Webinar on Competition law and policy approaches towards digital platforms and ecosystems in cooperation with the BRICS Competition Law and Policy Centre and the Brazilian Administrative Council for Economic Defense (CADE)

3 June 2024

Ecological Thinking on Digital Ecosystems for Better Competition Policy: Gardeners vs. Mechanics

Presented by:

Mr. Alexey Ivanov
BRICS Competition Law and Policy Centre
& The ECOANTITRUST Project Team

ECOLOGICAL THINKING ON DIGITAL ECOSYSTEMS FOR BETTER COMPETITION POLICY: GARDENERS VS MECHANICS

ALEXEY IVANOV
BRICS COMPETITION LAW AND POLICY CENTRE

& THE ECOANTITRUST PROJECT TEAM

BUSINESSES ARE **ECO-THINKING**

Alibaba Group 阿里巴巴集团

As we continue to expand our businesses from commerce to cloud computing, digital media and entertainment, among other sectors, Alibaba has evolved into **an ecosystem** that is unique, energetic and innovative

Alibaba Financial Report, 2021

Meta

...it's also going to take **ecosystem building**, norm setting and new forms of governance

Mark Zuckerberg on Facebook's rebranding to Meta, 2021

Microsoft

Our unique role as a platform and tools provider allows us to connect the dots, bring together **an ecosystem** of partners...

Microsoft Annual Report, 2020

Tencent 腾讯

...to build a new, intelligent **ecosystem** that efficiently connects customers and enterprises

Tencent Corporate Governance Report, 2020

A NEW **ECOLOGY** OF COMPETITION

An ecological approach can be used to analyze the evolution of any major business

Moore, 1993 [1]

We found that perhaps more than any other type of network, a biological ecosystem provides a powerful analogy for understanding a business network

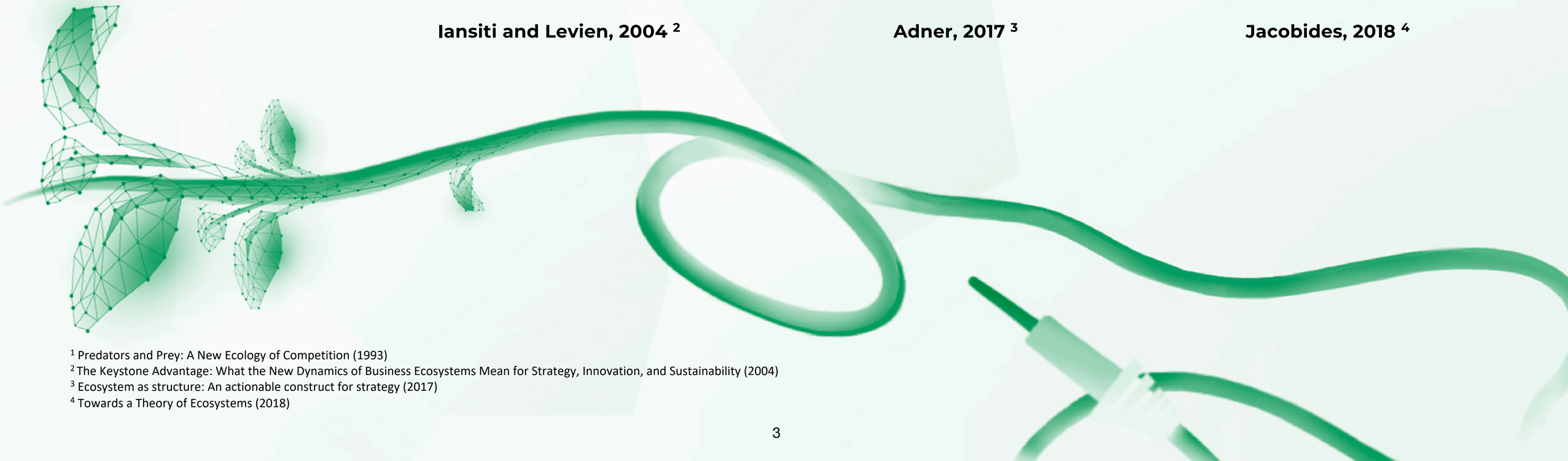
Iansiti and Levien, 2004 [2]

The notion of ecosystems has raised awareness and focused attention on new models of value creation and value capture

Adner, 2017 [3]

Over the last few years, there has been a surge of interest in the concept of "ecosystems" as a new way to depict the competitive environment

Jacobides, 2018 [4]



[1] Predators and Prey: A New Ecology of Competition (1993)
[2] The Keystone Advantage: What the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability (2004)
[3] Ecosystem as structure: An actionable construct for strategy (2017)
[4] Towards a Theory of Ecosystems (2018)

BUSINESS ALWAYS **LEARNS TO ADAPT**

Standard Oil took over most oil refineries in the US, creating a “Mother Trust” – “a maze of legal structures, which made its workings virtually impervious to public investigation and understanding”

Britannica

Since 1892, the Standard Oil trust repeatedly lost in courts, but effectively continued to operate by **constantly reorganizing** their business and adapting to new regulatory environment

THE TRUST EXISTED FOR 41 YEARS **UNTIL FINALLY AN ANTITRUST LAWSUIT LED TO ITS BREAKUP**

INDUSTRIAL VS DIGITAL

INDUSTRIAL FIRMS

defined

discrete individual parts

static

structured

...we have had to plan our operations with extreme care

Henry Ford

DIGITAL ECOSYSTEMS

blurred boundaries

agile

adaptive

dynamic

I call myself a blind man riding on a blind tiger

Jack Ma

ECOSYSTEMS GROW

BEYOND THE CONTROL OF ORGANIZERS

Facebook's nearly one billion users have become the largest **unpaid workforce** in history

