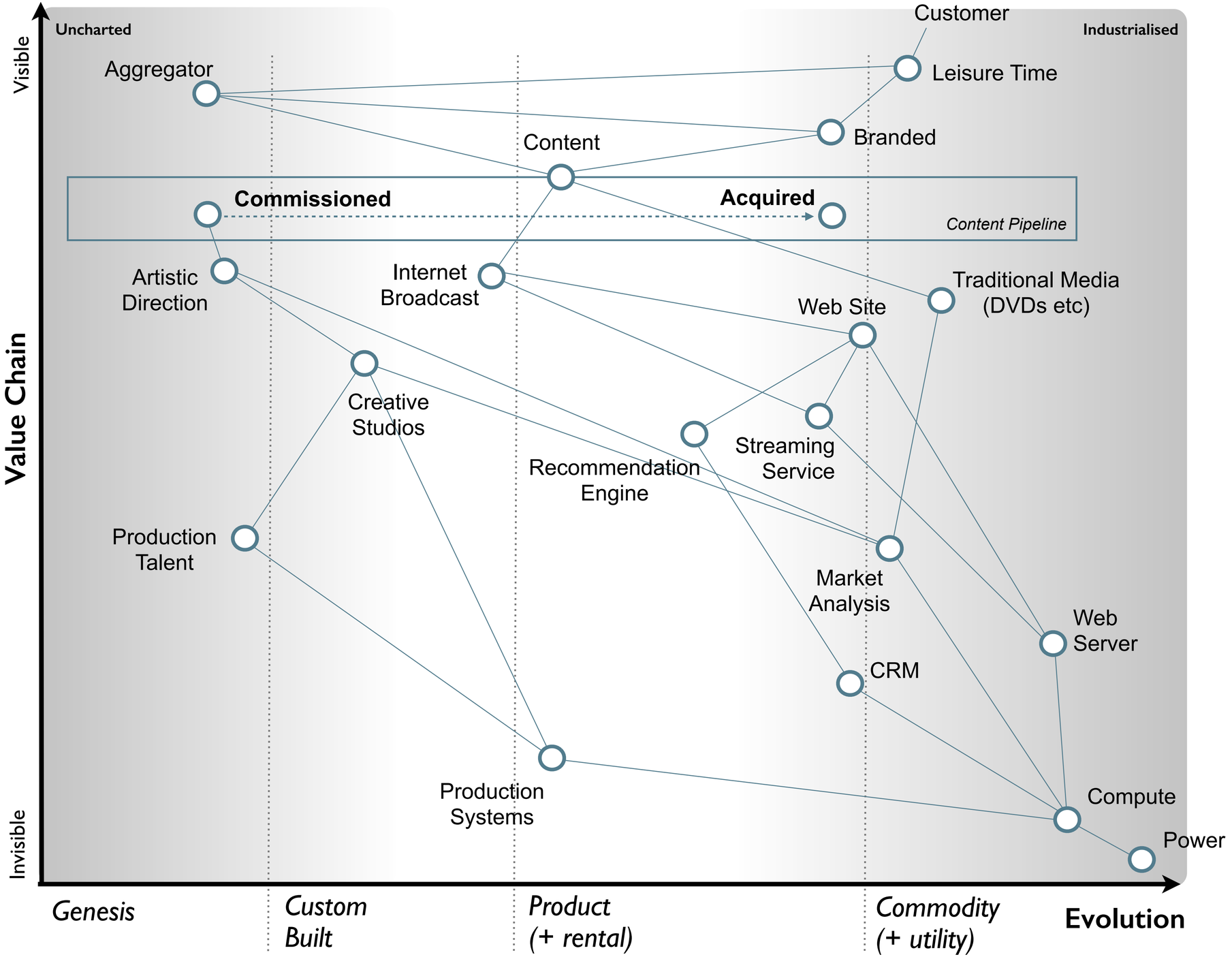

Uncharted
Industrialised
Visible
Invisible
Value Chain
The Far Future
The Near Future
A
needs
B
C
Competition
Competition
A line of the Present
POSITION
MOVEMENT
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

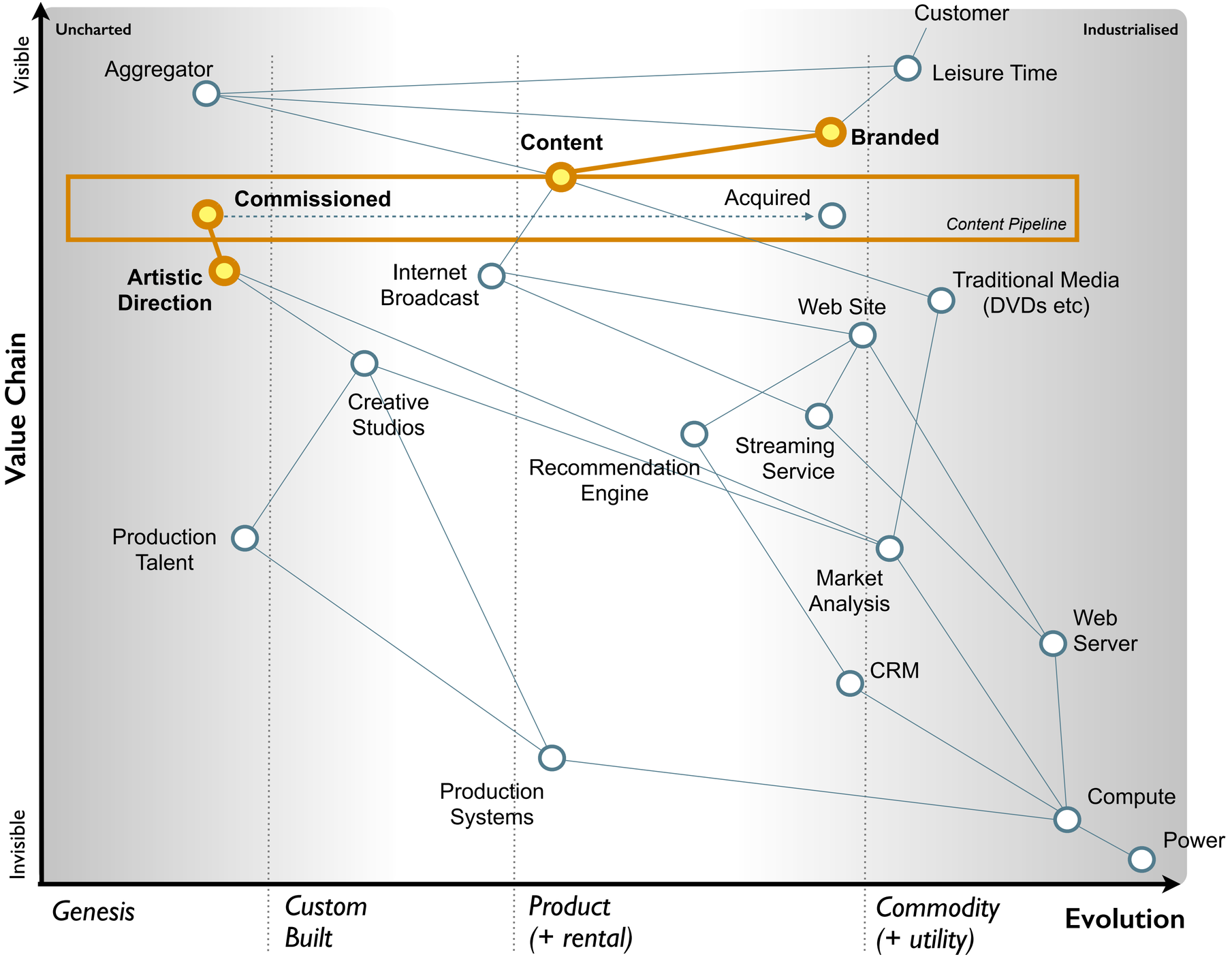

Uncharted
Industrialised
Visible
Value Chain
Invisible
ATTACK HERE?
ATTACK HERE?
ATTACK HERE?
ATTACK HERE?
POSITION
A
needs
B
C
A line of the Present
MOVEMENT
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

