

Name Collision Scenario

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About OCTO-034

Goals

Document some of the technical challenges in deploying alternative naming systems alongside the Domain Name System (DNS).

Non-Goals

In-depth analysis of how each alternative naming system works

Analysis of the policy-making process of each alternative naming system.

<https://www.icann.org/en/system/files/files/octo-034-27apr22-en.pdf>

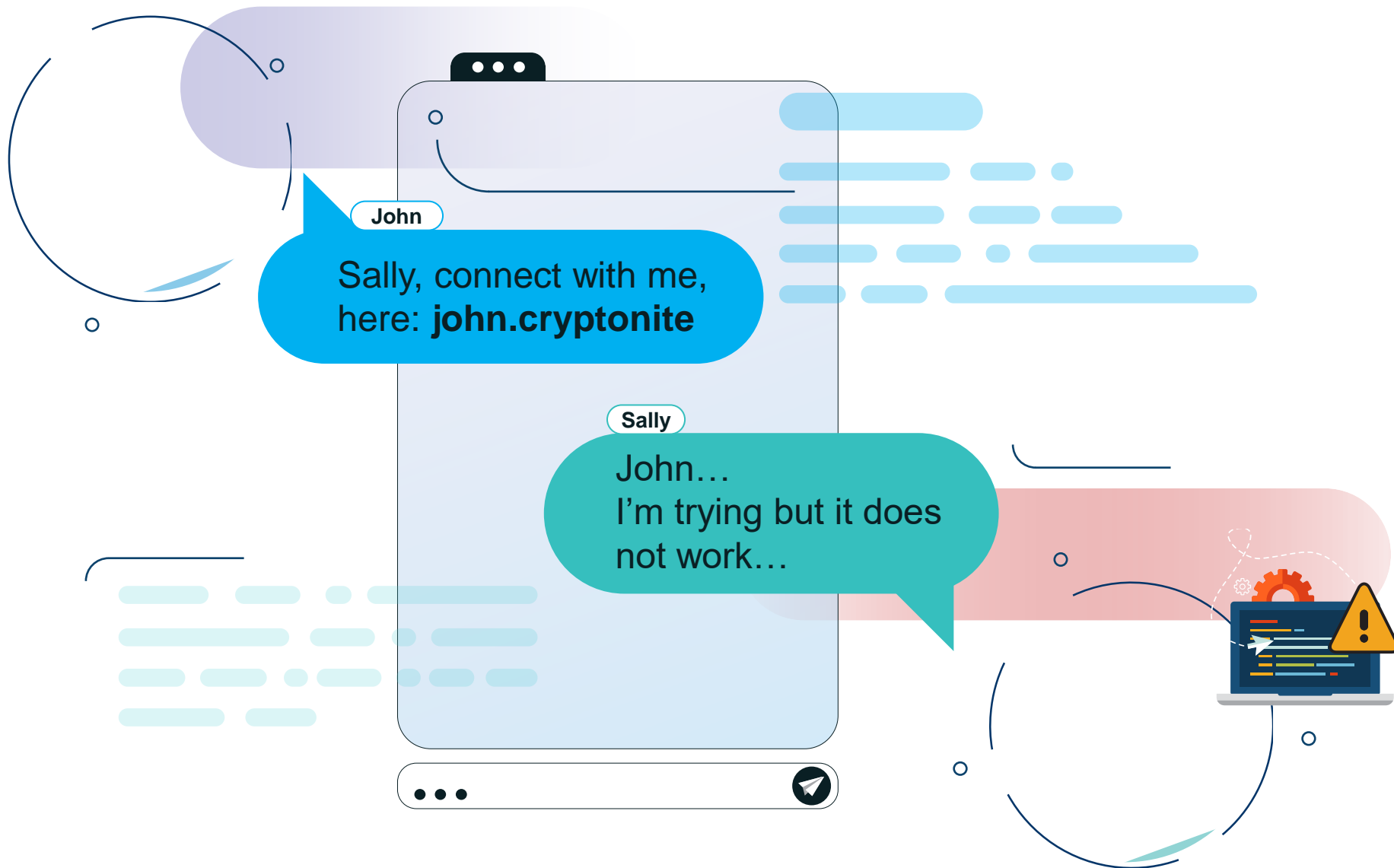
Back to 2001 and ICP-3

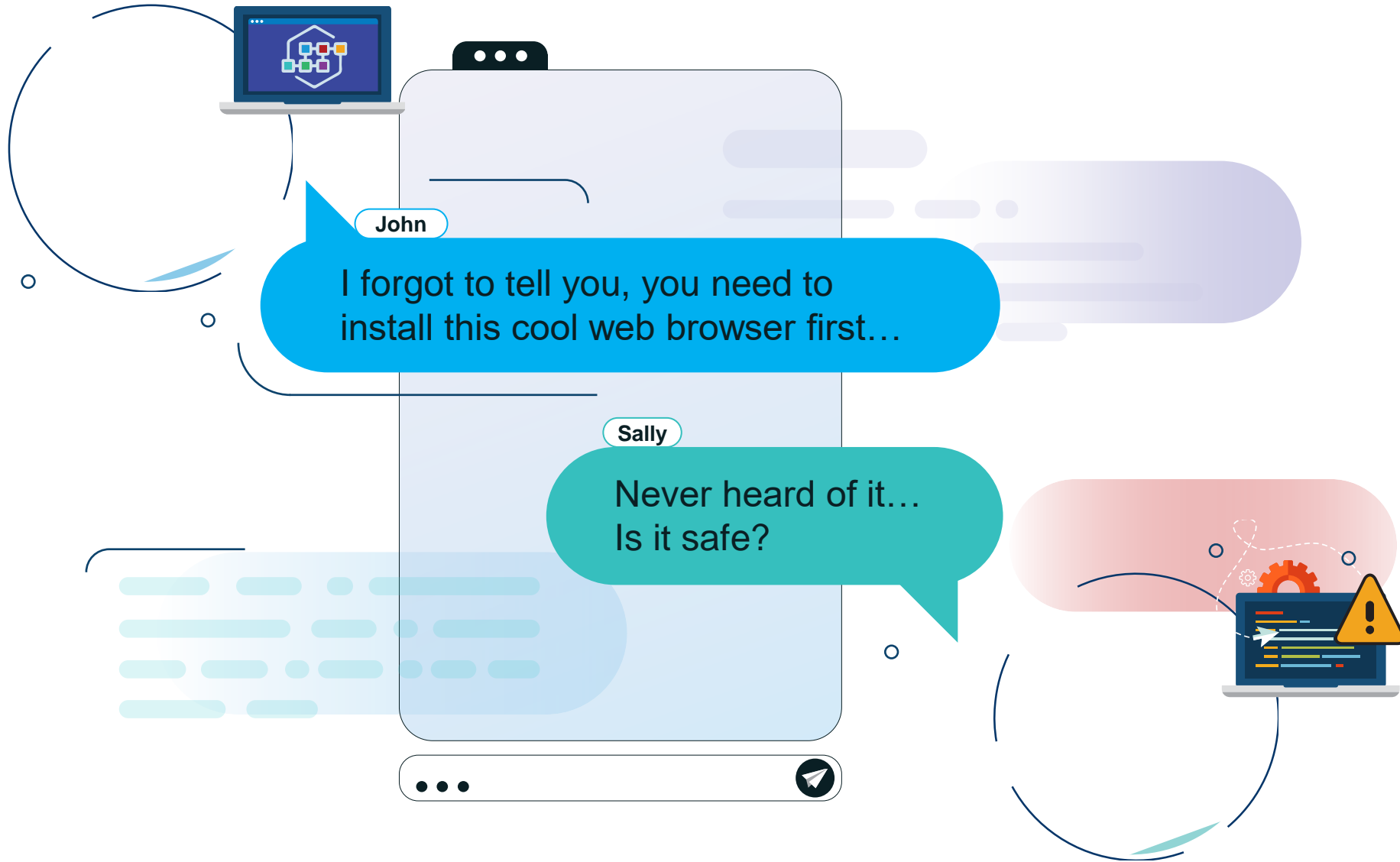
“This document reaffirms ICANN's commitment to a single, authoritative public root for the Internet Domain Name System (DNS) and to the management of that unique root in the public interest according to policies developed through community processes.”