D.Laney, 2012 [1]

The participation of millions of people from all walks of life in computer-mediated activities and interactions adds **a new source of wealth accumulation** to the previous mechanisms of exploitation of labor

H.Ekbia and B.Nardi, 2017 [2]

In ecosystems, both natural and digital, **impreciseness creates intra-species variability and is a precondition for evolution**

"[...] if we could understand evolution, we could understand that most mysterious of processes: innovation"

B. Arthur, 2009

[1] To Facebook You're Worth $80.95 (2012)
[2] Five Minutes with Hamid Ekbia and Bonnie Nardi on Heteromation, And Other Stories Of Computing And Capitalism (MIT Press, 2017)

REGULATION IN A MECHANISTIC TRAP

Our existing institutions, mechanisms and models are **struggling to respond** effectively to the pace of change and its distributed nature

WEF Report [1]

But law is stuck in a mechanistic, seventeenth-century view that the world is made up of **discrete individual parts**. This led to legal theory focusing on these parts and ignoring the bigger picture…

Capra and Mattei [2]

THE FLUID DIGITAL ECONOMY FLOWS AROUND ROCK-SOLID LAWS

…fluids do not keep to any shape for long and are constantly ready (and prone) to change it <…> From the meeting with solids they emerge unscathed, while the solids they have met, if they stay solid, are changed – get moist or drenched.

Bauman[3]

[1] Our Shared Digital Future: Building an Inclusive, Trustworthy and Sustainable Digital Society (2018)
[2] The Ecology of Law: Toward a Legal System in Tune with Nature and Community (2015)
[3] Liquid Modernity (2000)

ECOSYSTEMS BECOME A CATEGORY OF ANTITRUST ANALYSIS

Ecosystems left the purely academic realm: in several key recent decisions, competition authorities use this concept as their analytical method

The Market Study noted that one of the **defining features** of Facebook's business is that it **has built a large 'ecosystem' of complementary products and services around its core service**.

Facebook/GIPHY, UK CMA, 2021

Competition in such a scenario is amongst ecosystems and not just the verticals or independent services. In such a case, the **entire platform has to be taken as one unit to account for the cross-market externalities between platform sides.**

Android case, CCI, 2021

Ecosystem operators regularly have good possibilities to avert competition by other providers (e.g., in the form of innovation competition in subsectors) and the expansion of competitors' activities. […] **because within their ecosystem they can themselves organize the markets, their entry conditions and thus the competitive possibilities and/or there can be high switching costs for users due to the breadth and characteristics of the ecosystem**.

Article 19a decision on Google, BkA, 2022

FRAGMENTATION OF THE GLOBAL DIGITAL ECONOMY

SAME ANTICOMPETITIVE BEHAVIOR SEEN THROUGH DIFFERENT LENS – FRAGMENTARILY

Fragmented vision of an ecosystem

Italy — Tying

UK — Discrimination

Germany — paramount significance across markets

US — MFN agreements

UK — Blocked

EU — Cleared subject to conditions

Brazil, China, Japan — Cleared unconditionally

US — Injunction granted

Microsoft

Microsoft/Activision merger controversy

Different results of the Google Shopping saga

EU — Google's apparent non-compliance with remedies

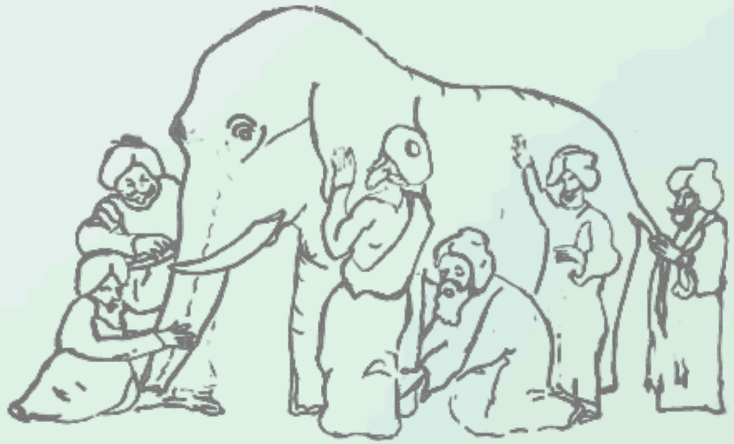
Russia, EU — Settlement and self-regulation in a similar case

