Overcoming Human Harm Challenges in Digital Identity Ecosystems

White paper for Public Review

Tags: #ethics #accountability #DigitalIdentity #governance #SSI #HumanExperience #DecentralizedIdentity #HumanRights #resilience

https://trustoverip.org/wp-content/uploads/Overcoming-Human-Harm-Challenges-in-Digital-Identity-Ecosystems-V1.0-2022-11-16.pdf

TRUST Over IP FOUNDATION

☐ THE LINUX FOUNDATION

1.5 years of research and analysis with dozens of contributors

sovrin identity for all

Identity for All Council discussion
Summer '21

IIW Session, October '21

To ID or not to ID?
Power, Politics, Hamlet & Harms

Trust over IP Harms Task Force, Spring '22

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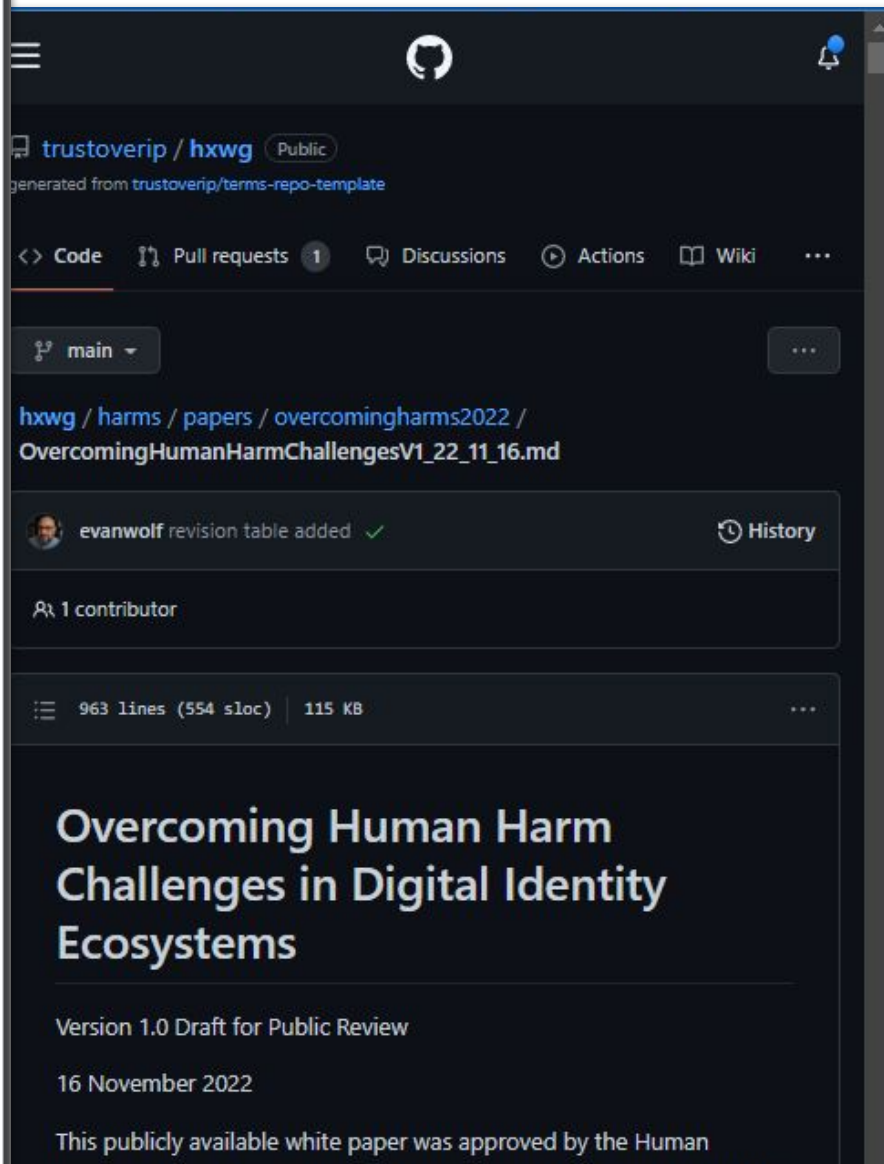Sankarshan Mukhopadhyay - Dhiway

