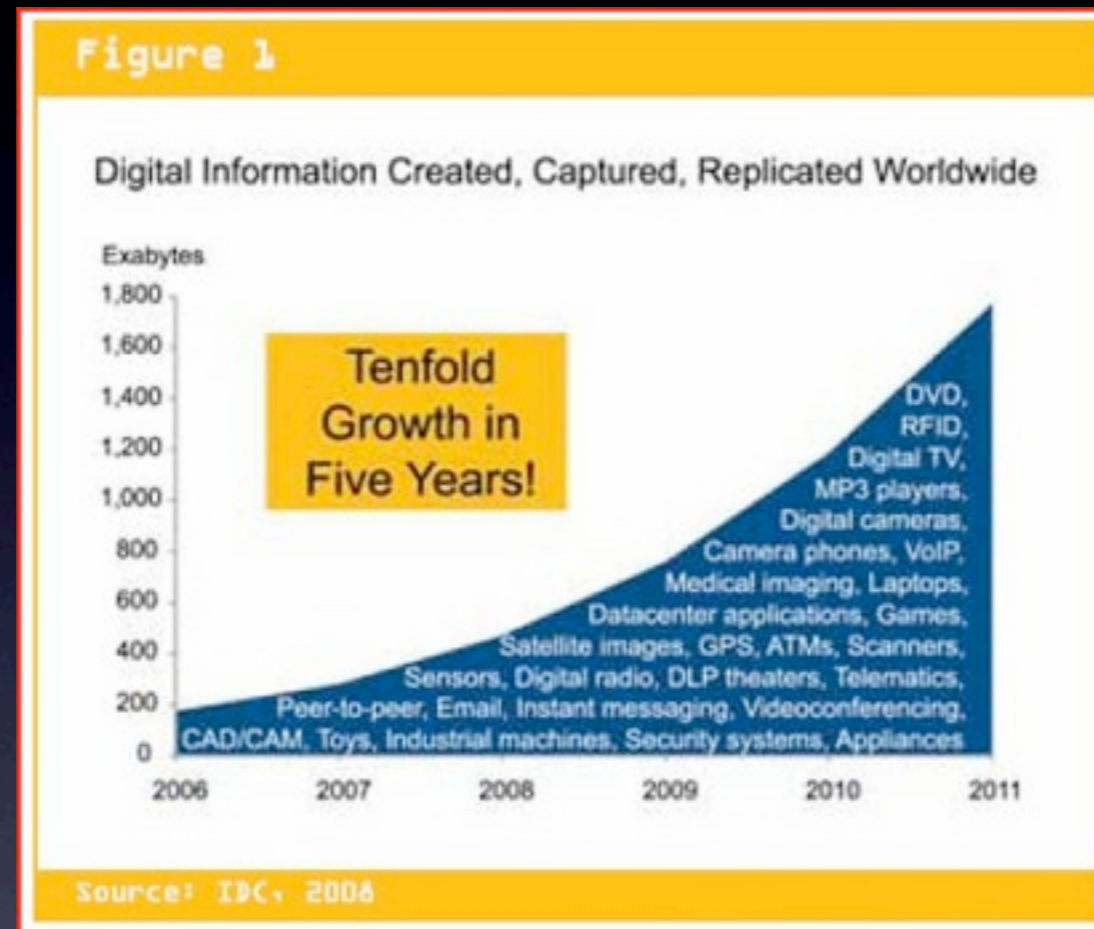


Preserving digital data - risk assessment and digital preservation strategies

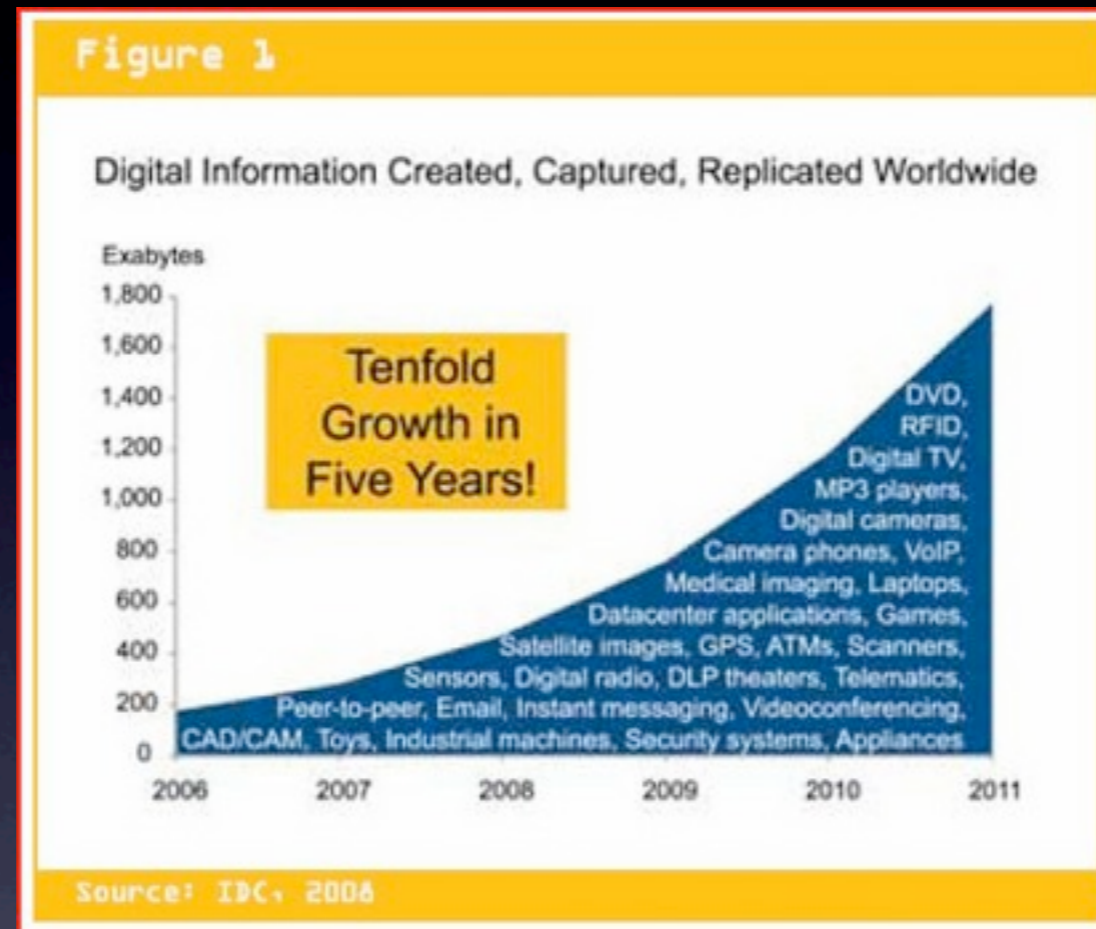
Martin Iordanidis, M.A.
ePublishing systems