Turkey — Google chose to remove Shopping Units

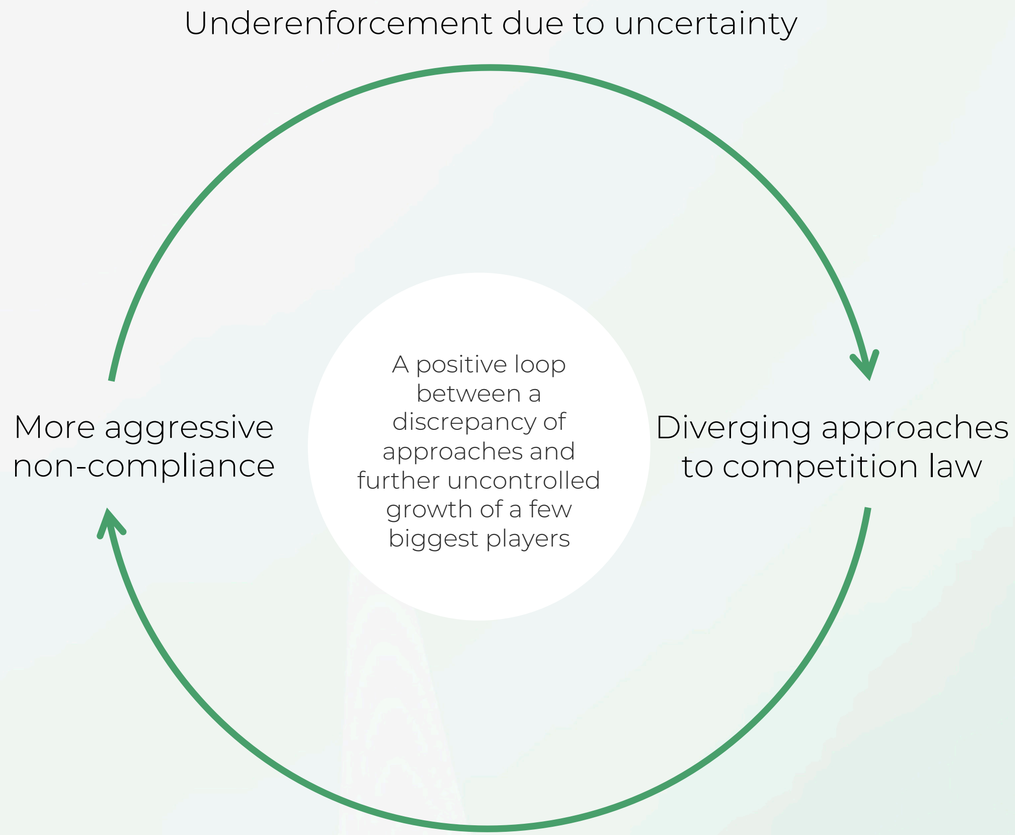
Brazil — Google escaped conviction

"So, oft in theologic wars, the
disputants, I ween,
tread on in utter ignorance, of
what each other mean,
and prate about the elephant,
not one of them has seen!"

John G. Saxe



VICIOUS CYCLE OF FRAGMENTATION



Absence of consensus leads to underenforcement, since competition authorities may prefer not to act due to uncertainty

This leads to ecosystems increasing their anticompetitive pressure in various forms which, in turn, deepens divergence

Competition law is on the brink of losing its regulatory relevance and power in the digital economy

SHARED VISION

TO ACHIEVE COMMON GOALS WE MUST SPEAK A “COMMON REGULATORY LANGUAGE”, JUST AS WE ESTABLISHED COMMON GROUND ON CLIMATE CHANGE AND BIODIVERSITY

1995 the Convention on Biological Diversity

2015 the Paris Agreement (UN Framework Convention on Climate Change)

NATURAL ENVIRONMENT

- Climate
- Biodiversity
- Ecosystem conservation
- Sustainability

ECONOMIC ENVIRONMENT

- Markets
- Competition
- Digital economy
- Fairness

LEARNING FROM NATURE TO BRING SUSTAINABILITY

All theory is grey, my friend.
But forever green is the tree of life.

