StartupBlink

UNDP

Kampala

Ecosystem Health Check Report 2022

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1. Introduction

In this report, we analyze Kampala's performance across the different parameters of the Global Startup Ecosystem Index (GSEI) ranking algorithm developed by StartupBlink, in its 2022 edition.

Section 2 will introduce the different subscores and their impact on total rankings. In section 3, we introduce the analysis of Kampala's "Health Check" by looking at each parameter in isolation and reviewing Kampala's rank in each particular parameter, as well as how Kampala's rank would have varied if these parameters hadn't been considered in the algorithm.

In section 4, we compare Kampala's performance in each parameter against peer ecosystems. Peers are selected by size and region (Nairobi, Kigali, and Dar es Salaam). In section 5 we run a couple of simulations on how the ranking would have changed if the ecosystem had managed to create special entities or attract strategic branches from tech corporations.

Section 6 provides high-level recommendations based on the analysis. These recommendations can be supplemented in the future with a full ecosystem diagnosis and roadmap report, to be performed by our team in the ecosystem. To finalize the report, section 7 details the methodology of the analysis, and a glossary of key terms is found in section 8.

2. **Subscores analysis**

This section aims to analyze the relative importance of each of Kampala's subscores in StartupBlink's 2022 rankings. The city is ranked **462nd** globally, with a total score of **0.855**. For details on the methodology, please refer to the Methodology section.

Due to the characteristics of the ranking algorithm, the degree of impact of each of the subscores on an ecosystem's ranking varies. As can be seen in the table below, the Quantity score contributed 31.17% of the total in 2022, the Quality score contributed 17.95%, and the Business/Critical mass score contributed almost 50.88%, and these figures are slightly different from 2021.

	Quantity score	Quality score	Business score	Total
2022 rank	257-258	414	558	462
2022 score	0.267	0.154	0.435	0.855
% of total score 2022	31.17%	17.95%	50.88%	100.00%
% of total score 2021	31.55%	9.46%	58.36%	100.00%

3. Health Check Analysis

Below, we present the 2022 Health Check for Kampala. The city was ranked **462nd in the world** in StartupBlink's GSEI 2022. In line with StartupBlink's methodology we analyze the Quantity and Quality scores at the city level while for the Business score, the analysis is done at the national level for Uganda (not ranked among the Top 100 countries in 2022). This is because Business score parameters are mostly evaluated at the country level and then applied a discount based on the level of startup activity in each city.

It should also be noted that parameters related to the Quantity score are calculated on an estimated global sample size of 15% for all benchmarked startup ecosystems.

The tables below show the Health Check analysis for Kampala. From left to right, the columns in the tables express the following:

1.   Parameter - Algorithm parameters that are being evaluated separately. An explanation of each parameter can be found in the Glossary of Health Check parameters section.

2.   Result - The number (or rank, if applicable) achieved by the location in StartupBlink's 2022 GSEI.

3.   Rank gain/loss due to parameter - The number of spots in the rankings that the city increases or decreases due to the direct impact of the specific parameter. This is done by recalculating the global rank of the ecosystem excluding the parameter and comparing it to the actual global rank. Essentially:

Rank gain/loss due to parameter = Global rank (excluding parameter) - Actual Global rank

For example: If an ecosystem ranks 20th globally, but running the algorithm <u>excluding</u> the parameter of "sample size of startups" ranks it 22nd globally, then the Rank gain/loss due to the impact of the "sample size of startups" parameter is 22 - 20 = +2 (positive +2).

Given that the location would rank 2 spots lower without using the parameter of "sample size of startups" in the index, the location gains 2 spots due to the positive impact of this parameter. If positive, Rank gain means that our ecosystems went above X ecosystems in the general rankings because of the inclusion of the parameter. If negative, Rank loss means that X ecosystems overtook our ecosystem in the general rankings, because of the inclusion of the parameter.

4.   Parameter Global rank - Kampala's isolated rank when only the specific parameter is considered. This column is also color-coded, as green represents a positive impact, yellow for no impact, and red indicates a negative impact for the specific parameter compared to the global rankings of the ecosystem. This color code holds for all tables of this section.