Exponential growth of digital data

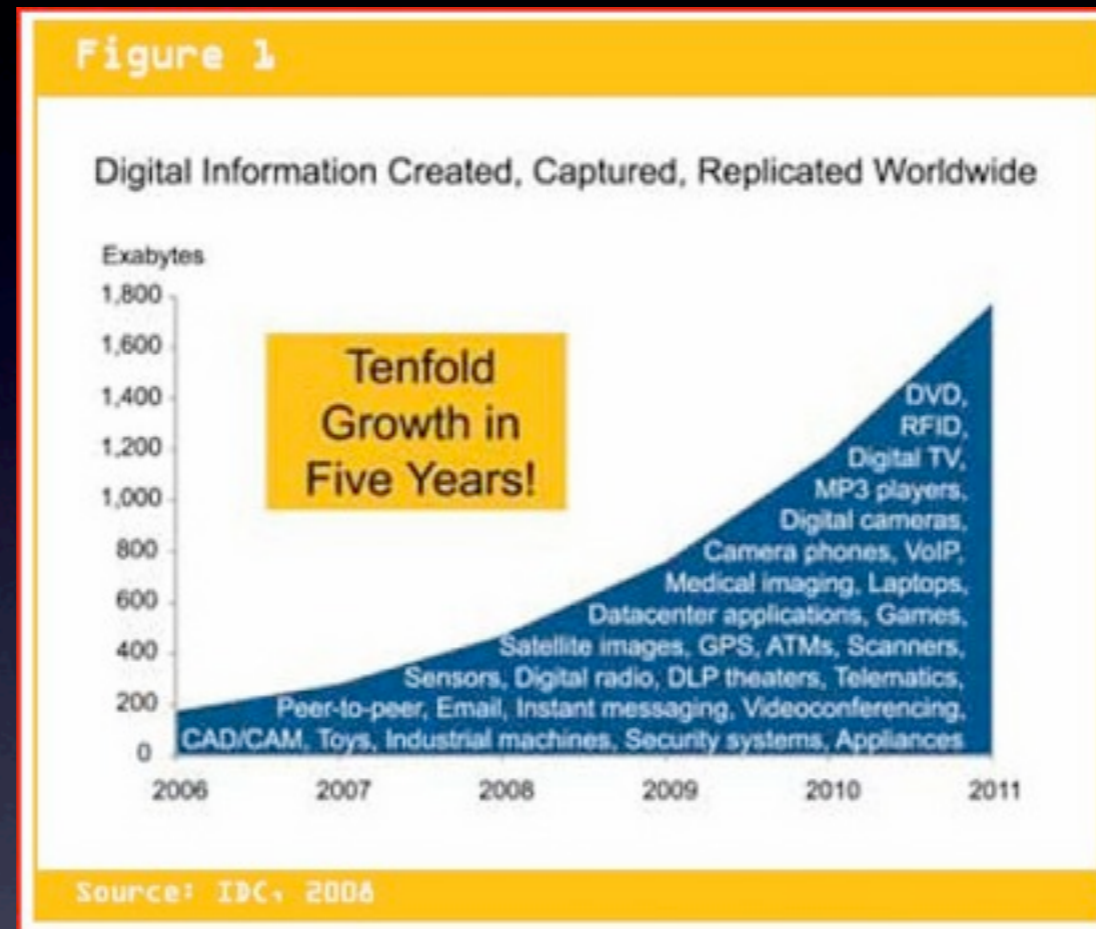


Exponential growth of digital data



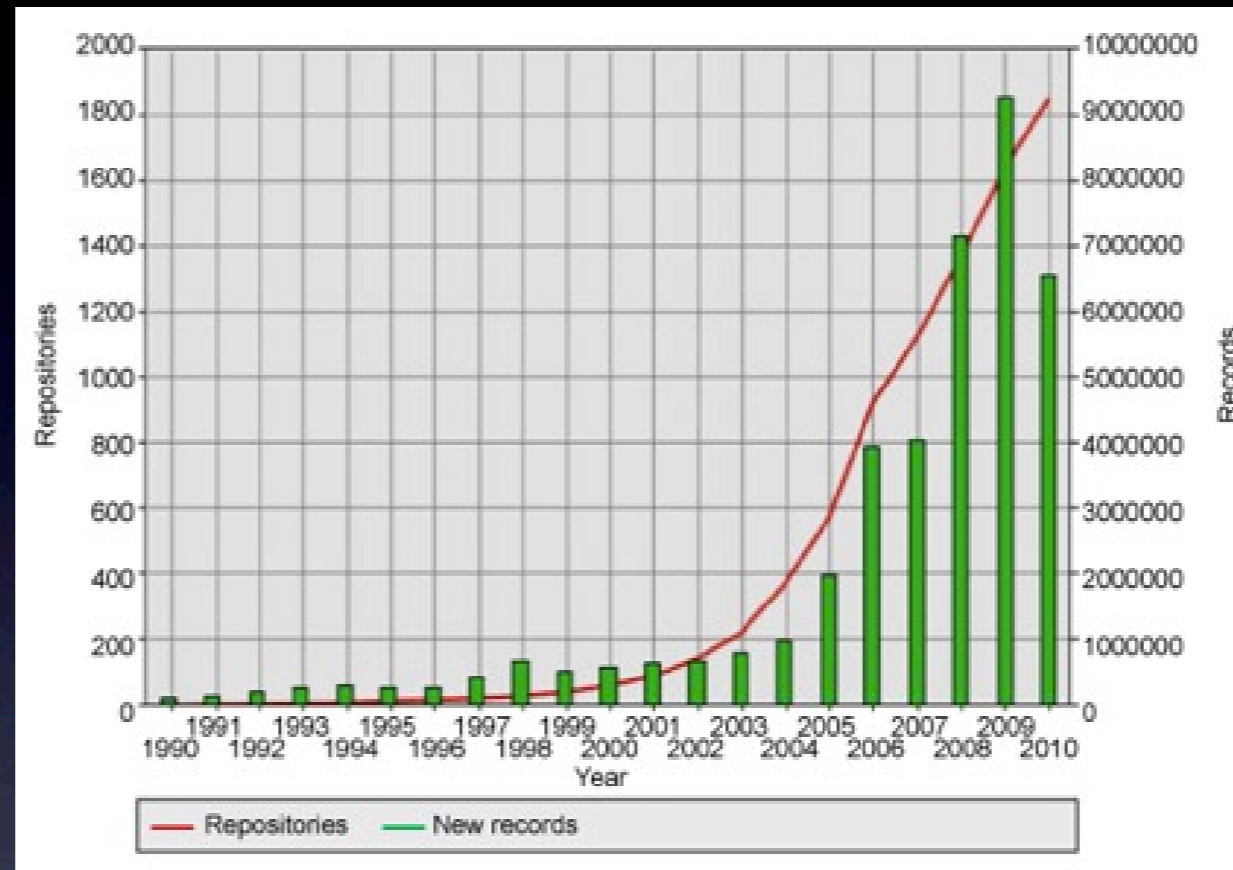
- tenfold growth in 5 years*

