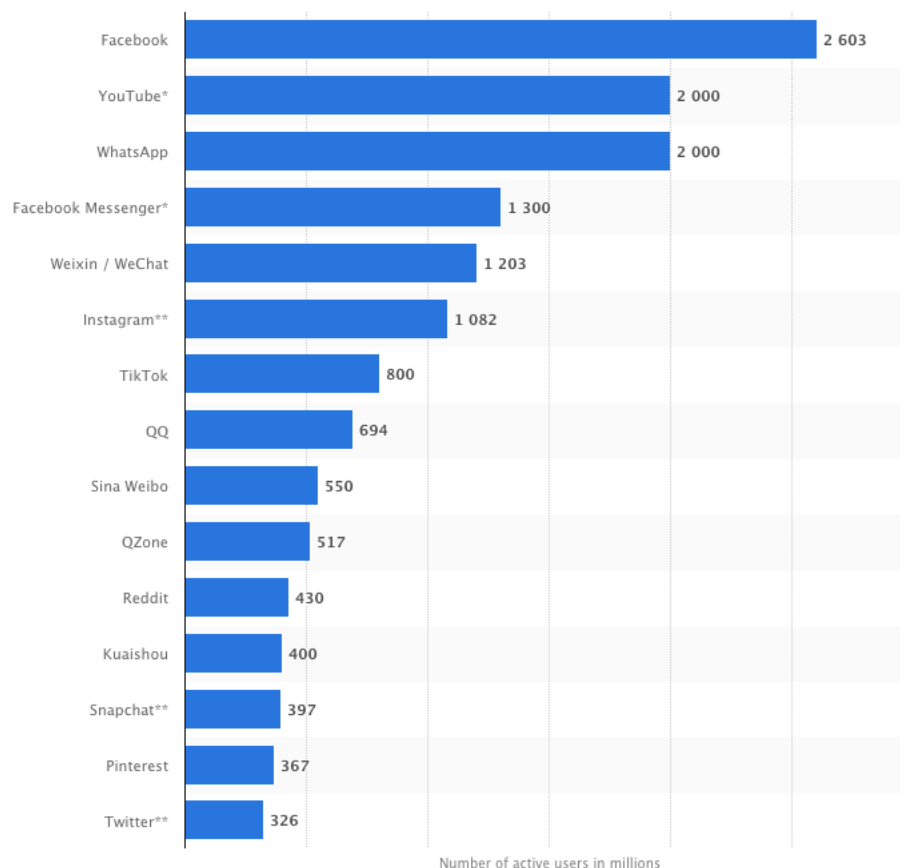# Statement of Work: UA Readiness of Social Network Applications

Ver.: 2021-1-21

Purpose

Social networks are used by thousands of millions users around the globe (Figure 1). End users typically use an email address to sign in and often share website addresses among their contacts by private or group messages and posts on their account feeds. Having an UA-ready user experience means at the very least two things: a) a user can use his or her choice of email address to use these services, and b) the user is able to share and read website addresses without issues (e.g. issues of acceptance or display). .

Figure 1: Most popular social networks worldwide as of July 2020, ranked by number of active users *(in millions)*

Source: https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

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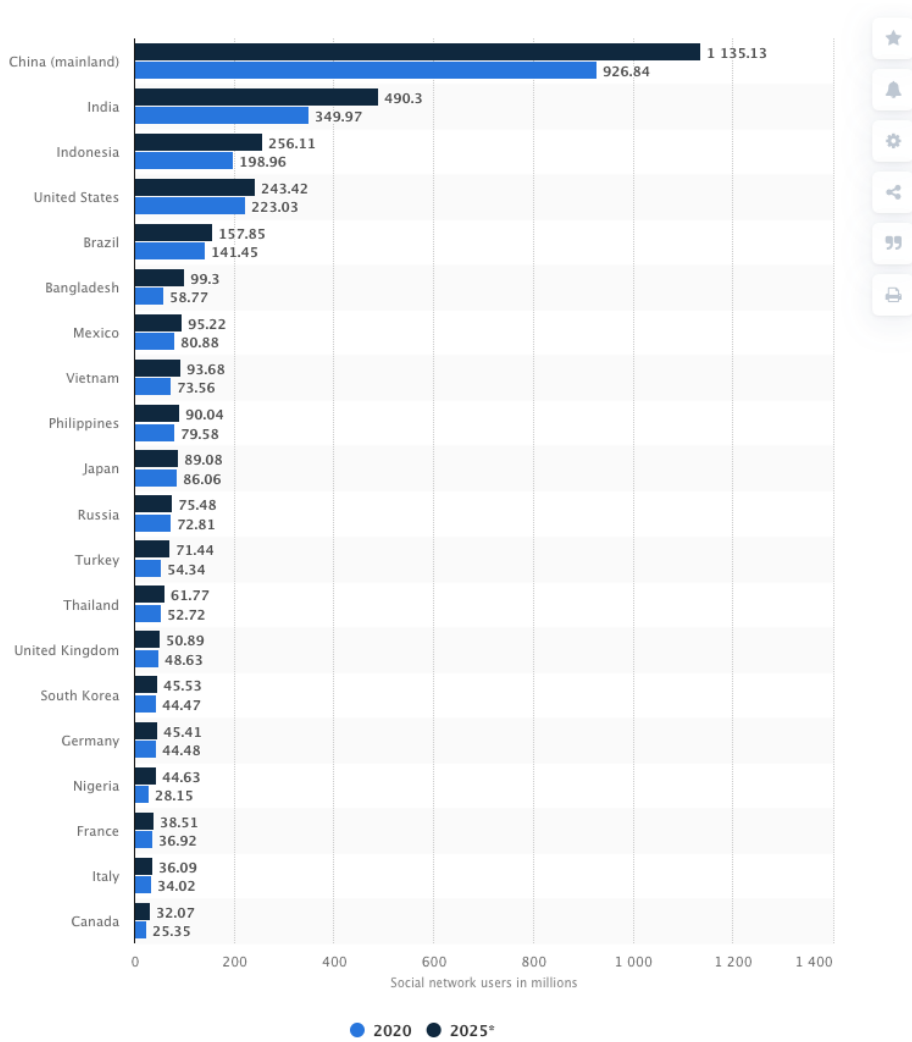visit/ www.uasg.tech /
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Another aspect about social networks is that they have evolved beyond their platform or walled gardens. There is an increasing trend in the use of social network IDs as a form of authentication on ecommerce websites.

