TABC
TUNISIA-AFRICA BUSINESS COUNCIL

THE THINK TANK
FOR A SHARED PROSPERITY IN AFRICA

SEMINAIRE

Sous l'égide de M. Mohamed Fadhel Kraiem,
Ministre des Technologies de la Communication et de la Transformation Digitale

Présentation en avant première des résultats de l'étude

« Potentiel et performance des écosystèmes d'innovation en Afrique»

HOTEL LAICO TUNIS
27 JUIN 2020
De 8h:30 à 10 h:30

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Agenda

1) General context & Introduction
2) Innovation ecosystem landscape in Africa
- The major enablers of the African Innovation Ecosystem
- Venture capital investments in Africa in 2019-2020
- Effects of the COVID19 pandemic on the Africa Startup scene

3) Startup Ecosystem potential and performance
- Key findings from the survey
- The concept of potential and performance
- Measuring African Startup Ecosystem Performance

4) Tunisia case study
5) Q&A

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General context & Introduction

- ***54 countries, but only few are in the race of innovation***
- ***Total continent GDP = US$ 3000 Bn (4% WGDP)***
- ***Foreign exchanges = US$ 1065 Bn***
- ***Infrastructure investment needs = US$ 2400 Bn***
- ***Alternative finance is emerging with Diaspora***
- ***The first successes are still very fragile***

General context & Introduction

- *In most countries, health care systems were not well prepared to face a global sanitary crisis*
- *Fighting the pandemic involved different industries, including the startups*
- *Innovation ecosystem maturity was a decisive factor in organizing the technological response*

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- **Venture capital investments in Africa in 2019**
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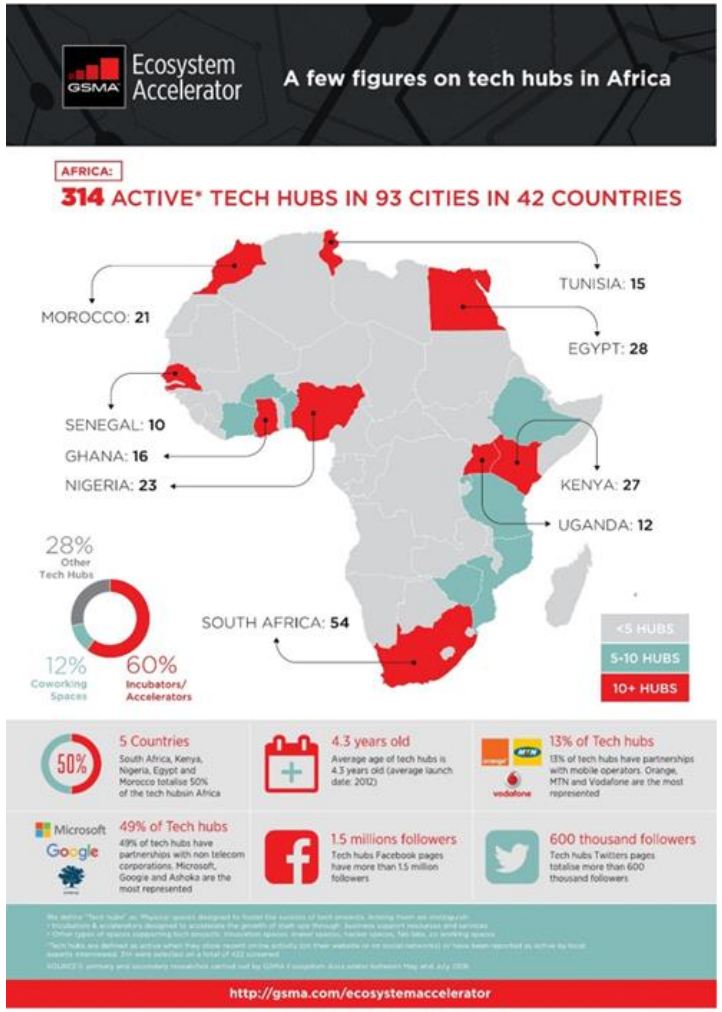
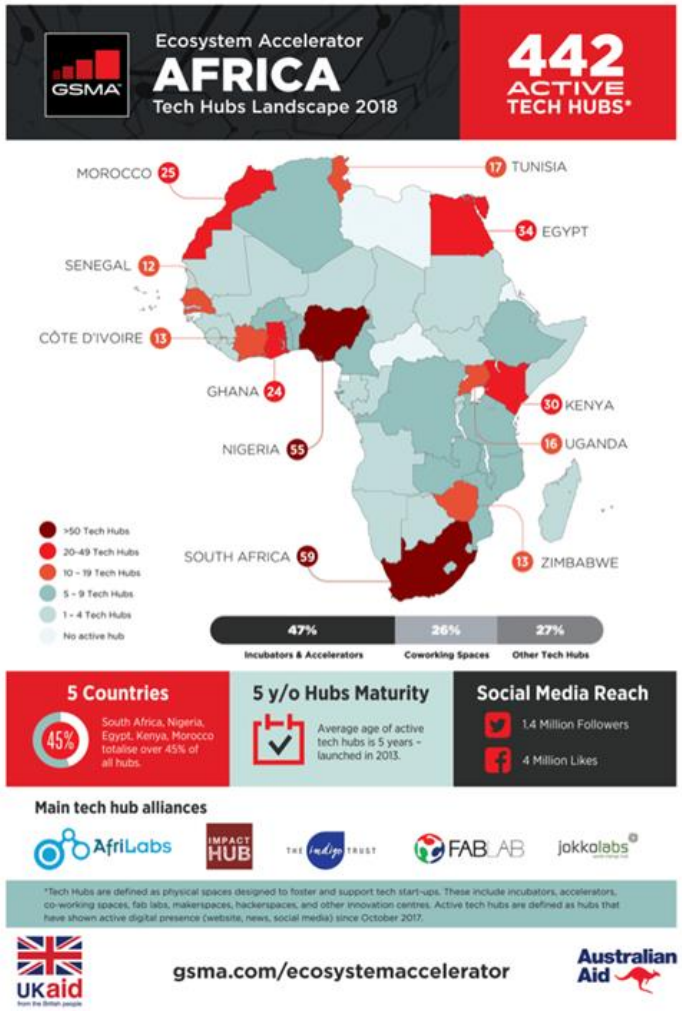
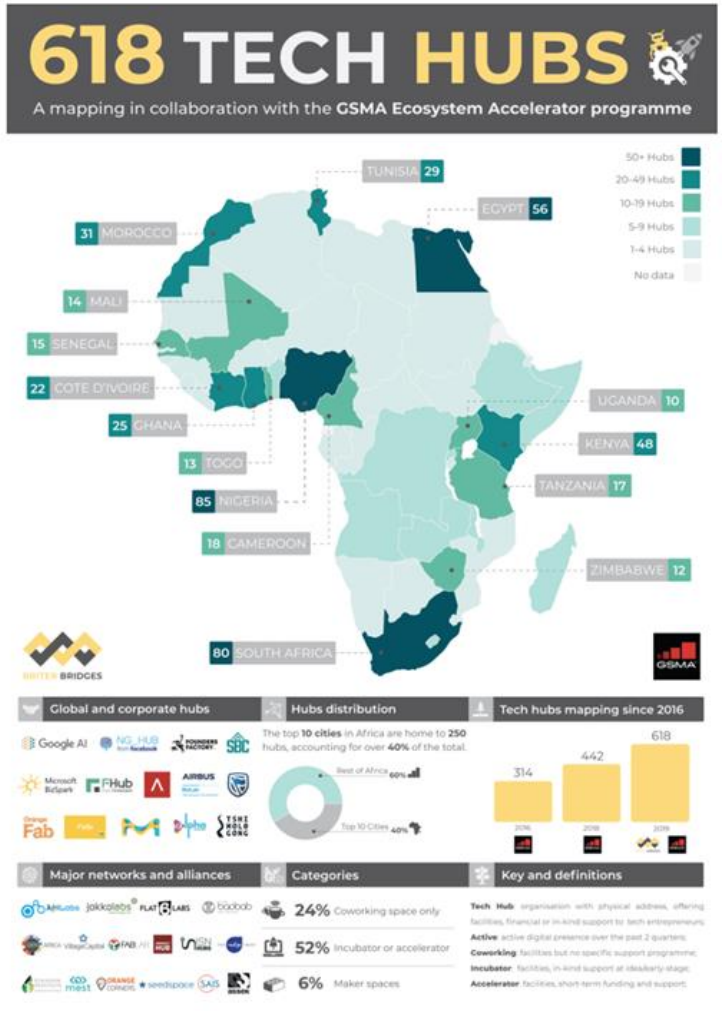
Innovation ecosystems landscape in Africa

2016: 314 active tech hubs | **2018: 442 active tech hubs** | **2019: 618 active tech hubs**







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Innovation ecosystems landscape in Africa

Innovation ecosystems landscape in Africa

Here is a break-down of the 15 main tech cities:

Lagos, **Cairo**, **Cape Town**, **Nairobi**, and **Johannesburg** belong to Tier 1, with 20 to 40 hubs each;

Casablanca, **Accra**, **Abidjan**, **Tunis**, and **Abuja** follow suit as Tier 2 cities, with 15+ hubs each; and **Dakar**, **Bamako**, **Kampala**, **Dar Es Salaam**, and **Lomé** with 10+ hubs are the latest emerging cities.

It is worth noting that many of the above-mentioned emerging cities have recently launched angel networks and have joined regional or international tech alliances.

→ +250 investment Firms are directly operating in Africa

Innovation ecosystems landscape in Africa

Source: WeeTracker – African Venture Capital Report 2019

African venture investments records **USD 1.340 Bn** through **427 deals** in equity and debt financing in 2019.

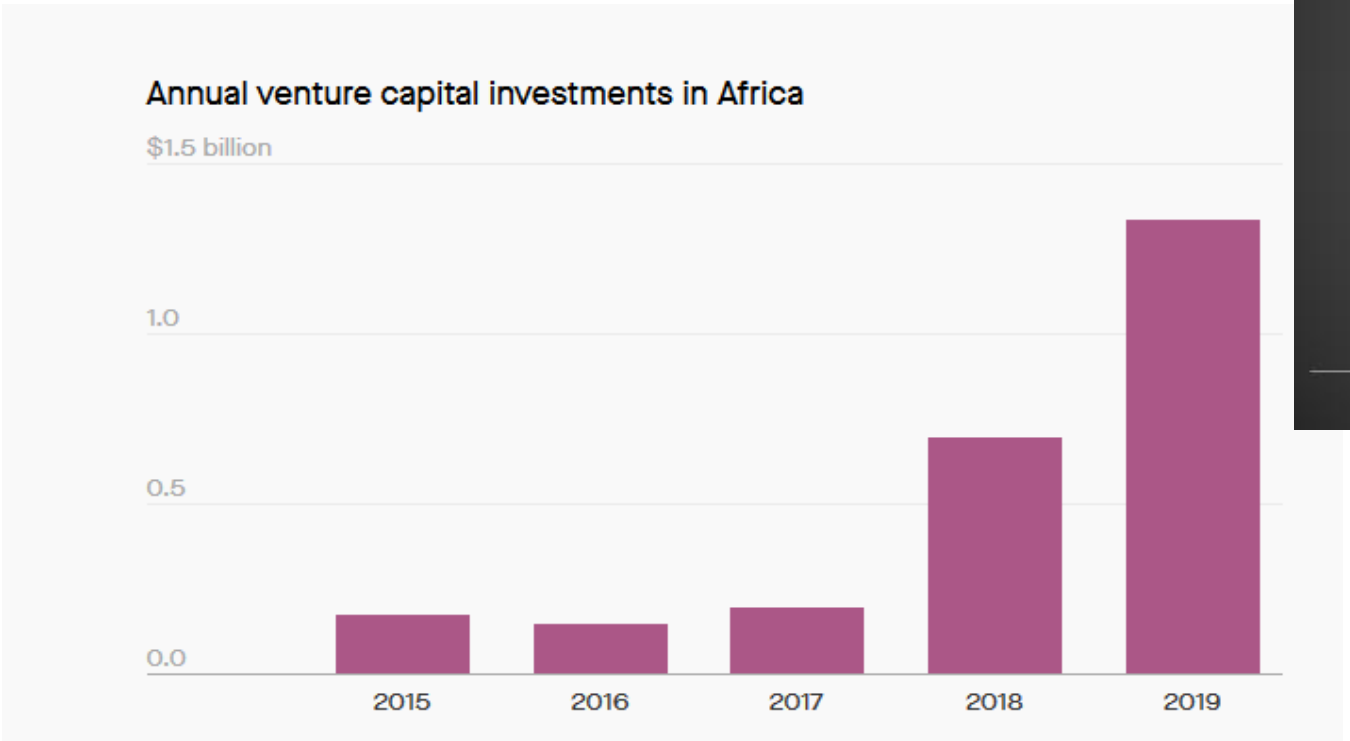
The year was especially great for the **Nigerian** ventures that raked in **USD 663.24 Mn**, highest amount of venture capital money secured by a country in 2019.

Kenya had a super growth year netting **283.64%** growth over the previous year's funding amount.

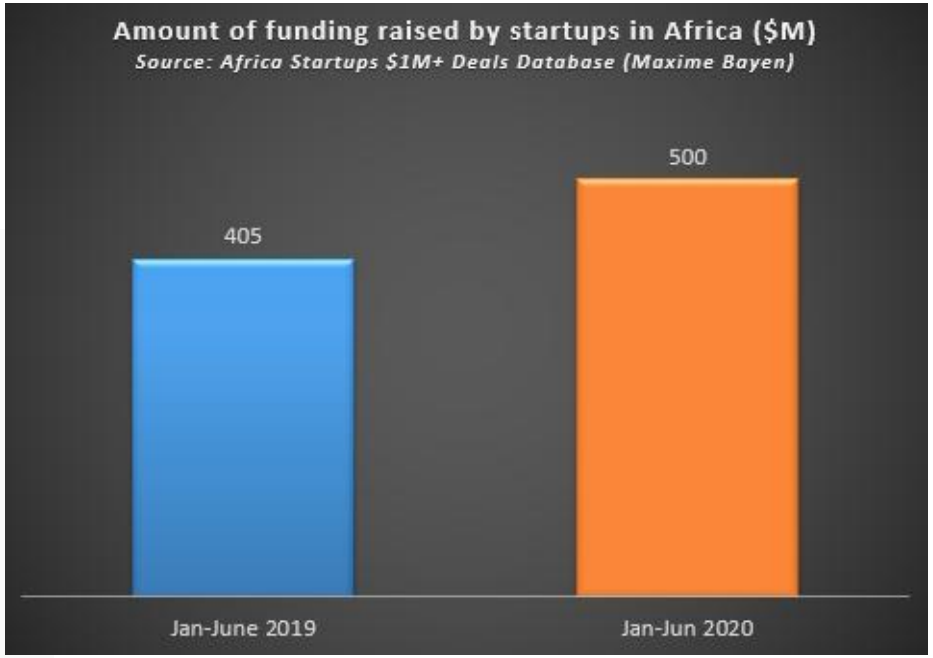
South Africa took the third position as per funding amount.