Exponential growth of digital data

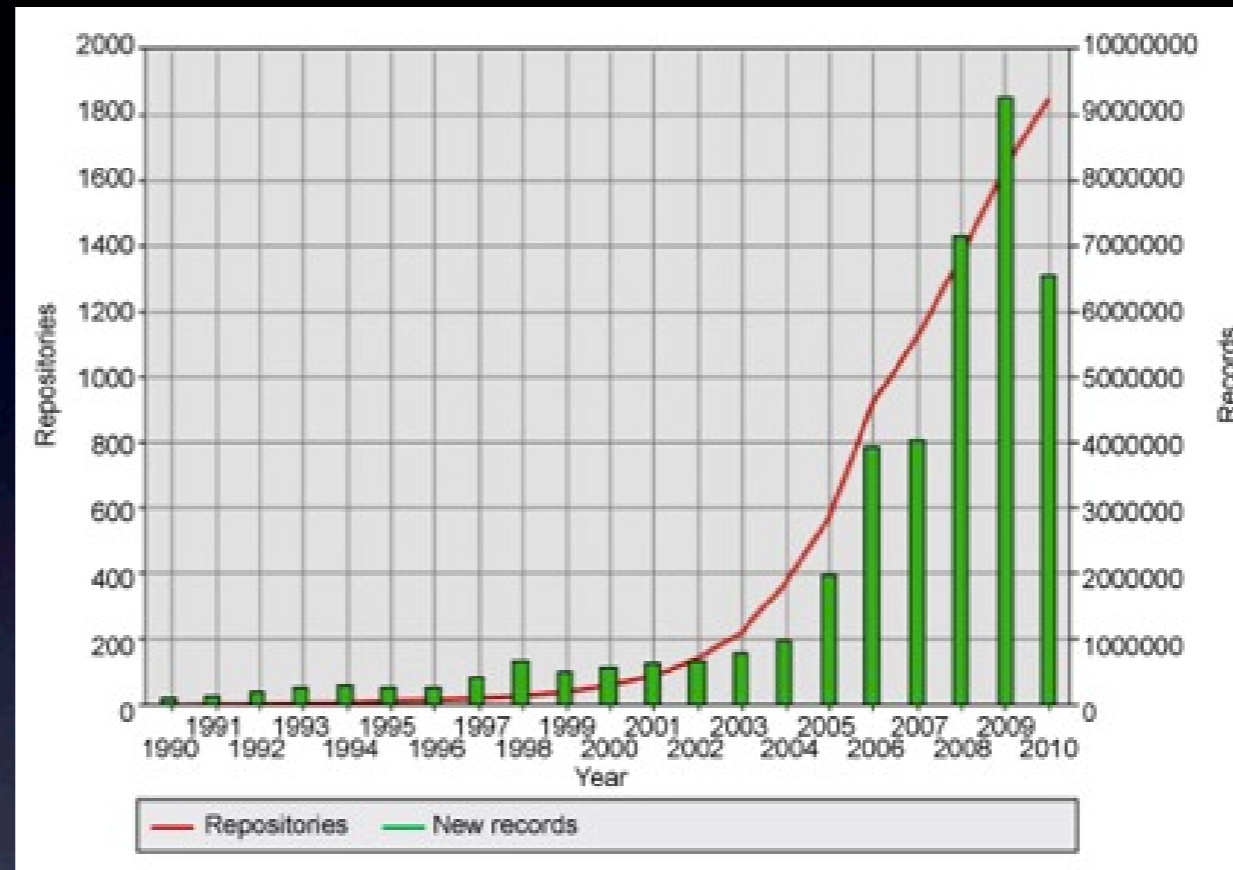


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- *Gantz (2008) "The Diverse And Exploding Digital Universe"