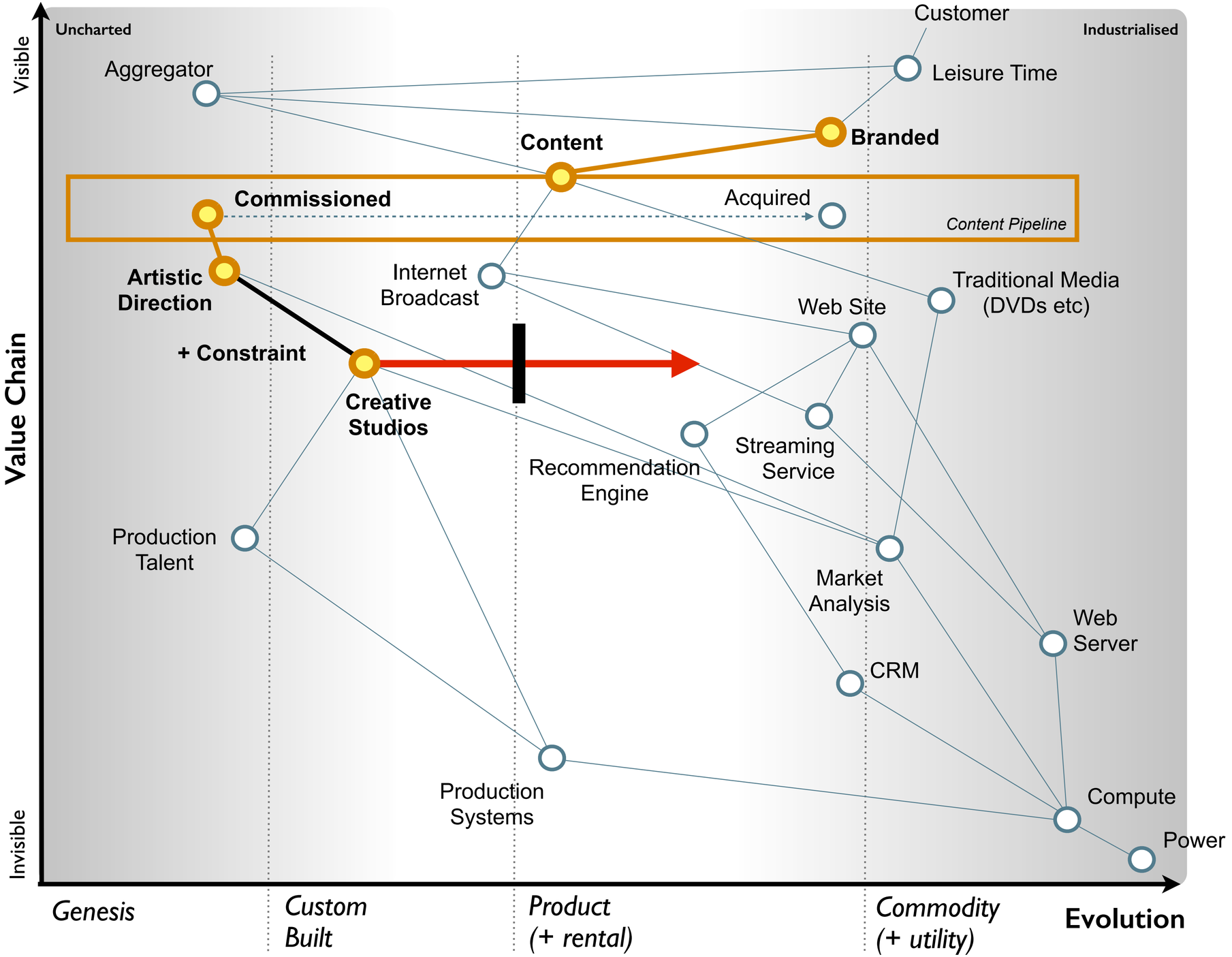

Uncharted
Industrialised
Visible
Value Chain
Invisible
POSITION
A
needs
B
C
A line of the Present
MOVEMENT
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

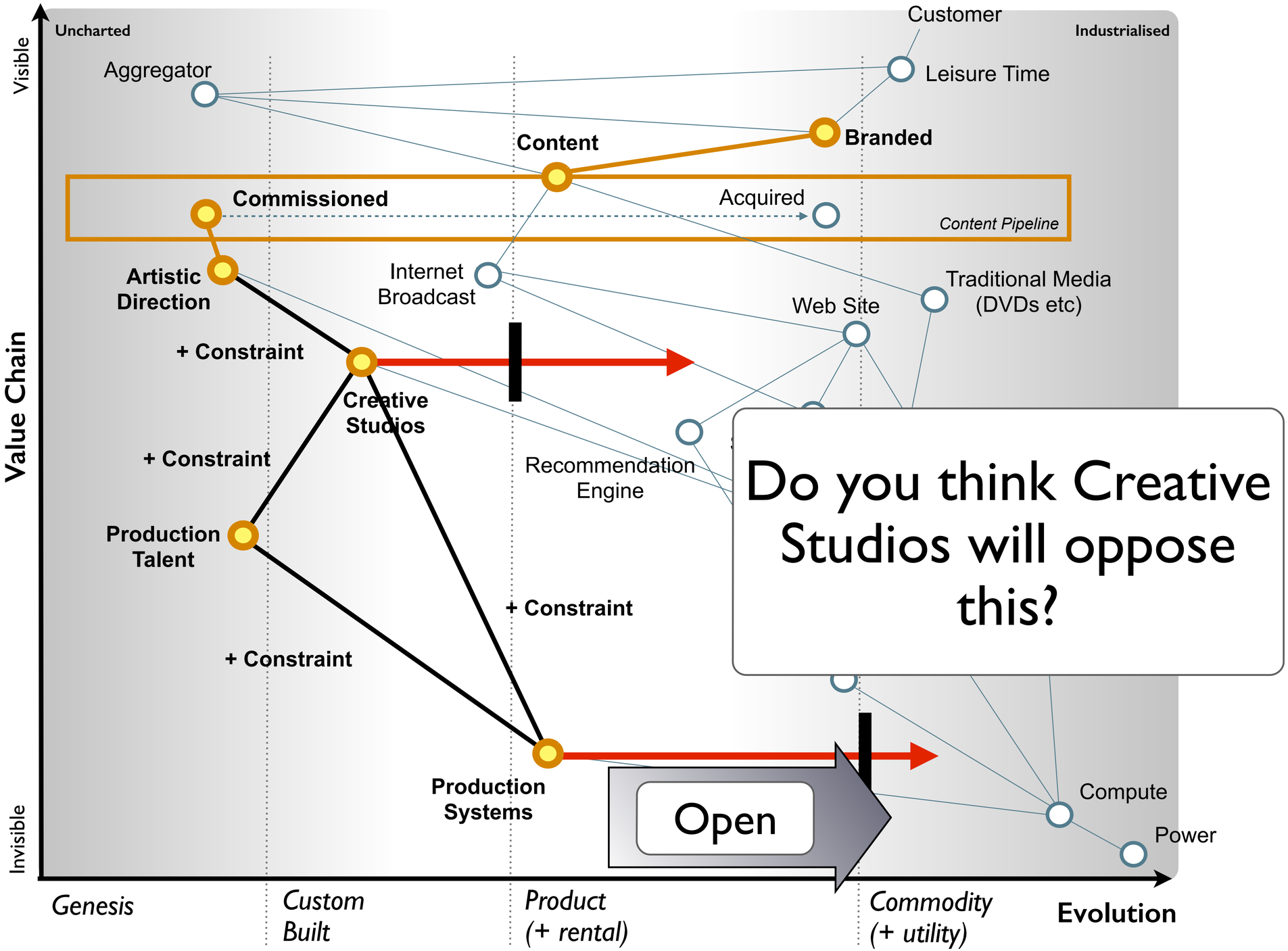
Focus	Gameplay						LG N LE CE
Basic Operations	Focus on user needs	Situational awareness (communication, alignment)	Effective & efficient (methods, silos, bias, rationalisation)	Structure & culture (PST)	Optimising Flow (financial, risk, marketing, operation, profile)	Channel conflicts & disintermediation	
User Perception	Consumer education	Bundling	Creating artifical needs	Creating a confusion of choice	FUD (fear, uncertainty, doubt)	Artificial competition	Lobbying / counter
Accelerators	Market Enablement	Open approaches (data, source etc)	Exploiting network effects	Co-operation	Industrial policy		
De-accelerators	Exploitation of existing constraints	Patents & IPR	Creating constraints (supply chain)	Limitation of competition			
Dealing with toxicity	Disposal of liability	Sweat and dump	Pig in a poke				
Market	Differentiation	Pricing policy	Exploiting buyer / supplier power	Harvesting	Standards game	Signal distortion	
Defensive	Threat acquisition	Raising barriers to entry	Procrastination & timing	Defensive regulation			
Attacking	Directed investment	Experimentation	Creating a centre of gravity	Undermining barriers to entry	Fool's mate (lower orders)		
Ecosystem	Alliances	Co-creation	ILC (sensing engines)	Tower & moat	2 factor	Co-opting & intercession	Embrace & extend
Competitor	Ambush (tech drops)	Fragmentation play	Reinforcing competitor inertia	Sapping (multiple fronts)	Misdirection	Restriction of movement (circling)	Talent raid
Positional	Land grab	First mover (Industrialisation)	Fast follower (Innovation)	Weak signal / horizon			
Poison	Licensing play	Insertion	Designed to fail (community)				

