

MODERNISING GOVERNMENT TO SHAPE A BETTER FUTURE

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WHAT DO WE MEAN BY MODERNISATION OF GOVERNMENT AND WHY DO IT?

- To be up-to-date?
- To be more efficient?
- To be technologically sophisticated?

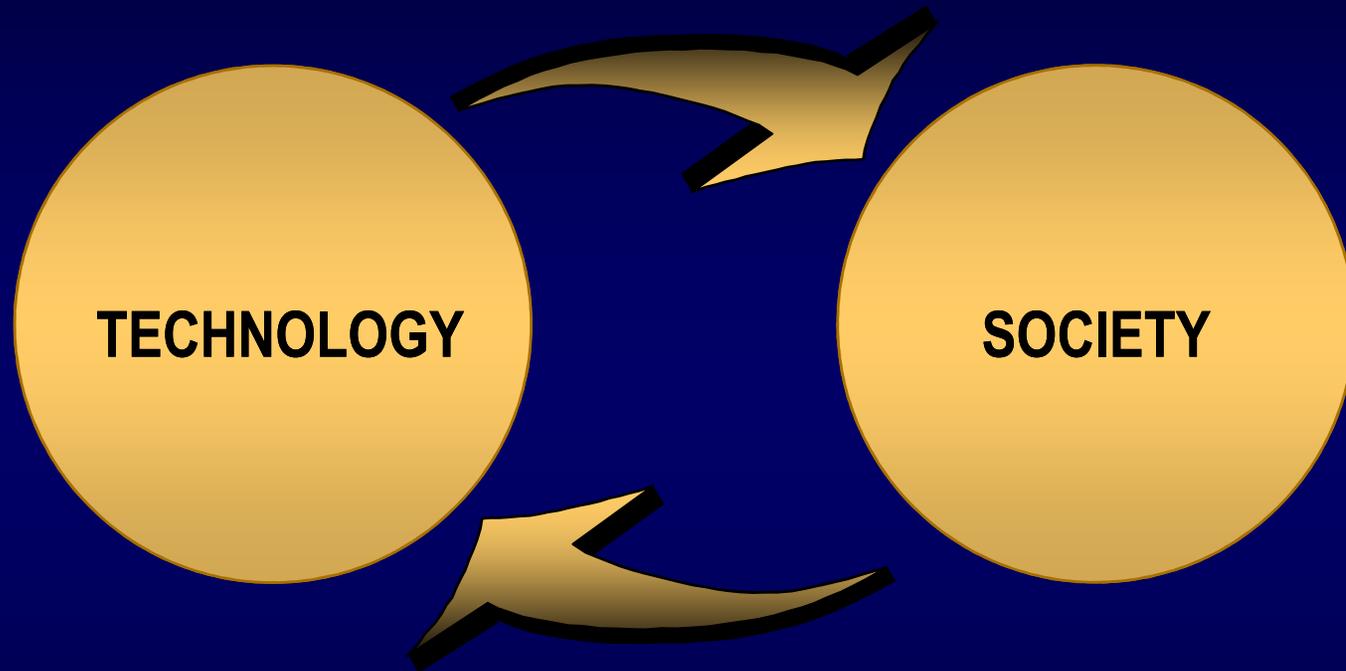
That's not enough!

Modern technology in government
would make little sense
if it did not contribute
to real social progress

**By modernisation of government
we mean
using the most powerful means
available in our time
to enable reaching
the new and more ambitious goals
that become possible
for the economy and society**

**THE NEW AND MAJOR CHALLENGES
IN THE ECONOMY, THE ENVIRONMENT
AND EDUCATION
CAN BE BETTER FACED
WITH A MODERN GOVERNMENT
USING ADEQUATE TECHNOLOGIES**

A crucial relationship to examine

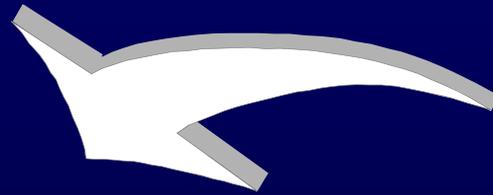


**The historical analysis reveals
a process of mutual shaping
in a periodically changing context**

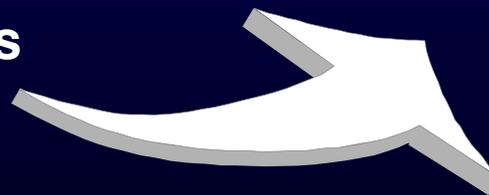
**BECAUSE IN MARKET ECONOMIES
TECHNICAL CHANGE OCCURS BY REVOLUTIONS**

**Capitalism experiences pendular swings
every two or three decades**

**From a “gilded age”
led by finance
aided by unfettered free markets
when investment concentrates
in installing the new technologies
and changing the range
of wealth creating opportunities**



**To a “golden age”
led by production
aided by an active government
in order to make the most
of the installed potential
for growth and
for social well being**



**THE MAJOR BUBBLE COLLAPSE
MARKS THE SWING OF THE PENDULUM**

**What worked before for growth and innovation
may not work from now on**

1

**Technological revolutions
and techno-economic paradigms**

2

**Technological, organisational and cultural
change with the paradigm shift**

3

**Redesigning government,
its behaviour and its roles**

1

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FIVE TECHNOLOGICAL REVOLUTIONS IN 240 YEARS

1771

The 'Industrial Revolution' (machines, factories and canals)

1829

Age of Steam, Coal, Iron and Railways

1875

Age of Steel and Heavy Engineering (electrical, chemical, civil, naval)

1908

Age of the Automobile, Oil, Petrochemicals and Mass Production

1971

Age of Information Technology and Telecommunications

20??