> *"Social networking is also a growing force in the area of e-commerce as the niche of social commerce is slowly expanding because of increased social feature integration on e-commerce sites. Consumers can login to websites with social network IDs to simplify their registration and unify their online experience. Facebook is the most popular social login network ID, followed by Google and Yahoo."*

The UASG, through its UA Measurement working group, would like to understand the level of UA-readiness of different social network applications in relevant user communities. This information would be meaningful to support outreach efforts by our UASG Ambassadors and Local Initiatives, and to inform future remediation efforts, if any.

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Figure 2: Number of social network users in selected countries in 2020 and 2025
(in millions)

China (mainland) — 1 135.13 / 926.84
India — 490.3 / 349.97
Indonesia — 256.11 / 198.96
United States — 243.42 / 223.03
Brazil — 157.85 / 141.45
Bangladesh — 99.3 / 58.77
Mexico — 95.22 / 80.88
Vietnam — 93.68 / 73.56
Philippines — 90.04 / 79.58
Japan — 89.08 / 86.06
Russia — 75.48 / 72.81
Turkey — 71.44 / 54.34
Thailand — 61.77 / 52.72
United Kingdom — 50.89 / 48.63
South Korea — 45.53 / 44.47
Germany — 45.41 / 44.48
Nigeria — 44.63 / 28.15
France — 38.51 / 36.92
Italy — 36.09 / 34.02
Canada — 32.07 / 25.35

Social network users in millions

● 2020 ● 2025*

Source: https://www.statista.com/statistics/278341/number-of-social-network-users-in-selected-countries/

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![Universal Acceptance logo - //*.*/]

Scope

The following table shows the most popular social networks in use, Worldwide and in specific countries or regions.

The objective of this analysis is to survey a representative list of applications to answer the following questions:

- What are, if any, the deficiencies with respect to UA readiness? (i.e. measure against UA Readiness Framework, UASG026)
- For applications used in more than one region: is the application's behavior consistent across locations? In other words, is the application behavior locale dependent?

	Rank	Worldwide	China[1]	India[2]	EE	Thailand	Latam	Middle East	Africa
Phase 1	1	Facebook	Wechat	Tik Tok	Vkontakte	Line	Facebook	Facebook	Facebook
	2	Youtube	Sina Weibo	Whatsapp	Telegram	Facebook	Youtube	Youtube	Youtube
	3	Whatsapp	QQ (Tencent)	Youtube	Odnoklassniki (ok.ru)	Youtube	Whatsapp	Whatsapp	Whatsapp
	4	Facebook Messenger	Dou Yin (Tik Tok)	Facebook		Whatsapp			
	5	Wechat	Baidu Tieba	Instagram					
		Twitter							
Phase 2	6	Instagram		Linkedin					
	7	Tik Tok		Telegram					
	8	QQ		Snapchat					
	9	Sina Weibo		Twitter					
	10	Qzone							

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[1] https://www.statista.com/statistics/250546/leading-social-network-sites-in-china/
[2] https://sannams4.com/top-social-media-trends-in-india-2020/

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Requirements

Category and Components

These Categories and Components come from the [UA Readiness Framework, UASG026](#).