...such as digital library holdings

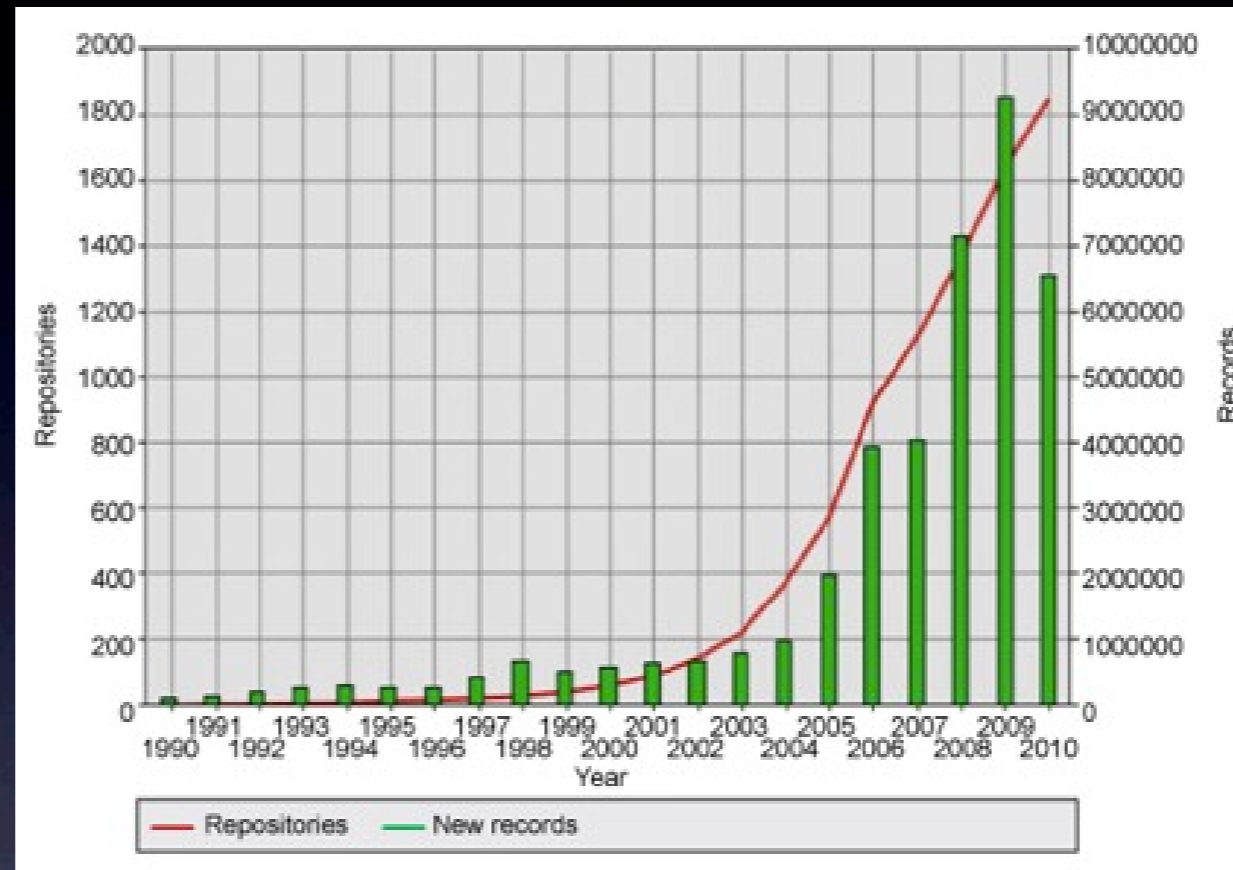


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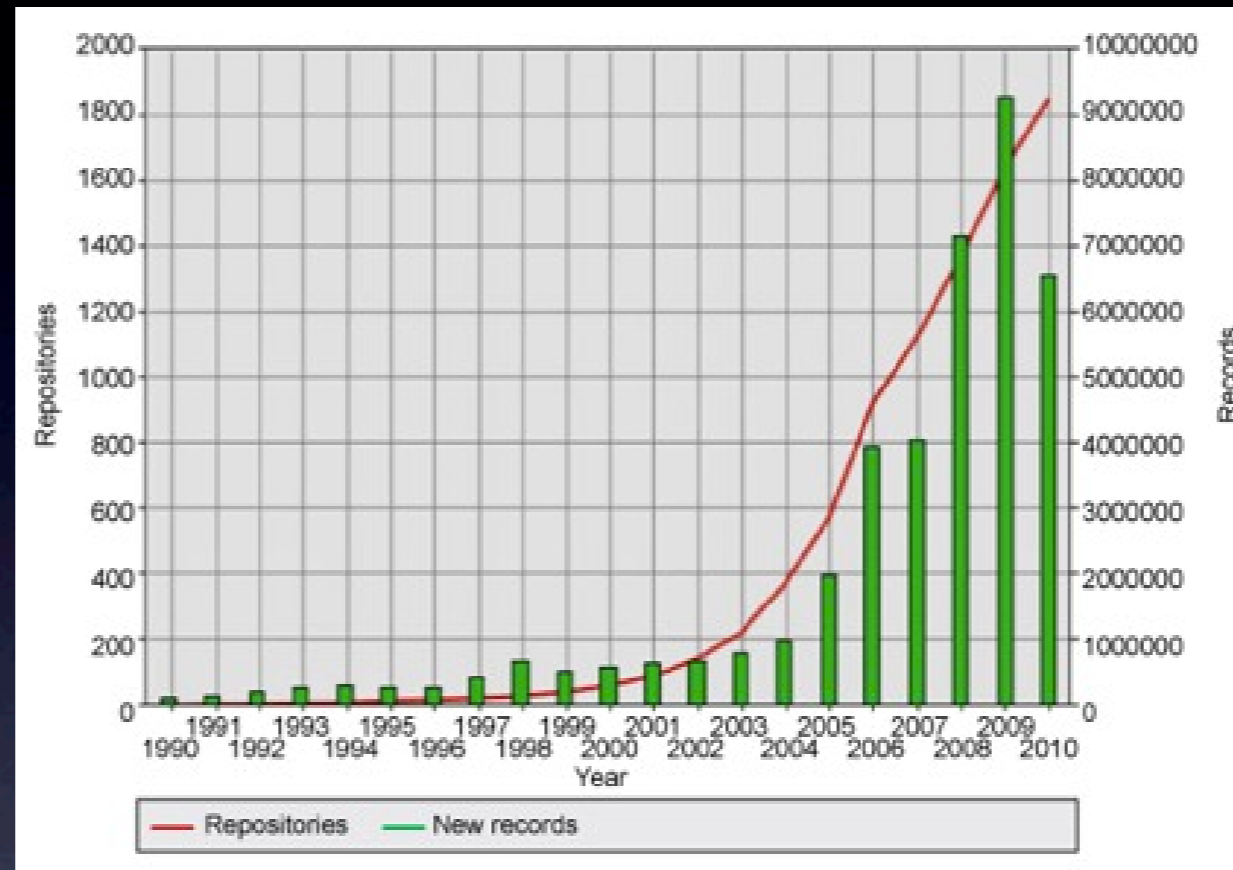
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