Fintech secured **USD 678.73 Mn**, witnessed a spectacular growth of **138.48%** over the previous year.

Evolution of venture capital Investments in Africa fundings in Africa 2015-2020



Source: WeeTracker Report, 2020



Source: Maxime Bayen, 2020

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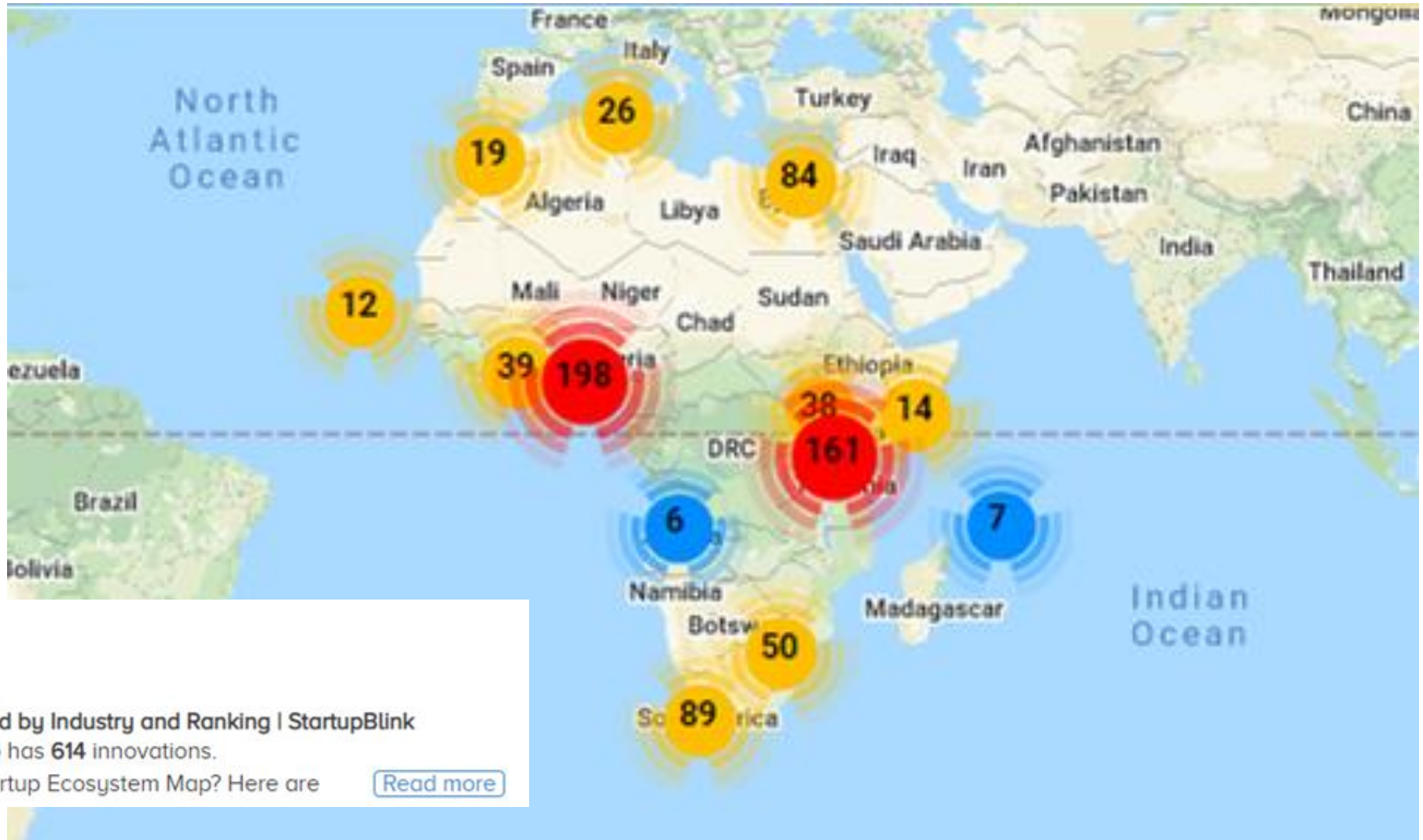
The number of startups in Africa is growing fast...



STARTUP Blink

Map of Startups in Africa, listed by Industry and Ranking | StartupBlink

Africa Startup Ecosystem Map has 614 innovations.

Want to explore the Africa Startup Ecosystem Map? Here are Read more

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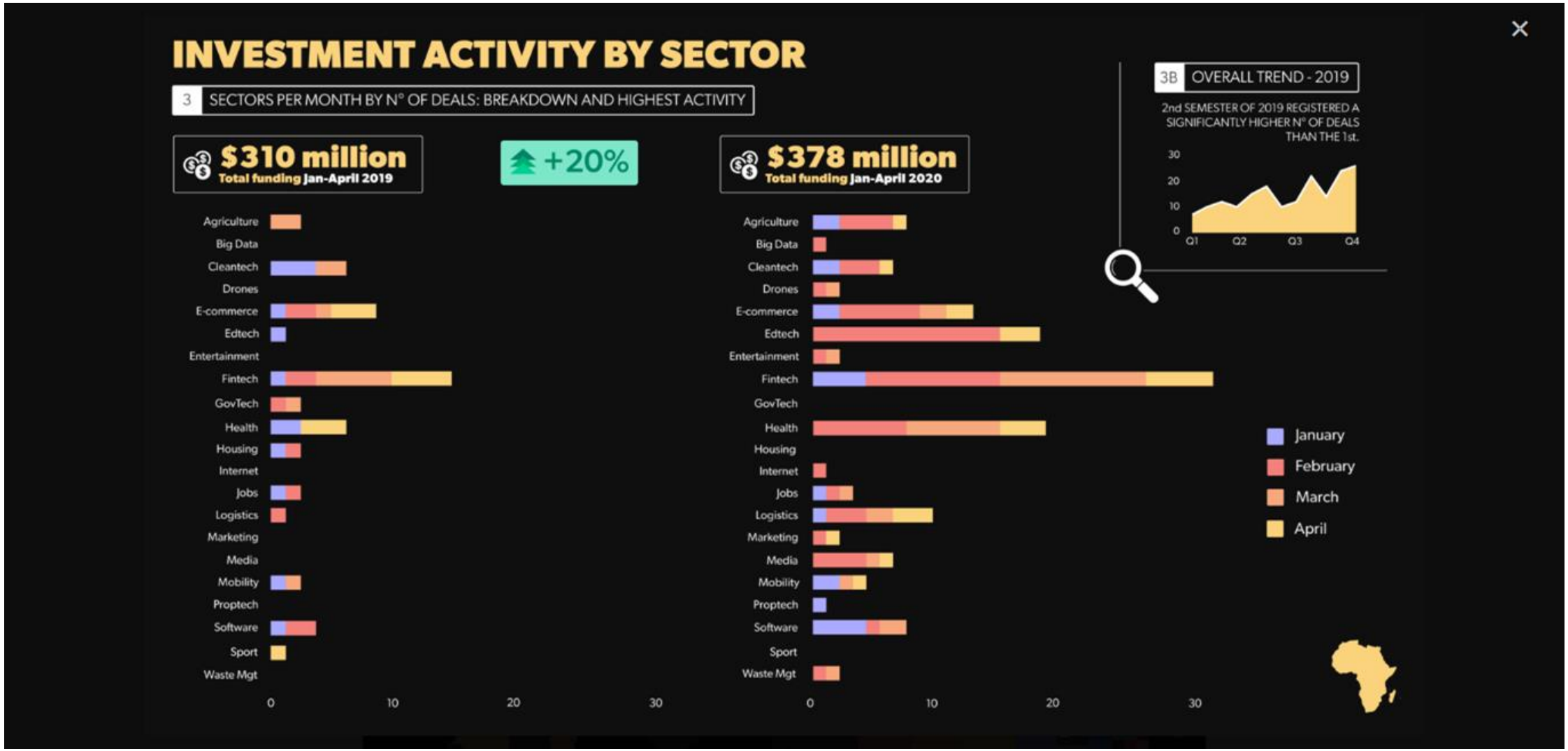

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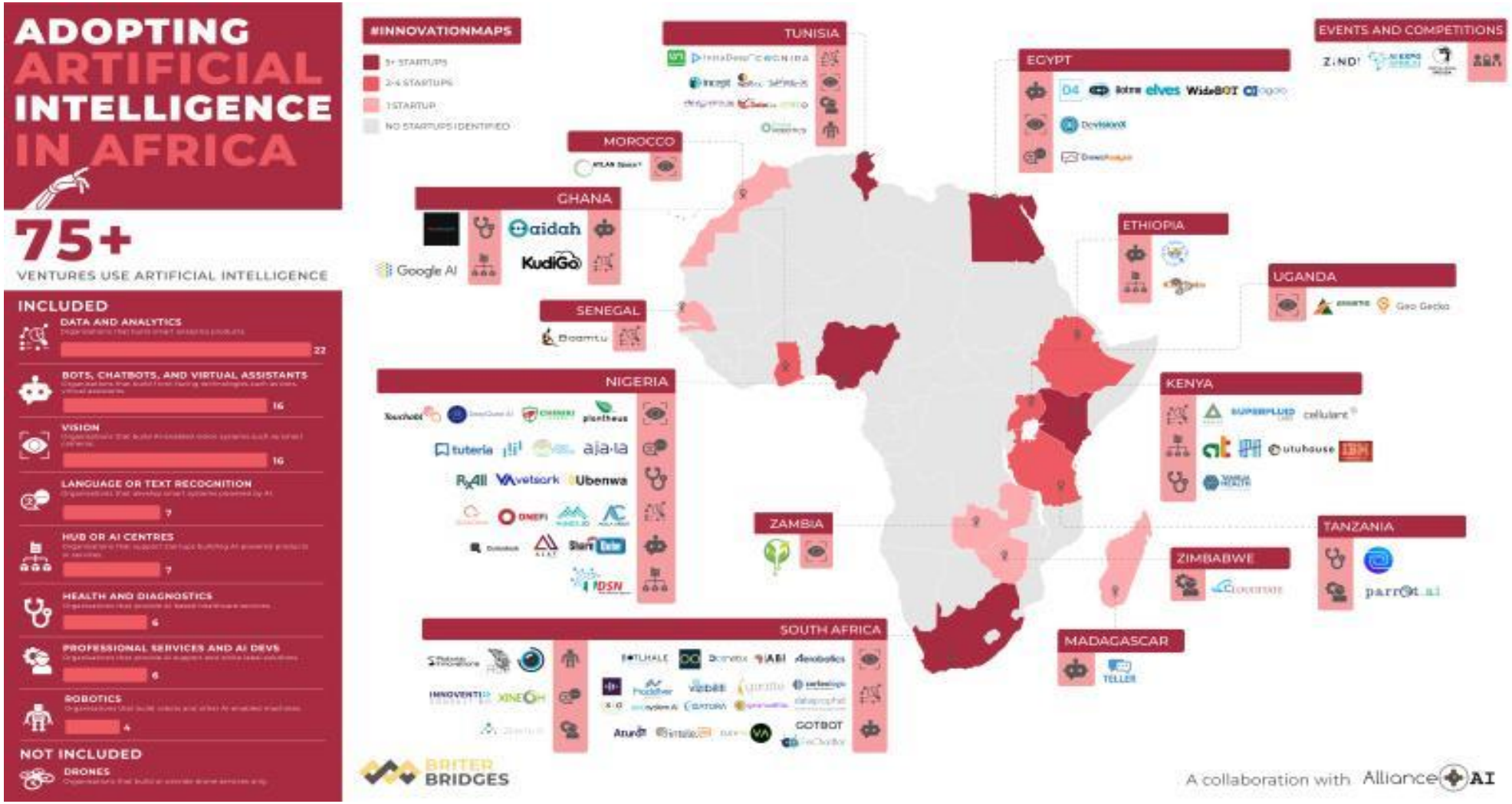
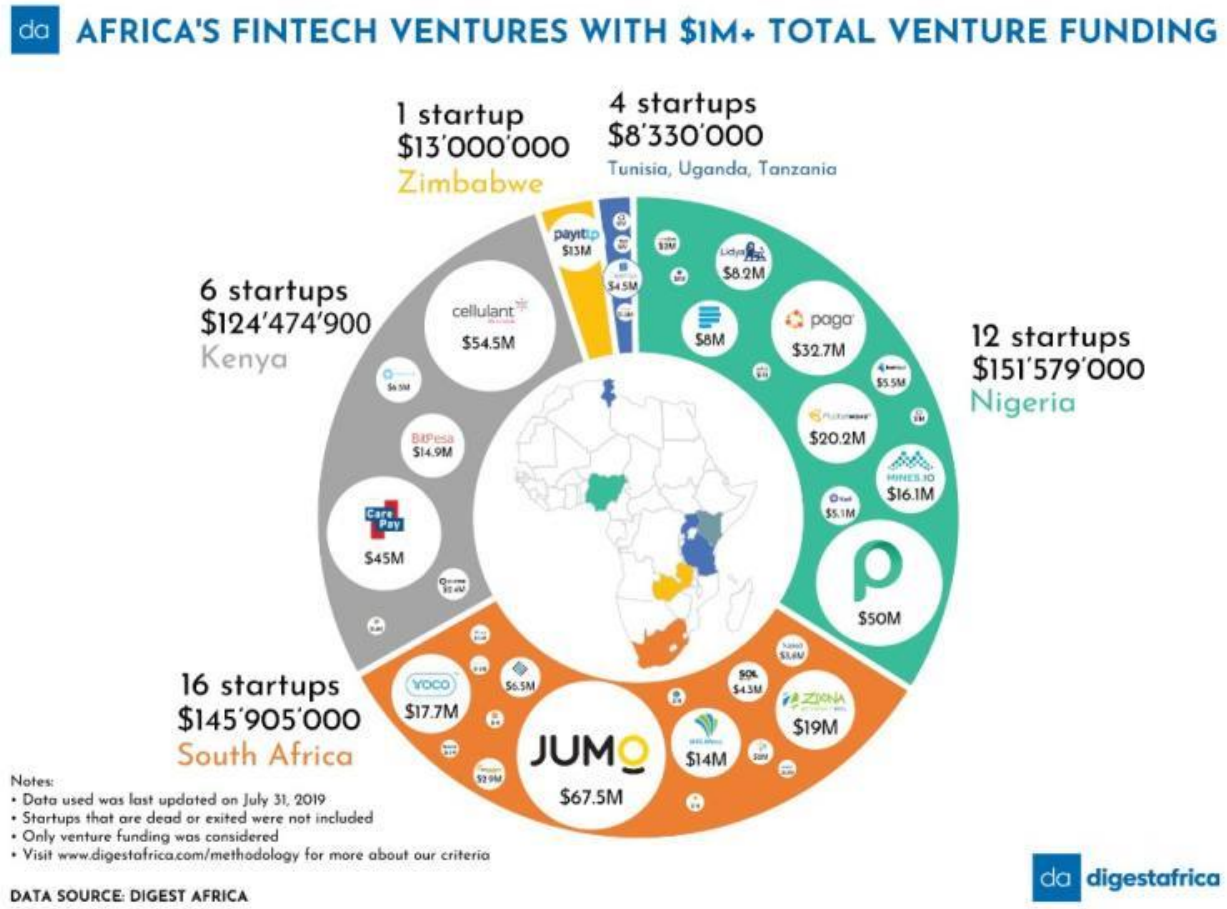
Clustering & Specialization



Clustering & Specialization



The major ecosystem enablers ...