Age of Biotech, Bioelectronics, Nanotech and new materials?

**Each revolution drives a GREAT SURGE OF DEVELOPMENT
and shapes innovation for half a century or more**

Why call them revolutions?

Because they transform the whole economy!

NEW INDUSTRIES

A powerful cluster of new dynamic industries and infrastructures with increasing productivity and decreasing costs

NEW TECHNO-ECONOMIC PARADIGM

New generic technologies, infrastructures and organisational principles for modernising the existing industries too

Explosive growth and structural change

A quantum jump in innovation and productivity for all

A massive change in managerial common sense

TRANSFORMING THE OPPORTUNITY SPACE AND THE WAYS OF LIVING, WORKING AND COMMUNICATING

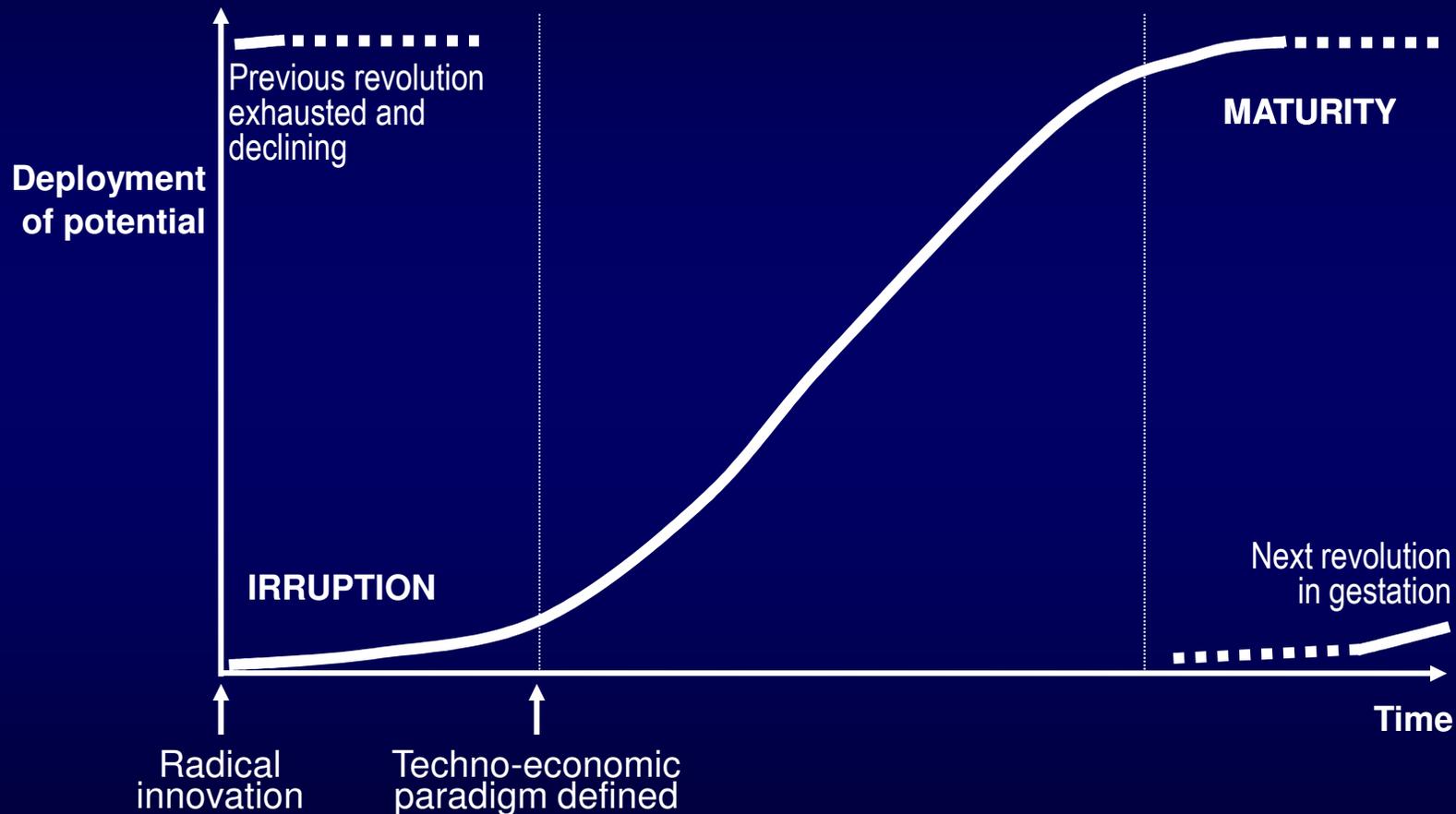
The paradigm shift taking place since the 1970s