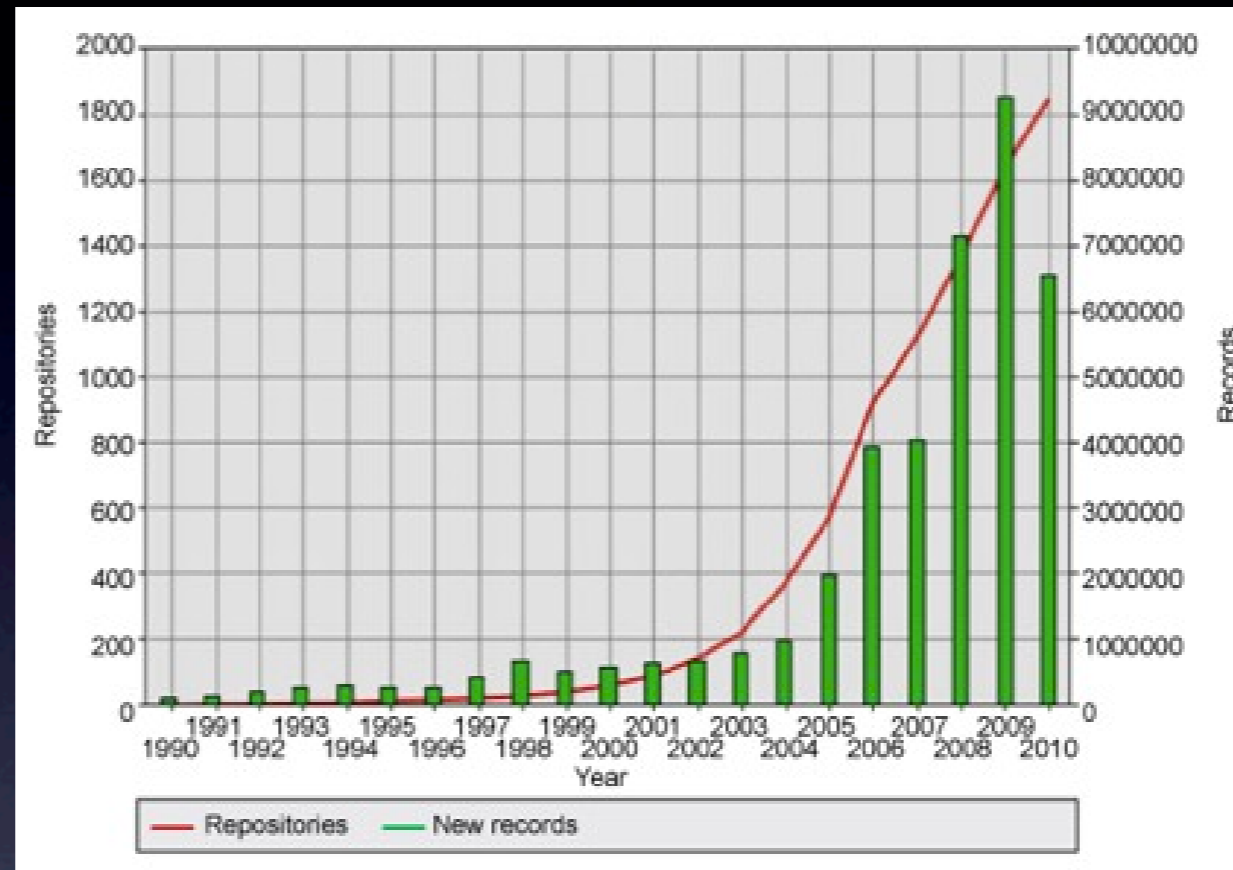
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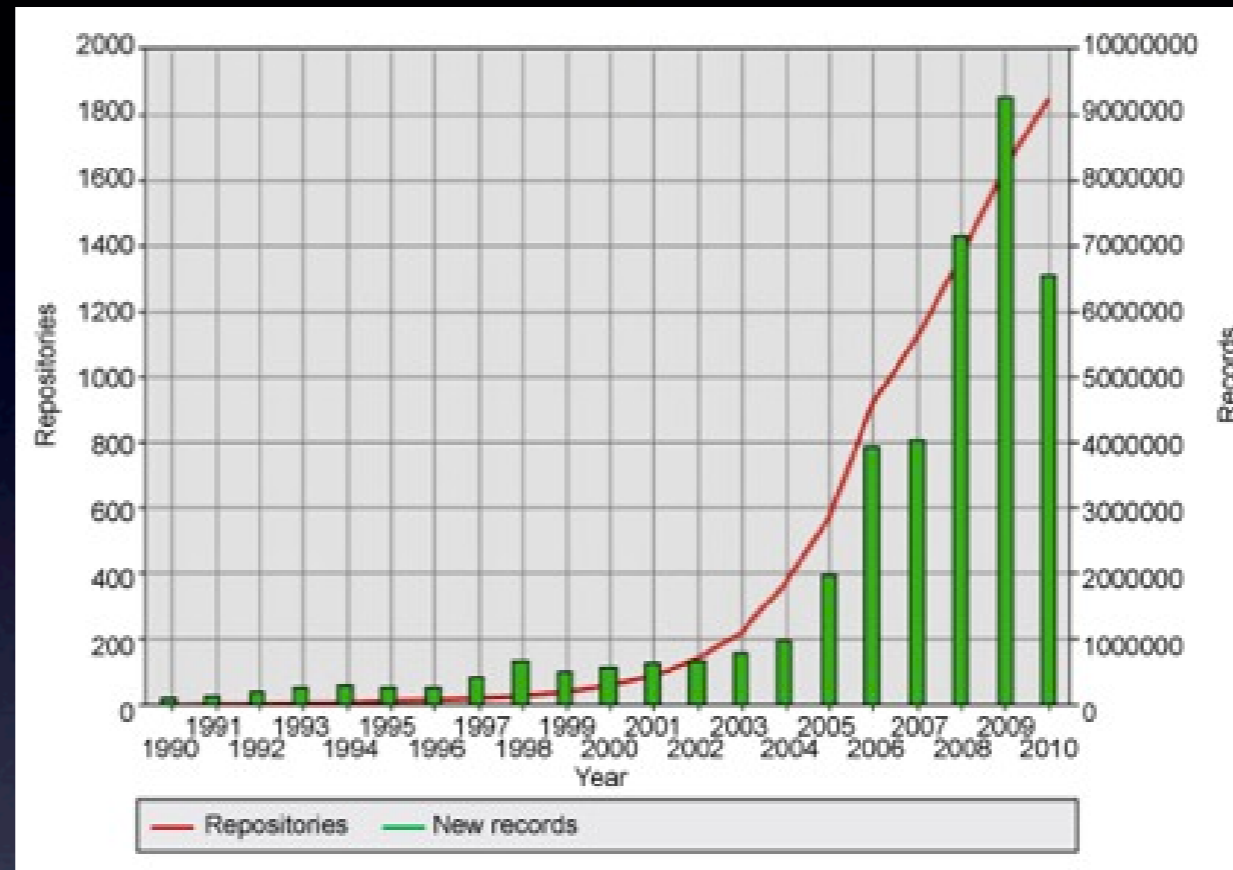
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