Source: WeeTracker – African Venture Capital Report 2019

→ US$ 2.5 Billion growth projection for africa's crowdfunding market potential by 2025

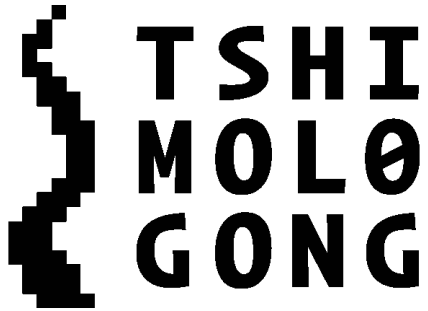
Telco, Tech companies, Banks and Universities are interconnecting local ecosystems to global ones...

https://www.orangefab.com/

https://www.liquidtelecom.com/about-us/news

https://developers.google.com/community/accelerators/

https://tshimologong.joburg/

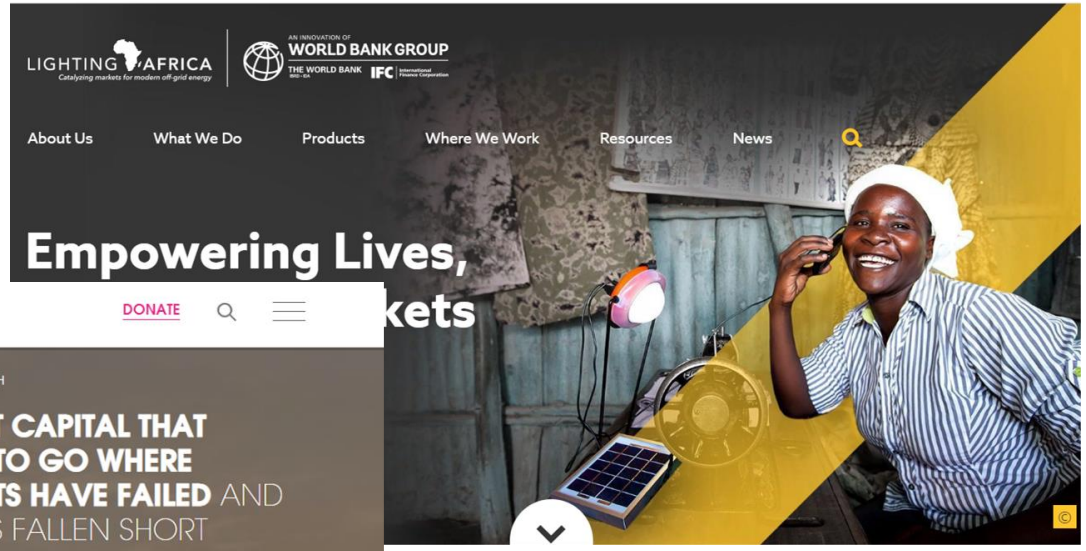


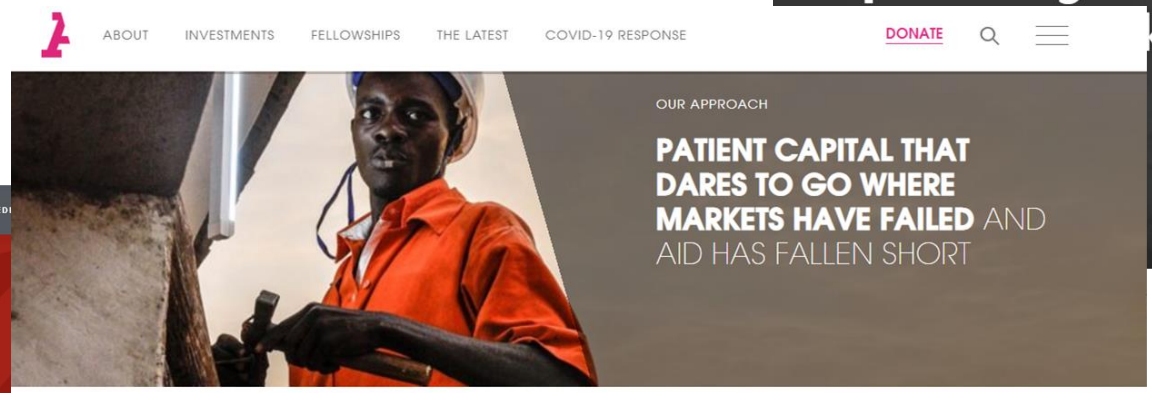
https://ecobankfintech.com/

Institutionalizing Impact investing in Africa

Impact Investing funds are multiplying in Sub Saharan

Our estimation* of available impact funds > USS$ 1 Tn





(*) Based on different sources including https://www.africaglobalfunds.com/

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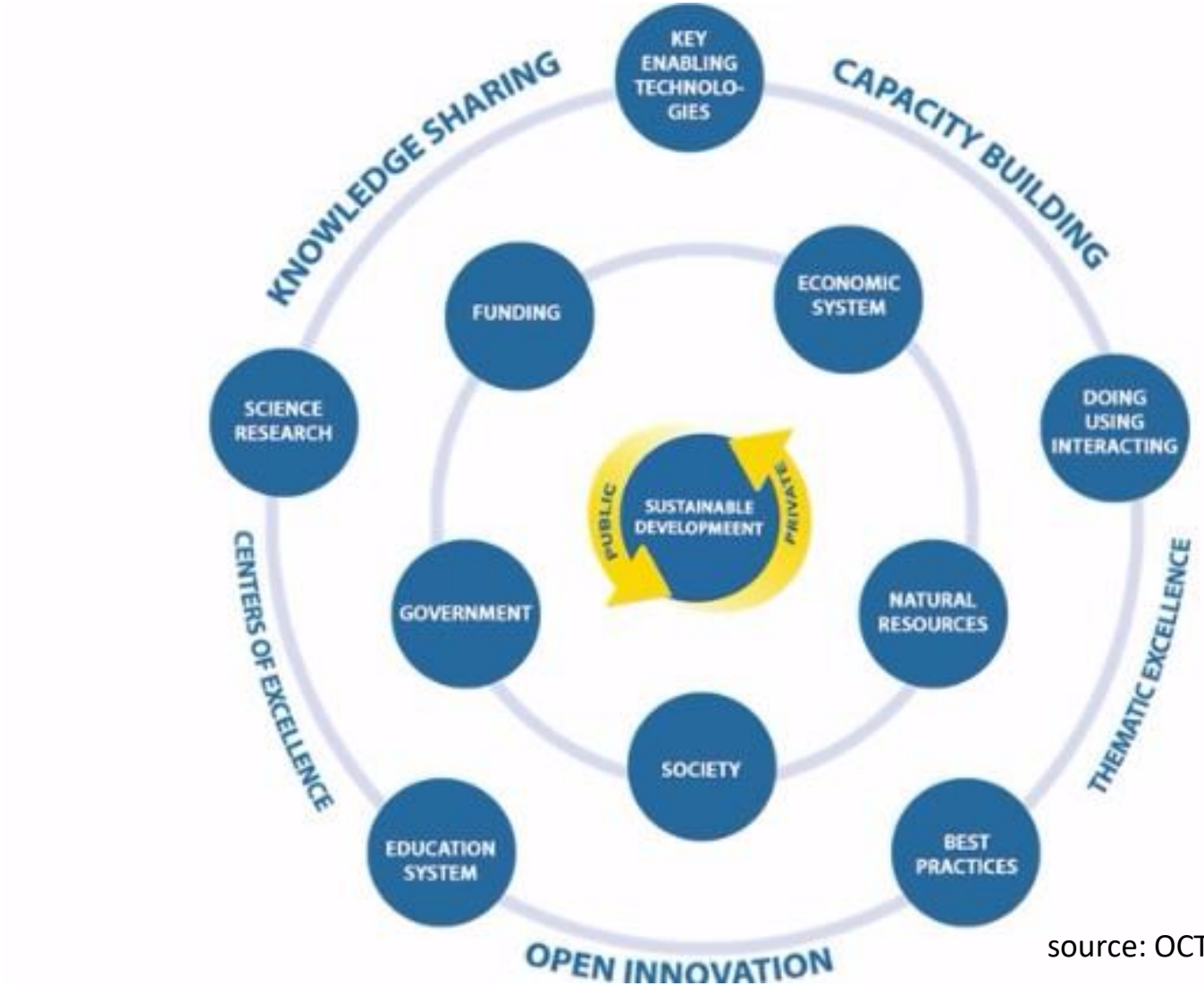
Innovation ecosystem

Innovation is driven by a dedicated ecosystem, centered on sustainable development goals



source: OCTA innovation

Innovation Ecosystem policy covers a large chapter on the startup industry

→ Making all actors agree to commit with the final objective of sustainable development

→ Setting up favorable conditions for actors to interact and undertake risk

→ Accompany the rise of a new wealth creation agent the “Startup”

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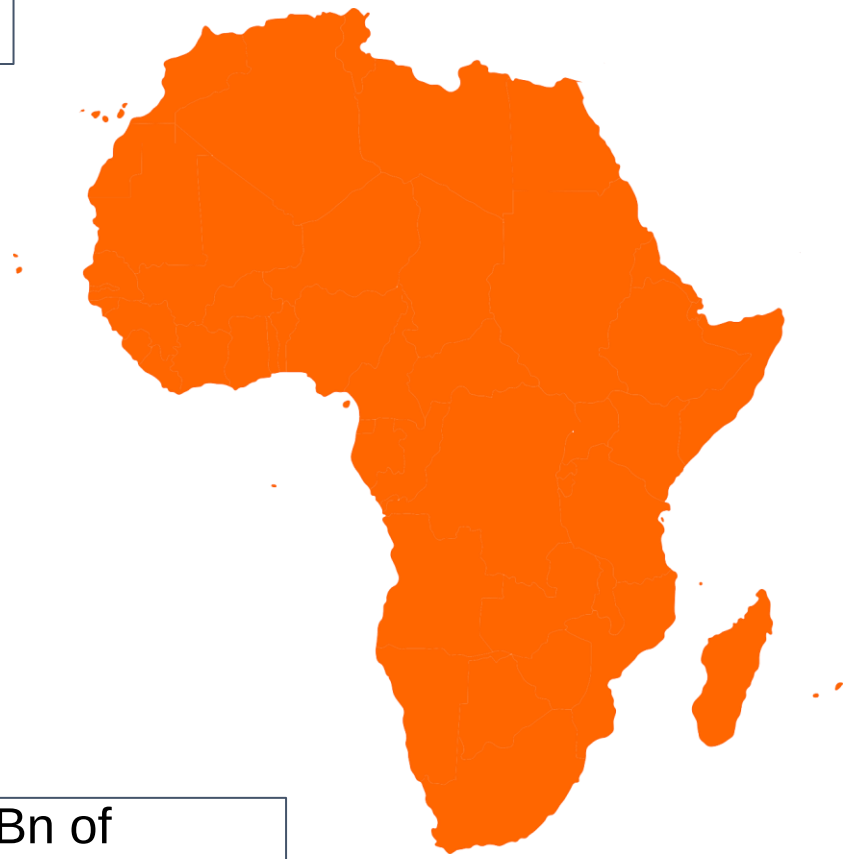
The Instruments of Public Policy

CAPITAL	KNOWLEDGE	MARKET / ENTREPRENEURSHIP
Tax discount for investors	Clustering & specialization	Ideation programs with academia & entreprises
Tax discount for startups	IP protection facility	adapted judicial framework
Easy operations on the capital	researchers secondments	Innovation incubation
access to international capital market	Access to Technological Infrastructure	Startups - Technoparks collaboration
sophistication of the financial instruments	Tech Transfer assistance	Acces to international markets
Financing all the stages of the startup	Open Data & eGov	Transparent public bids and procurement process
Direct funding of the entrepreneurs	Open Innovation	Startup acceleration
Dedicated room for startups in the local capital market	Research Based SpinOff	Economic holding
Simplified procedure for bankruptcy	Collaborative research projects PPP	Technology Hubs

African Innovation ecosystem at a glance (2019)

203 investors

618
Active Innovation Hub



427 deals

N°1 sector :Fintech

$1.340 Bn of venture capital

Survey Participants

Innovation actors from the following 13 countries :

Angola
Burkina Faso
Ghana
Kenya
Madagascar
Mozambique
Nigeria
Senegal
South Africa
Tanzania
Tunisia
Zimbabwe