**A radical change in managerial “common sense”
brought on by a different set of enabling technologies**

THE LIFE CYCLE OF EACH GREAT SURGE

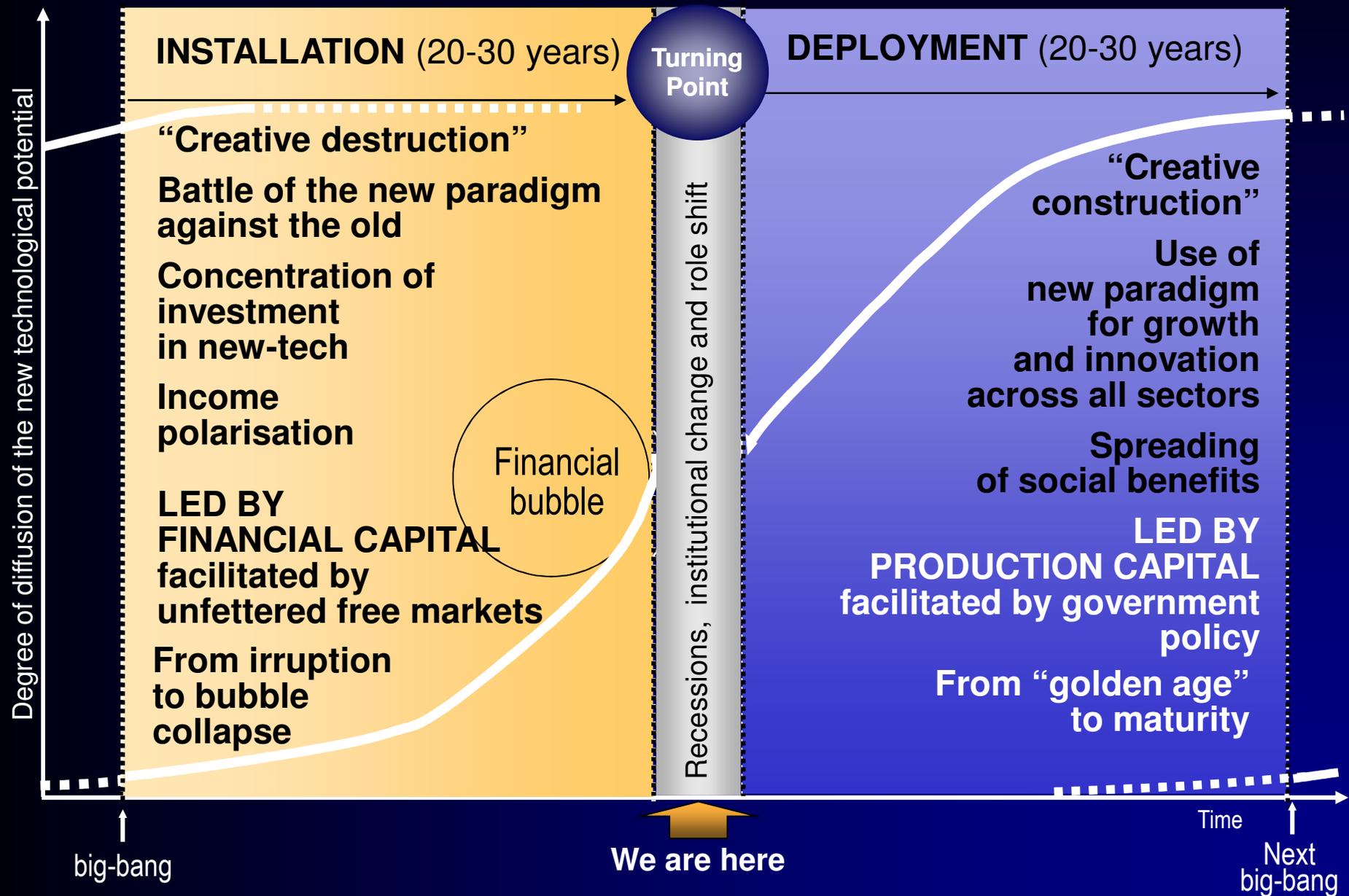
The process of propagation of each technological revolution and its paradigm



FIFTY TO SIXTY YEARS FROM IRRUPTION TO MATURITY

Due to resistance in assimilating such profound changes

EACH GREAT SURGE GOES THROUGH TWO DIFFERENT PERIODS



THE HISTORICAL RECORD

Bubble prosperities, recessions and golden ages

GREAT SURGE	INSTALLATION PERIOD	TURNING POINT	DEPLOYMENT PERIOD	
			"Golden Age" prosperity	Maturity
1st	1771 Britain	Canal mania	1793–97	The Great British leap
2nd	1829 Britain	Railway mania	1848–50	The Victorian Boom
3rd	1875 Britain / USA Germany	Bubbles of first globalisation	1890–95	Belle Époque (Europe) "Progressive Era" (USA)
4th	1908 USA	The roaring twenties	Europe 1929–33 USA 1929–43	Post-war Golden age
5th	1971 USA	Internet mania and financial casino	2007 /08 -???	Global Sustainable "Golden Age"?