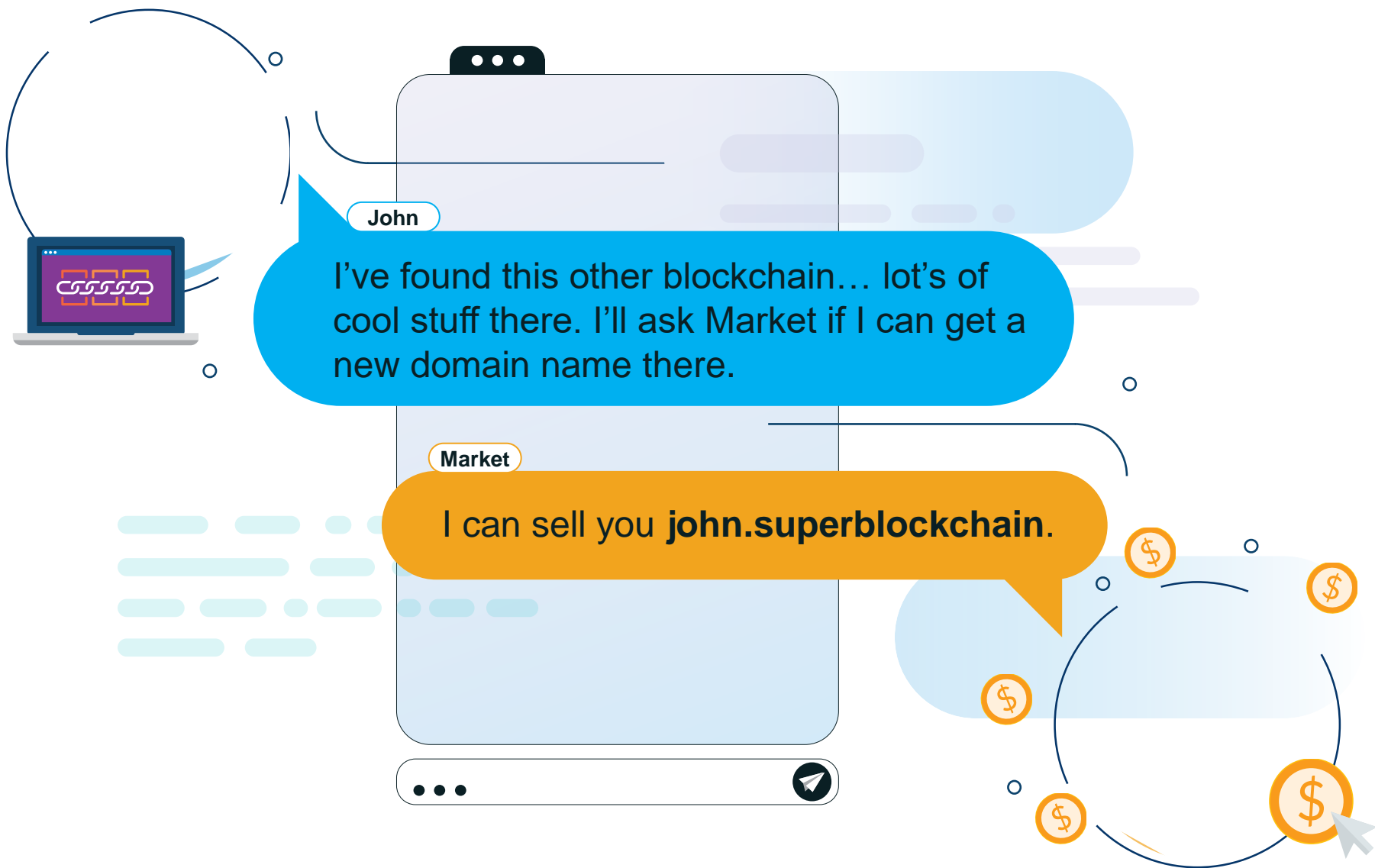
“These alternate roots typically substitute insular concerns in place of the community-based processes that govern the management of the authoritative root. Their operators decide to include particular top-level domains in these alternate roots that have not been subjected to the tests of community support and conformance with consensus processes – coordinated by ICANN – that would allow their inclusion in the authoritative root. These decisions of the alternate-root operators have been made without any apparent regard for the fundamental public-interest concern of Internet stability. The widespread use of active domain names in these alternate roots could in fact impair the uniqueness of the authoritative name-resolution mechanism and hence the stability of the DNS.”