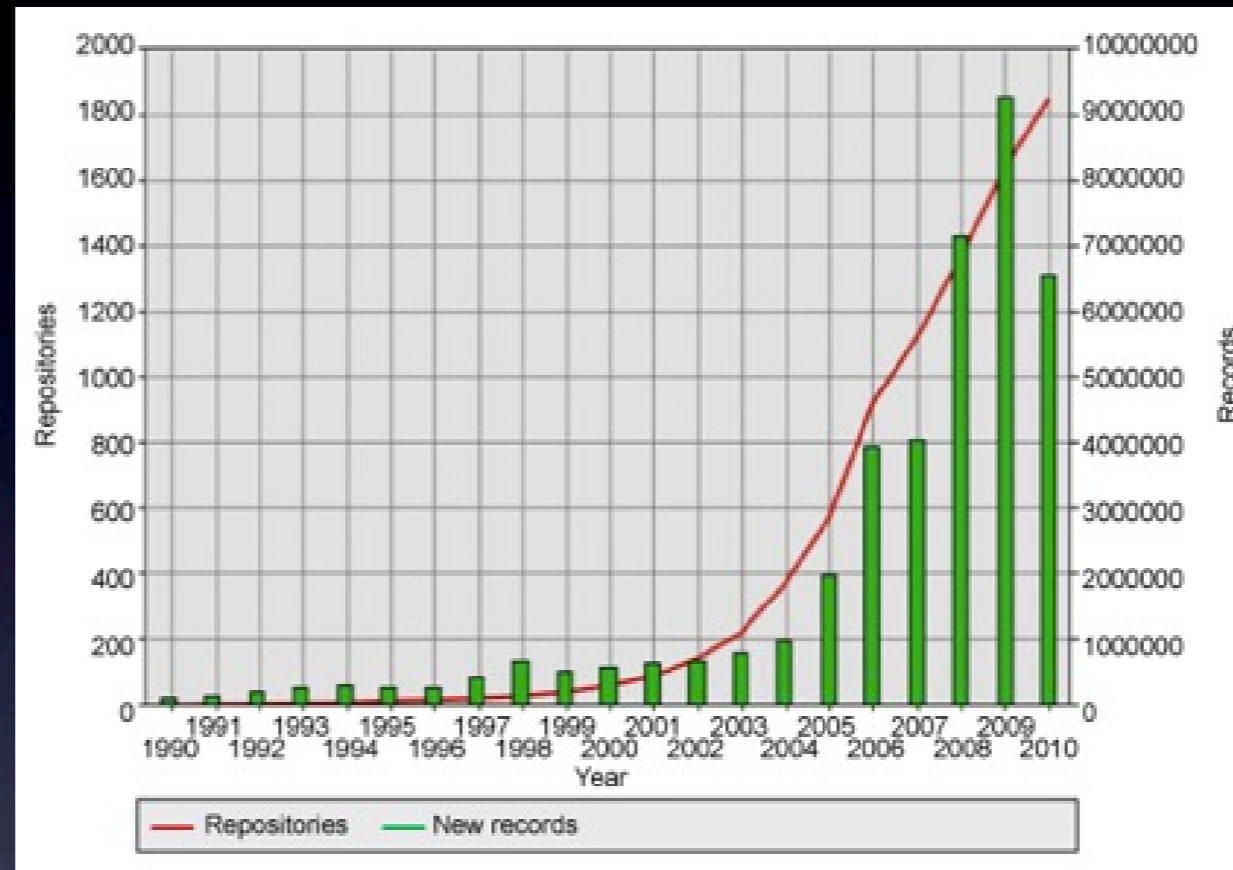
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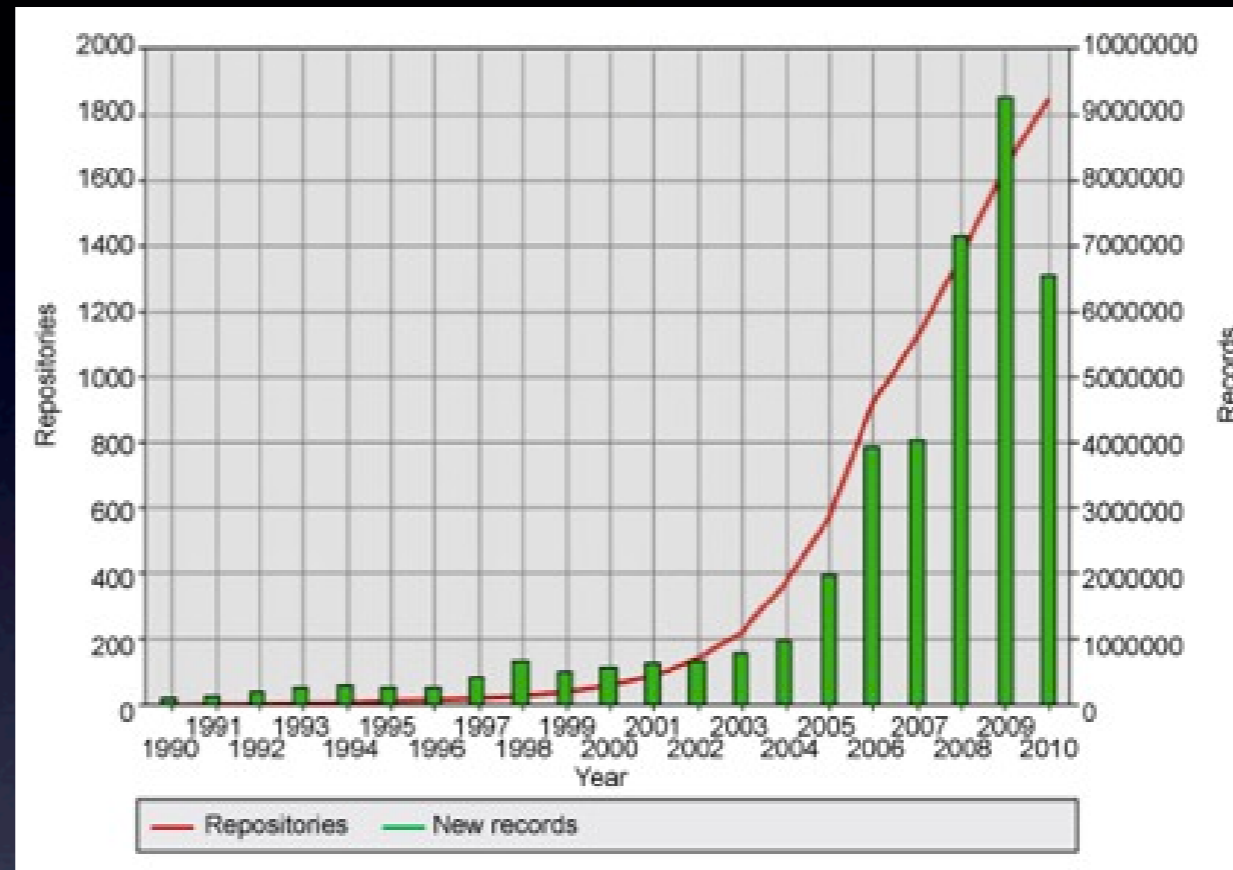
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 - research data