The shift from financial mania and collapse to Golden Ages is enabled by regulation and policies to shape and widen markets

The structural shift involves
A CHANGE IN THE DRIVERS OF INNOVATION

INSTALLATION

THE STATE
in a
facilitating
service
role

FINANCE
and
THE NEW
ENTREPRENEURS
as drivers
and innovators

DEPLOYMENT

FINANCE
in a
facilitating
service
role

PRODUCTION
and
THE STATE
as drivers
and innovators

A vast free market experiment

**The full flourishing
of the installed potential**

**A successful deployment depends
on modern and innovative government and policies
to shape the social and market context
for taking best advantage of the new paradigm**

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THE TECHNO-ECONOMIC PARADIGM

Is the most powerful set of technological and organisational means for achieving complex goals in a particular epoch

It includes

- technologies
- infrastructures
- forms of organisation and
- behaviours

It is applied across all spheres and becomes the shared “common sense” for a long period (until the next revolution)

The main trends of the current paradigm shift depend on ICT

FLEXIBLE ADAPTABLE SYSTEMS

- Rapid and constant response to markets
- Dynamic product mix
- Continuous innovation [CAD, CAE, compu-synthesis, compu-simulation, etc.]
- Adapting to user requirements [mass customisation, fine specialisation]

KNOWLEDGE- BASED SOCIETY

- Human capital, basic and changing skills
- Intangible value added
- Learning organisations
- Social networks
- Service and complex product innovation
- E-commerce, e-business, e-education, e-government...

GLOBALISATION

- Coordination of complex global networks, value-chains and multiple alliances
- World market segmentation, niche targeting
- Hypermarkets
- Worldwide franchise and supplier networks
- Global off-shoring and re-specialisation

SURVIVAL COMPETITION DRIVES THE CHANGE IN FIRMS

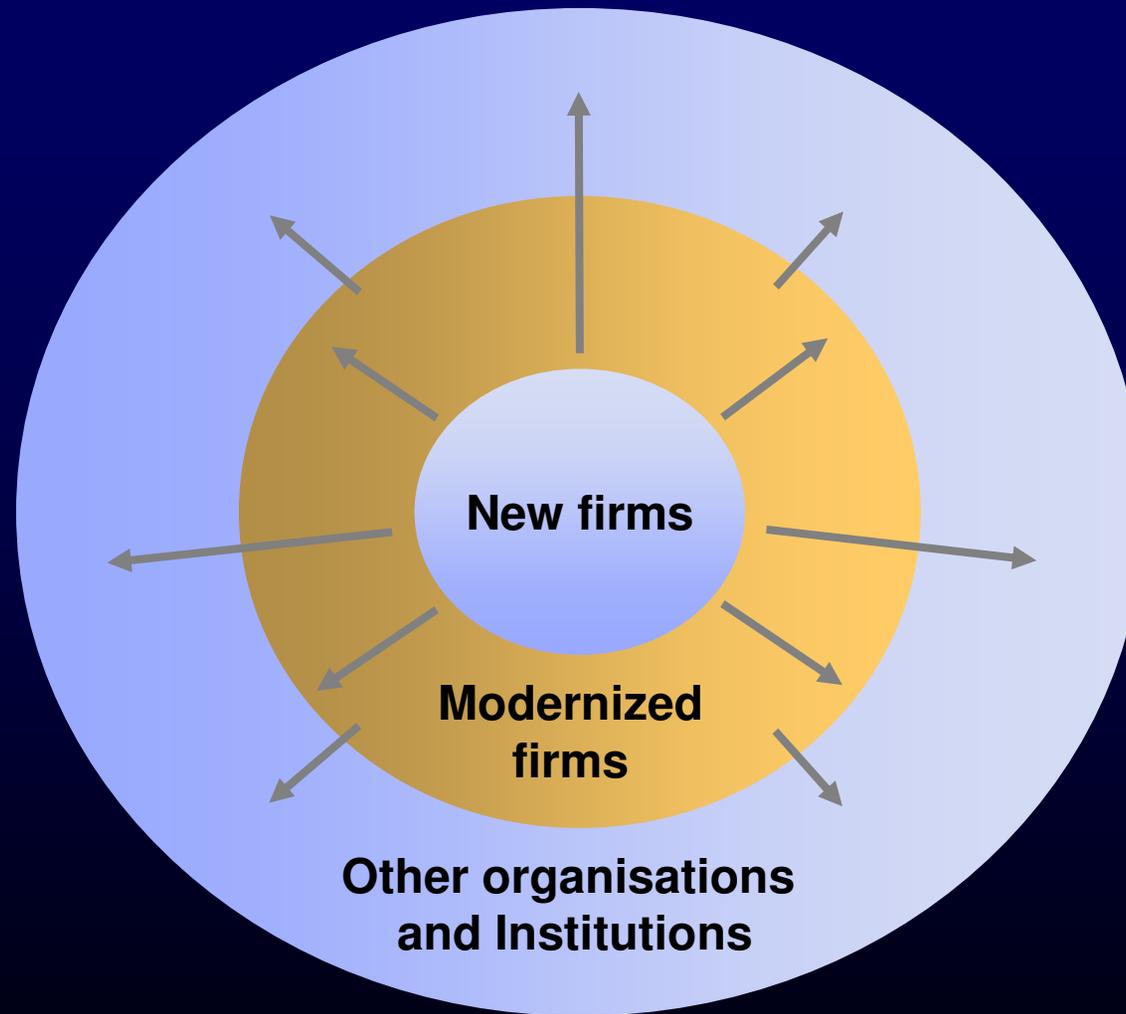
**Those that do not adopt
the new paradigm
stagnate or disappear**