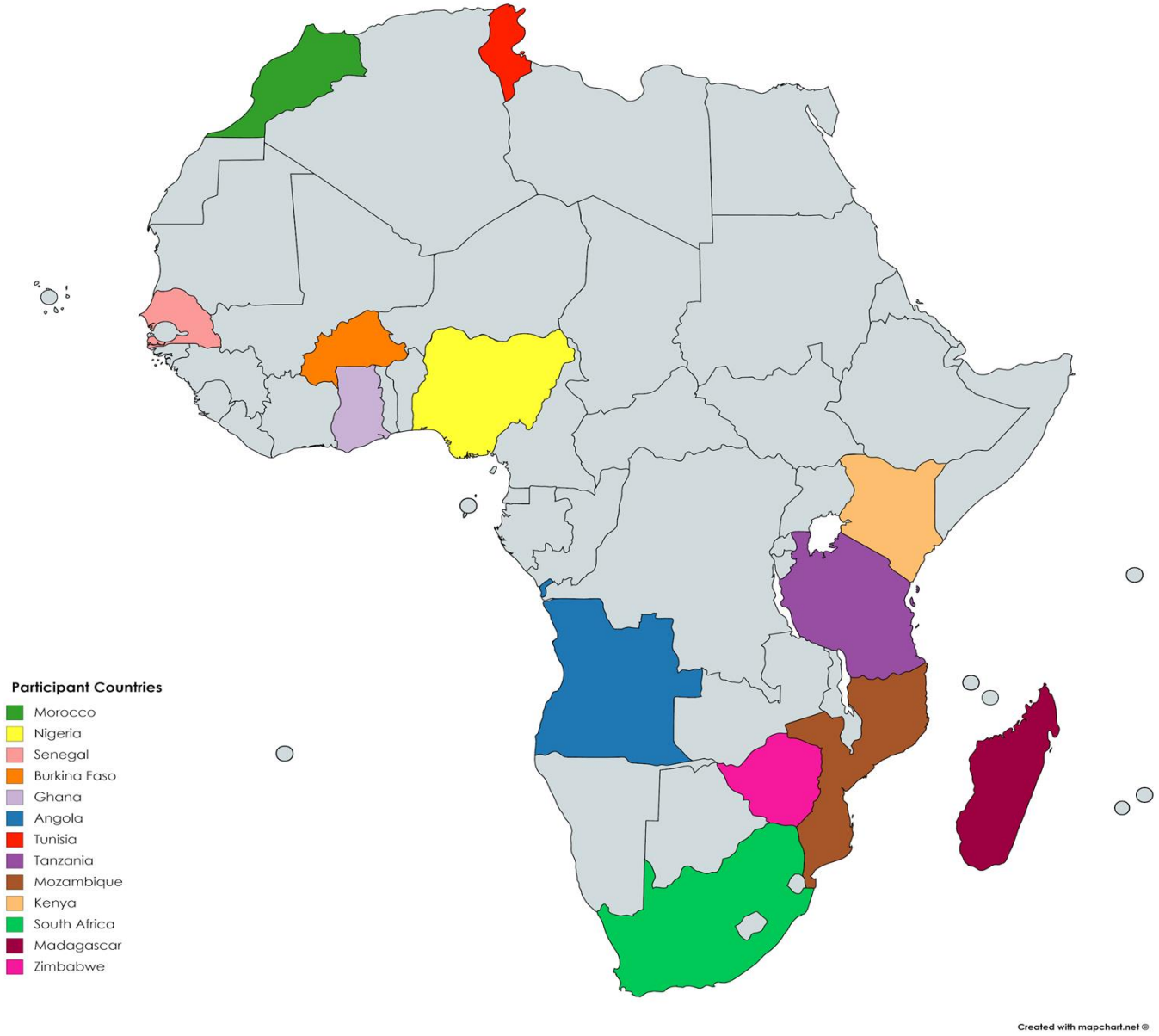
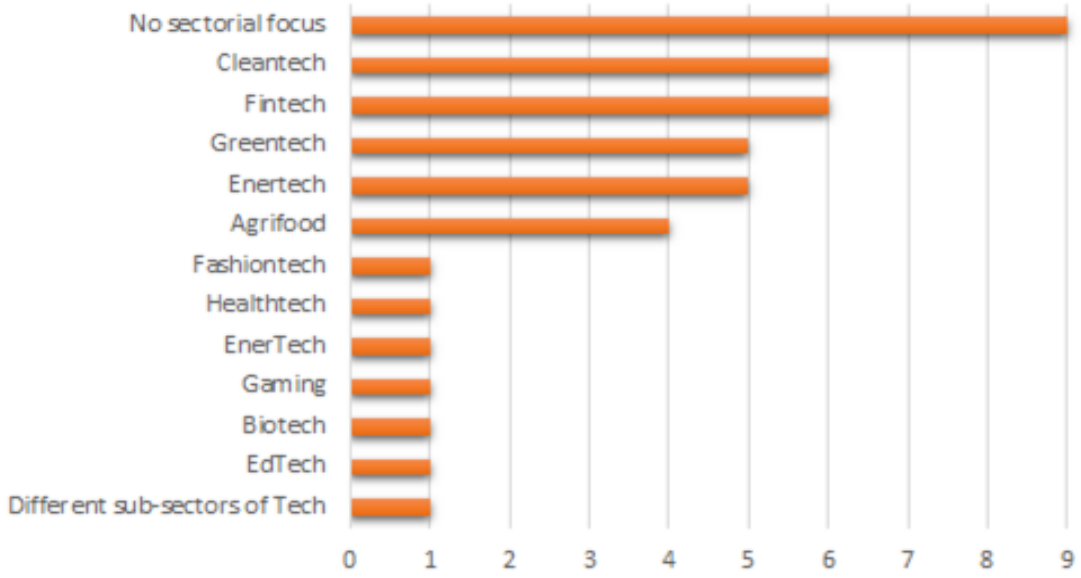


Chart 3: **Survey participants per sector**

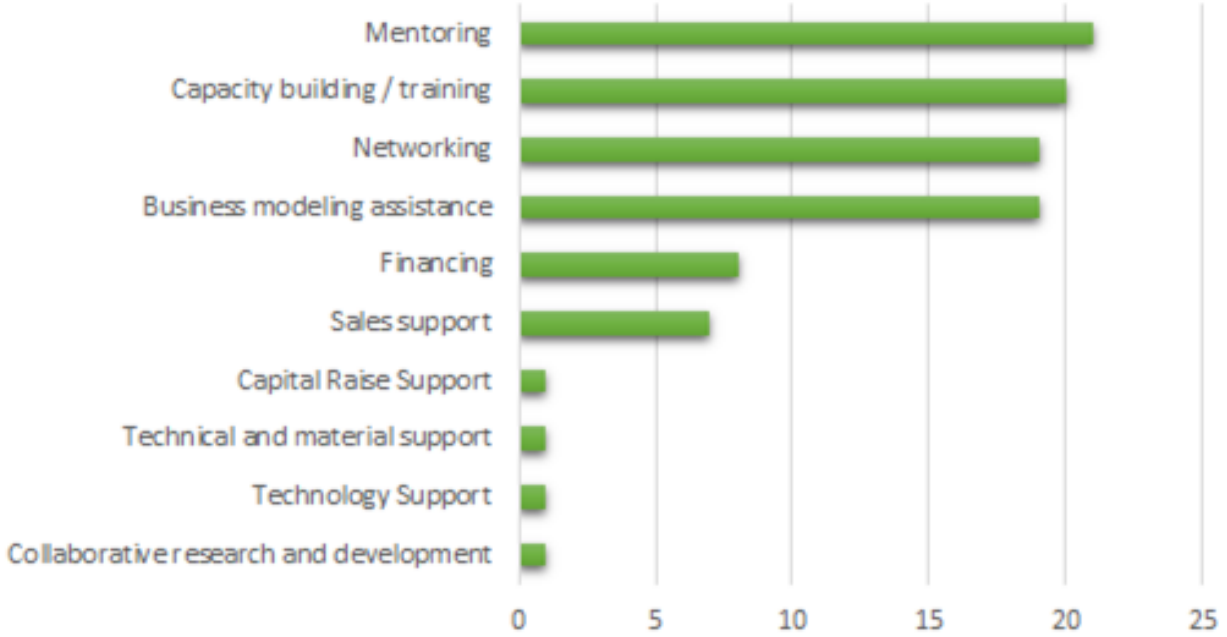


The top 5 sectors in which participant actors operate are cleantech ,fintech followed by greentech ,enertech and agrifood

95% offer mentoring and capacity building services

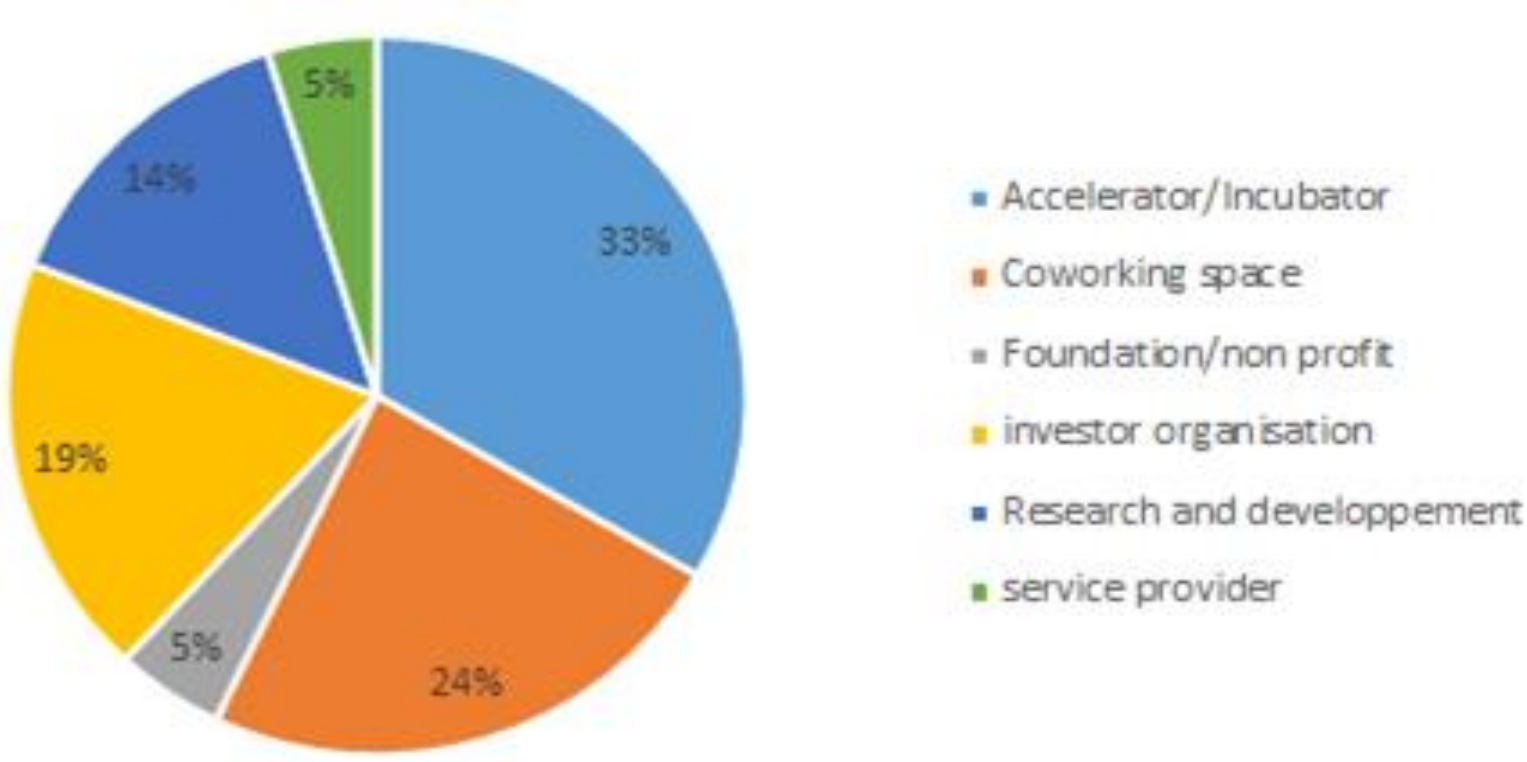
86% work provide Networking and business model assistance

Only 36% provide financing support



GRAPH 3: **Survey Participants Per Service**

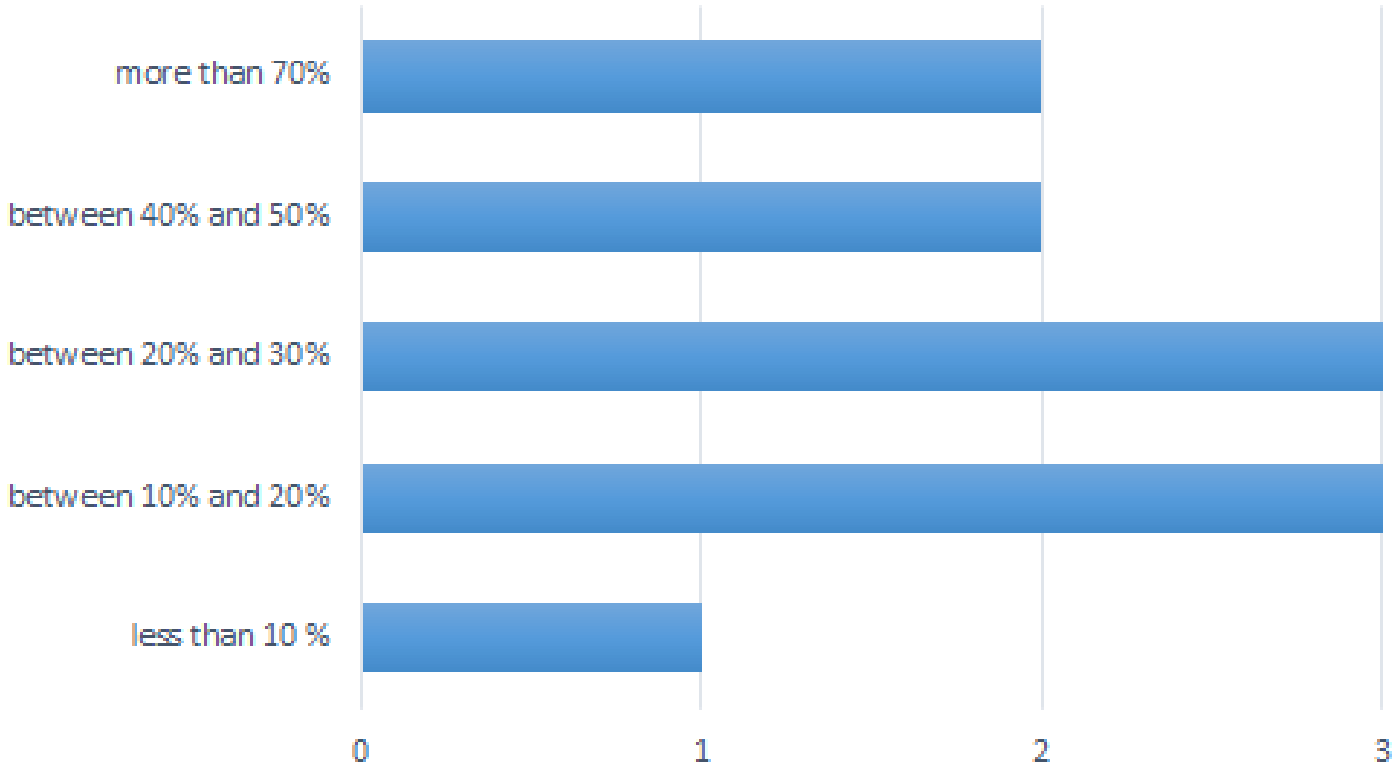
GRAPH 1: **Survey Participants Per Category**



The questionnaire brought together different actors of the innovation ecosystem from all over the continent making it possible to look at the african image from different angles