Scott Perry - Schellman

Public Review - comments by end March 2023 - See ToIP Blog for how to do that

https://trustoverip.org/blog/2023/01/17/why-the-digital-identity-juggernaut-needs-safety-belts/

When we say "harms" we mean:

harm noun physical, mental or moral injury or damage. verb (harmed, harming) to injure physically, mentally or morally ETYMOLOGY: Anglo-Saxon *hearm.*

"For too long, the emphasis has been on the development promises of digital ID systems, but it is past time to reckon with their vast potential for abuse and exploitation".

[Letter from 70+ global CSOs to the World Bank](#)
[Privacy International](#), September 2022

The paper

Part 1: Problem Definition
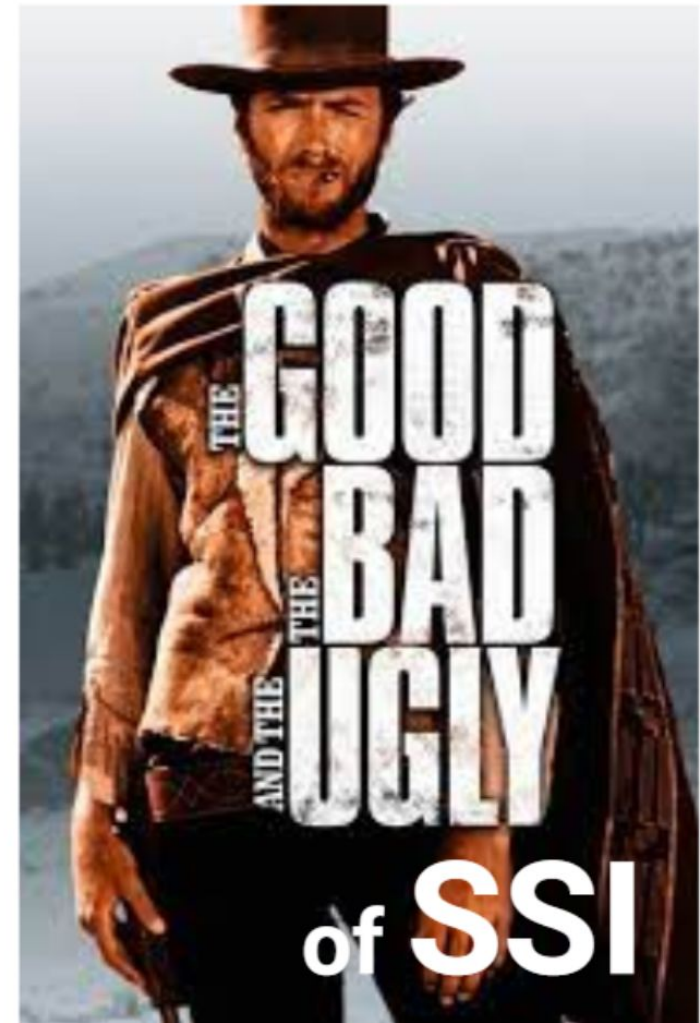
Key Findings:

Only 3 unique SSI Exacerbations:
1. Over-verification
2. Lack of backup & restore
3. Automation especially in governance

Primary SSI Mitigations
1. Governance - a Socio-technical system
2. Technology - Guardianship Credentials, Trust Registries
3. Culture - Interop, decentralisation, ethics by design