INERTIA DELAYS THE CHANGE IN GOVERNMENT INSTITUTIONS

**It is usually the political pressure
during major crises
that forces the modernisation of the State**

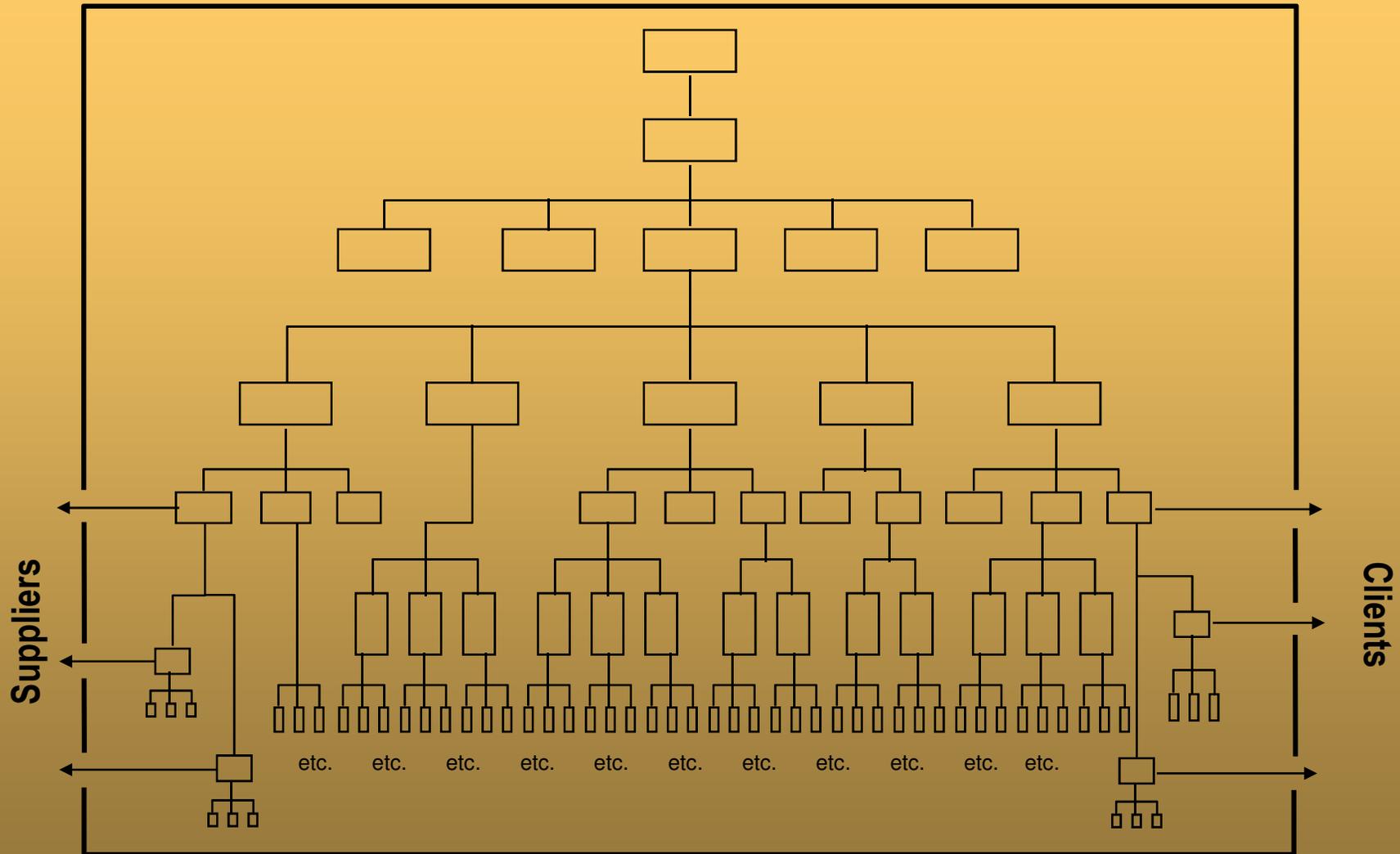
And how do non-profit institutions learn the new paradigm?