GRAPH 7: **Venture Survival rate after 3 years period**

N=22



Senegal ,South Africa

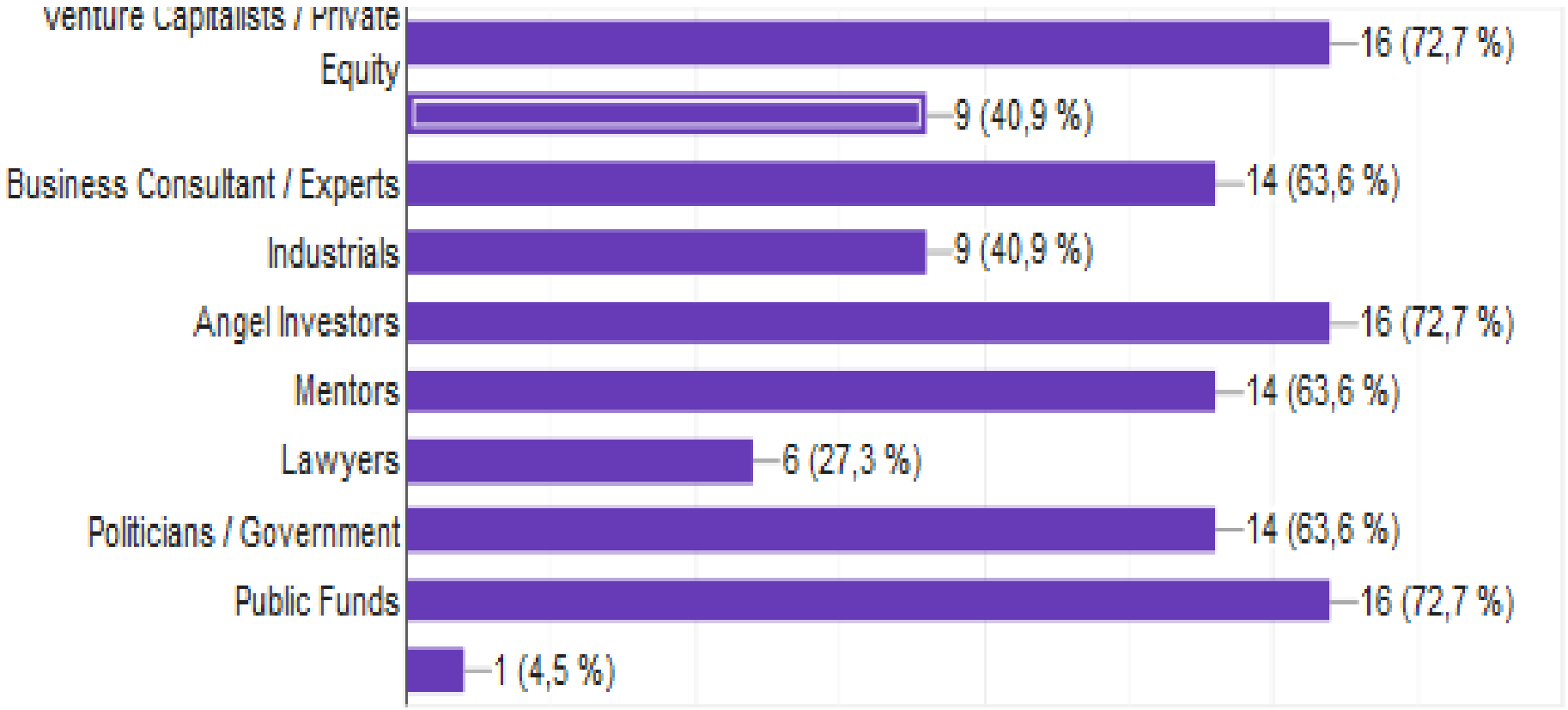
Tunisia ,Nigeria

Burkina Faso ,Kenya ,Morocco

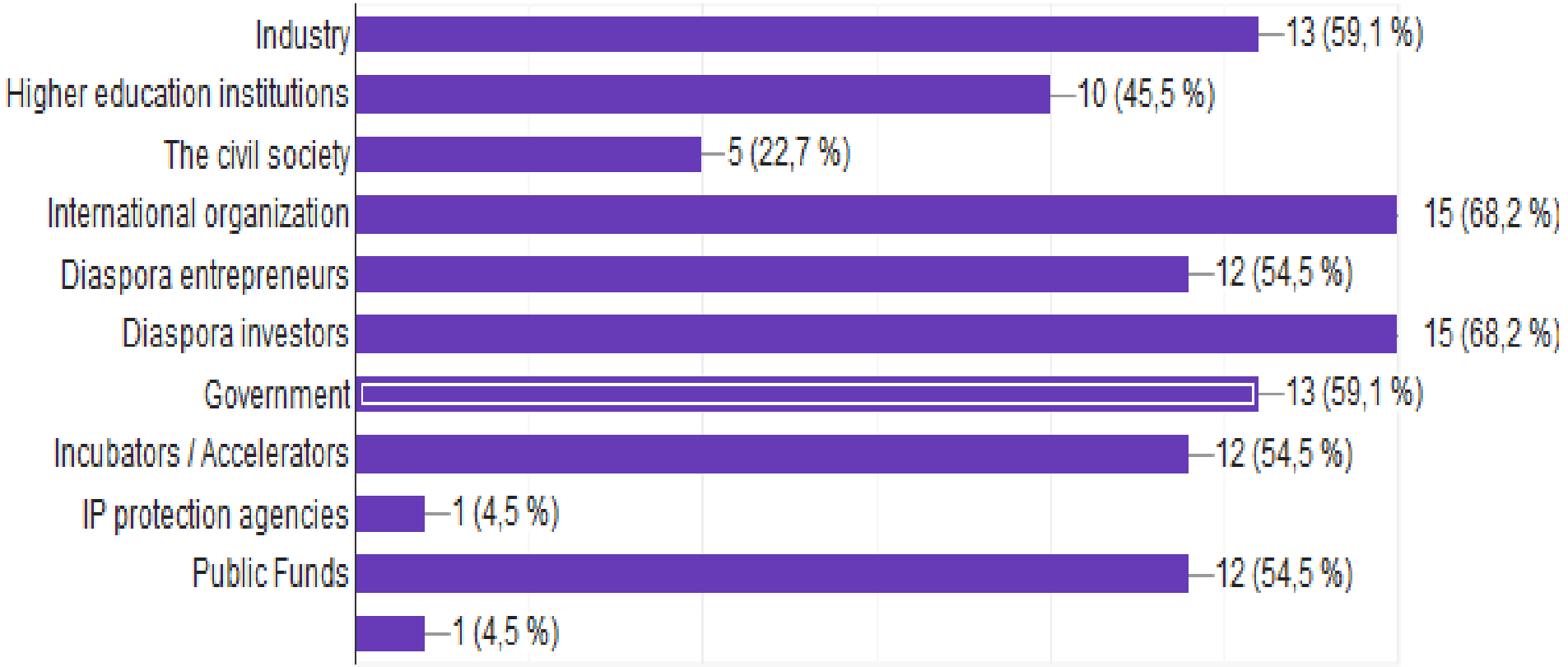
Tanzania,Madagascar ,Ghana

Angola

Who are the actors who need to be more involved to enhance the innovation ecosystem performance?



With whom do you need to improve the interaction to better achieve your objectives?



How to improve these numbers?

All 13 participant countries pointed the necessity to improve the following in order to achieve better results and improve their performance:

-Develop sector specific mentoring

-Conductive legal and regulatory policies

-Availability of Venture Funds

-Larger angels network

-Improve supply chain management

-Technology valorisation

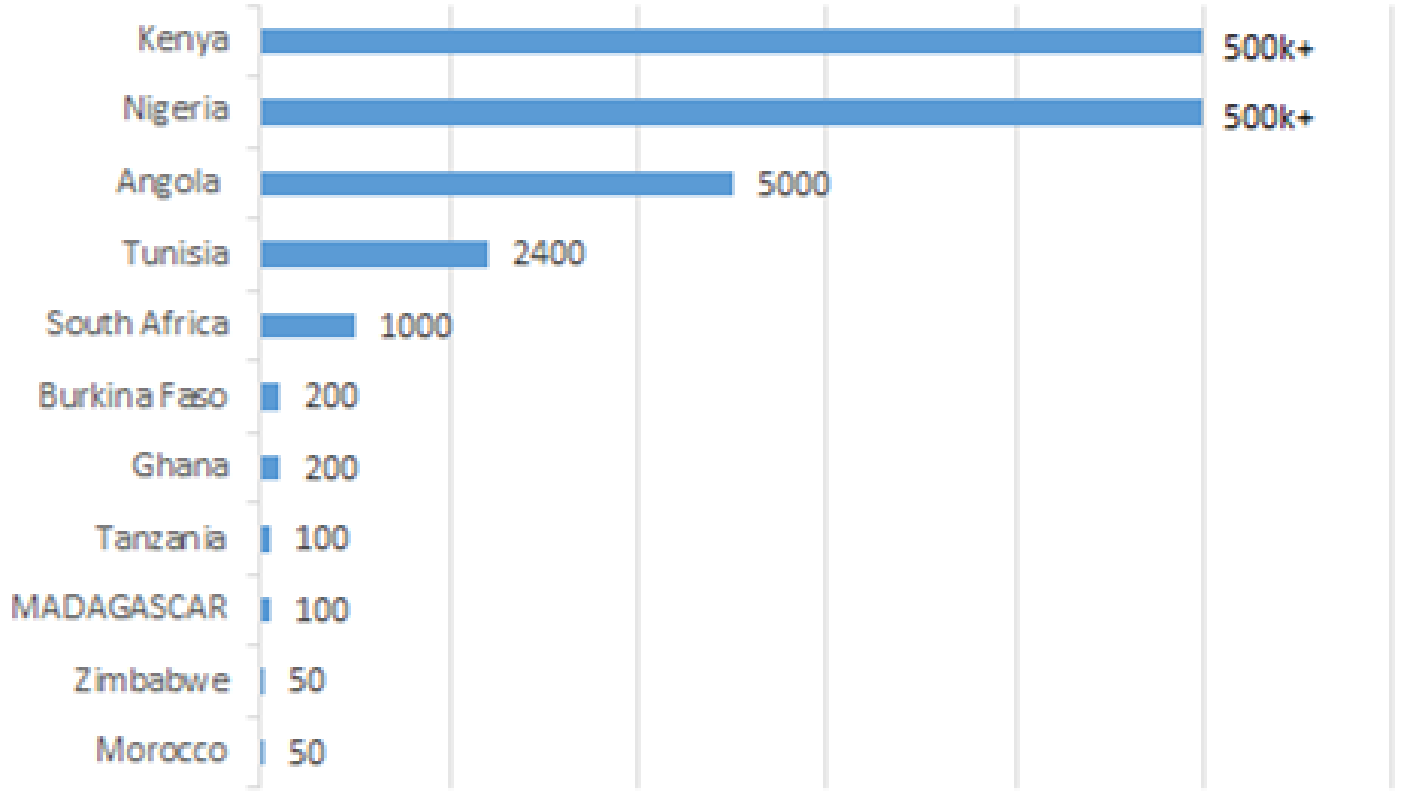
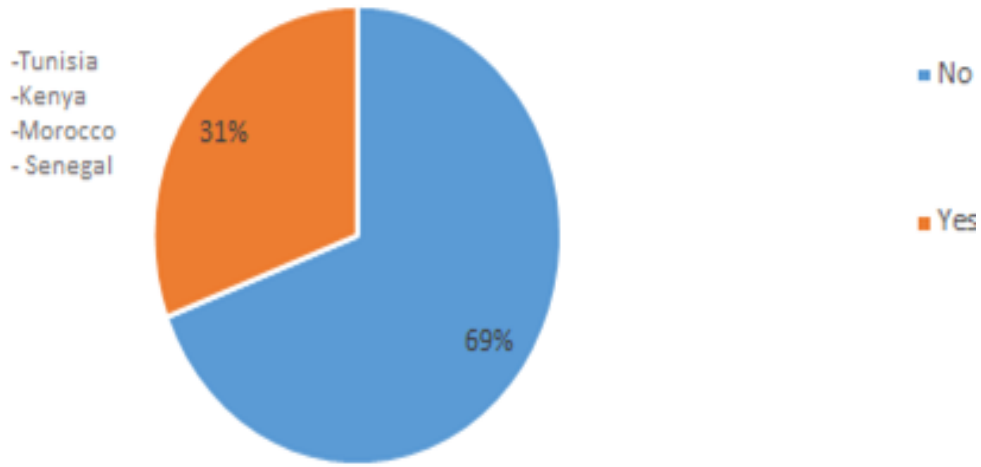
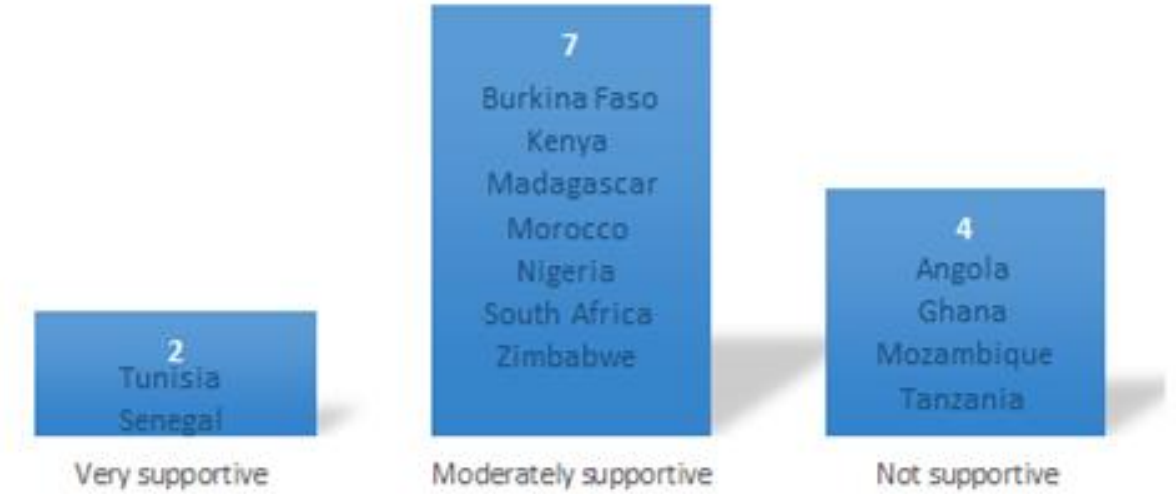


Chart : **Participants Ability to generate startups in optimal conditions**

GRAPH 9: **Are your government priorities in terms of innovation clear for everyone?**