Quantity score Health Check (Kampala):

Parameter	Result	Rank gain/loss due to parameter	Parameter Global rank	Contribution to total score
0. Total score	0.855	0	462	100%
A. Quantity score	0.267	+106	257-258	31.17%
1. Sample size of startups	34	-62	286-291	13.25%
2. Sample size of accelerators	0	-3	341-1190	0.00%
3. Sample size of coworking spaces	14	+33	238-257	10.91%
4. Community score	0.06	+39	176-262	7.01%

Kampala's Quantity score rank is significantly better than its overall rank. The city outperforms at 286-291st globally on the most important parameter of the Quantity score (Sample size of Startups), as well as, coworking spaces, and Community score. The only parameter that does not affect Kampala's quantity score is the sample size of

the accelerators. Kampala's achievements in the Quantity score should be celebrated. Due to the city's good performance on Quantity, the city ranks 106 spots higher than if the Quantity score wasn't considered in the algorithm.

Quality score Health Check (Kampala):

Parameter	Result	Rank gain/loss due to parameter	Parameter Global rank	Contribution to total score
0. Total score	0.855	0	462	100%
B. Quality score	0.154	-114	414	17.95%
5. Traction (average top-20 startup rank)	8,037,048	-8	456	1.75%
6. Number of strategic branches	0	-5	148-1190	0.00%
7. Number of Y Combinator startups	1	+23	112-216	6.43%
8. Amount of funding (million)	$53	-32	451	3.39%
9. Amount of exits under $1b (million)	$34	-17	379	0.54%
10. Impact of global startup events	0	-1	20-1190	0.00%
11. Impact of unicorns (Bronze, Silver, Gold)	0(0+0+0)	-4	140-1190	0.00%
12. Impact of exits (>$1b) (Bronze, Silver, Gold)	0(0+0+0)	-2	118-1190	0.00%
13. Impact of pantheons (Bronze, Silver, Gold)	0(0+0+0)	-1	71-1190	0.00%
14. Impact of global startup leaders (Bronze, Silver, Gold)	0(0+0+0)	0	40-1190	0.00%
15. Number of startups with traction score (up to 20)	10.00	-11	371-390	5.84%

Kampala performs slightly better in Quality score compared to its global rank. The city overperforms in several parameters. The parameter in which the city overperforms the most is the Number of YC startups managing to have 1 startup accepted to this prestigious program. It also performs well on parameters such as traction, amount of funding, amount of exits under $1b, and the number of startups with traction scores. As for the rest of the parameters, there is little to no impact on Kampala's Quality score. It should be noted that 114 cities have climbed above Kampala in the rankings due to their specific success in creating special entities such as unicorns and exits.

Business score Health Check (Uganda):

Parameter	Rank gain/loss due to parameter	Parameter Global rank
0. Total score	0	462
C. Business score	-131	558
15. Ease of doing business	-7	585
16. Internet speed	-14	1135-1163
17. Open regulation	-5	575
18. Internet freedom	-5	485
19. Regulatory quality	-3	464
20. Internet users	-8	616
21. R&D expenditure	-3	415
22. Innovation index	-4	507
23. Number of universities in top-1000	-8	1111-1163
24. Diversity index	10	367
25. English proficiency index	-8	641
26. Critical mass factor	n.a.	330

The city's business score is a combination of the national business environment of Uganda, and a discount factor for cities that haven't reached a critical mass of startups. In the case of Kampala, this discount factor is 0.25. In general, Kampala underperforms in a Business score, and all the other parameters except for R&D expenditure, Diversity Index, and critical mass factor. Overall, the underperforming parameters cause Kampala to rank 131 spots lower than it would be ranked without accounting for the Business score completely.

4. Peer analysis

In this section, we review the performance of Kampala in each algorithm parameter, compared to three peer ecosystems picked due to their similarity in size and region: Nairobi, Kigali, and Dar es Salaam. Globally, Kampala ranks 462nd, Kigali ranks 395th, Nairobi is 163rd, and Dar es Salaam is 583rd. This means that Kampala ranks 3rd among this set of peers. The color coding reflects this: red when Kampala's rank against the set of peers is 3rd.