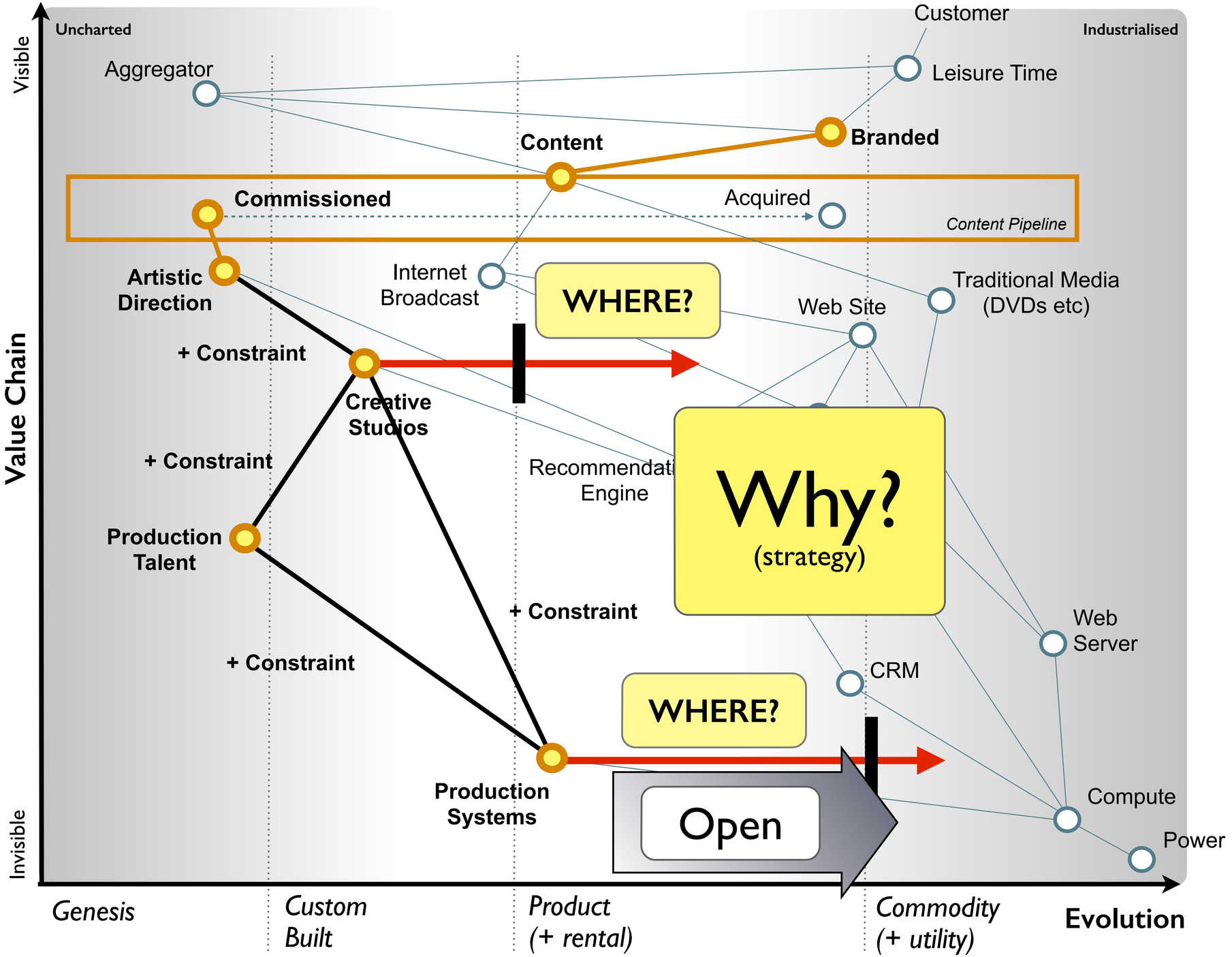
Focus	Gameplay					LG N LE CE	
Basic Operations	Focus on user needs	Situational awareness (communication, alignment)	Effective & efficient (methods, silos, bias, rationalisation)	Structure & culture (PST)	Optimising Flow (financial, risk, marketing, operation, profile)	Channel conflicts & disintermediation	
User Perception	Consumer education	Bundling	Creating artifical needs	Creating a confusion of choice	FUD (fear, uncertainty, doubt)	Artificial competition	Lobbying / counter
Accelerators	Market Enablement	Open approaches (data, source etc)	Exploiting network effects	Co-operation	Industrial policy		
De-accelerators	Exploitation of existing constraints	Patents & IPR	Creating constraints (supply chain)	Limitation of competition			
Dealing with toxicity	Disposal of liability	Sweat and dump	Pig in a poke				
Market	Differentiation	Pricing policy	Exploiting buyer / supplier power	Harvesting	Standards game	Signal distortion	
Defensive	Threat acquisition	Raising barriers to entry	Procrastination & timing	Defensive regulation			
Attacking	Directed investment	Experimentation	Creating a centre of gravity	Undermining barriers to entry	Fool's mate (lower orders)		
Ecosystem	Alliances	Co-creation	ILC (sensing engines)	Tower & moat	2 factor	Co-opting & intercession	Embrace & extend
Competitor	Ambush (tech drops)	Fragmentation play	Reinforcing competitor inertia	Sapping (multiple fronts)	Misdirection	Restriction of movement (circling)	Talent raid
Positional	Land grab	First mover (Industrialisation)	Fast follower (Innovation)	Weak signal / horizon			
Poison	Licensing play	Insertion	Designed to fail (community)				


Uncharted
Industrialised
Visible
Invisible
Value Chain
Customer
Aggregator
Leisure Time
Branded
Content
Commissioned
Acquired
Content Pipeline
Artistic Direction
Internet Broadcast
Traditional Media (DVDs etc)
Web Site
Creative Studios
Streaming Service
Recommendation Engine
Production Talent
Market Analysis
Web Server
CRM
Production Systems
Compute
Power
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

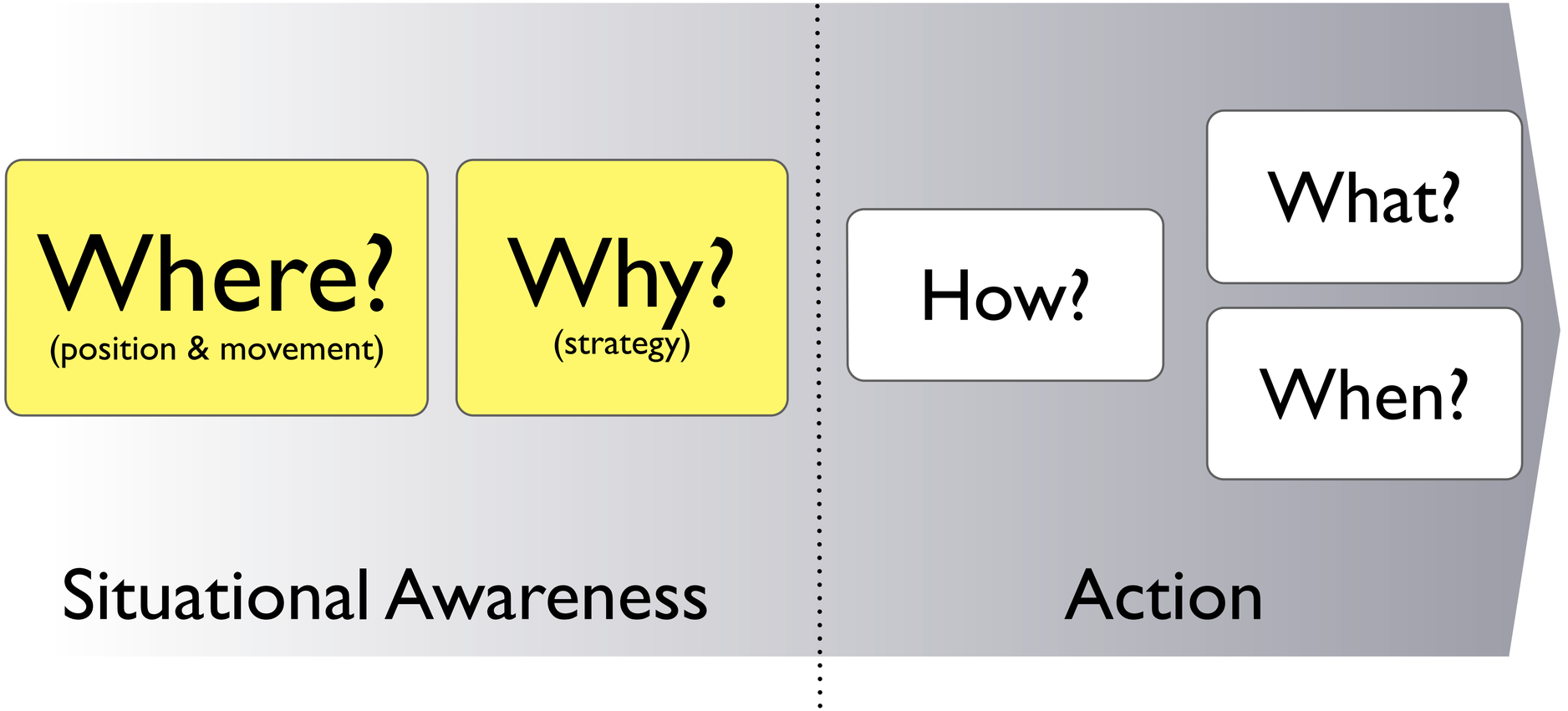

Uncharted
Industrialised
Visible
Invisible
Value Chain
Customer
Aggregator
Leisure Time
Branded
Content
Commissioned
Acquired
Content Pipeline
Artistic Direction
Internet Broadcast
Traditional Media (DVDs etc)
Web Site
Creative Studios
Streaming Service
Recommendation Engine
Production Talent
Market Analysis
Web Server
CRM
Production Systems
Compute
Power
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution


Uncharted
Industrialised
Visible
Invisible
Value Chain
Customer
Aggregator
Leisure Time
Content
Branded
Commissioned
Acquired
Content Pipeline
Artistic Direction
+ Constraint
Internet Broadcast
Traditional Media (DVDs etc)
Web Site
Creative Studios
Streaming Service
Recommendation Engine
Production Talent
Market Analysis
Web Server
CRM
Production Systems
Compute
Power
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