GRAPH 10: **Government Support to startup development**



Innovation policies

Tunisia:Startup Act

Kenya:Innovation support for Big 4 Agenda

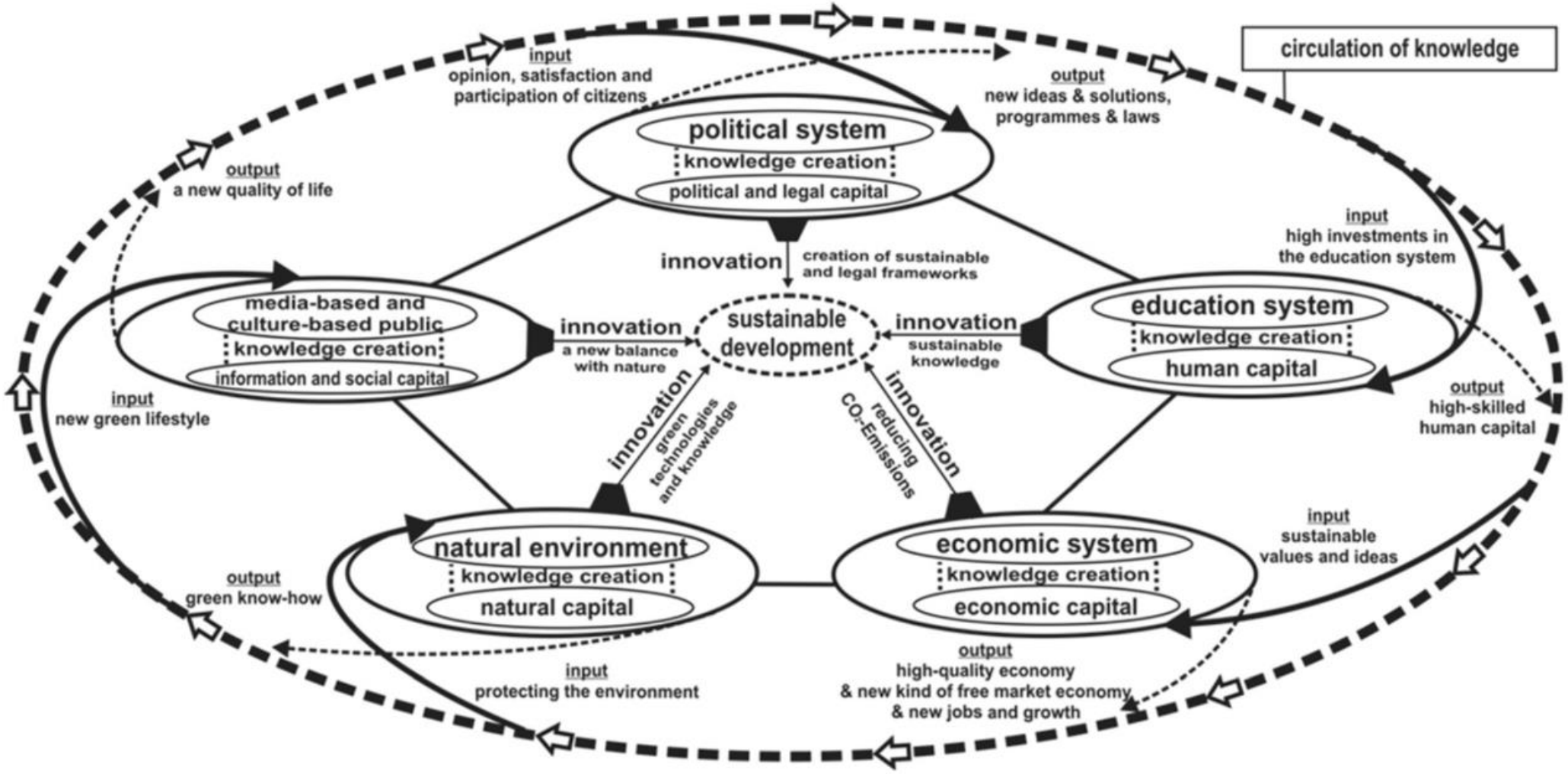
Morocco: Startup support; Technology transfer, Custer building

Madagascar: Fihariana Project

Senegal : Smart city project

As countries develop and move closer to the technological frontier, governments are undoubtedly showing an interest in the development and diffusion of innovations, but public policies must evolve. They need to focus more on helping the ecosystem improve its capacity to create knowledge and value by facilitating financing .

The quintuple helix model for Entrepreneurial Ecosystem

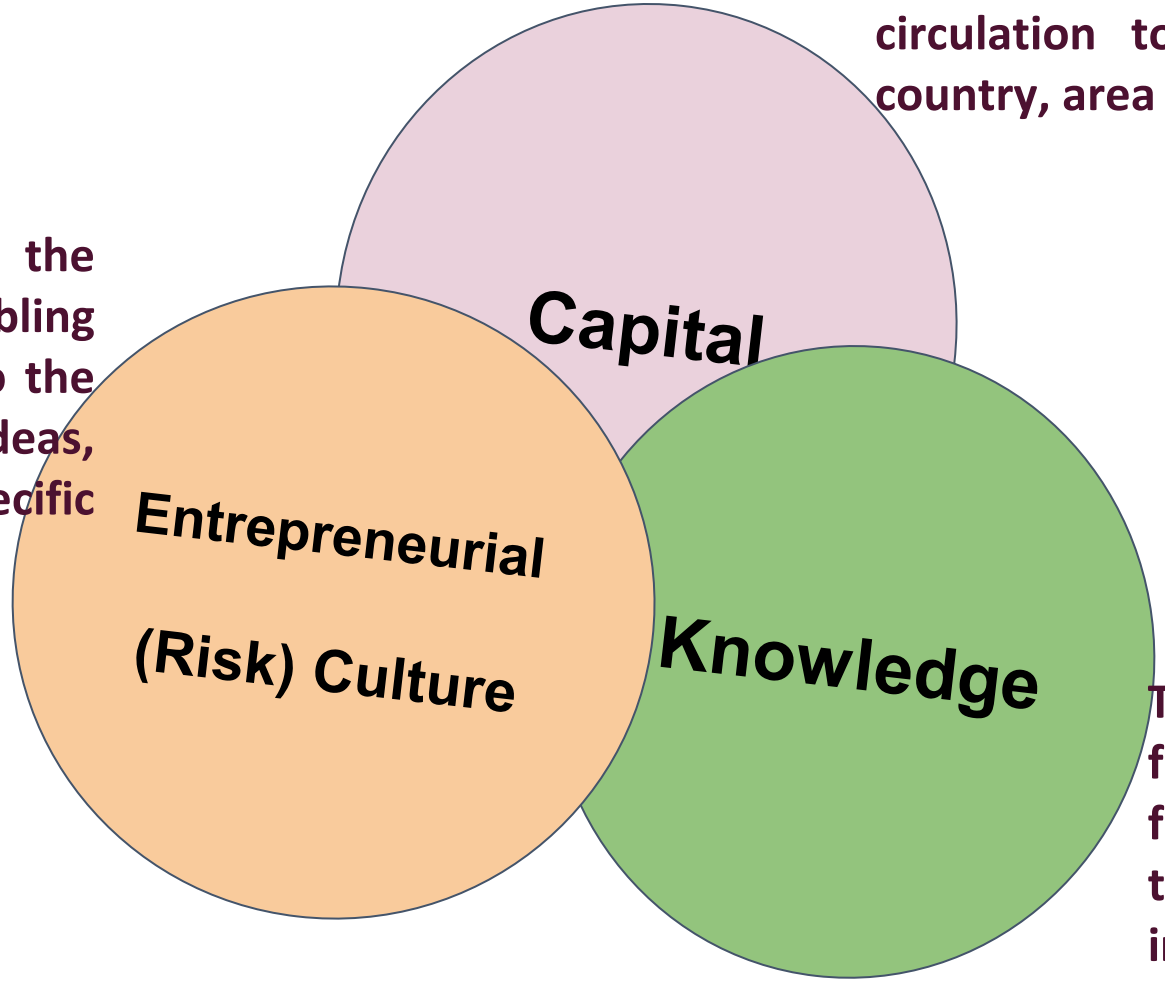


(2012-08-08). "The Quintuple Helix innovation model: global warming as a challenge and driver for innovation". Journal of Innovation and Entrepreneurship

The 3 sphères model

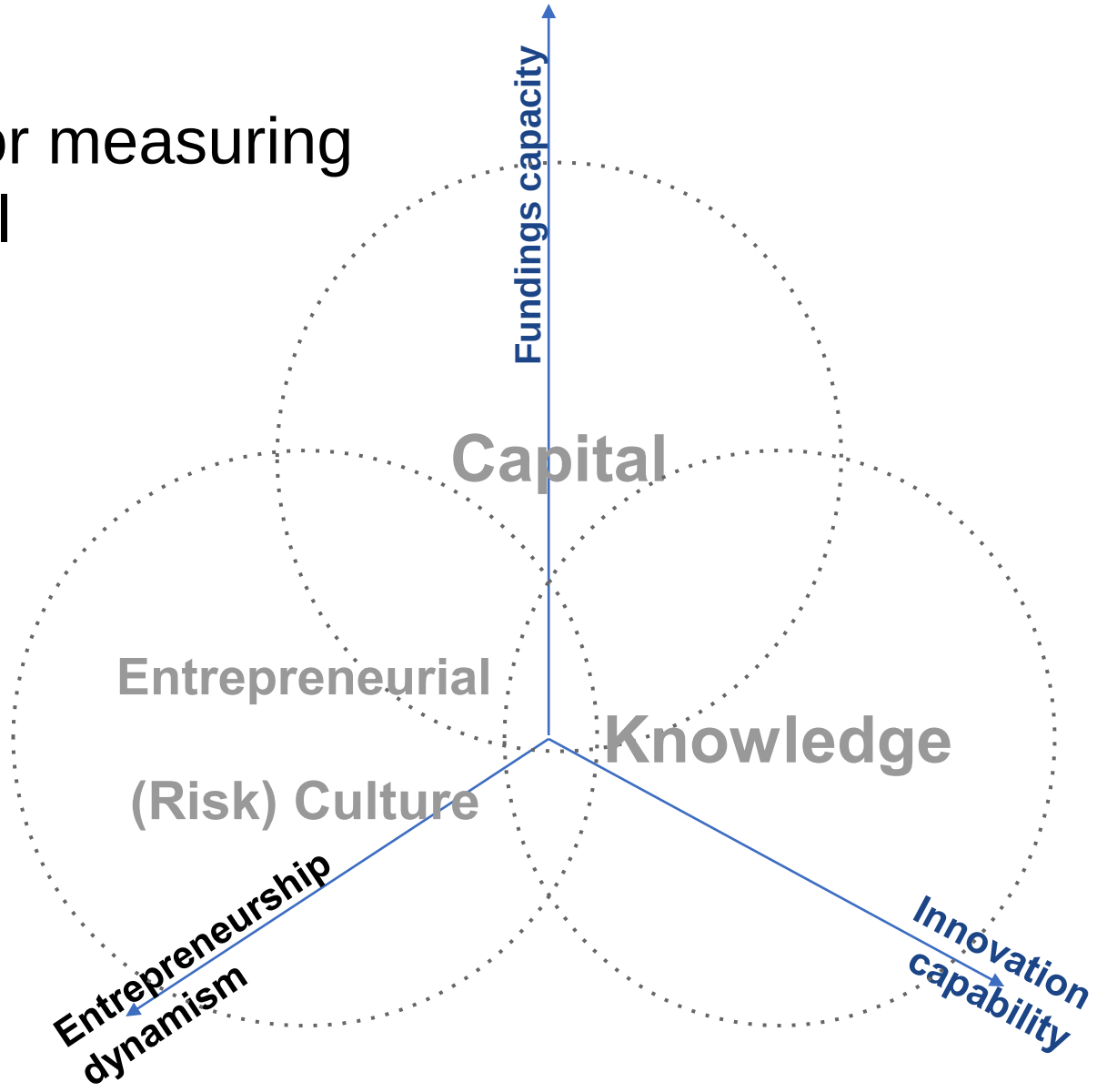
This sphere includes all the flows of capital in circulation to fund startups in a specific country, area or sector.

This sphere includes all the initiatives and enabling engagements that contribute to the proliferation of new business ideas, projects and people in a specific country, area or sector.

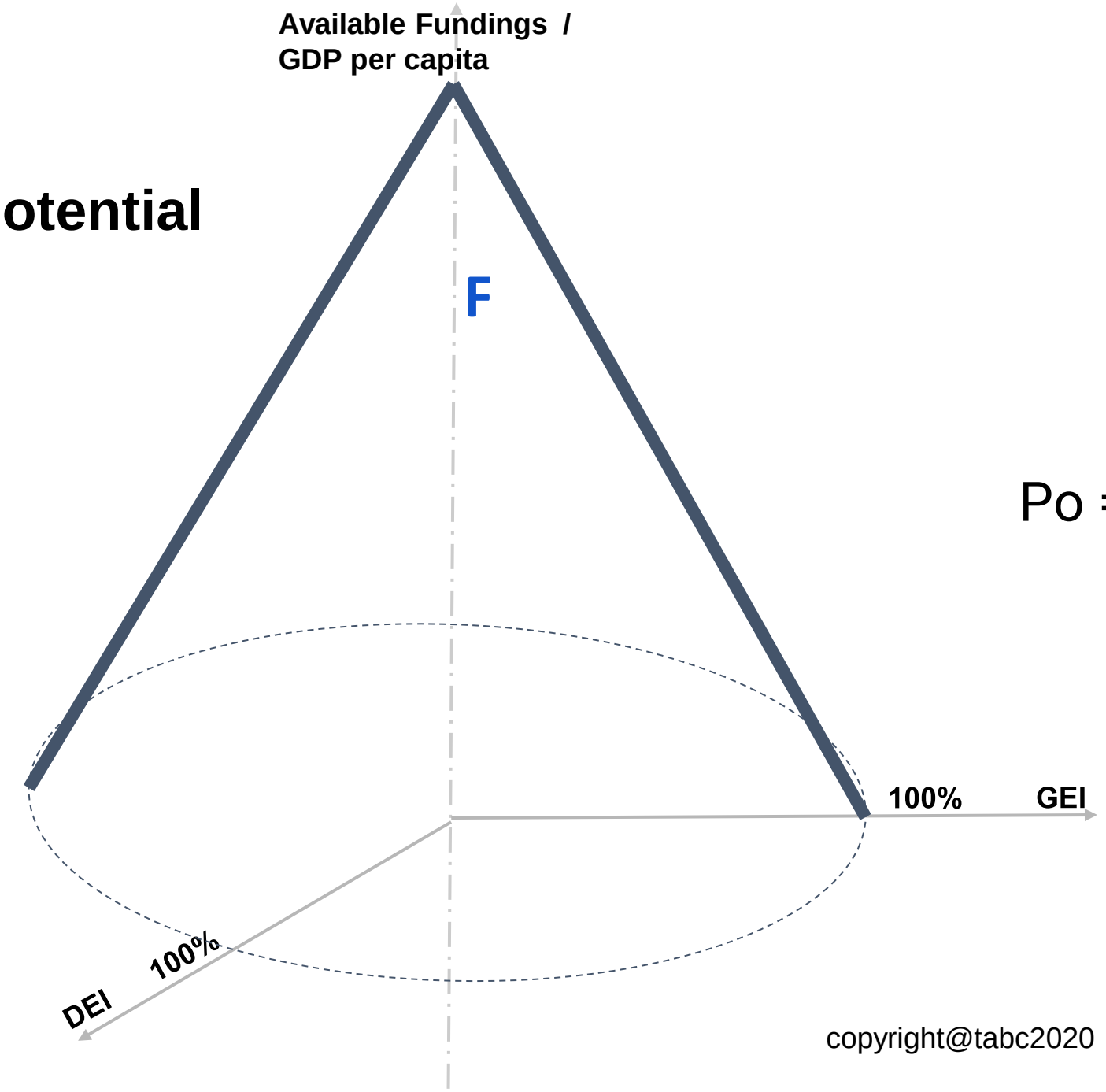


This sphere includes all the flows of knowledge under the form of science and technology that irrigate the startup industry in a specific country, area or