Quantity score peer analysis (city-level):

Parameter	Kampala		Nairobi		Kigali		Dar Es Salaam	
	Result	Global rank	Result	Global rank	Result	Global rank	Result	Global rank
0. Total score	0.855	462	4.819	163	1.235	395	0.532	583
A. Quantity score	0.267	257-258	1.228	84	0.157	325-326	0.120	383
1. Sample size of startups	34	286-291	188	93	30	310-315	15	455-470
2. Sample size of accelerators	0	341-1190	4	109-140	2	171-238	0	341-1190
3. Sample size of coworking spaces	14	238-257	77	67	9	332-351	6	416-450
4. Community score	0.06	176-262	0.12	77-113	0.00	327-1190	0.03	263-326

In the Quantity score, Kampala overperforms against its peers in the Quantity score, being ranked second among them. This is also the case for the sample size of startups, coworking spaces, and community scores. However, Kampala underperforms in the sample size of accelerators, ranking 3rd together with Dar es Salaam. On quantity, we should note Kampala is still behind by a big margin another east African hub, Nairobi.

Quality score peer analysis (city-level):

Parameter	Kampala		Nairobi		Kigali		Dar Es Salaam	
	Result	Global rank	Result	Global rank	Result	Global rank	Result	Global rank
0. Total score	0.855	462	4.819	163	1.235	395	0.532	583
B. Quality score	0.154	414	1.510	143	0.322	286	0.138	444
5. Traction (average top-20 startup rank)	8,037,048	456	1,063,465	172	7,204,977	391	10,062,001	943
6. Impact of strategic branches	0	148-1190	0.10	116-147	0.00	148-1190	0.00	148-1190
7. Number of Y Combinator startups	1	112-216	6	43-46	0	217-1190	2	75-111
8. Amount of funding (million)	53	451	877	113	9	691	2	861
9. Amount of exits under $1b (million)	34	379	0	474-1190	0	474-1190	32	384
10. Impact of global startup events	0	20-1190	0	20-1190	0.22	9-19	0.00	20-1190
11. Impact of unicorns (Bronze, Silver, Gold)	0(0+0+0)	140-1190	0(0+0+0)	140-1190	0(0+0+0)	140-1190	0(0+0+0)	140-1190
12. Impact of exits (>$1b) (Bronze, Silver, Gold)	0(0+0+0)	118-1190	0(0+0+0)	118-1190	0(0+0+0)	118-1190	0(0+0+0)	118-1190
13. Impact of pantheons (Bronze, Silver, Gold)	0(0+0+0)	71-1190	1(0+0+1)	28-70	0(0+0+0)	71-1190	0(0+0+0)	71-1190
14. Impact of global startup leaders (Bronze, Silver, Gold)	0(0+0+0)	40-1190	0(0+0+0)	40-1190	0(0+0+0)	40-1190	0(0+0+0)	40-1190

For the Quality score, Kampala underperforms amongst its peers, ranking 3rd among them. The same trend expands to parameters; traction and the number of Y Combinator startups. The only parameter that the city outperforms is the amount of exits under $1b, as Kampala ranks 1st among its set of peers. For the rest of the parameters, there are slight or no differences between Kampala and the peers.

Business score peer analysis (city-level):

Parameter	Kampala	Nairobi	Kigali	Dar Es Salaam
	Global rank	Global rank	Global rank	Global rank
0. Total score	462	163	395	583
C. Business score	558	259	438	706
15. Ease of doing business	585	210	310	1101
16. Internet speed	1135-1163	1135-1163	1135-1163	416
17. Open regulation	575	233-237	1071	727
18. Internet freedom	485	253	570	623
19. Regulatory quality	464	86	770	1002
20. Internet users	616	408	535	806
21. R&D expenditure	415	22	498	868
22. Innovation index	507	289	442	577
23. Number of universities in top-1000	1111-1163	1111-1163	1111-1163	1111-1163
24. Diversity index	367	205-208	326	454
25. English proficiency index	641	141	369	1151

This section analyzes differences in the business score between peers. The business score is calculated at the national level and is also differentiated (via the Adjustment

factor) based on the critical mass of startup activity in each city. Kampala underperforms against its peers, ranking third among them. The city underperforms in parameters, including Ease of doing business, internet users, innovation index, diversity index, and English proficiency index by ranking third among its set of peers. On the other hand, Kampala slightly performs better in open regulation, regulatory quality, and R&D expenditure as it ranks second. In the cohort of four cities, only Dar es Salaam has a relatively high internet speed. Lastly, all four cities performed equally on the number of universities in the top-1000.