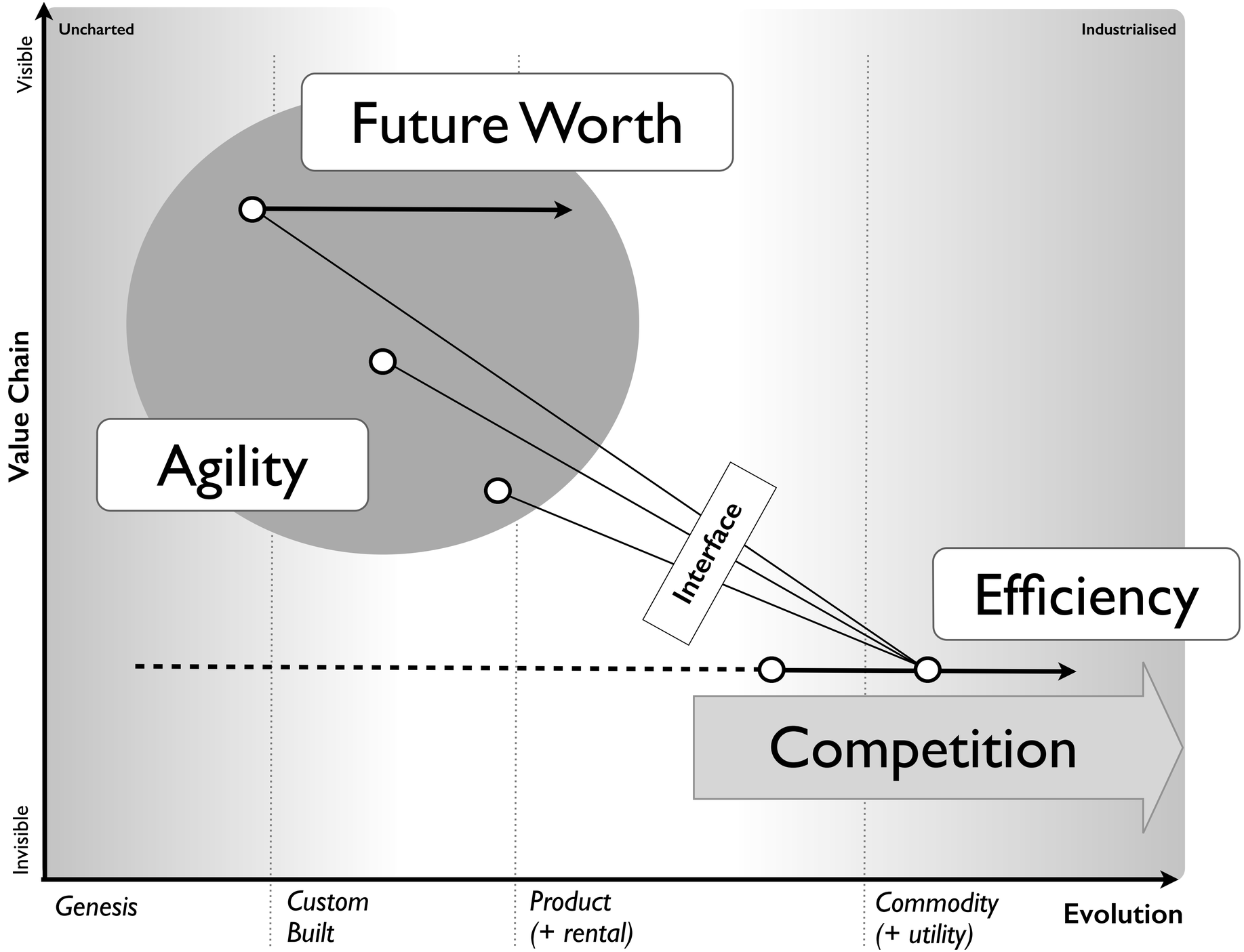

Uncharted
Industrialised
Visible
Invisible
Value Chain
Customer
Aggregator
Leisure Time
Content
Branded
Commissioned
Acquired
Content Pipeline
Artistic Direction
Internet Broadcast
Traditional Media (DVDs etc)
Web Site
+ Constraint
Creative Studios
+ Constraint
Recommendation Engine
Production Talent
+ Constraint
+ Constraint
Production Systems
Open
Compute
Power
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution
Do you think Creative Studios will oppose this?

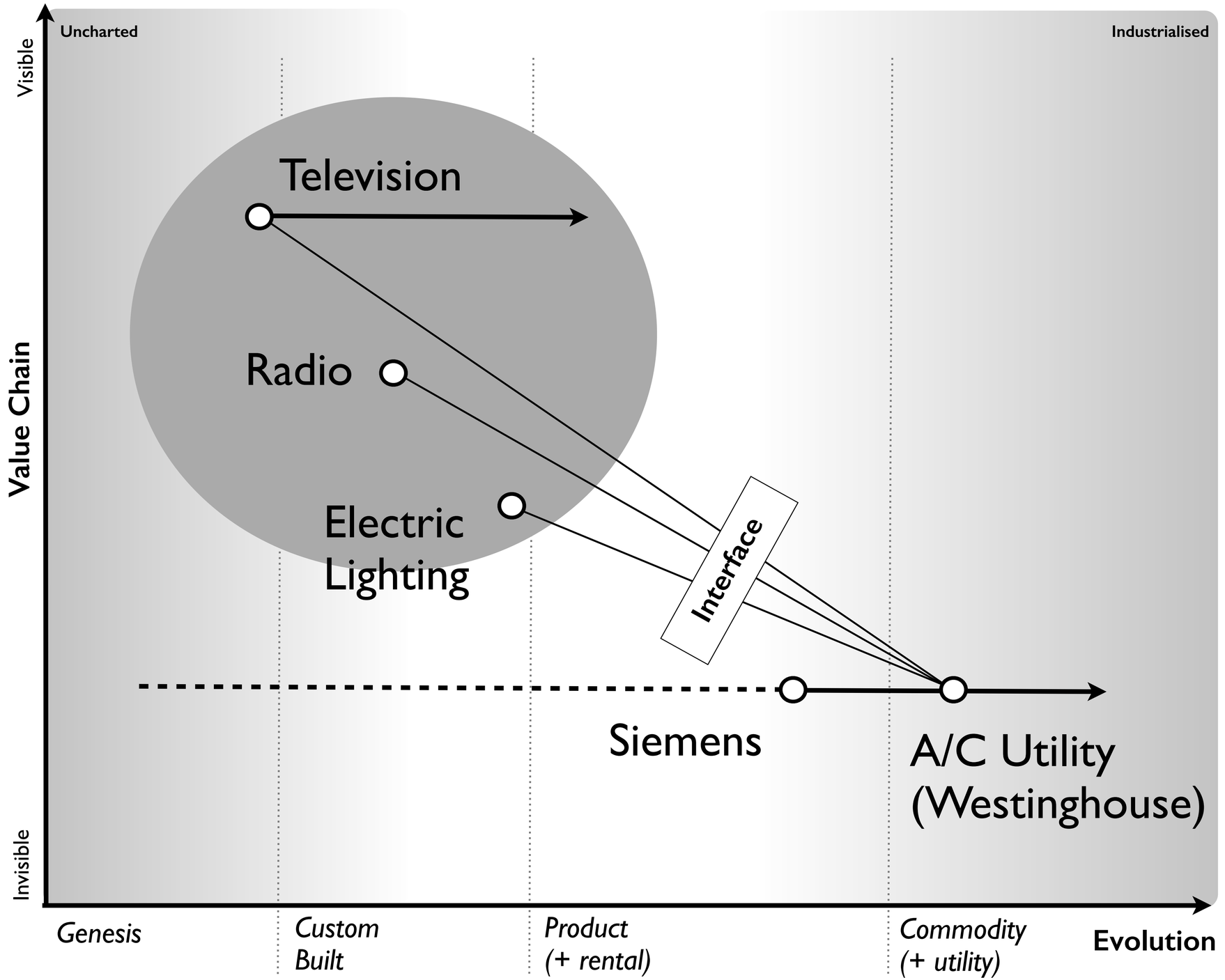

Uncharted
Industrialised
Visible
Invisible
Value Chain
Customer
Aggregator
Leisure Time
Content
Branded
Commissioned
Acquired
Content Pipeline
Artistic Direction
Internet Broadcast
WHERE?
Traditional Media (DVDs etc)
Web Site
+ Constraint
Creative Studios
+ Constraint
Recommendati Engine
Why?
(strategy)
Production Talent
+ Constraint
+ Constraint
Web Server
CRM
WHERE?
Production Systems
Open
Compute
Power
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