Johann Wolfgang von Goethe, Faust

To regulate ecosystems efficiently we need to understand their nature

IT IS DESIRABLE THAT REGULATORS TRANSFORM THEMSELVES

FROM

MECHANICS,

who repair and maintain,

TO

GARDENERS,

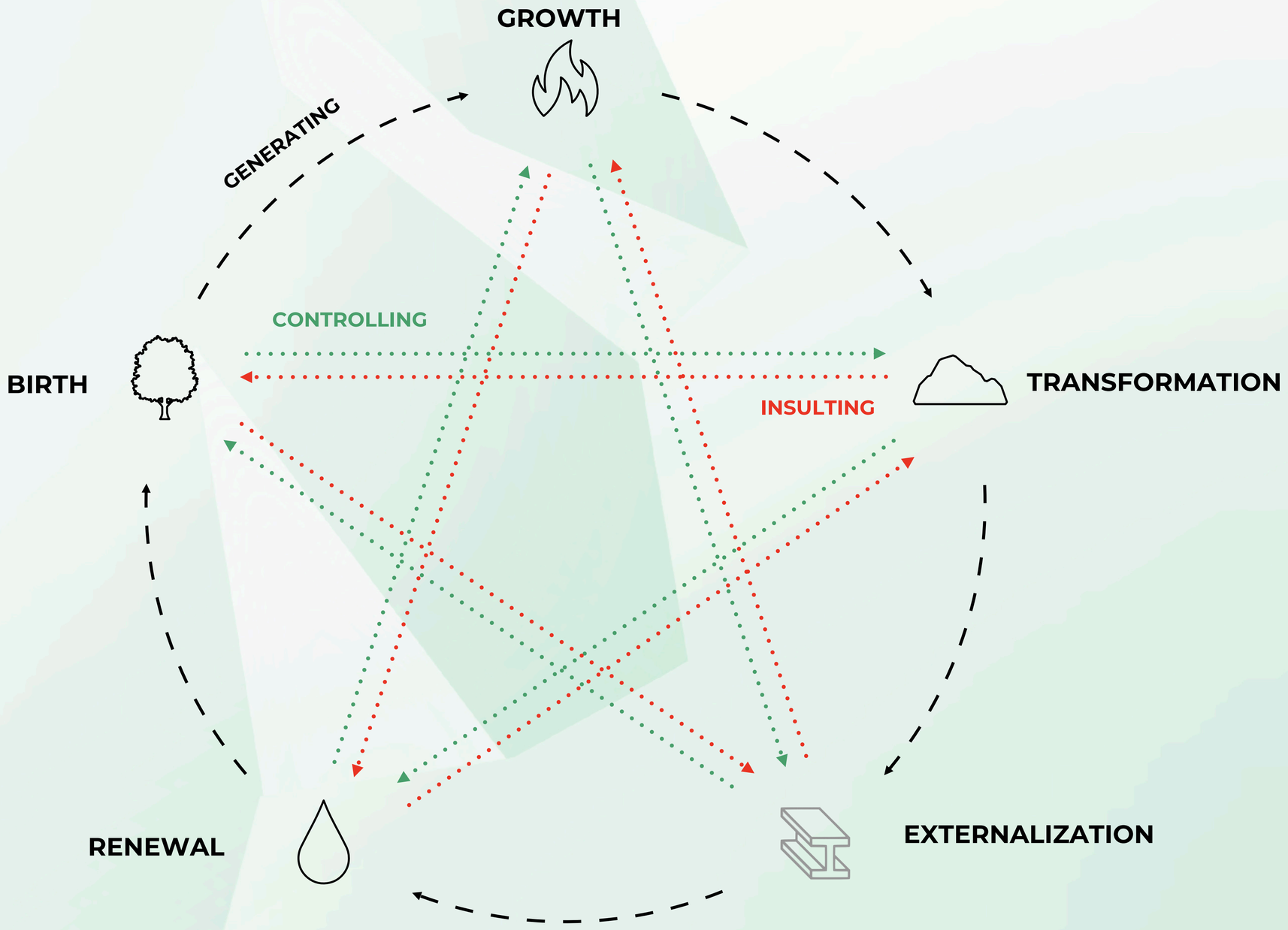
who cultivate and breed

INSIGHTS FROM PSYCHOLOGICAL MODELS

Ecosystems are **cyclical** in nature

Businesses think **cyclically** and adapt their strategies, according to **stages** of their lifecycle

Regulators should capture this **cyclical logic** as well

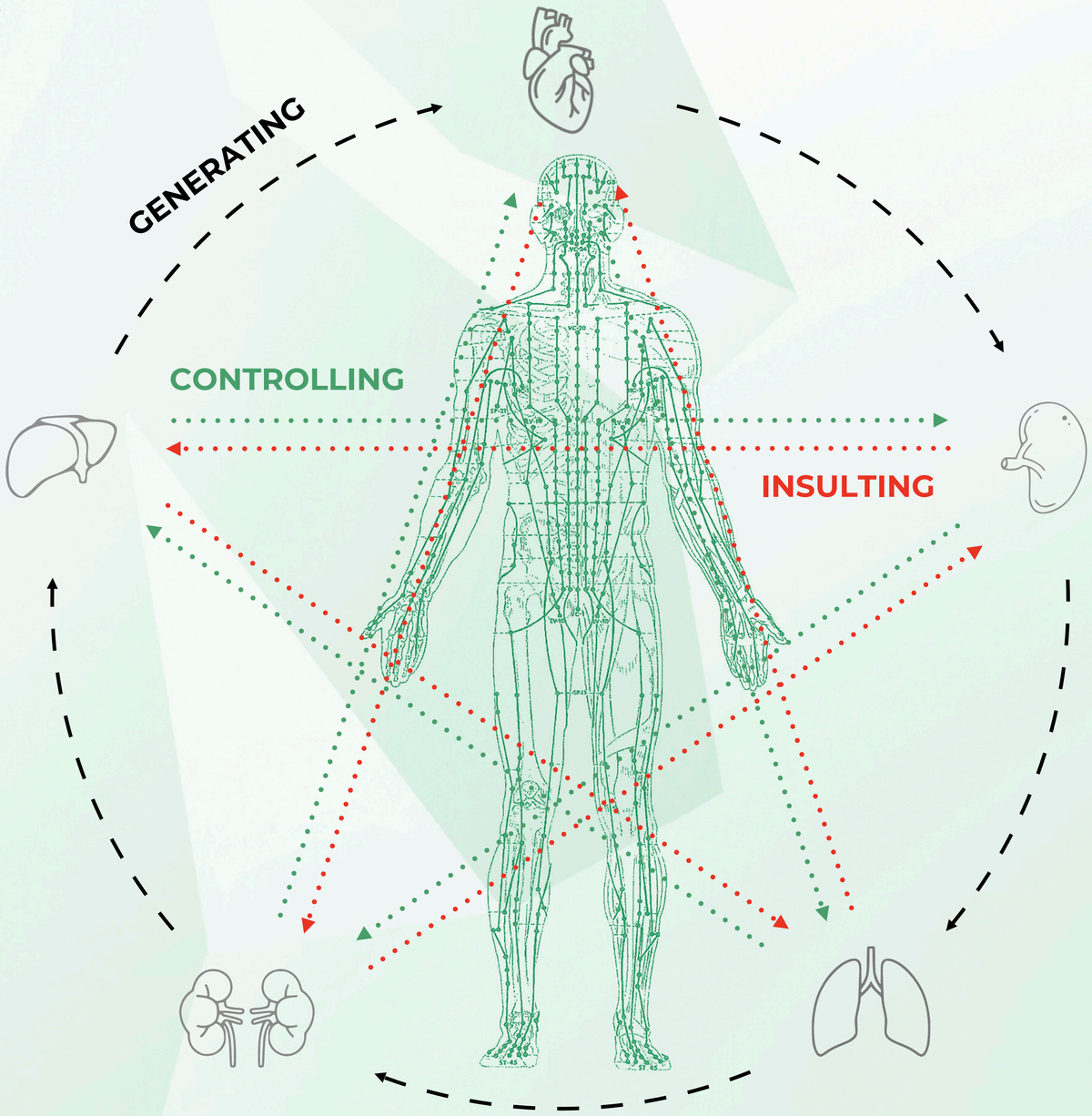


INSIGHTS FROM WUXING (FIVE ELEMENTS)