	Category	
Component	Web-based	Native
Web browser	X	
Front-end	X	
Back-end	X	
Database	X	X
Filesystem	X	X
External services	X	X
User interface (UI)		X
Internal		X

For all intent and purposes these applications (i.e. Facebook, Wechat, etc.) can be tested as black boxes. It means, we don't intend to break the application into its components, but rather use them as a whole as any other end user would. To this end, the analysis will test the social network application functions in the most relevant areas where a domain name or website address is used.

There will be other types of consideration as platform (i.e mobile or desktop) and operating system (i.e. Mac OS, Chrome OS, Windows).

Platform,Testing Environment, Test Cases, Test Domain Names and Email Addresses

Recommended scope for Phase 1

Locale	Platform/	Browser	Test Cases	Test Domain

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	Operating System			Names and Email Addresses
US China India Europe Thailand Middle East Africa Latin America	Mobile: iOS, Android Desktop: Mac OS, Windows	Mobile: n/a (use native app) Desktop: Chrome	Per Testing Matrix: Domain Name: from Test ID 1 to 5 Email Address: from Test ID 6 to 10	Fully ASCII: ● US: <legacy TLD>, short, long Fully Unicode: ● China: Han ● Thailand: Thai ● India: Devanagari ● Europe: Cyrillic, Greek (Final Sigma), Latin (Sharp S + non-NFC form) ● ME: Arabic ● Africa: Ethiopic, Latin, Arabic Hybrid: ASCII.IDN (Latin), ASCII@Unicode (Latin + non-NFC form)

Recommended scope for Phase 2

Locale	Platform/ Operating System	Browser	Test Cases	Test Domain Names and Email Addresses
	Mobile: ? Desktop: Linux	Mobile: Desktop:	Extend more non-NFC test cases	

Tests

Check the matrix attached with the SOW, which lists the features or functions that are common across various social network applications, and are relevant to UA testing.

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Definition of Tests

AT: Accept Test
- EAI: verify if it accepts any UTF8
- IDN: verify if it accepts any UTF8
- Long/new TLD: verify if it accepts any TLD as long label

VT: Validate Test
- Verify if it normalizes a non-normalized UTF8 label
- Verify if it validates a valid/non-valid domain name
- Verify if it validates a valid/non-valid IDN
- Verify if it validates a valid/non-valid long/new TLD

P1T: Process on Input Test
- Verify that the input of the processing does not change the output, unless it normalizes the string.

ST: Store test
- EAI:Given good EAI input, verify that the database content for that input is correct: i.e. either identical or normalized version of the local part. The domain part, if IDN, could be either A-Label or U-Label form.
  - Given bad EAI input, verify that the database content for that input is not saved.
- IDN:
  - Given good IDN input, verify that the database content is either A-Label or ULabel form.
  - Given bad IDN input, verify that the database content for that input is not saved.
- Long/new TLD strings:
  - Given long TLD string as input, verify that the database content is not truncated.
  - Given too long TLD string as input, verify that the database content for that input is not saved.
  - Given new TLD string as input, verify the database content contains the new TLD.

P2T: Process on Output Test
- Given a good value in the database, verify that the value going to be displayed by the UI is correct: local part is UTF8, IDN is in U-Label format, long string TLD is not truncated, new TLD string is processed.

DT: Display Test
- Given a good value in the database, verify that the displayed value by the UI is correct: local part is UTF8, IDN is in U-Label format, long string TLD is not truncated, new TLD (from the root) is shown, removed TLD (from the root) is not shown.

Deliverables

The expected deliverable(s) for the project.
- Test plan (should be presented to WG before execution) for Phase 1.
- Detailed testing data set (in Microsoft Excel or Google Sheets format) for Phase 1.
- Preliminary (for review and feedback from WG) and Final report for Phase 1.
- Provide presentation of the outcome of the project in Microsoft PowerPoint format.

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Proposal Submission

The proposal should be submitted to: UAProgram@icann.org before the submission due date.

The submitted proposal should include the contractor's qualification, experience, previous similar completed projects, and a proposed work plan.

The proposal should confirm compliance with scope of the project and deliverables. It should also include a financial section that shows the project's cost and details of any used software or tool.

Project Timeline

The due date for receiving the submitted proposals: 7 February 2021
Tentative start date: 25 February 2021
Tentative end date: 30 May 2021

Conflict of Interest

To help avoid any perceived or actual conflict of interest (COI), UASG leaders, UASG Ambassadors, members holding working group's leadership positions in the UASG, and any organization(s) affiliated with individuals in these UASG roles, are prohibited from participating in this SOW. In addition, ICANN org COI applies.

References

- Universal Acceptance Readiness Framework (UASG026):
  https://uasg.tech/wp-content/uploads/documents/UASG026-en-digital.pdf

- Use Cases for UA Readiness Evaluation (UASG004): https://uasg.tech/wp-content/uploads/documents/UASG004-en-digital.pdf

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