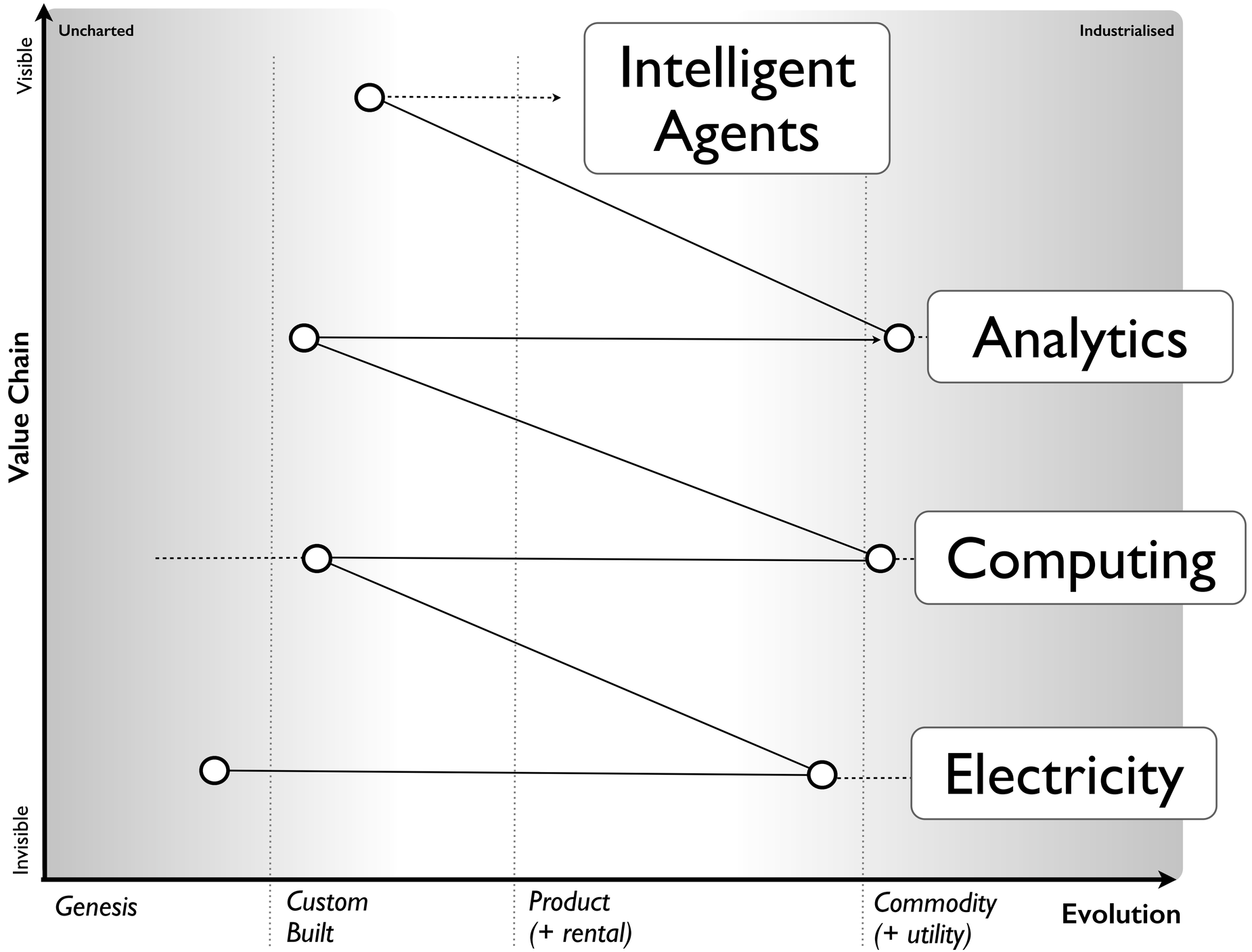
In Business ...

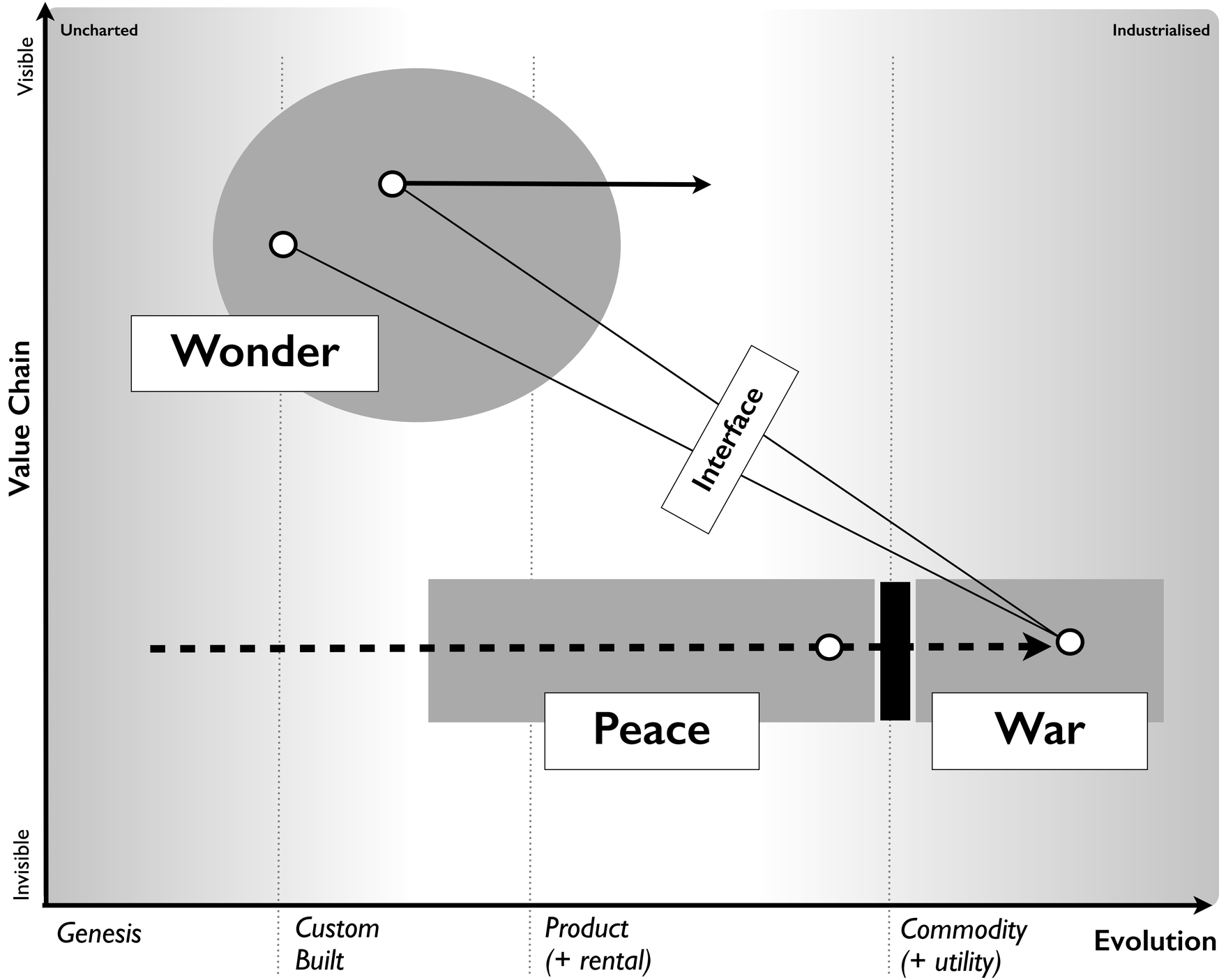

Where?
(position & movement)
Why?
(strategy)
How?
What?
When?
Situational Awareness
Action

Focus	Gameplay						LG N LE CE
Basic Operations	Focus on user needs	Situational awareness (communication, alignment)	Effective & efficient (methods, silos, bias, rationalisation)	Structure & culture (PST)	Optimising Flow (financial, risk, marketing, operation, profile)	Channel conflicts & disintermediation	
User Perception	Consumer education	Bundling	Creating artifical needs	Creating a confusion of choice	FUD (fear, uncertainty, doubt)	Artificial competition	Lobbying / counter
Accelerators	Market Enablement	Open approaches (data, source etc)	Exploiting network effects	Co-operation	Industrial policy		
De-accelerators	Exploitation of existing constraints	Patents & IPR	Creating constraints (supply chain)	Limitation of competition			
Dealing with toxicity	Disposal of liability	Sweat and dump	Pig in a poke				
Market	Differentiation	Pricing policy	Exploiting buyer / supplier power	Harvesting	Standards game	Signal distortion	
Defensive	Threat acquisition	Raising barriers to entry	Procrastination & timing	Defensive regulation			
Attacking	Directed investment	Experimentation	Creating a centre of gravity	Undermining barriers to entry	Fool's mate (lower orders)		
Ecosystem	Alliances	Co-creation	ILC (sensing engines)	Tower & moat	2 factor	Co-opting & intercession	Embrace & extend
Competitor	Ambush (tech drops)	Fragmentation play	Reinforcing competitor inertia	Sapping (multiple fronts)	Misdirection	Restriction of movement (circling)	Talent raid
Positional	Land grab	First mover (Industrialisation)	Fast follower (Innovation)	Weak signal / horizon			
Poison	Licensing play	Insertion	Designed to fail (community)				