The sages did not treat those already ill, but treated those not yet ill, they ... put in order what was not yet in disorder

The Yellow Emperor's Inner Classic, ~300 BC

Holistic approach in traditional medicine to achieve whole-body balance



ANDROID CASE

GROWTH

Terrified by Apple’s triumph in the smartphone market, Google acquired Android

TRANSFORMATION

Creeping power over the Android ecosystem

EXTERNALIZATION

Harm to independent developers

RENEWAL

What is the next step for the ecosystem?

BIRTH

Android, Inc. began as an open-source system

ECO-THINKING: THE CASE OF RIDE-HAILING PLATFORMS

Jurisdictions around the world deal with ride-hailing platforms differently, but so far, regulatory and antitrust interventions have not shown any significant effect

While until recently, stand-alone RHPs (like Uber, Ola) were prevalent, the market now gets more of ecosystem effects: alongside RHPs integrated into an ecosystem (Yandex Go), new business models emerge (e.g. Amap)

Country	Regulatory Measures	Antitrust Intervention	Other Formats of Regulation
Russia			Self-Regulation in absence of decision-making power of the competition authority
Kazakhstan		**An innovative approach using a dynamic monitoring remedy**	
India	Scattered efforts to impose price caps	A 2022 market study focusing on lack of price formation transparency; investigations against Uber, Ola (no harm established)	Self-regulation urging platforms to ensure surge pricing fairness
Austria		A 2021 market study by FCA showed negative effect on competition from proposed regulation	
EU	RHPs either banned or restricted in several national jurisdictions		2017 decision by the CJEU ruling Uber is a transport services company
SEA and the Middle East		Active merger control in 2015-2020 (Uber/Careem, Grab/Uber) that did not yield much result	
Uzbekistan		Proposal to launch a UNCTAD-backed study on mergers between RHPs	

YANDEX GO CASE IN KAZAKHSTAN

The Agency for Protection and Development of Competition of the Republic of Kazakhstan

About Agency | Activity | Documents | Press Room | Contacts | Regions | Feedback

Home / The Agency for Protection and Development of Competition of the Republic of Kazakhstan / Press center / News