**THROUGH THE FLOW OF PEOPLE AND INFORMATION
ACROSS SOCIAL SPHERES**



THE RESULT IS SOCIETY-WIDE LEARNING

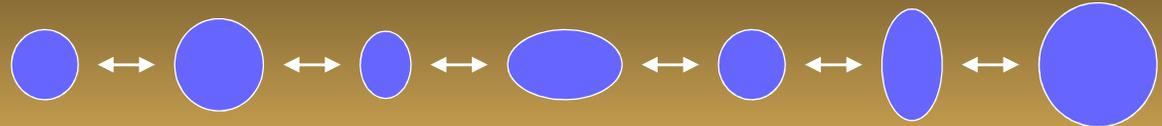
THE CLOSED HIERARCHICAL AND FUNCTIONAL PYRAMID OF THE MASS PRODUCTION PARADIGM



**It was used successfully for decades by companies, governments
and most large organizations, but is now obsolete**

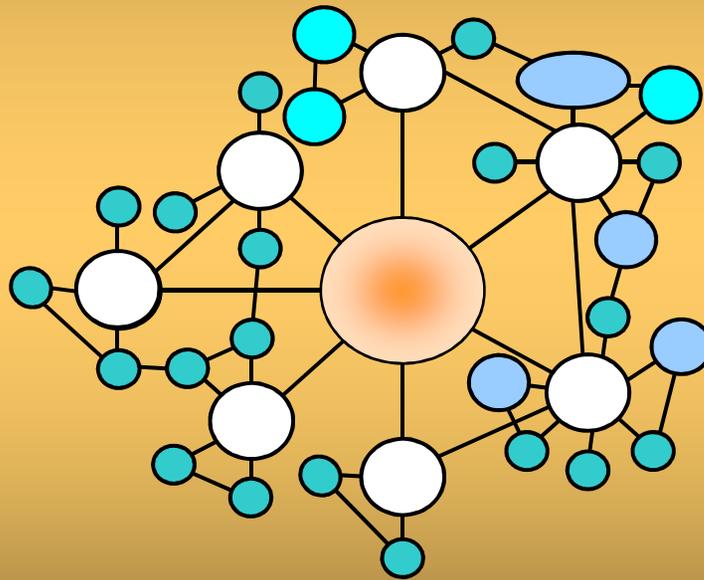
MULTIPLE FORMS OF LOCAL AND GLOBAL NETWORKS OF THE ICT PARADIGM

Along the value chain



Agreements from initial inputs to final distribution

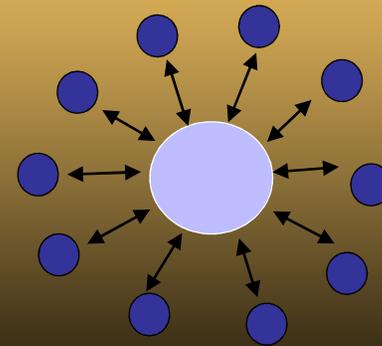
Around a large company (local or global)



Including internal disaggregation, outsourcing and various forms of joint ventures, contracts alliances and agreements, local or at a distance