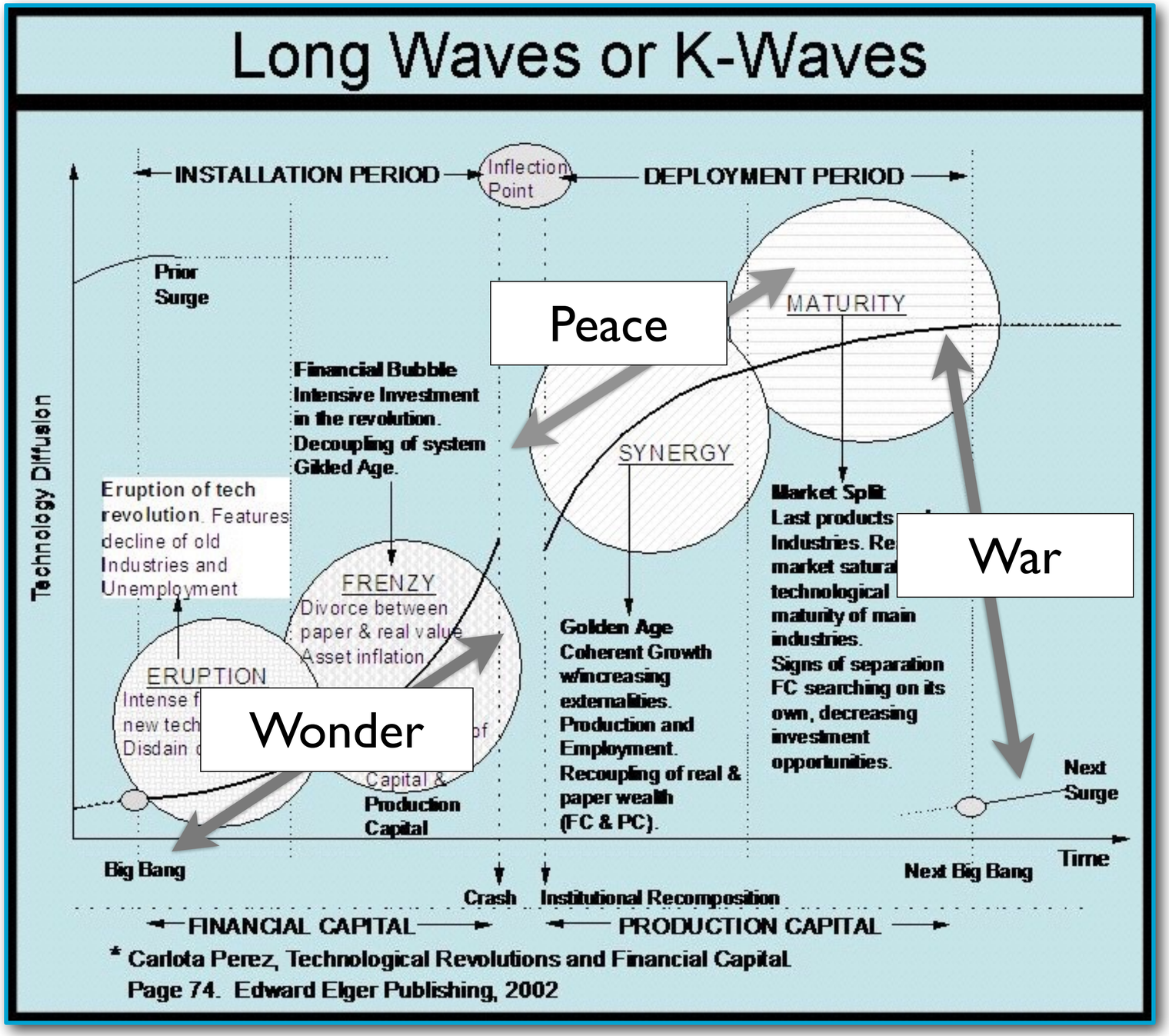

Uncharted
Industrialised
Visible
Value Chain
Invisible
Future Worth
Agility
Interface
Efficiency
Competition
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution


Uncharted
Industrialised
Visible
Value Chain
Invisible
Television
Radio
Electric
Lighting
Interface
Siemens
A/C Utility
(Westinghouse)
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution

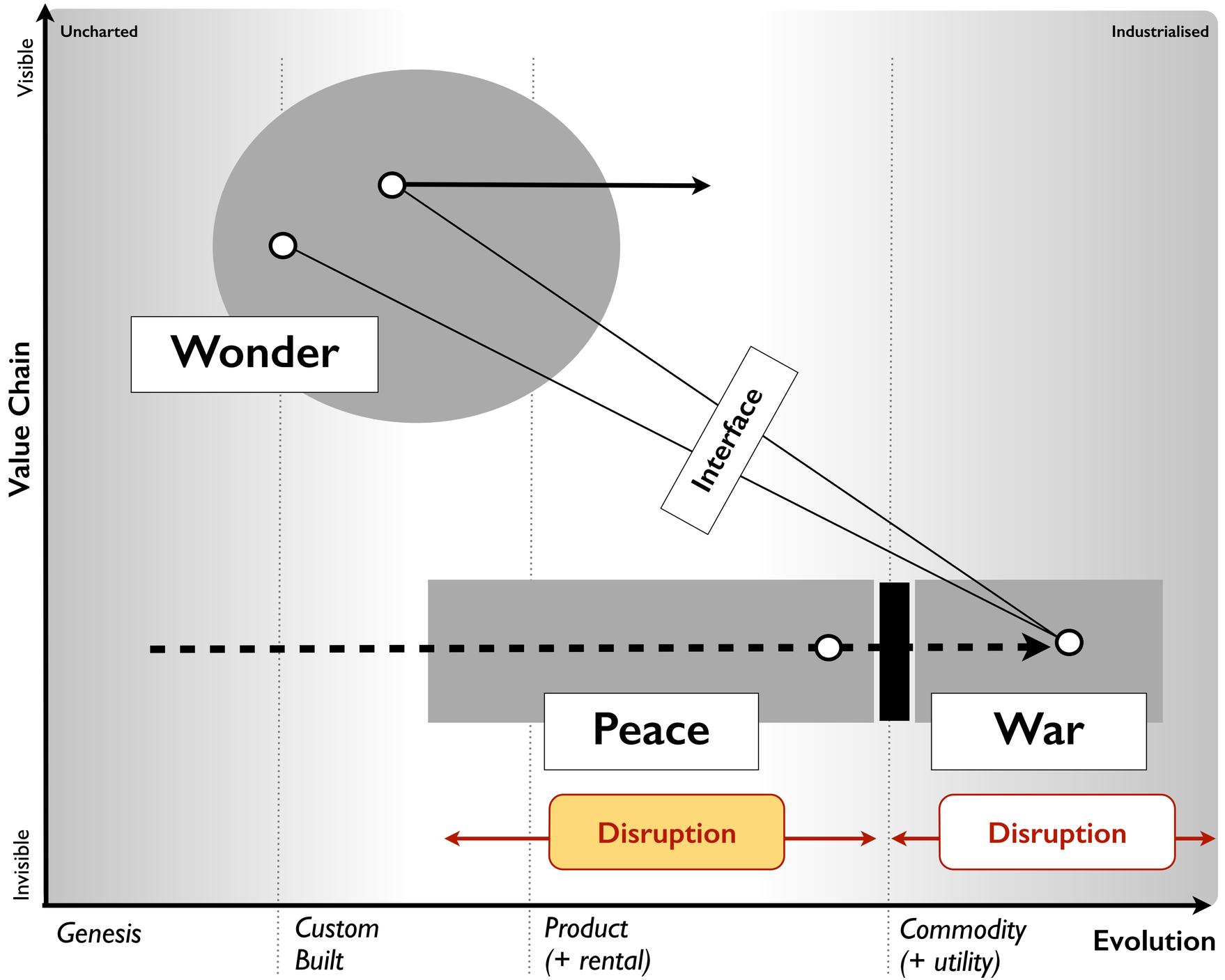

Uncharted
Industrialised
Visible
Value Chain
Invisible
Intelligent Agents
Analytics
Computing
Electricity
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution

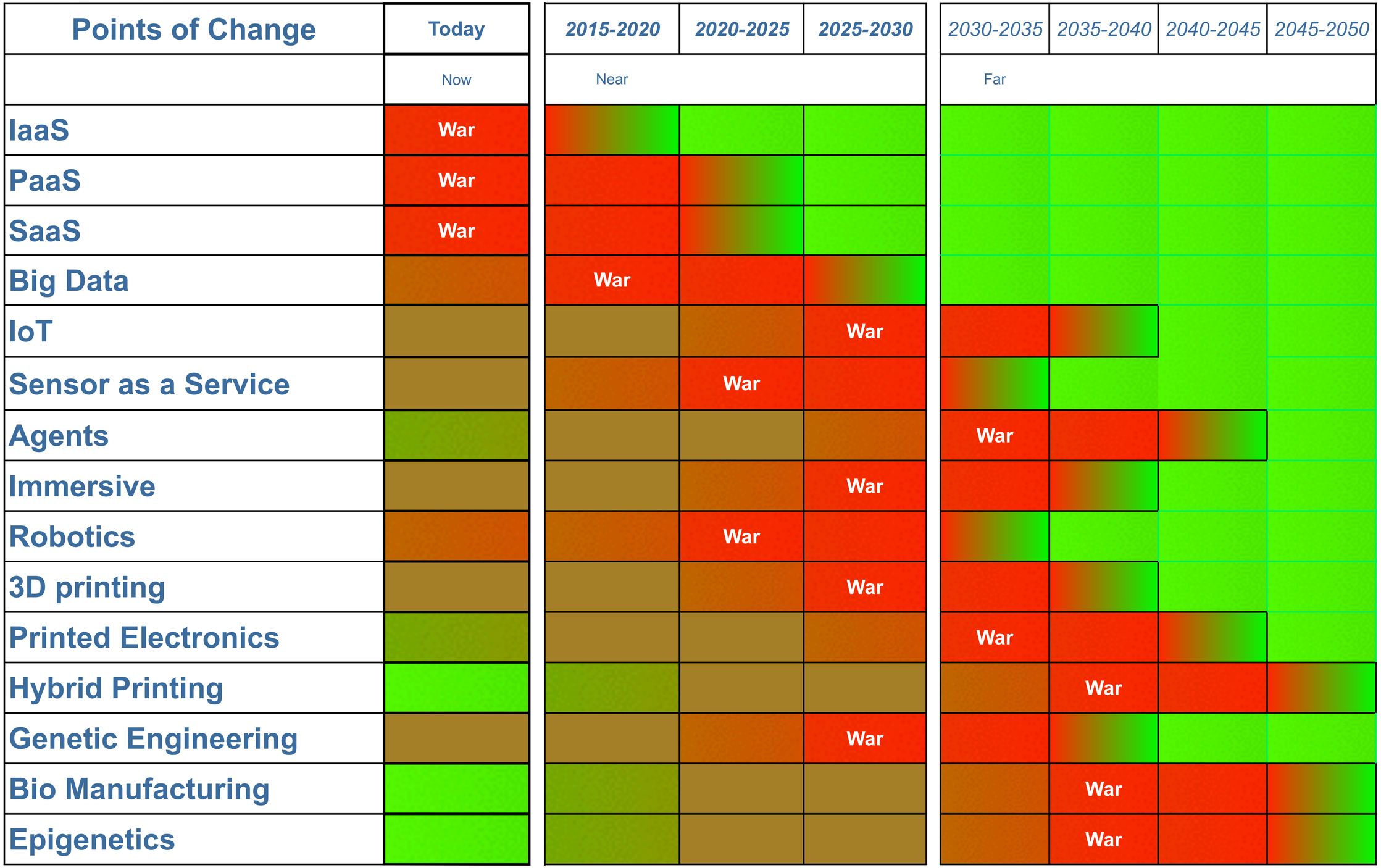

Uncharted
Industrialised
Visible
Value Chain
Invisible
Wonder
Interface
Peace
War
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution