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 - websites, databases, audiovisual data, blogs, (...)

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- * EPrints.org (2010): "Registry of Open Access Repositories"

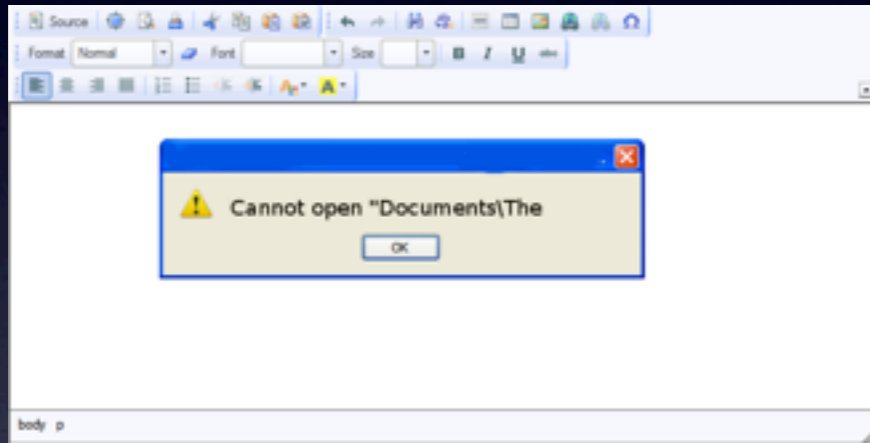
Presenting the problem

Presenting the problem

- digital data is extremely fragile
 - example: „bit rot“

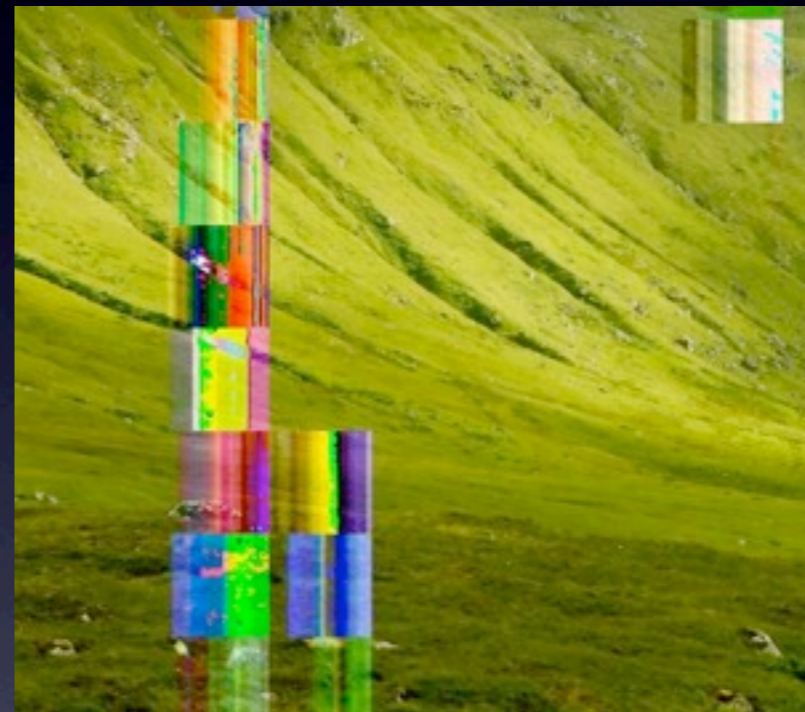
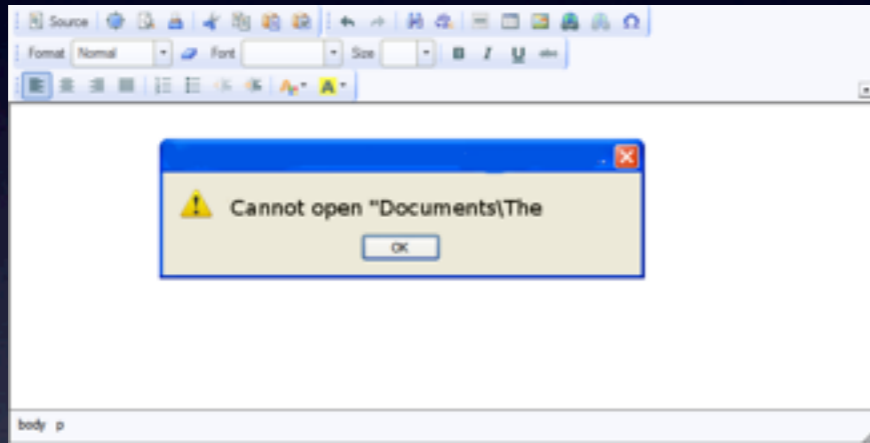
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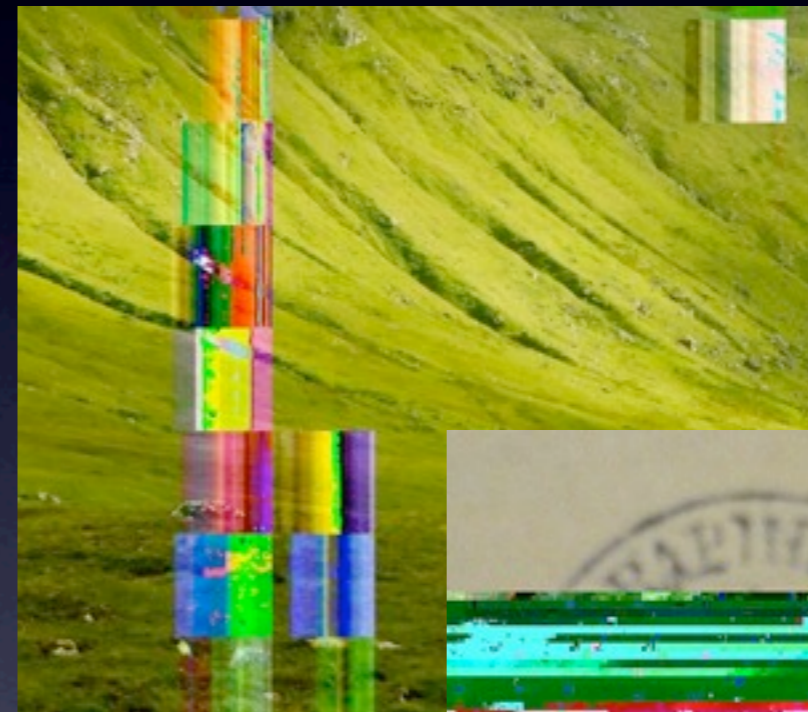
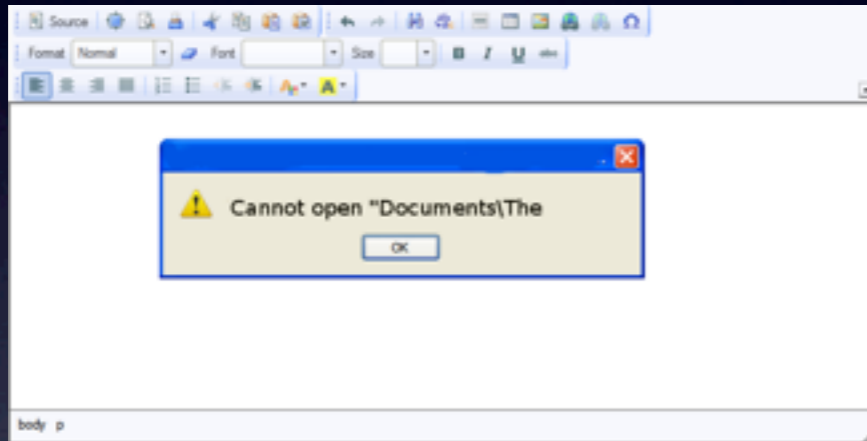
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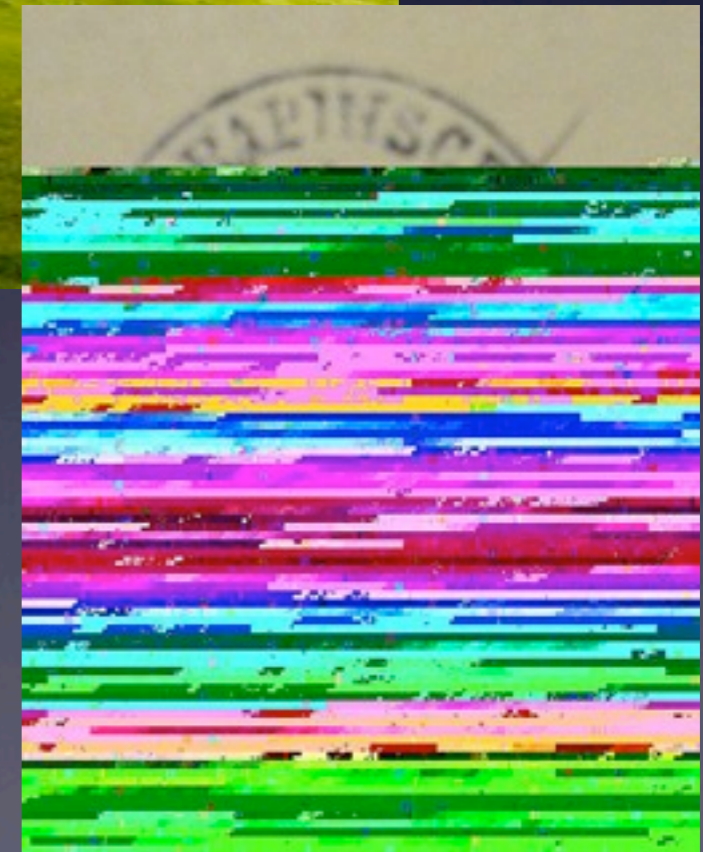
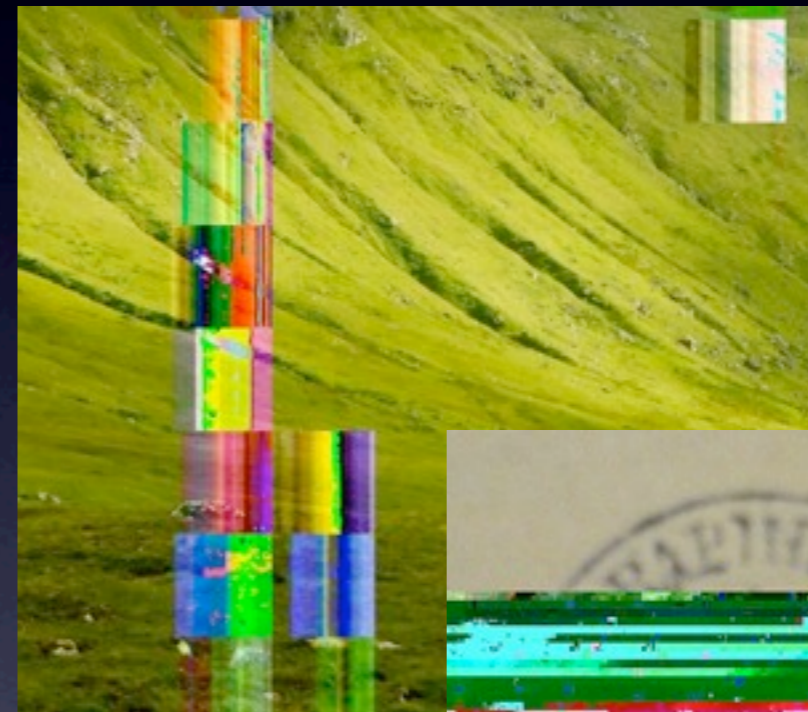