5. Ecosystem Simulations

In this short section we will simulate how Kampala's rankings would have changed in StartupBlink's GSEI 2022 if certain milestones had been achieved by the ecosystem. The goal of this section is to illustrate the importance these types of entities have in a startup ecosystem.

	GSEI 2022	One Bronze Unicorn	One Strategic Branch
Score	0.855	1.405	0.955
Global rank	462	368	443
Rank change vs GSEI 2022	0	+94	+19

The following simulations were calculated:

- **One Bronze Unicorn:** If Kampala had had one Unicorn or other Special Entity (Exit >$1b or Pantheon) in 2022, the city would have achieved a score of **1.405** (with increases not only in Quality score but also in Business score due to the increase of the critical mass of startup activity in the city). This score would have meant a rank of **368th in the world** (+94 spots from the actual rank), just above Jinan (China), Fayetteville (the United States), and below Gold Coast (Australia).

- **One strategic branch[1]:** If Kampala had had one Strategic branch of major tech companies in 2022, the city would have achieved a score of **0.955** (with increases in Quality and Business scores, as in the case above). This score would have meant a rank of 443rd in the world (+19 spots from the actual rank), just above Baku (Azerbaijan), Fargo (the United States), and below Freiburg (Germany).

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[1] Microsoft, Google, Samsung, Oracle, IBM or Intel

6. Recommendations

It should be noted the following recommendations are based only on the analysis of the above numbers. In order to build an ecosystem strategic roadmap, and fully analyze the ecosystem's strengths and weaknesses, performing an on site policy advising project that will include dozens of interviews with local startup ecosystems stakeholders is recommended.

Short-term recommendations:
- The sample size of the 2022 report for Kampala was small due to the difficulty to find readily available information and databases on the ecosystem. The creation of the Uganda Startup Ecosystem Database should greatly improve the sample size and allow the distribution of ecosystem information globally in 2023.
- Kampala's quantity score is vastly better than its quality score. This is an indication that although there are big numbers of startup related entities in the ecosystem, their quality in terms of traction, investment and general success is much lower. Ecosystem developers should focus less on the number of entities, and more on their quality, and specifically supporting those with a potential of making an impact.
- A significant one-off boost can be achieved by creating at least one special entity of any kind. As shown in the simulations, just one low-ranked unicorn will provide almost 100 places of improvement.
- Attracting a strategic branch, while less effective than a special entity, is much easier and also provides a noticeable improvement in rankings.
- Having more startups participating in YCombinator programs and backing Kampala's startups by them is another area of significant improvement. Due to high success rates of YCombinator investments, such cooperation is rewarded greatly in the algorithm.
- Attracting more investments could greatly increase Kampala's ranking.

Long-term recommendations:

- Improving everything related to business score. It is by far the most influential subscore in locations below top-100, but a large portion of it depends on the country level policies and is updated slower than parameters in other subscores. Due to this, it is a good goal to work on for the long term.

7. Methodology

This analysis is based solely on data gathered via the StartupBlink platform and ranking algorithm and does not include any consultation or policy advising based on interviews or desk research. The writers avoided including their personal views and knowledge about the ecosystem to ensure results are based purely on objective ecosystem data. The ranking algorithm and dataset on which the ecosystem Health Check results are based were sealed in May 2022.

Our database is a unique collection of approximately **100,000 startups** gathered via crowdsourcing, and our work with global data partners, local governments, and startup support organizations. This information, besides the information collected from other sources in relevant parameters, is introduced in StartupBlink's algorithm and divided into three subscores: Quantity, Quality, and Business.