Approach for measuring the potential

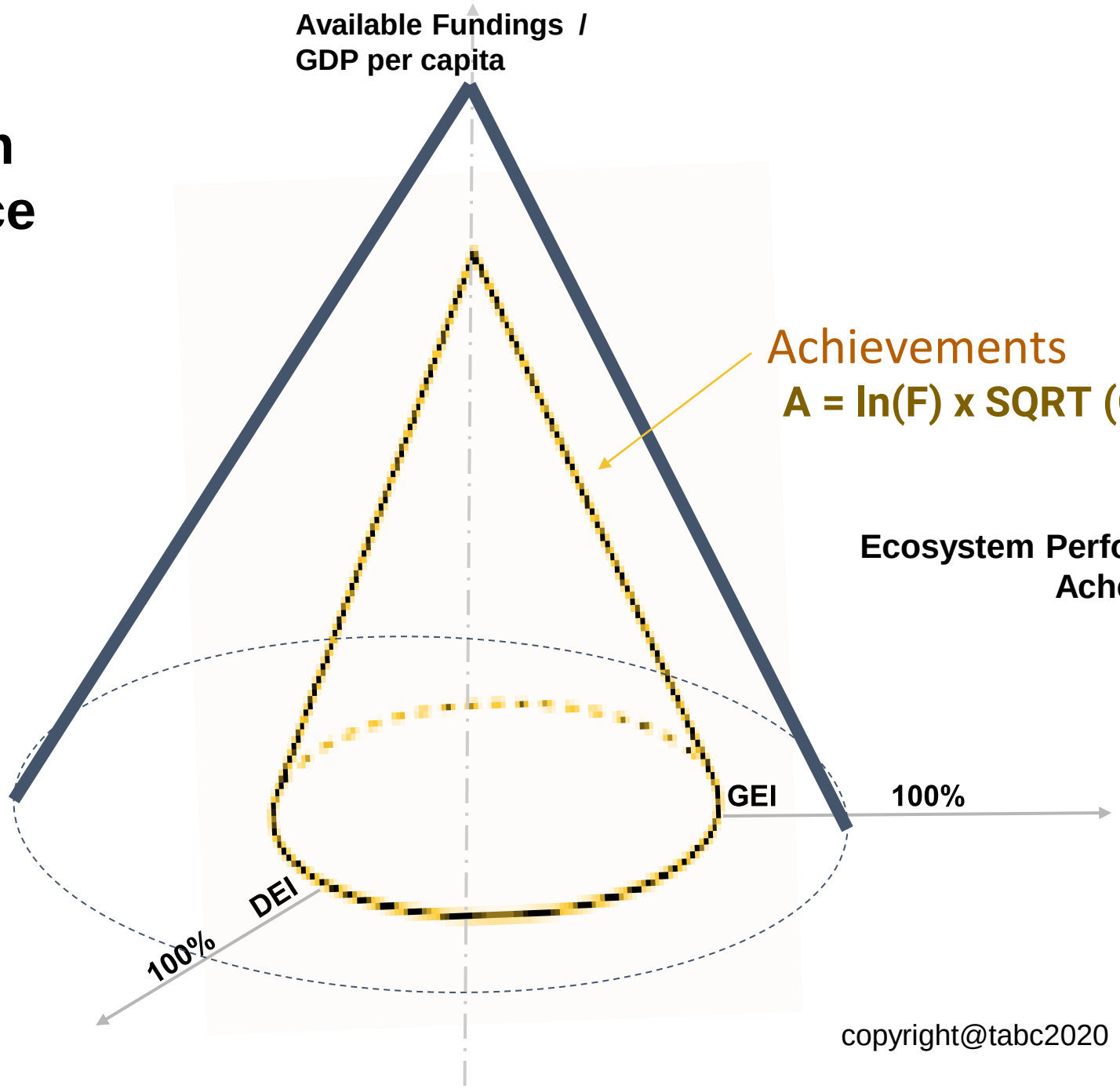


Ecosytem potential



$$Po = \ln(F) \times Pi / 3$$

Ecosystem performance



Ecosystem Performance = Volume of Acheivements / Potential

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1. Funding capacity

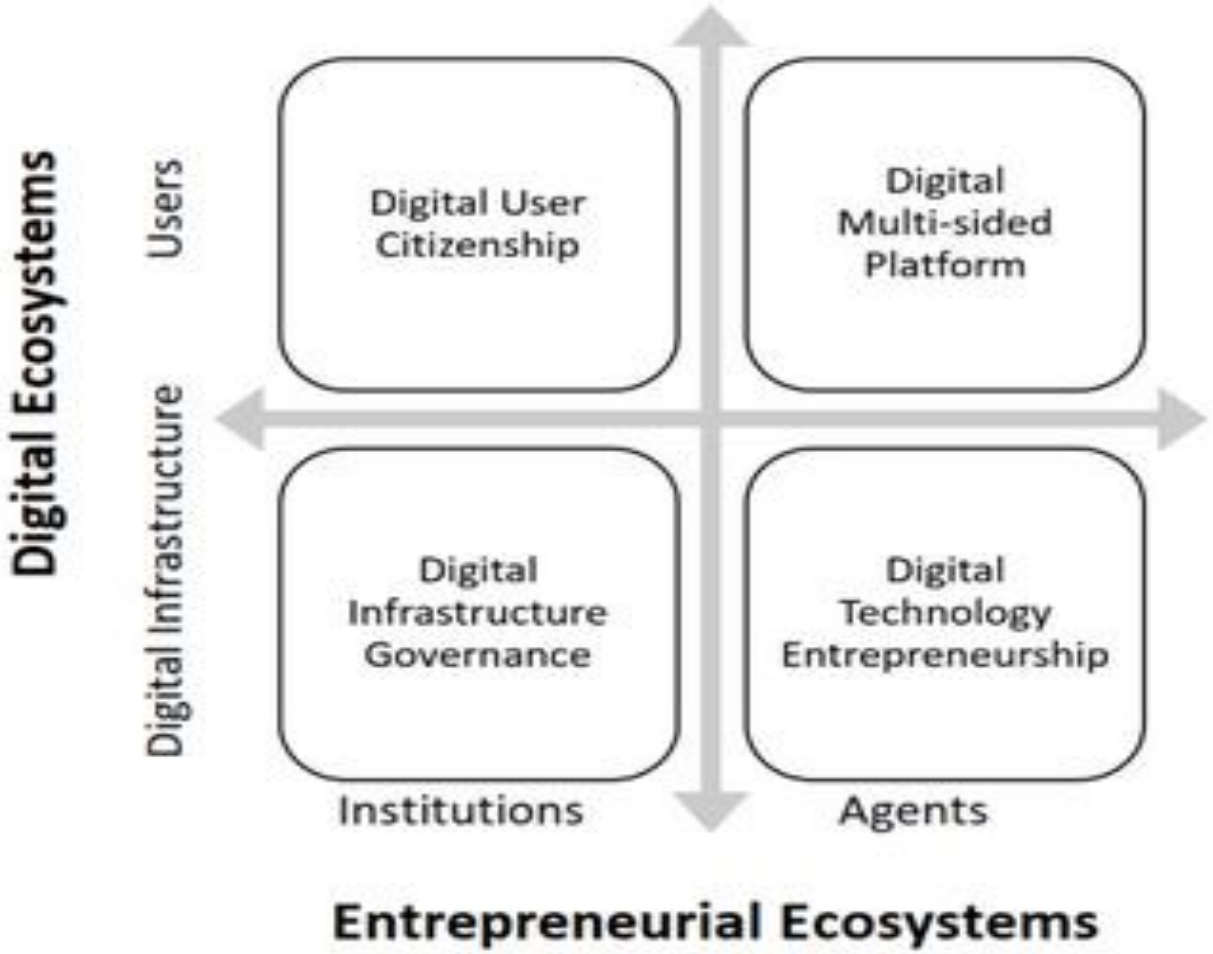
The **Funding Capacity or dry powder for the startups** is the capacity to support startup ecosystem with fundings. It stands for the Logarithm (Ln) of the dry powder in a given country or region adjusted by its GDP/capita.

2. Knowledge and technological capability

The Digital Entrepreneurial Index (DEI) fits the second sphere and attempts to measure the digital entrepreneurial ecosystem. The DEI framework includes Digital Infrastructure Governance, Digital User

Citizenship, Digital Multi-sided Platform, and Digital Technology Entrepreneurship. 12 Pillars are identified as the most important constituents of the model and measured by the authors .

Pillars are comprised from 24 variables, representing digital ecosystem (12) and entrepreneurship ecosystem (12).



Source: The Global Entrepreneurship and Develpment Institure, report, 2019

All pillars contain two types of variables: One is representing the Digital Ecosystem (Digital infrastructure and Users) and the other representing the Entrepreneurship Ecosystem (Institutions and Agents). The overall influence of these two types of variables is captured by multiplying the two components leading to the DEI

The table below summarizes and describes the 12 pillars

DEI Structure

Sub-indexes	Pillars	Variables (entrepreneurship/digital)
Digital Infrastructure Governance	Digital openness	*Digital Openness Institutions*
		Digital openness Digital Infrastructure
	Digital freedom	*Digital Freedom Institutions*
		Digital Freedom Digital Infrastructure
	Digital protection	*Digital protection Institutions*
		Digital protection Digital Infrastructure
Digital User Citizenship	Digital literacy	*Digital literacy Institutions*
		Digital literacy Users
	Digital access	*Digital access Institutions*
		Digital access Digital Infrastructure
	Digital rights	*Digital rights Institutions*
		Digital rights Digital Infrastructure

Digital Multi-sided Platform	Networking	*Networking Agents*
		Networking Users
	Matchmaking	*Matchmaking Agents*
		Matchmaking Users
	Financial facilitation	*Financial facilitation Agents*
		Financial facilitation Users
Digital Technology Entrepreneurship	Digital adaptation	*Digital adoption Agents*
		Digital adoption Digital Infrastructure
	Technology absorption	*Technology absorption Agents*
		Technology absorption Digital Infrastructure
	Technology transfer	*Technology transfer Agents*
		Technology transfer Digital Infrastructure

Source: The GEDI report, 2019

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3. Market and Entrepreneurship ability

The third component is captured by the **G**lobal **E**ntrepreneurship **I**ndex. The GEI combines a set of values, norms, attitudes, competencies and behavior related to risk awareness and risk taking (active business decisions) that determines the entrepreneur's commitment to and style of risk management. Hence, it is the entrepreneur who drive the trial and error dynamic

It notes "the dynamic, institutionally embedded interaction between entrepreneurial attitudes, entrepreneurial abilities, and entrepreneurial aspirations by individuals, which drives the allocation of resources through the creation and operation of new ventures."

Source : Global Entrepreneurship Index Report (2019)

→ The 3 building blocks composing the GEI fit the risk culture sphere where nascent and new entrepreneurs are at the core of the system.

1. **Entrepreneurial Attitudes**: reflects t**he potential of the opportunity recognition and perception** with respect to the property rights and the regulatory difficulties that could obstruct the realization of the opportunity.

It is also about **skills perception**. The potential entrepreneur should have the adequate startup skills to launch a business. In developing countries skills are usually acquired through workplace trial and error in relatively simple business activities. In developed countries, business formation & operation require skills that are acquired through formal education and training.

Risk Acceptance: Aversion to high-risk enterprises and fear of failure attitudes can impede entrepreneurial action.

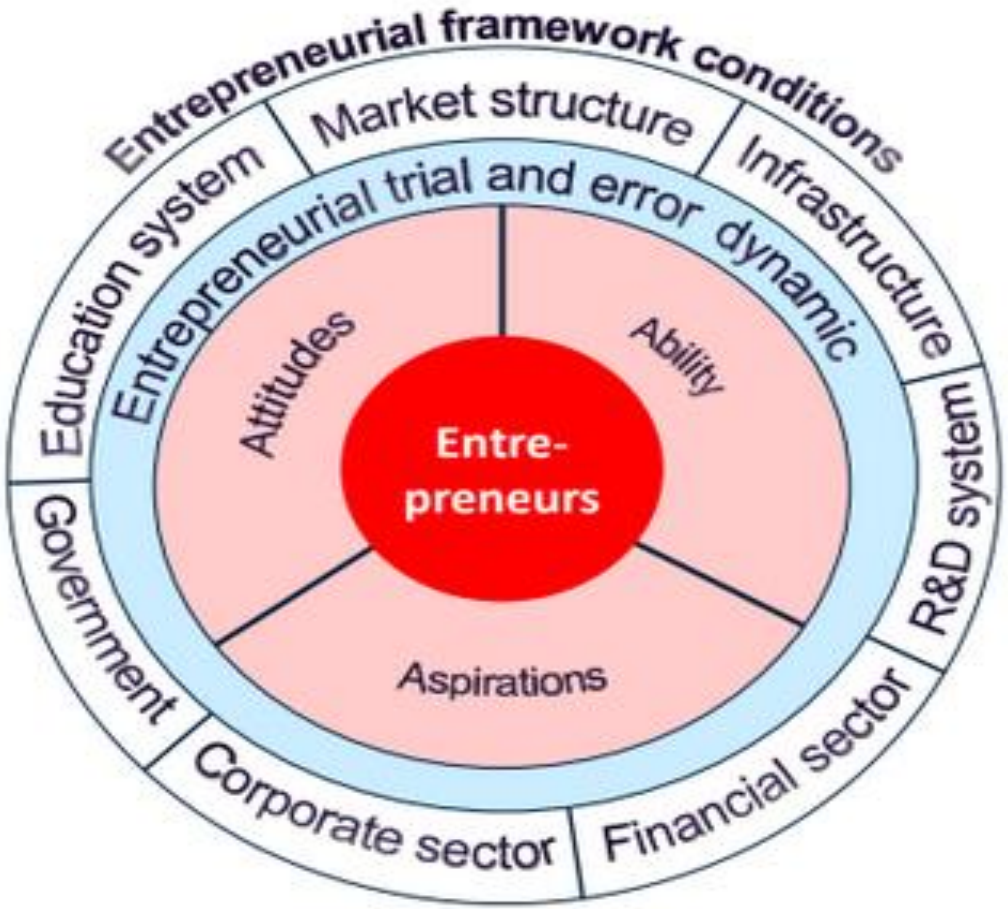
Networking Entrepreneurs who have better networks are more successful, can identify more viable opportunities, and can access more and better resources

cultural support how a country's inhabitants view entrepreneurs in terms of status and career choice, and how the level of corruption in that country affects this view

2. Entrepreneurial abilities : Combines **opportunity startups** by people who are motivated by opportunity as an important signal of quality. **Technology absorption** indicates that ICT provides better chances for businesses to survive and or their potential for growth.

The prevalence of high-quality **human capital** is vitally important for ventures that are highly innovative and require an educated, experienced, and healthy workforce to continue to grow and finally **competition**.