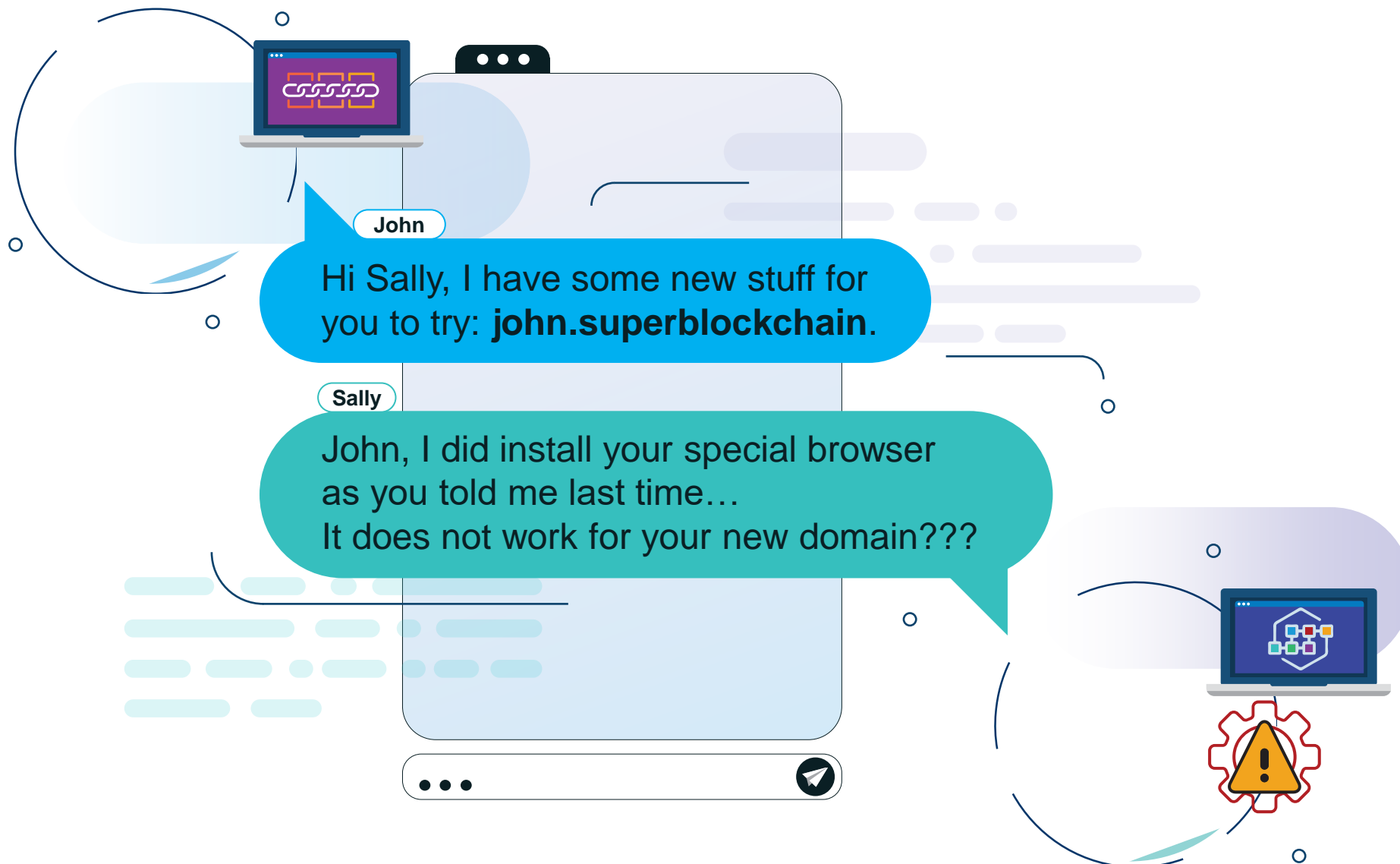
“ICANN's mandate to preserve stability of the DNS requires that it avoid encouraging the proliferation of these alternate roots that could cause conflicts and instability.”