ON THE RESULTS OF ANTITRUST INVESTIGATIONS ON YANDEX TAXI IN KAZAKHSTAN

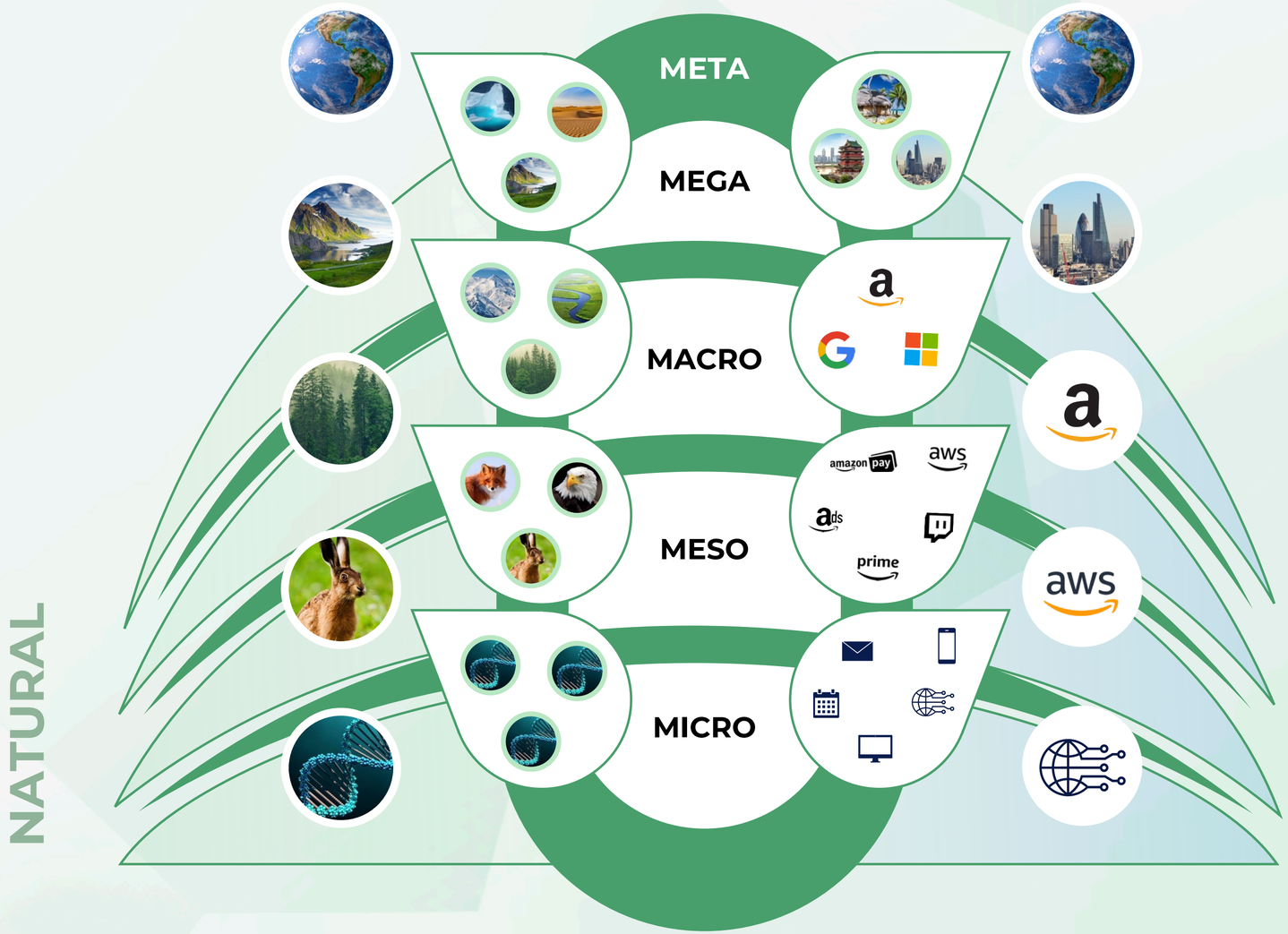
15 December 2023 - 08:11

Elements of the ecosystem approach to analyzing digital platforms are already being applied by the regulator in Kazakhstan, in particular, during an investigation into one of the popular online cab ordering services, said **Marat Omarov, Chairman of the Agency for Protection and Development of Competition of the Republic of Kazakhstan**. "As part of the approach proposed by the BRICS Center, we focus on dynamic remedies that help to act in the interests of both consumers and drivers, and at the same time do not hinder innovation," he noted.

An ecological approach to DPEs regulation proposes to **adapt remedies based on the level where an abuse happens and bearing in mind the Meta interactions between the levels** – how will an innovation-related remedy on the Micro level affect inter-ecosystem competition on the Macro level?

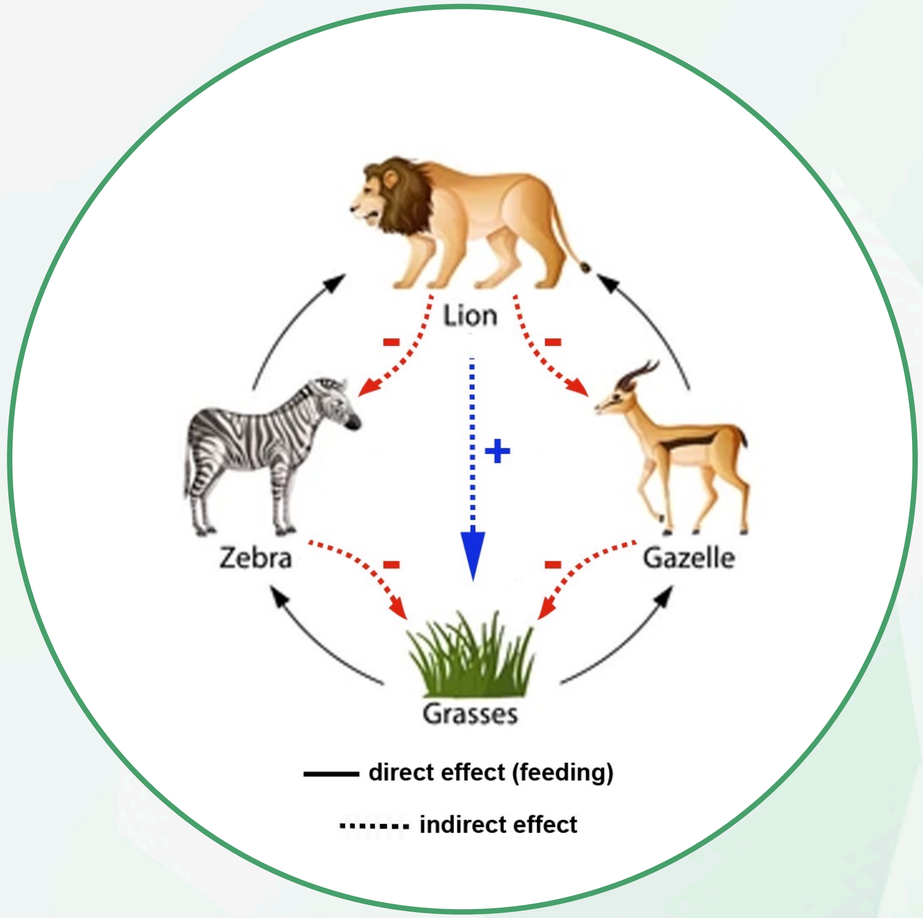
Pereira Neto & Lancieri (2022) propose a framework of adapting remedies based on effect on welfare – from those narrowly tailored to one ecosystem, to economy-wide non-liability remedies

