### ccTLD Infrastructure DIY

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# Components

#### Components

- 1. DNS Service for TLD and your own domains
- 2. DNSSEC Signing and key management, zone generation
- 3. WHOIS and RDAP services
- 4. Web sites for public, portal for registrars, maybe users
- 5. EPP service for registrars
- 6. Email, chat, phone, fax (hope not) for support
- 7. TBC...

#### Components, continued

- 7. Datacenter space, internet, networking hardware, ...
- 8. Software development, testing, and maintenance
- 9. System/network administration, operations, devops...
- 10. Business back office (accounting)
- 11. Lawyers!

## Choices

#### **Outsource or not?**

- 1. DNS secondary service: probably the easiest
- 2. EPP and WHOIS: possible, but look for data protection
- 3. Your business and financial operations better not
- 4. Datacenter space, colocation, virtual servers sure
- 5. Your registry database?
- 6. Your DNSSEC signing and DNS zone exports?
- 7. Your suport staff?
- 8. Your entire operation?

### Software: build or buy?

- 1. DNS servers, OS, virtualization
- 2. Registry (EPP server)
- 3. Database and data replication
- 4. Accounting
- 5. Mailing lists
- 6. ..

## Costs

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- It may be not obvious yet but we are entering commodity era for software development, operation, cloud
- 2. What made sense in 1990s and 2000s is now silly
- 3. Cost of rebuilding your systems may be too high
- 4. It is what nobody else can decide. It's you who chooses
- 5. There may be good offers but ask your laywyers to help

# Acknowledgements

### Acknowledgements

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### **Questions?**

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(Running TLD since 1992)

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