Clusters of small firms

Usually combining cooperation and competition



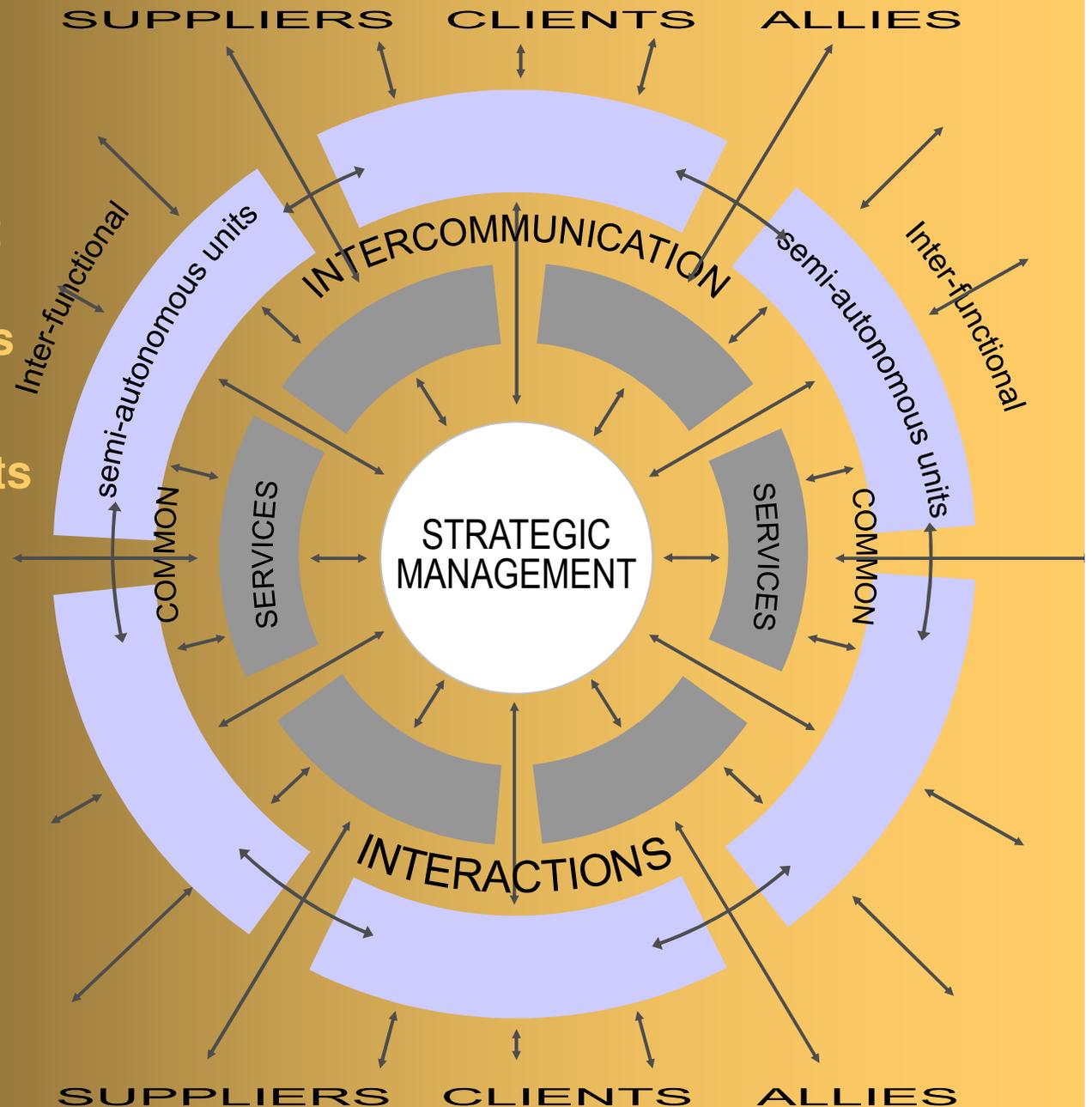
THE MODERN NETWORKED ORGANISATION

Strategic management sets the goals and provides the resources

Semi-autonomous units interact intensely with suppliers, clients and allies...

...as well as with common services and other units

AND ICTs ARE THE MAIN ENABLERS



EACH GREAT SURGE HAS ALSO BROUGHT A CHANGE IN LIFESTYLES AND PATTERNS OF CONSUMPTION

	DEPLOYMENT PERIOD	LIFESTYLE
Age of Steam, Coal, Iron and Railways	1850s-1860s	Urban, industry-based VICTORIAN LIVING in Britain
Age of Steel and Heavy Engineering	1890s-1910s	Urban, cosmopolitan lifestyle of THE BELLE EPOQUE in Europe
Age of the Automobile, oil and Mass Production	1950s-1960s	Suburban, energy-intensive AMERICAN WAY OF LIFE

Each style became “the good life” redefining people’s desires and guiding innovation trajectories

Our current Age of global ICT	2010s-20??s	Will the developed and emerging countries adopt a variety of ICT-intensive and “glocal” SUSTAINABLE LIFESTYLES?
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**In the mass production surge
the change of paradigm in consumption
was enabled by suburbanisation
and the Welfare State
at the national level**

**To succeed this time
in fostering a golden-age-deployment,
all levels will have to play their role,
from the global to the local**

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MUCH INSTITUTIONAL INNOVATION IS NOW NEEDED

TO ENABLE SUSTAINABLE GROWTH AND INCREASING SOCIAL WELL BEING

FINANCE

Regulating and restructuring the national and global financial architectures towards financing the real economy (away from the casino)

GREEN

Tilting the playing field strongly in favour of environmentally friendly investment and innovation

EDUCATION

Enabling the education intensity, coverage and variety required for the Knowledge Society

WELFARE

Reinventing the Welfare State for the current paradigm and fostering investment within and across countries (for expansive –rather than intensive– demand growth)

ICT

Facilitating universal access to broadband and the intelligent use of internet for all of the above

THESE GOALS WILL REQUIRE ACTIONS FROM THE GLOBAL TO THE LOCAL LEVEL

CONCEIVING GLOCALIZATION:

A flexible network of policy, information and regulation levels

Interacting networks and markets

	PUBLIC	PRIVATE	THIRD SECTOR
Global			
Supranational (Blocs)			
National			
Regional			
Local			
"Parish", etc.			