Problem: Technology is not neutral

Six Buckets Of Harm

Political: Manipulation: Digital Identity and Democracy

Economic: Datafication - Digital Identity as a Means of Production

Sociocultural: Fragmentation: Digital Identity and Globalisation

Technological: Innovation: Digital Identity and Efficiency

Environmental: Dissociation: Digital Identity and Anthropocentrism

Legal: Identification: Digital Identity as a Function of the Nation-State
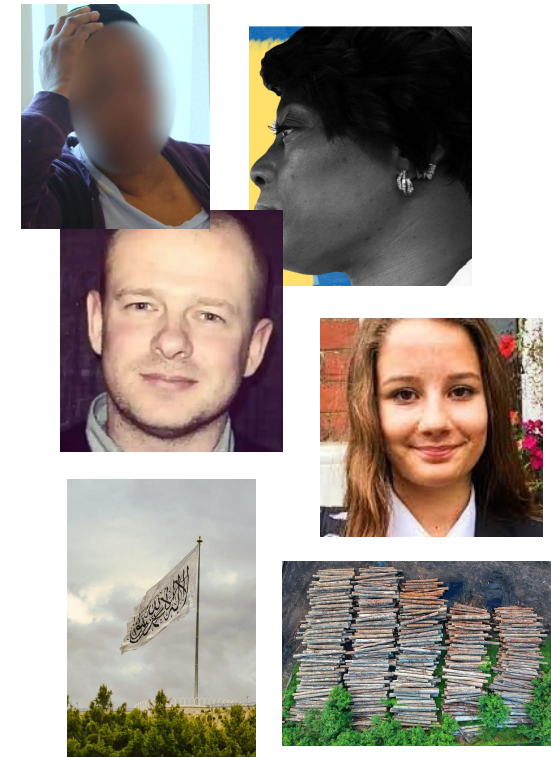
Six Buckets Of Harm

Political

Economic

Sociocultural

Technological

Environmental

Legal

Political: Manipulation

Digital Identity and Democracy

" I was shocked, it was like, this is not real. How could he find me guilty? When my release supervisor testified on the stand that; 'No, no-one told me anything, no-one told me I couldn't vote'. That right there should have been an open and closed case. But, it wasn't. It was very hurtful, it was almost like it was already planned.

Crystal, USA, 2018 convicted of election fraud for voting on supervised release.
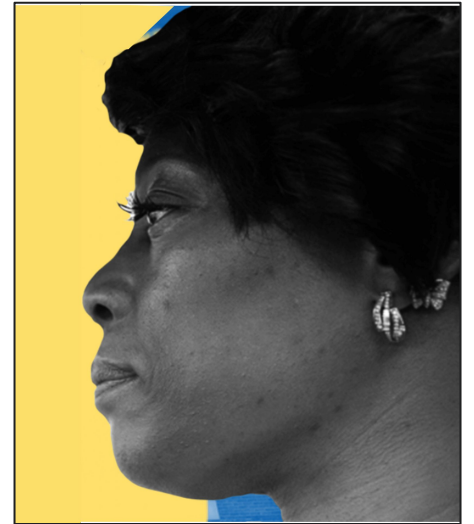
Economic: Datafication

Digital Identity as a Means of Production

"

These [gambling] companies know a staggering amount about their customers... They track their habits and patterns and vulnerabilities online to find out when best to advertise to them and what kind of emails they are most likely to open. They could, if they wanted to, use this information to help people, to block their accounts; but often they use it to drag them further into addiction.
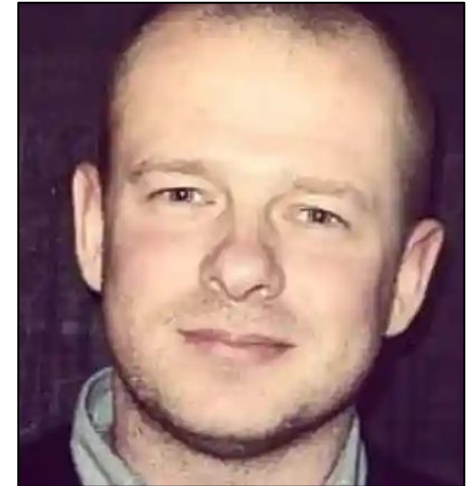
Annie, UK, 2021 wife of a recovering gambling addict who took his own life after being targeted by gambling companies