INTRODUCING THE (ECO-EVOLUTIONARY ROOTED) 5M FRAMEWORK



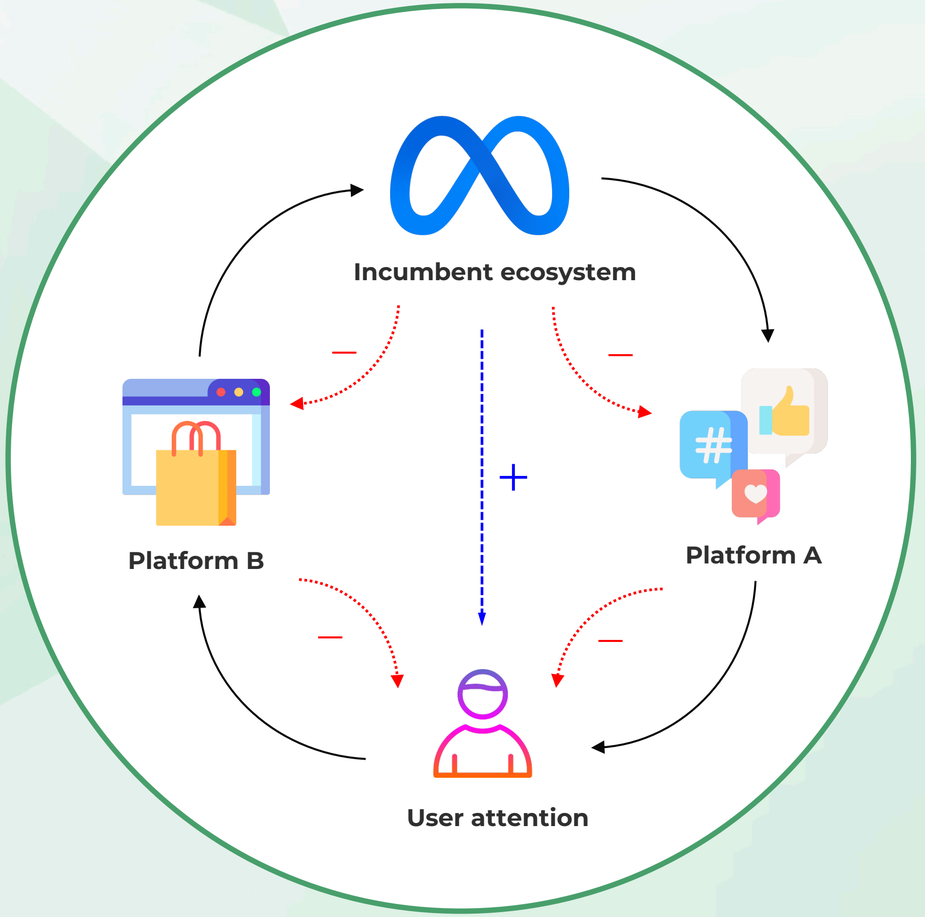
META LEVEL – DISENTANGLING INTERACTIONS

Excerpt of a food web of an NE

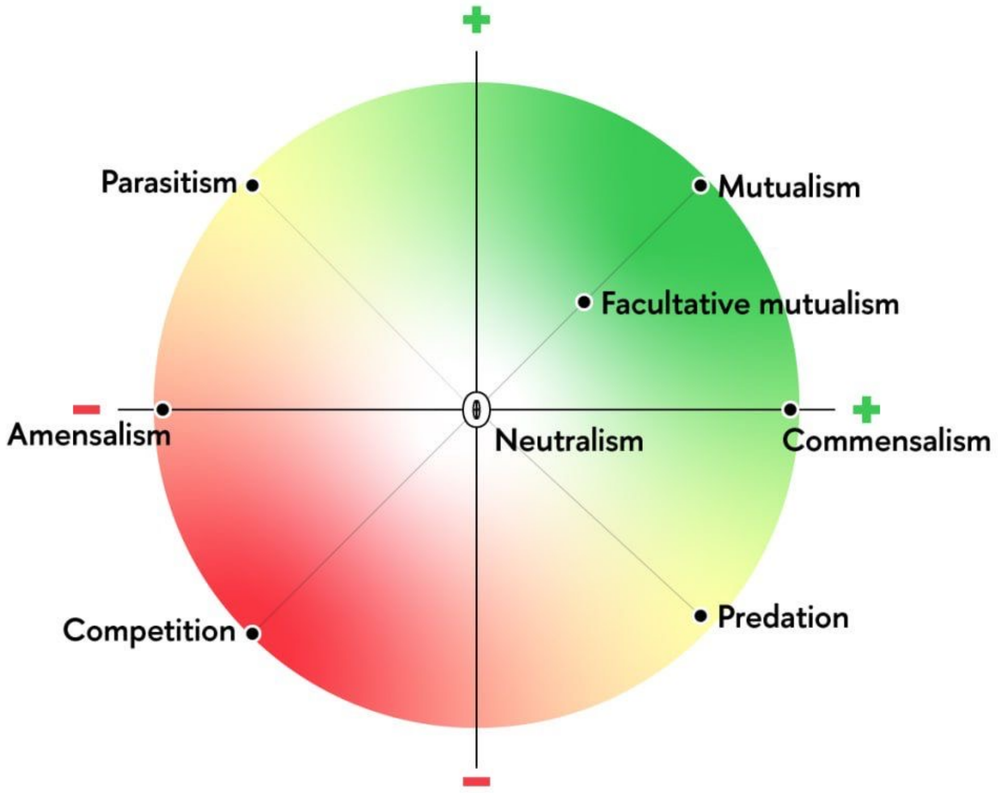


Interactions happening at the Meso level

Excerpt of the interactions from a DPE



KEY ENABLERS OF LIFE



Positive interactions at all levels of ecosystems are key enablers of life

Regulators can uphold an interaction-based analytical framework in designing market-wide remedies

ECO-REMEDIES: CHASING ECOSYSTEM POWER

Assessing the capabilities of the ecosystem to create and sustain an algorithm to comprehend “innovation spaces” competition; **who is the decision maker and operates the algorithm?**

MICRO

MESO

Assessing the algorithm based on data and operators and **forecasting effects from its change**

MACRO

Assessing **how an algorithm-based product is situated within the broader ecosystem** and what inputs it receives from the ecosystem and the outer environment

MEGA

How does the algorithm allow the ecosystem to compete and to decrease or increase welfare?