All enabled by information and communications technologies

DEFINING THE ROLE OF LOCAL GOVERNMENT IN A GLOBALISED WORLD:

Empower the citizens for a good life in the global space

ENVIRONMENT

Only at the local level can the conditions be created for well being with “green” lifestyles

EDUCATION

Both formal and informal education (and shaping of citizen behaviour) occur at the local level and can be enhanced

INNOVATION

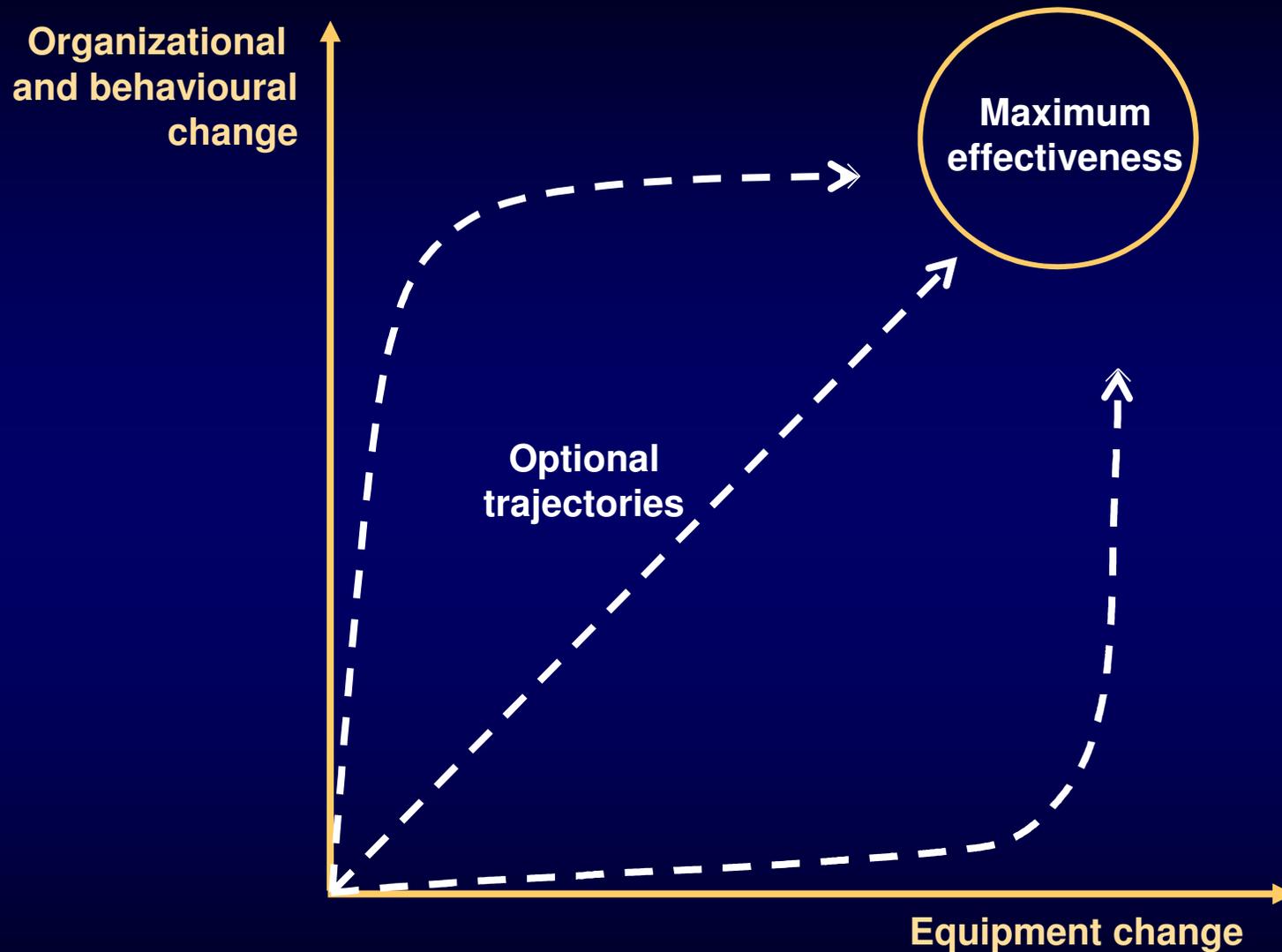
Local access to infrastructure, information, finance and other forms of support define how favourable the context is for innovation

GLOCALISATION

The welfare of the citizens and the community will increasingly depend on their capacity to interact locally and with the global economy and society

**A dynamic, healthy, well informed and well connected
GLOCAL community
needs world quality services with high quality ICT**

ICT ALSO REQUIRES CHANGES IN ORGANISATION AND BEHAVIOURS



**E-government is not about putting the bureaucratic routines on the web
but about reinventing service behaviour for empowering citizens**

Not only

THINK GLOBAL, ACT LOCAL

But also

THINK LOCAL, ACT GLOBAL

**THAT IS WHAT THE CITADEL STATEMENT DOES
FOR RESHAPING E-GOVERNMENT**

**AND FOR EMPOWERING
EVERY BIT OF EUROPEAN TERRITORY AND SOCIETY
TO SUCCEED IN THE GLOBALISED ECONOMY**