Sociocultural: Fragmentation

Digital Identity and Globalisation

" Not being able to get services.
Not being able to reach your goal.
Not being able to have even the basic things of life.
Not feeling part of the society, feeling like an outcast.[....]
I was really, really angry. I was angry.
I was almost depressed.[.....] My second son will even say, 'are we criminals?'

Aisha, UK.
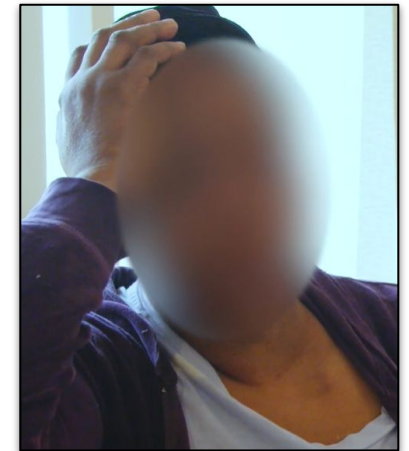
Technological: Innovation

Digital Identity and Efficiency

" The evening of Nov. 20, 2017, was perfectly ordinary: Our family sat watching reality TV and laughing together before heading to our bedrooms and saying our usual "see you tomorrow morning" to each other. Later that night, alone in her room, my 14-year-old daughter Molly connected to the Internet one last time --- including logging on to Instagram, where she'd been pushed into a rabbit hole of depressive content --- and then took her own life.

Ian Russell, UK

Environmental: Dissociation

Digital Identity and Anthropocentrism

" This practice is a legacy that has been handed down by ancestors. The Kiau people believe that the forest is guarded by spirits and when entering the forest, the *mamatang* ceremony will be conducted to ask for permission to do activities or take forest resources. While *boros puru* will be the mode of communication throughout their time in the forest. This practice is also a practice of the Dusun Kiau community and we believe that if the forest disappears, then *mamatang* and *boros puru* will disappear or part of the Dusun Kiau identity will be lost.

Mojelle Musin, Youth representative of Kiau Dusun People, Malaysia

Legal: Identification

Digital Identity as a Function of the Nation-State

" A former military commander still in Afghanistan said that [the] Taliban detained him for twelve days in November and took his fingerprints and scanned his irises with a data-collection tool. "They told me they took my fingerprints to check if I was military and if they could confirm it, they would kill me"

Six Expressions Of Harm

Political

Economic

Sociocultural

Technological

Environmental

Legal

The paper

Part 1: Problem Definition
SSI Exacerbations & Mitigations

Part 2: Systemic Framework
How does harm function?

External Life Context
Indirect Harm

Collective
Resiliency

Digital Identity Ecosystem Context
Contingent Harm

Balance of
Power

P2P Decision Context
Direct Harm

Edge Agency

Internal Life Context
Felt-Harm

Vulnerability
Recognition

Quiz

Quiz

Do you believe your identity systems can hurt people?

Quiz

How likely is it that news of human harms
(that emerge from *your* work)
will reach you? ever?

Quiz

Which harms are more likely to emerge based on your ecosystem architecture and governance policy choices?

Quiz

When reporters ask your executives about SSI's negative externalities, how prepared are they?