3. **Entrepreneurial Aspiration:** Product innovation (Potential to generate new products), process innovation (Applying and/or creating high technology), high growth business (10 people at least and intend more),internationalization (Exporting demand capabilities) and risk capital (The availability of risk finance) are the last four pillars that define the third sub-index



Source: GEI Report, 2020

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Global Startup Ranking: The Potential Score

Rank	Country	Potential Score
1	Nigeria	14.53
2	Egypt	13.78
3	Ethiopia	13.72
4	South Africa	13.32
5	Tanzania	13.17
6	Kenya	13.14
7	Algeria	13.08
8	Uganda	12.81
9	Morocco	12.75
10	Rwanda	12.49

Rank	Country	Potential Score
11	Cameroon	12.41
12	Malawi	12.13
13	Zambia	12.12
14	Mali	12.08
15	Senegal	12.02
16	Tunisia	11.66

TABC TUNISIA-AFRICA BUSINESS COUNCIL
THE THINK TANK FOR A SHARED PROSPERITY IN AFRICA

Global Startup Rankings: The Potential score

TOP 10 COUNTRIES

1. Nigeria
2. Egypt
3. Ethiopia
4. South Africa
5. Tanzania
6. Kenya
7. Algeria
8. Uganda
9. Morocco
10. Rwanda

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Global Startup Performance Score

Rank	Country	Performance Score (%)
1	South Africa	41.17
2	Tunisia	36.24
3	Egypt	32.07
4	Kenya	31.19
5	Morocco	30.46
6	Rwanda	27.76
7	Nigeria	26.95
8	Senegal	25.14
9	Zambia	20.97
10	Uganda	19.75

Rank	Country	Performance Score (%)
11	Algeria	18.91
12	Malawi	17.58
13	Mali	16.55
14	Cameroon	16.29
15	Tanzania	15.04
16	Ethiopia	12.87

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Global Startup Performance Rankings

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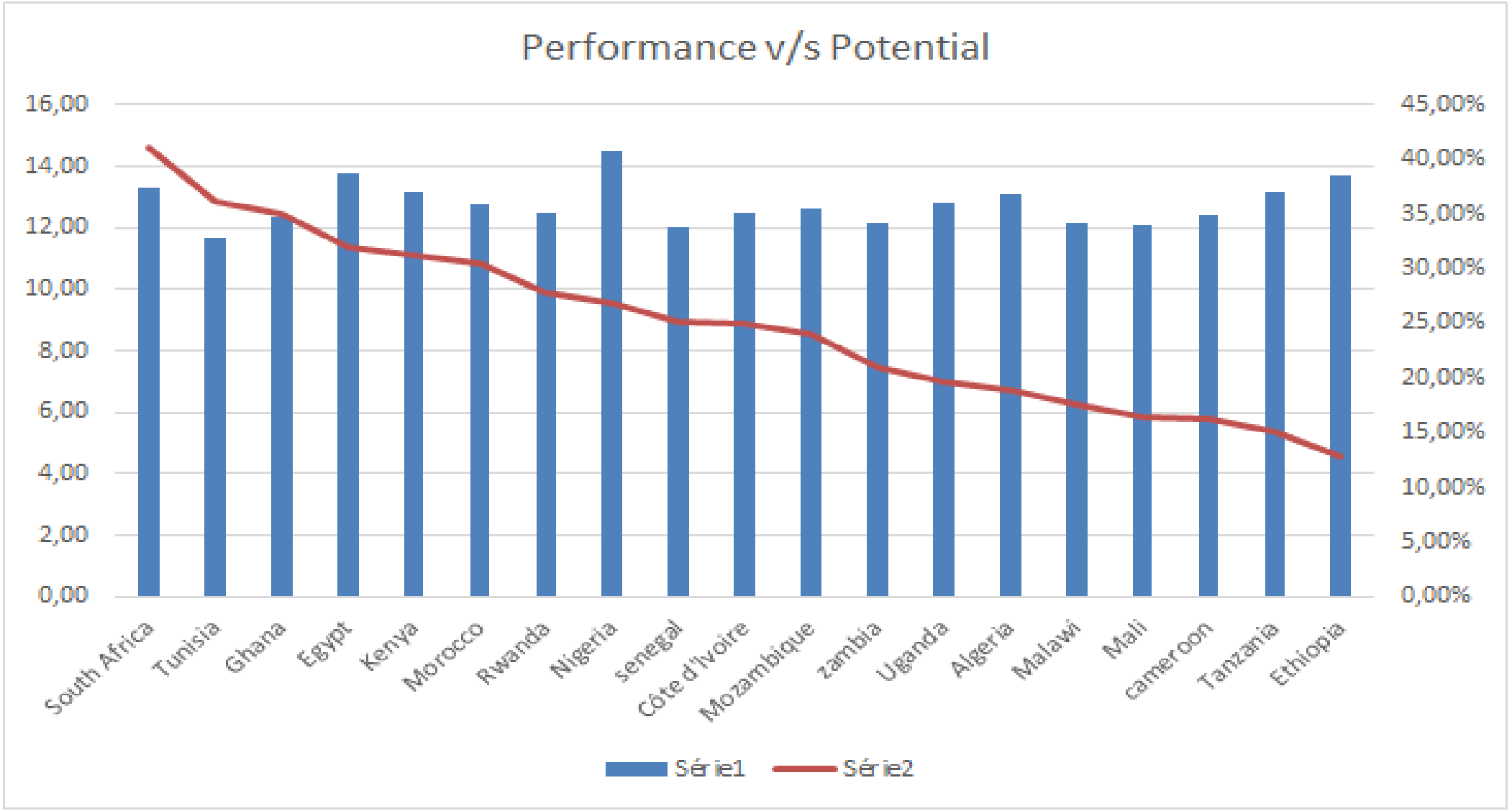

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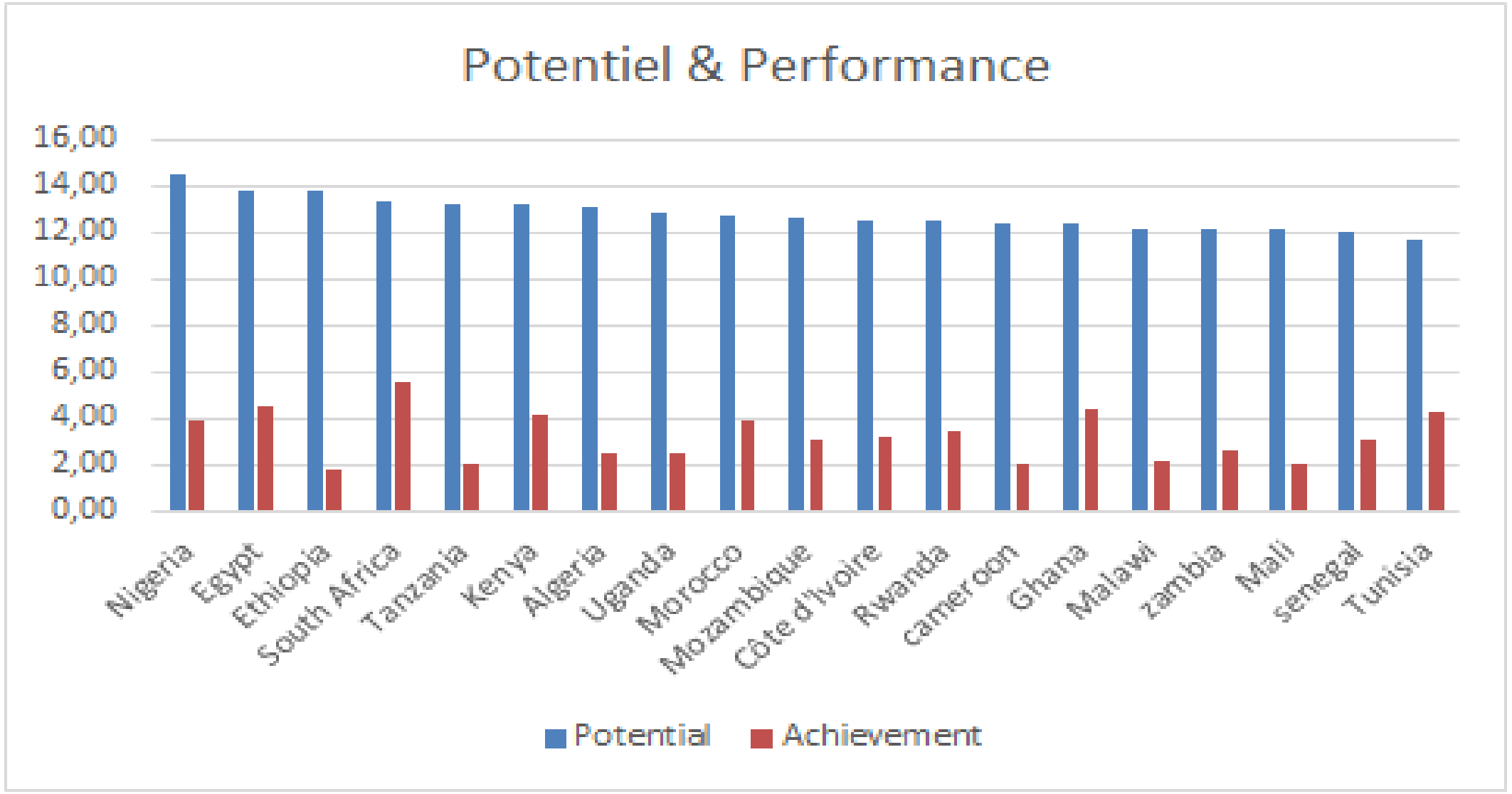

Agenda

1) General context & Introduction
2) Innovation ecosystem landscape in Africa
- The major enablers of the African Innovation Ecosystem
- Venture capital investments in Africa in 2019
- Effects of the COVID19 pandemic on the Africa Startup scene

3) Startup Ecosystem potential and performance
- Key findings from the survey
- The concept of potential and performance
- Measuring African Startup Ecosystem Performance

4) Tunisia case study

5) Q&A + Wrapp up

Le contexte et les contingences locales

- La Révolution de 2011 n'a pas apporté de fruits en matière de développement économique, et ce malgré les fonds de soutien abondants qui ont été mobilisés à cet égard, par les pays partenaires et les institutions financières internationales.
- Le marché des capitaux a faiblement bougé pour rattraper quelques retards, et n'a produit qu'une dynamique d'investissement timide dans les nouveaux compartiments (Micro, PME, Mezzo Finance, PPP,…)
- En particulier, l'innovation en Tunisie connaît des barrières réglementaires, technologiques et financières. La création de Startups se fait en explorant le champs du possible, et souvent en outrepassant les limites fixées par les autorités. D'où l'importance d'une révision complète des politiques publiques, en plus des appels à projets à lancer dans le sillage de la crise du COVID19.

2018: l'an zéro de la « Startup Institutionnelle » en Tunisie

Un ensemble de textes de loi et d'application matérialisant un politique publique plus engageante en faveur de la Startup innovante en Tunisie!

1) Absence d’un tableau de bord pour l’écosystème des startups

2) Une partie des décisions de Startup Act non encore actée

3) Autres futures améliorations

- Article 7.1 obligation de réaliser ses objectifs
- Article 7.2 Comptabilité simplifiée
- Article 7.3 Contrôle de conformité par convocation « physique »
- Article 12 Décaissement des frais de prise en charge des brevets à l’international

La mesure d’impact de la politique publique n’est pas formellement établie

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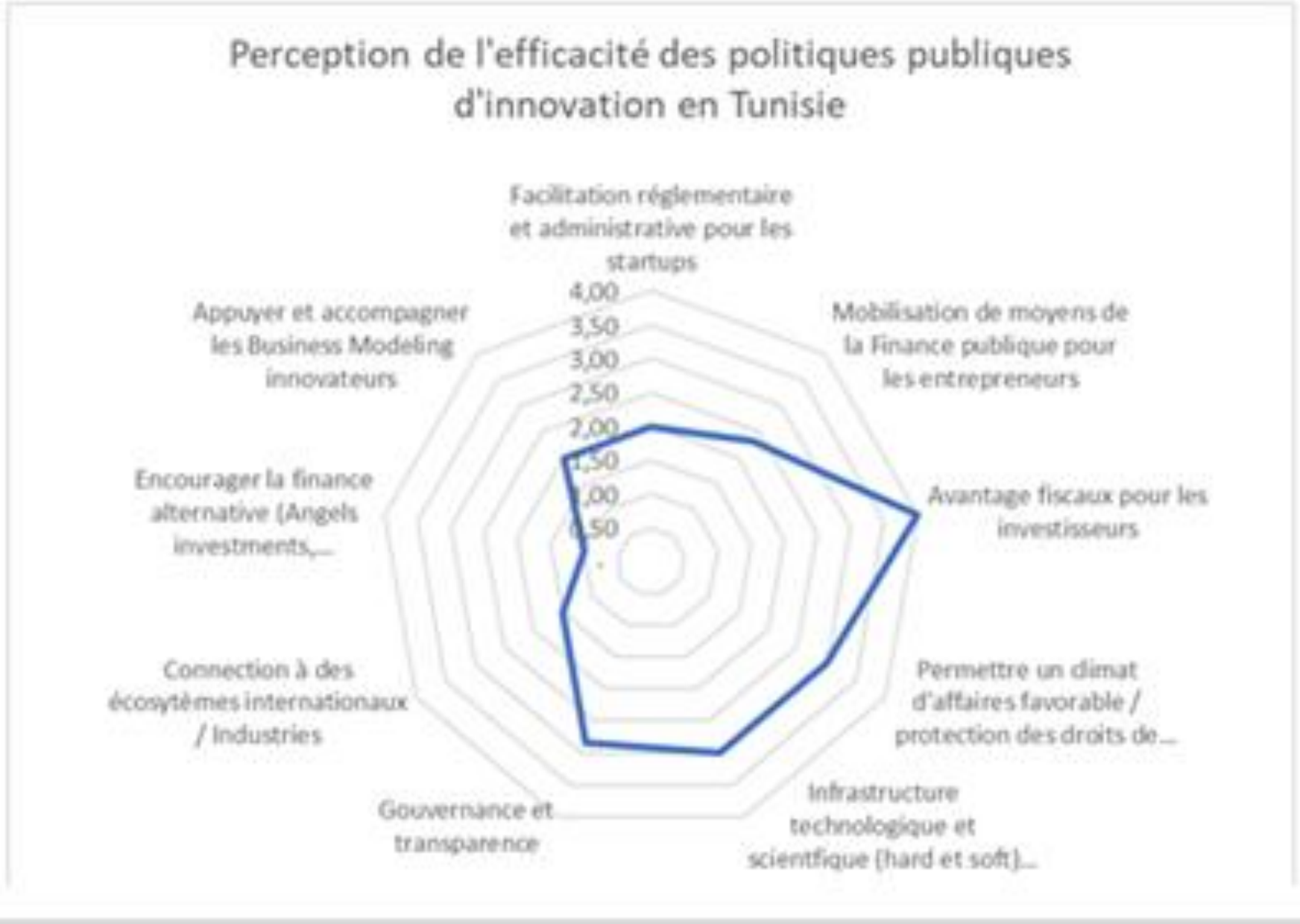

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Premières recommandations :

1- Réformer le code des sociétés commerciales pour acter certaines mesures édictées par le Startup Act comme la SAS

2- Instaurer un tribunal de commerce en charge exclusivement des litiges commerciaux et aussi en charge de faciliter les reprises, la transmission et les faillites des entreprises.

3- Ouvrir un compartiment pour les Startups à la Bourse des valeurs mobilières de Tunis

4- Réformer le code des sociétés d'investissement et des gestionnaires d'actifs et permettre plus d'instruments financiers et accélérer les Société d'Investissement des BA

5- Lancers des clusters d'innovation en partenariat public privé et multiplier les projets de recherche collaboratif en mode « open innovation »

6- Donner la priorité aux startups locales pour répondre aux appels d'offres « digital »

7- Créer un corps de métiers spécialisé en protection de la propriété intellectuelle et le transfert de technologies

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Thank you for your attention !