A continuous non-liability monitoring remedy to observe the life cycle of a technology and intervene accordingly bearing in mind repercussions through the Meta level

In the case of Yandex, stand-alone interventions at separate levels most likely would not increase welfare (e.g. intervening with a fare price cap at Meso (the product level) would not explain price formation happening at Micro)

ALGORITHM TRANSPARENCY AS A REMEDY

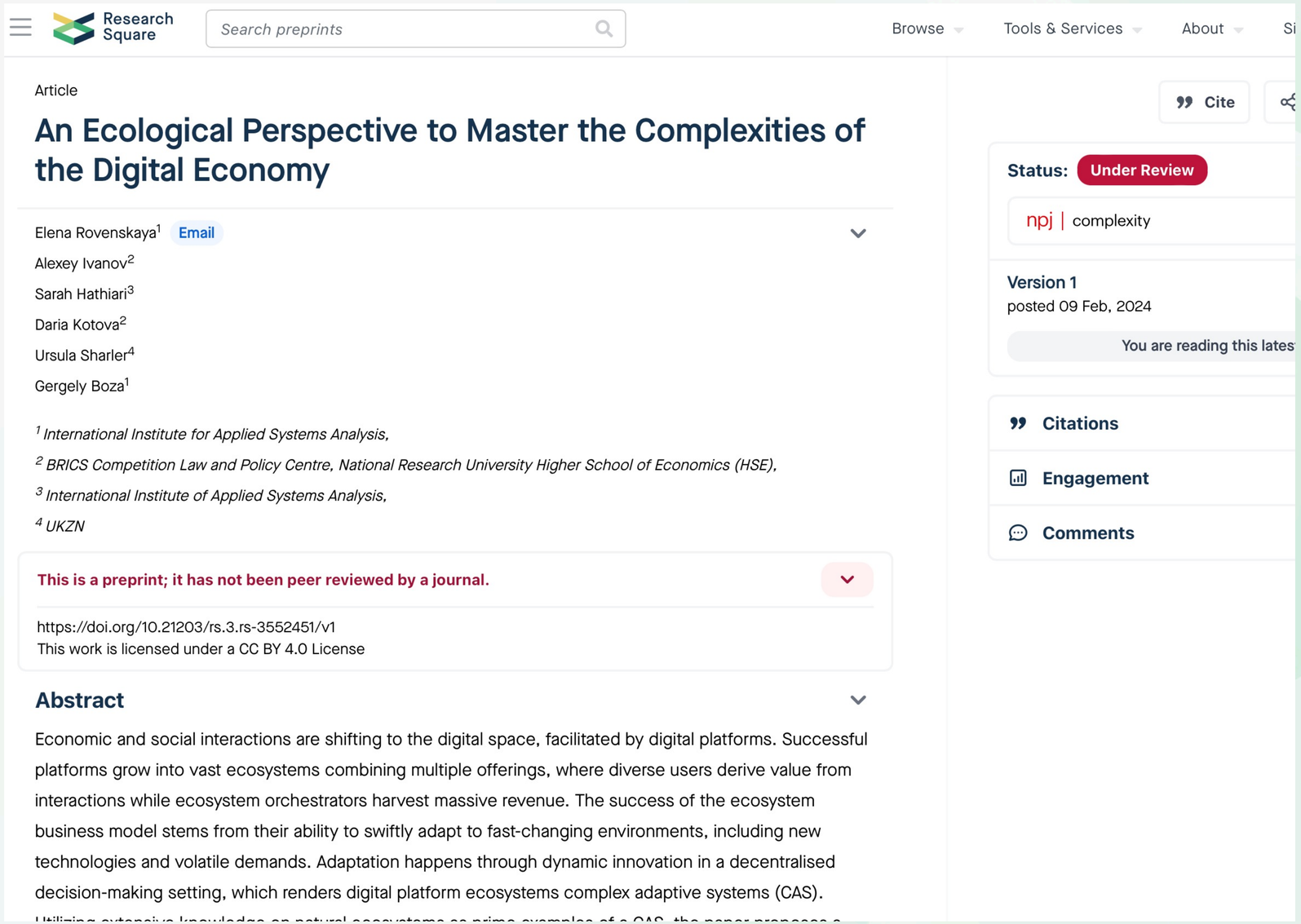
- As an adaptive remedy, **algorithm disclosure and monitoring allow to explain how data and technology feed into each of the DPE levels and what are the intra-ecosystem interactions they contribute to**

- **Auditing the algorithm as a code only** does not explain ecosystem inputs on the Macro level (data received from within and outside of the ecosystem) as well as the environment in which it functions (including people and strategy at the Micro level and interactions with other products at the Meso level)

- **Because a DPE's algorithms fuel the entire ecosystem**, auditing them together with data inputs and outputs presents a dynamic remedy where intervention is not static and fragmented

- These dynamic transparency mechanisms underscore the new role of competition regulator in the economy – not reacting to separate expressions of abuse, **but rather assessing the systemic effects of the market ecology**

STAY TUNED FOR OUR FORTHCOMING PAPER



Follow the QR code for access