Quiz

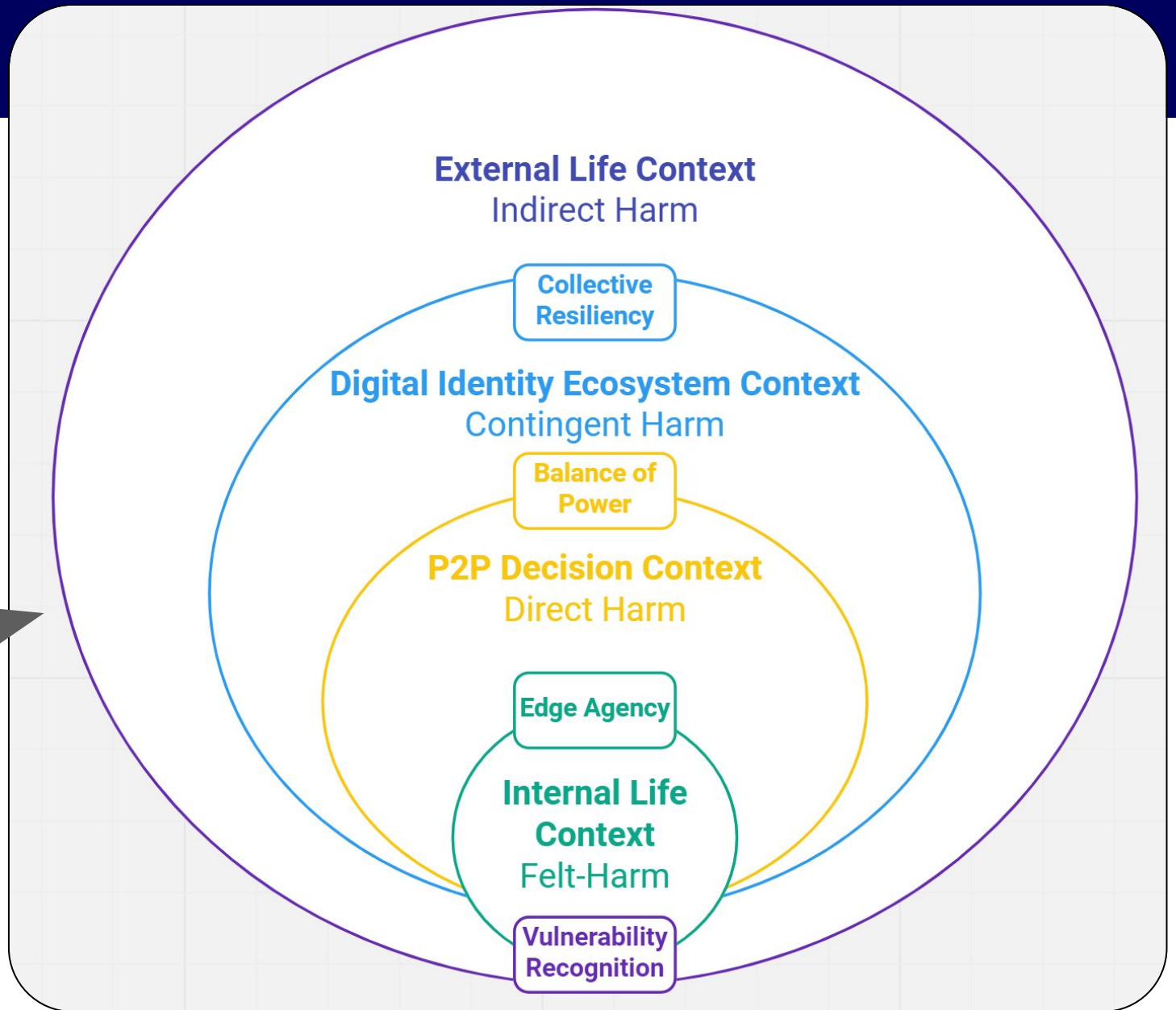What measures insulate your identity ecosystem from the blowback that comes from highly visible negative externalities?
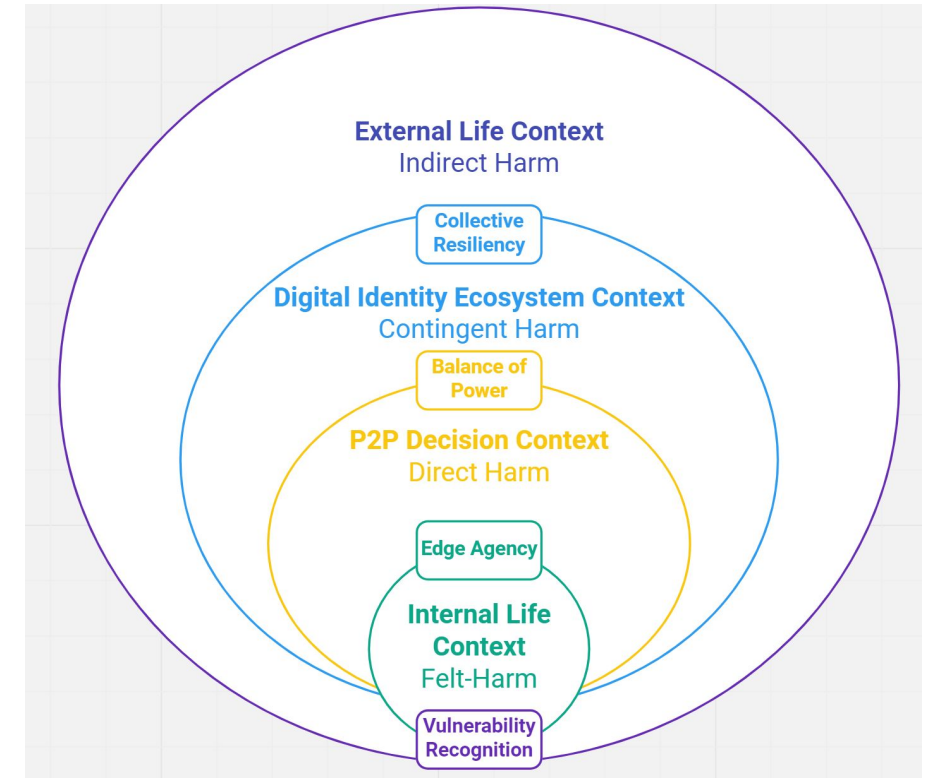
Quiz