For the Health Check analysis, we analyze each of these parameters in isolation. We compare the rank the location has in each parameter with the overall rank the location had in the GSEI 2022. Besides this, we analyze how the overall rank would change if the specific parameter weren't considered in the algorithm.

For the Peer analysis, we compare the performance of the location in each parameter and compare it to the performance of the peers (provided by the client). The goal is to understand the strengths and weaknesses of the analyzed startup ecosystem in relation to its most relevant competitors.

8. Glossary of Health Check parameters

● **Sample size of startups:** Amount of startups in the location that have been added to StartupBlink's database.

● **Sample of accelerators:** Amount of accelerators in the location taking into account StartupBlink's database and external sources.

● **Sample of coworking spaces:** Amount of coworking spaces in the location taking into account StartupBlink's database and external sources.

● **Community score**: Score calculated by StartupBlink, based on data provided directly by Meetup.com. This score considers the number of Startup and Technology Meetup groups in a given location, as well as their level of activity.

● **Traction score:** The traction score assesses the traction level of startups based on analyzing their website performance. This analysis includes a variety of factors, such as monthly visits, authority, and customer base, and for a given city, the score reflects the average of the 20 startups with the highest traction score..

● **Number of Strategic branches:** This parameter assesses the number of R&D branches from eight selected global tech brands (Microsoft, Google, Samsung, Intel, Oracle, IBM, SAP, and WeWork) that are present in the location.

● **Y Combinator startups:** Number of startups in the location that have been selected by Y Combinator to participate in their acceleration program in the last 5 years (2018-2022).

● **Amount of funding:** The cumulative amount of funding received by startups in this location in the period 2019-2022.

● **Amount of exits under $1b:** Cumulative value of startup exits below $1b from the location in the period 2019-2022.

● **Impact of Global startup events:** This parameter assesses the number of global startup events in the location, which are categorized into tiers based on factors like the number of participants.

● **Impact of Unicorns:** This parameter assesses the number of unicorns (private tech companies with a valuation over $1b) in a location, which is categorized into three tiers based on their valuation and is assigned different weights. The tiers have different

impacts on the overall score. This parameter is divided into three tiers: **Gold** (>$10b), **Silver** ($2b to $10b), and **Bronze** ($1b to $2b).

- **Impact of Pantheons:** An entity that is a member of the Pantheon group is derived from a StartupBlink original concept, referring to an organization that has made an important mark in the location's startup ecosystem at a higher level than a typical Unicorn or Exit (ie. Facebook, Amazon). This parameter assesses the number of pantheons in a location, which is categorized into three tiers based on their influence: **Gold**, **Silver** and **Bronze**.

- **Impact of exits over $1b:** Companies that have made an IPO or Acquisition, at a valuation of more than $1b. They are divided into three tiers based on their exit amount, and every tier has a different impact on the overall score. This parameter is divided into three tiers: **Gold** (>$10b), **Silver** ($2b to $10b) and **Bronze** ($1b to $2b).

- **Impact of Global startup leaders:** Global startup leaders are people in the startup and innovation scene that have been singled out by StartupBlink because they have generated global impact beyond their local ecosystems. They are divided into three tiers (**Gold**, **Silver** and **Bronze**) based on their influence with different impacts on the overall score.

- **Ease of doing business:** based on the World Bank's report.

- **Internet speed:** A measurement of average internet speed across the country based on Speedtest.net research

- **Open regulation:** A measurement of the number of digital economy options available, including Uber, Apple Pay, Google Pay, Stripe, Bitcoin, and Paypal.

- **Internet freedom:** ranking of countries based on [Freedom House's score](#).

- **Regulatory quality:** based on [World Bank's Worldwide Governance Indicators](#).

- **Internet users:** based on the [World Bank's Indicator](#).

- **R&D expenditure:** based on the [World Bank's Indicator](#).

- **Innovation Index:** ranking of countries based on the [Global Innovation Index](#).

- **Universities in top-1000:** based on [QS University's rankings](#).

- **Diversity index:** ranking of countries based on the [World Bank's rankings](#).

- **English proficiency index:** ranking of countries based on [Education First's rankings](#).

- **Critical mass:** Discount factor for cities that is applied to the country-level business score according to the level of startup activity in the ecosystem.