Long Waves or K-Waves



* Carlota Perez, Technological Revolutions and Financial Capital
Page 74. Edward Elger Publishing, 2002


Uncharted
Industrialised
Visible
Value Chain
Invisible
Wonder
Interface
Peace
War
Disruption
Disruption
Genesis
Custom
Built
Product
(+ rental)
Commodity
(+ utility)
Evolution


Points of Change
Today
2015-2020
2020-2025
2025-2030
2030-2035
2035-2040
2040-2045
2045-2050
Now
Near
Far
IaaS
War
PaaS
War
SaaS
War
Big Data
War
IoT
War
Sensor as a Service
War
Agents
War
Immersive
War
Robotics
War
3D printing
War
Printed Electronics
War
Hybrid Printing
War
Genetic Engineering
War
Bio Manufacturing
War
Epigenetics
War

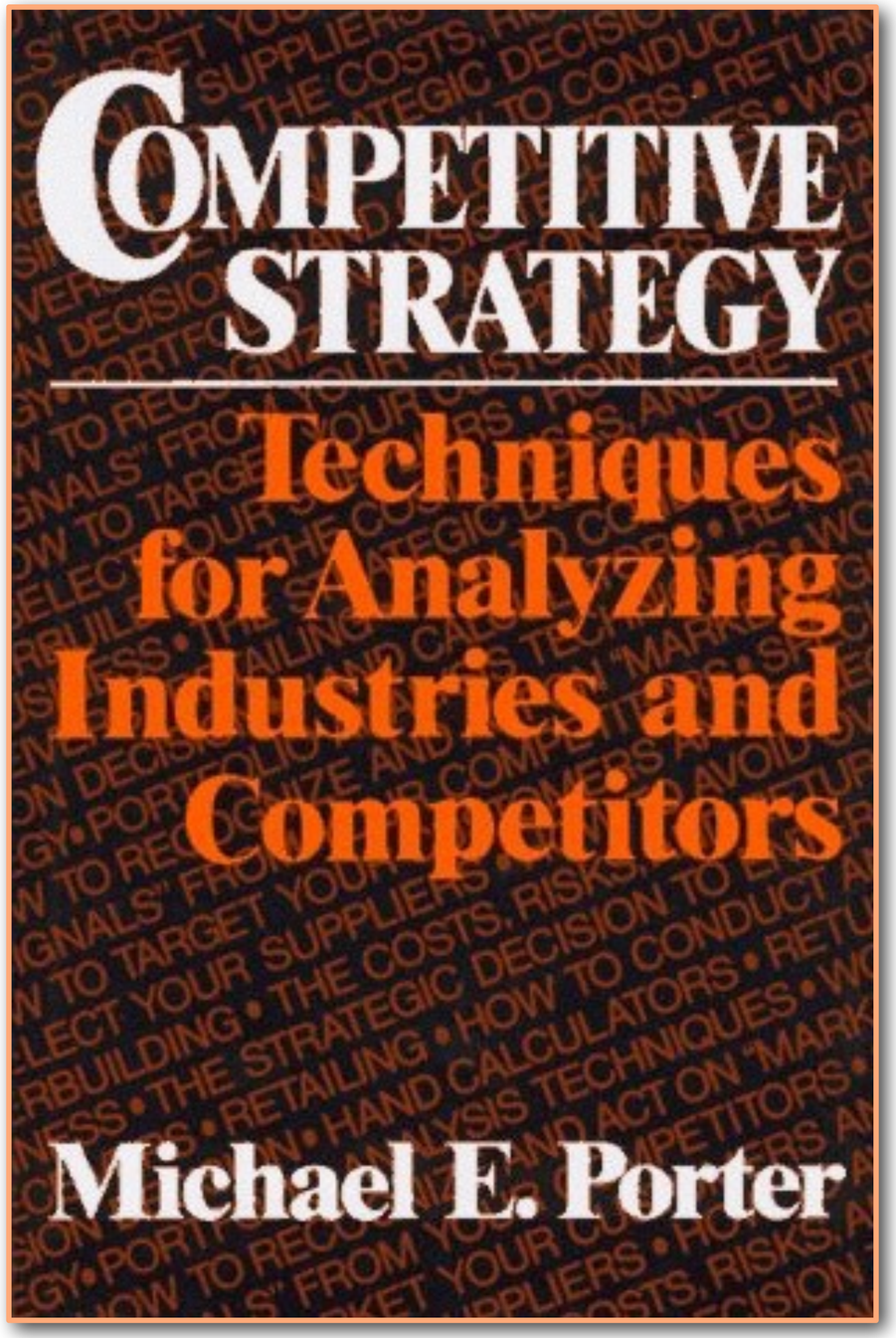
Focus	Gameplay						LG N LE CE
Basic Operations	Focus on user needs	Situational awareness (communication, alignment)	Effective & efficient (methods, silos, bias, rationalisation)	Structure & culture (PST)	Optimising Flow (financial, risk, marketing, operation, profile)	Channel conflicts & disintermediation	
User Perception	Consumer education	Bundling	Creating artifical needs	Creating a confusion of choice	FUD (fear, uncertainty, doubt)	Artificial competition	Lobbying / counter
Accelerators	Market Enablement	Open approaches (data, source etc)	Exploiting network effects	Co-operation	Industrial policy		
De-accelerators	Exploitation of existing constraints	Patents & IPR	Creating constraints (supply chain)	Limitation of competition			
Dealing with toxicity	Disposal of liability	Sweat and dump	Pig in a poke				
Market	Differentiation	Pricing policy	Exploiting buyer / supplier power	Harvesting	Standards game	Signal distortion	
Defensive	Threat acquisition	Raising barriers to entry	Procrastination & timing	Defensive regulation			
Attacking	Directed investment	Experimentation	Creating a centre of gravity	Undermining barriers to entry	Fool's mate (lower orders)		
Ecosystem	Alliances	Co-creation	ILC (sensing engines)	Tower & moat	2 factor	Co-opting & intercession	Embrace & extend
Competitor	Ambush (tech drops)	Fragmentation play	Reinforcing competitor inertia	Sapping (multiple fronts)	Misdirection	Restriction of movement (circling)	Talent raid
Positional	Land grab	First mover (Industrialisation)	Fast follower (Innovation)	Weak signal / horizon			
Poison	Licensing play	Insertion	Designed to fail (community)				

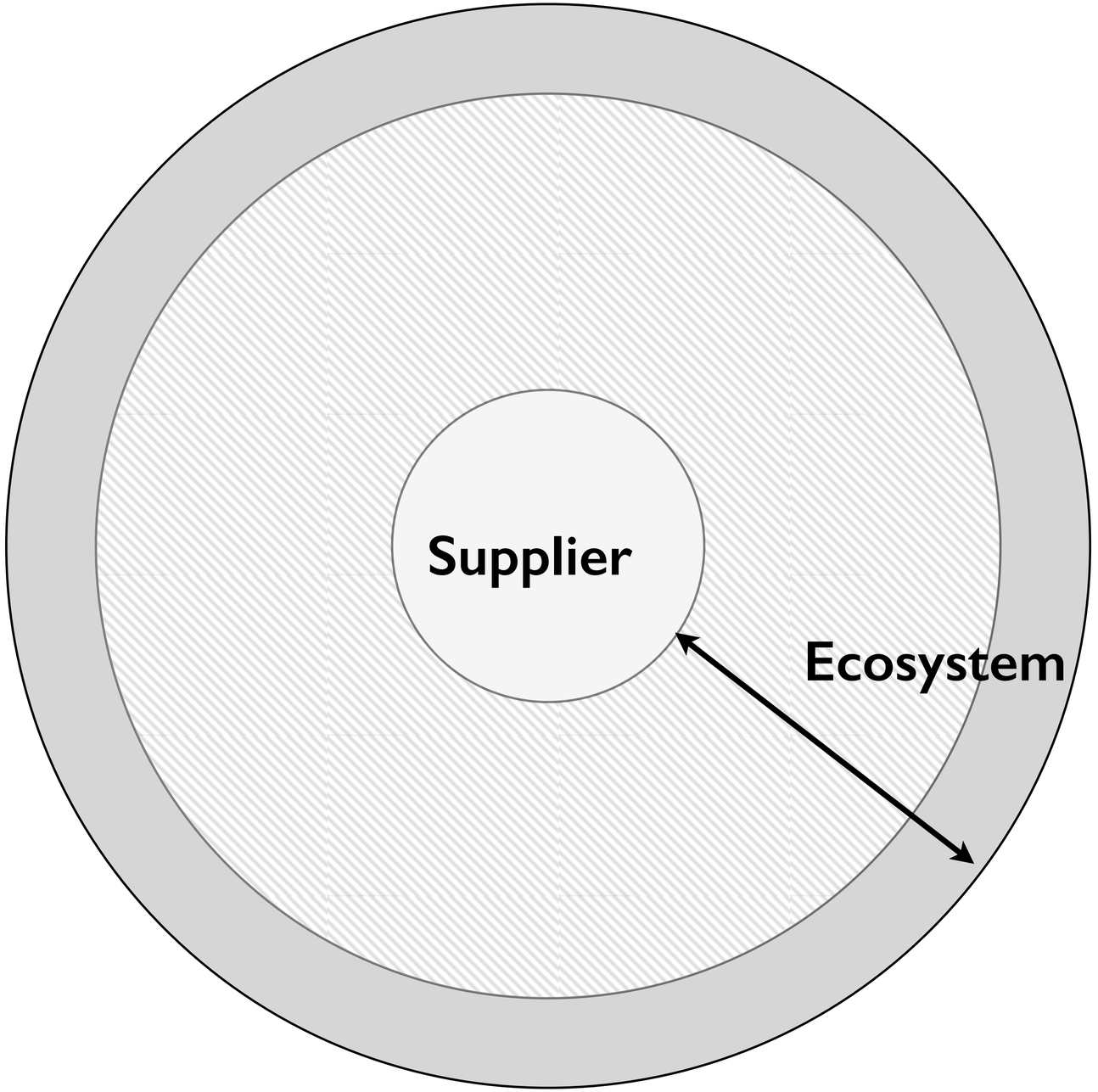
Choose one ...