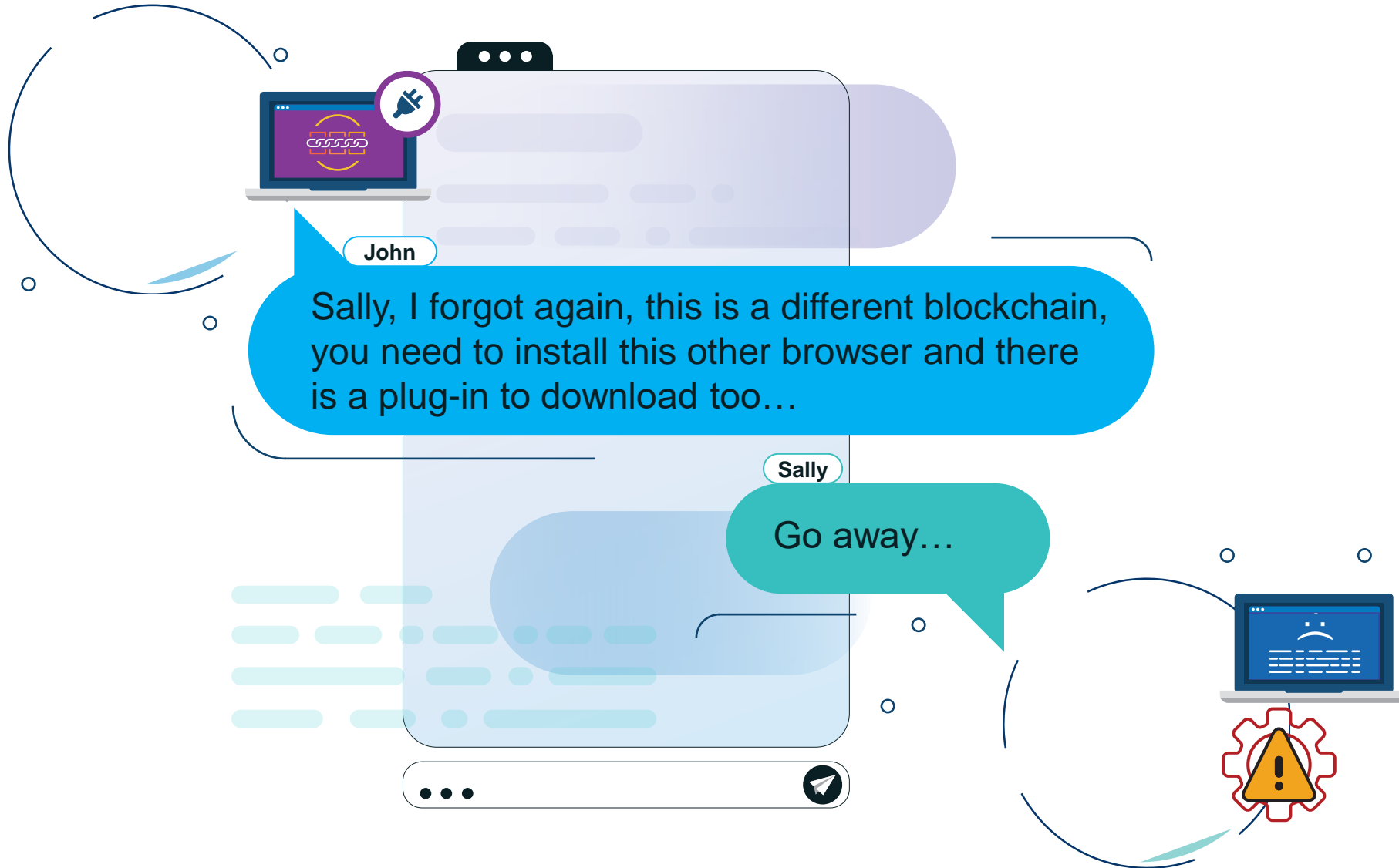


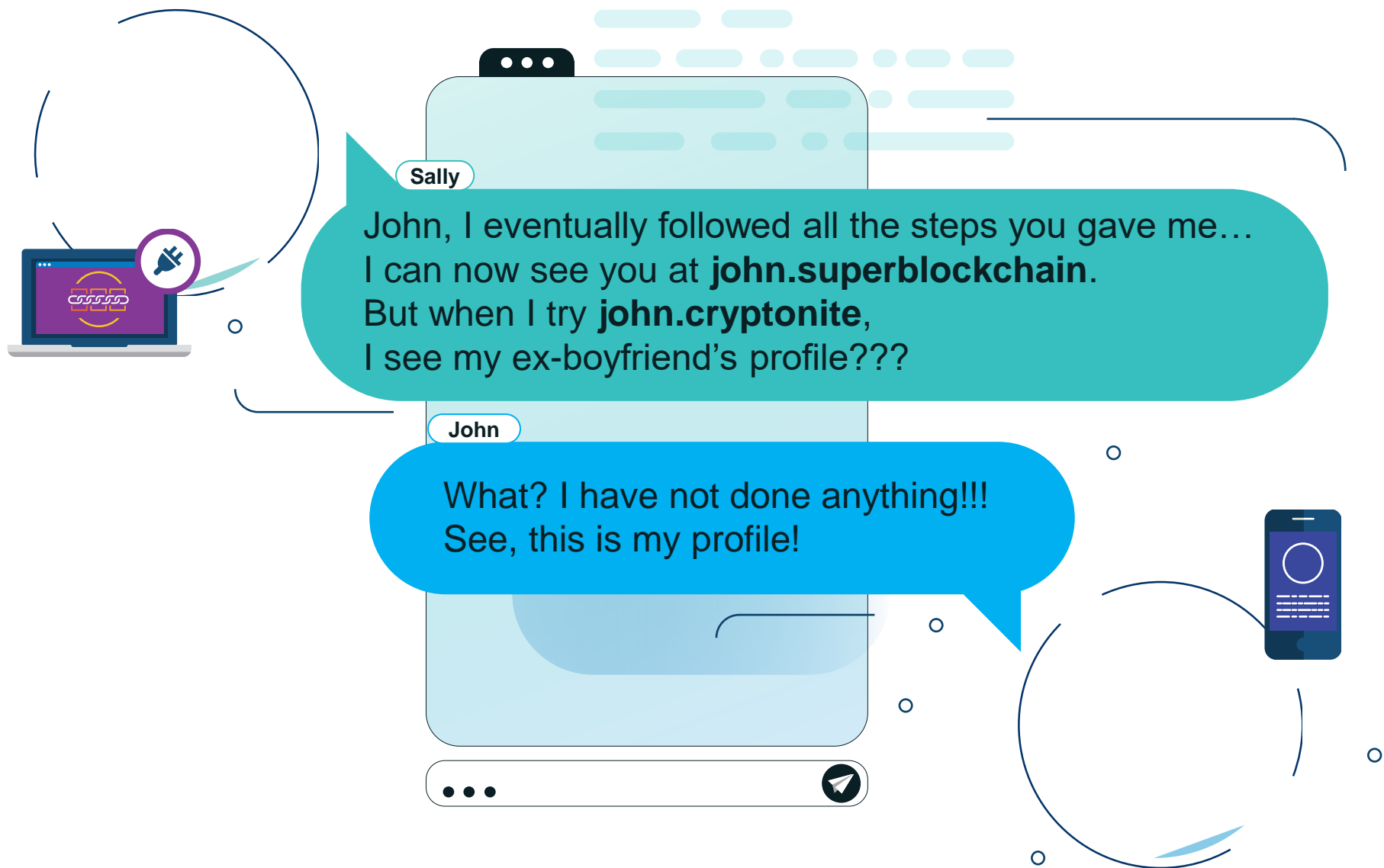












John

Market, Sally is unhappy.
How come she and I see different things when
we type **john.cryptonite**?

Market

This is called name collision.

Cryptonite is popular!
At least three different blockchains are using it!

Your computer and hers are not set-up the same way.
You look in one name space, she looks in another...
No wonder you see different things!





John

This is stupid. I'm going back to my old **john.icannTLD** domain name!
At least it was unique...

Market

Ha! You can't escape name collision! Ha!

See: **.icannTLD** is now available in five different alternative naming systems!

Maybe you want to create your own naming system?

John

Market, you are a monster!
The Internet is now broken.



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Thank You and Questions

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