The paper

Part 1: Problem Definition
SSI Exacerbations & Mitigations

Part 2: Systemic Framework
How does harm function?

Part 3: Harms Mitigation Strategies

- Improve **ecosystem** capability to recognize participants' vulnerabilities to **felt harm.**

- Foster the **agency** of all edge **parties** to help them protect themselves from **direct harm** within the **ecosystem**

- Balance the **power** held within the **ecosystem** to protect from **contingent harm**.

- Build the **ecosystem's collective resiliency** to protect from **indirect harm.**

External Life Context
Indirect Harm

Collective Resiliency

Digital Identity Ecosystem Context
Contingent Harm

Balance of Power

P2P Decision Context
Direct Harm

Edge Agency

Internal Life Context
Felt-Harm

Vulnerability Recognition

Next?

- Public Review to end Feb
  - Read: pdf, github
  - Comment:
    - ToIP g-Docs (ToIP Member)
    - Github Discussion

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General

Announcing the Overcoming Harms Paper - Draft 1.0 Review

evanwolf

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Categories ✎

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💬 General

Discussions

↑ 1   💬   What human harms use cases are there?
evanwolf started 20 minutes ago in General   0

↑ 1   💬   Announcing the Overcoming Harms Paper - Draft 1.0 Review   0

Next?

- Outreach:
  - ToIP working groups
  - wider digital identity community
  - other forums (suggestions?)

Next?

- 2023 Deliverables:
  - Case studies, cheat sheet, research, maturity model?
  - Find prior art from other technologies, industries
  - **What do you think the community needs?**

Thank you

ToIP HXWG

[Confluence Wiki](#)

ToIP Slack #human-experience-wg

Monthly calls see ToIP Calendar

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