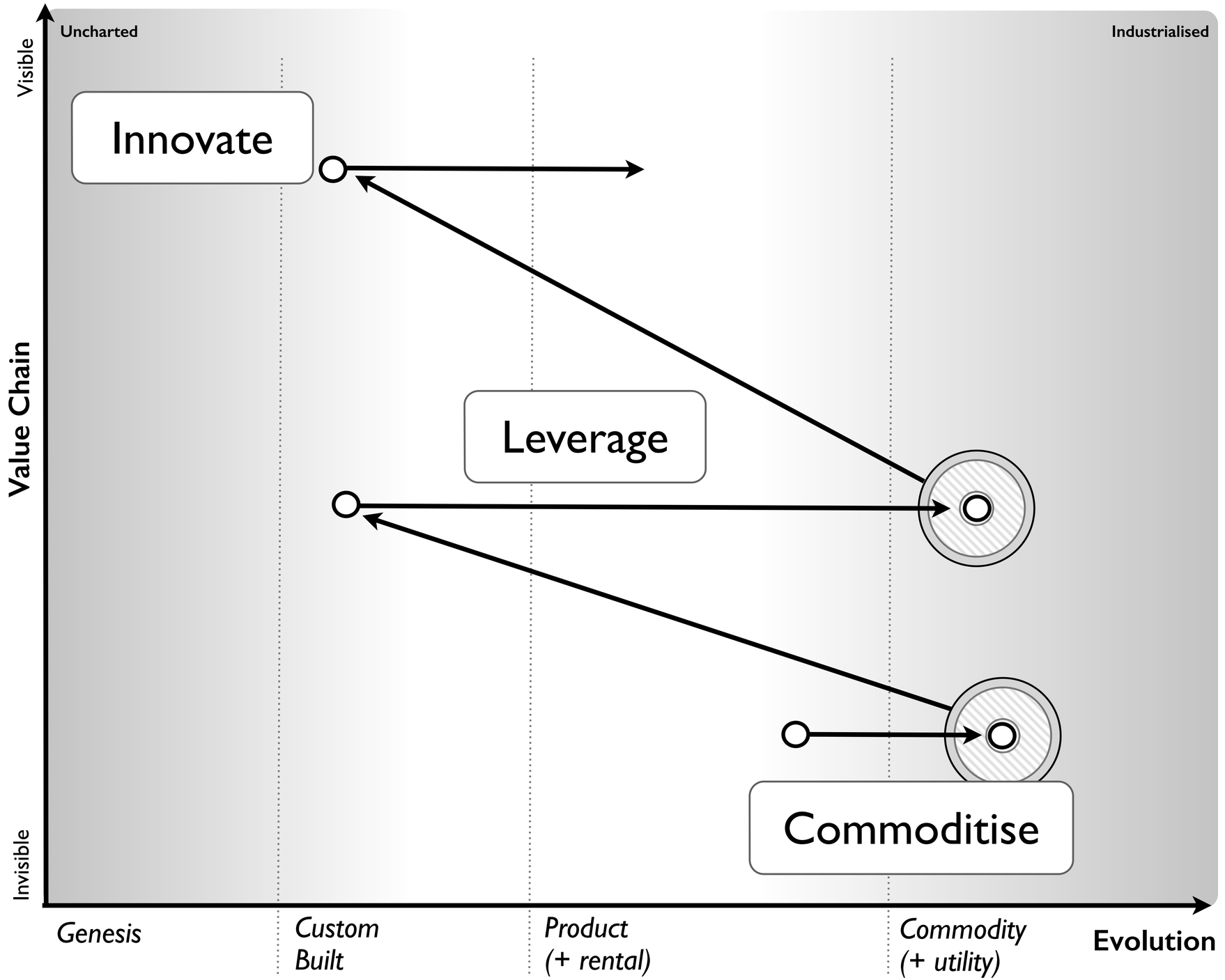
+ Innovation

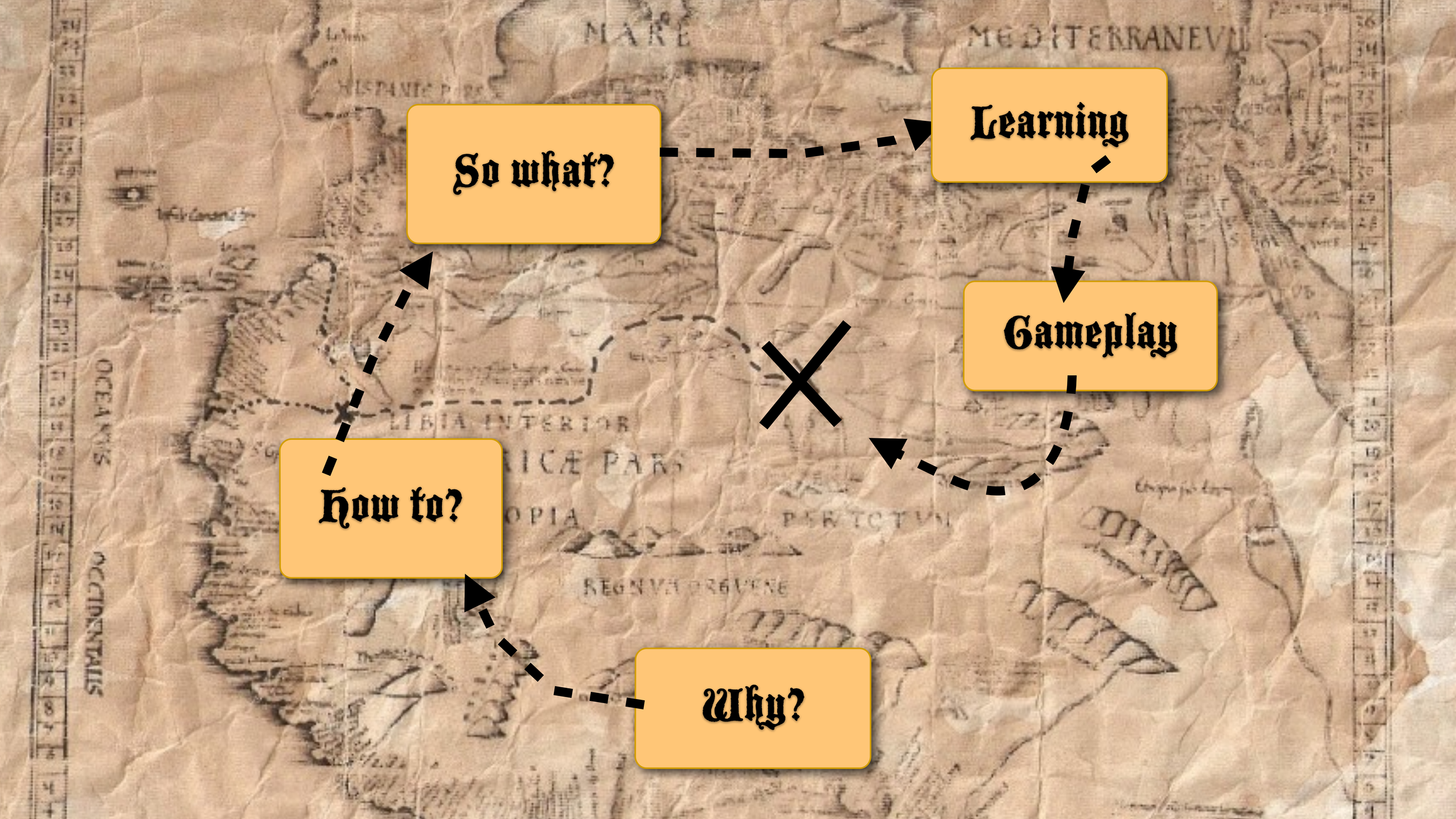
+ Customer

+ Efficiency




Supplier
Ecosystem


Uncharted
Industrialised
Visible
Value Chain
Invisible
Innovate
Leverage
Commoditise
Genesis
Custom Built
Product (+ rental)
Commodity (+ utility)
Evolution


So what?
Learning
Gameplay
How to?
Why?

THANK YOU

@swardley

https://leadingedgeforum.com/

LEADING
EDGE FORUM