Internationalized Domain Names: Challenges and Opportunities

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IDN 101

Internationalized Domain Names

café.org  英文数字.中国 日本.jp

A-Z  0-9  ‘’

Punycode algorithm: Unicode Label → ASCII Label

café.org = xn--caf-dma.org

英文数字.中国 = xn--p8sv8u7bx89m.xn--fiqs8s

日本.jp = xn--wgv71a.jp
Talking Points

IDN implementations have made progress; however, they continue to underperform compared to their potential

1. IDN usage
2. User perception
3. Insights from Asian businesses
4. Call to action
A Year from Rome
<table>
<thead>
<tr>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td>▪ 36 IDN ccTLDs</td>
<td>▪ Over 100 new gTLDs</td>
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<td>▪ Ecosystem dilemma. Who goes first?</td>
<td>▪ Including 25 new IDN gTLDs</td>
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<td>▪ UNESCO and EURid published the Report on IDN Deployment</td>
<td>▪ 16 Chinese TLDs and first Japanese IDN TLD</td>
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<td>▪ .CO launched IDNs in Chinese, Japanese and Korean</td>
<td>▪ Internal IDN software development contest</td>
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IDN Usage
IDNs versus ASCII Domain Names Worldwide

ASCII: 98%
IDN: 2%
- IDN Non-Latin: ~50%
- IDN Latin: ~50%

World Report on IDN Deployment, Unesco and EURid, 2013
Almost 70% of the Content is in English

Source: Language analysis on .com websites, October 2013
50%+ of Internet population lives in non-Latin Language speaking countries

Growth in .com IDNs Used in Websites

Source: Analysis on .com websites, October 2013
Content Language Analysis

Higher percentage usage of IDNs as redirect links
IDN Usage Highlights

- More than 50% of the population lives in non-Latin speaking countries
- 69% of .com websites are in English
- Only 2% of domain names worldwide are IDNs
per·cep·tion

the way you think about or understand someone or something
Internet Users Distribution Worldwide

- Asia: 45%
- Europe: 21%
- North America: 11%
- Middle East: 4%
- Africa: 7%
- Latam/Caribbean: 11%
- Oceania: 1%

Internationalized Domain Names in Applications
by the Internet Community

1.3 billion customer reviews

“I clicked on this link 福祥邓.cc and my browser transforms it into xn--jjz7c761f.cc. This is not where I wanted to go in the first place!”

Chinese user

“The 5 most popular desktop browsers have strong support for IDNs in their latest versions. In mobile devices there is poor support for IDNs.”

The 5 most popular desktop browsers have strong support for IDNs in their latest versions. In mobile devices there is poor support for IDNs

“I cannot use my IDN email to sign up to Facebook or Twitter!”

Russian user

Only 2% of domain names worldwide are IDNs

“Is this domain name real? I’ve never heard about domain names in local language.”

Thai user

0% of the world’s most popular websites allow IDN email addresses as user accounts
How Well Applications Support IDNs

Internet browsers ★★★★★
Email clients ★★★★★
Search engines ★★★★★
Social media ★★★★★
Software tools ★★★★★
End user awareness ★★★★★
Negative Cycle

- Low user awareness
- Low user uptake
- Low user uptake
- Poor user experience

Adapted from The Report on IDN Deployment 2013, The IDN negative cycle
User Perception Highlights

- End user awareness of IDNs is low
- With the exception of Internet browsers, user experience in applications is poor
- Poor user experience is a barrier to greater IDN adoption
2013 Insights from Asian Businesses
Insights

• Users expect domain names in ASCII
• But they search the Internet in local language
• Low to moderate awareness of IDNs
• Some are aware of usability issues

BUT ...
Top Benefits of Local Domain Names

- Will help customers remember a domain name more easily:
  - China: 57%
  - Korea: 56%

- Will help to better communicate-market web addresses verbally:
  - China: 39%
  - Korea: 32%

- Are easier for local customers to use:
  - China: 37%
  - Korea: 45%

- Will help better reach local customer base:
  - China: 32%
  - Korea: 35%
Likelihood to Register IDN.IDN Among SMBs

Likelihood to register IDN.IDN after educating the respondent. Top 2 Boxes on a scale 1 to 5, where 1 is extremely likely and 5 is not at all likely.
Asia Insights Highlights

- Users expect domain names in ASCII
- Low adoption of IDNs, but there is a recognition of its benefits (i.e. easier to understand and share)
Call to Action
The Internet Community

End User

- Registries
- Registrars
- Internet infrastructure
- Policy
- Content creators
- Developers
Let’s Break the Negative Cycle

- Low user awareness
- Low user uptake
- Poor user experience
- Low user uptake
“If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language that goes to his heart.”

- Nelson Mandela