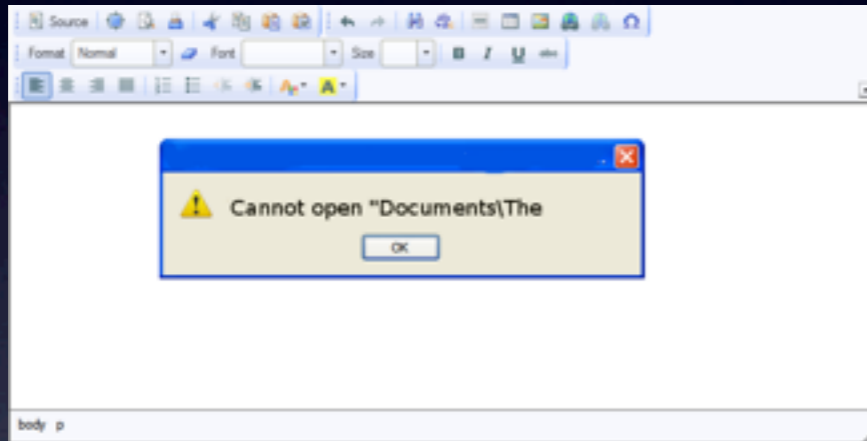
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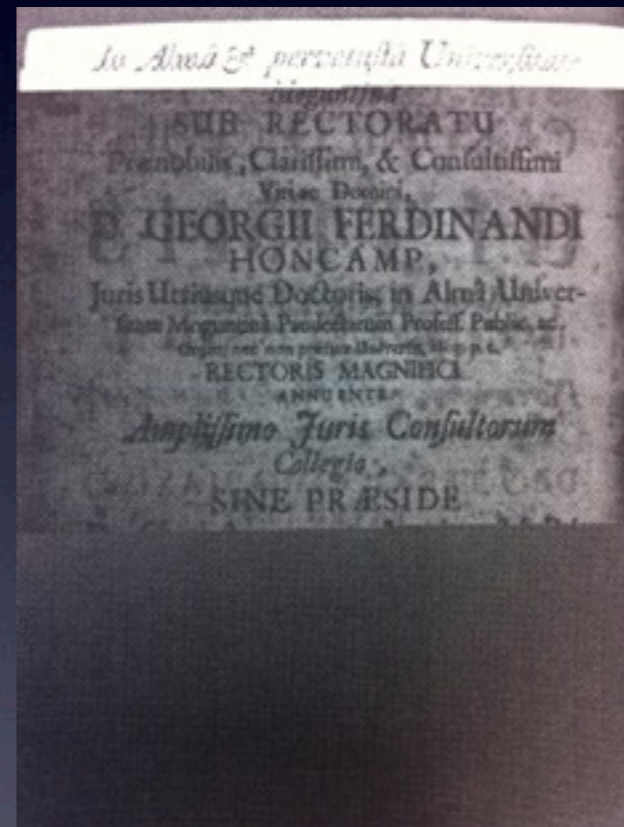
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Presenting the problem

- digital data is extremely fragile
 - example: short-lived storage media



Presenting the problem

- digital data is extremely fragile
 - example: short-lived storage media



Storage at risk

Storage at risk

- Storage media do not last forever!
 - Hard drive (in service): 2 - 10 years
 - Hard drive (stock only): 10 - 30 years
 - Flash memory: 10 - 30 years
 - Magnetic tape: > 30 years
 - CDs/DVDs: 50 - 80 years*

* http://de.wikipedia.org/wiki/Langzeitarchivierung#Haltbarkeit_der_Tr.C3.A4germedien

Digital data - risk levels



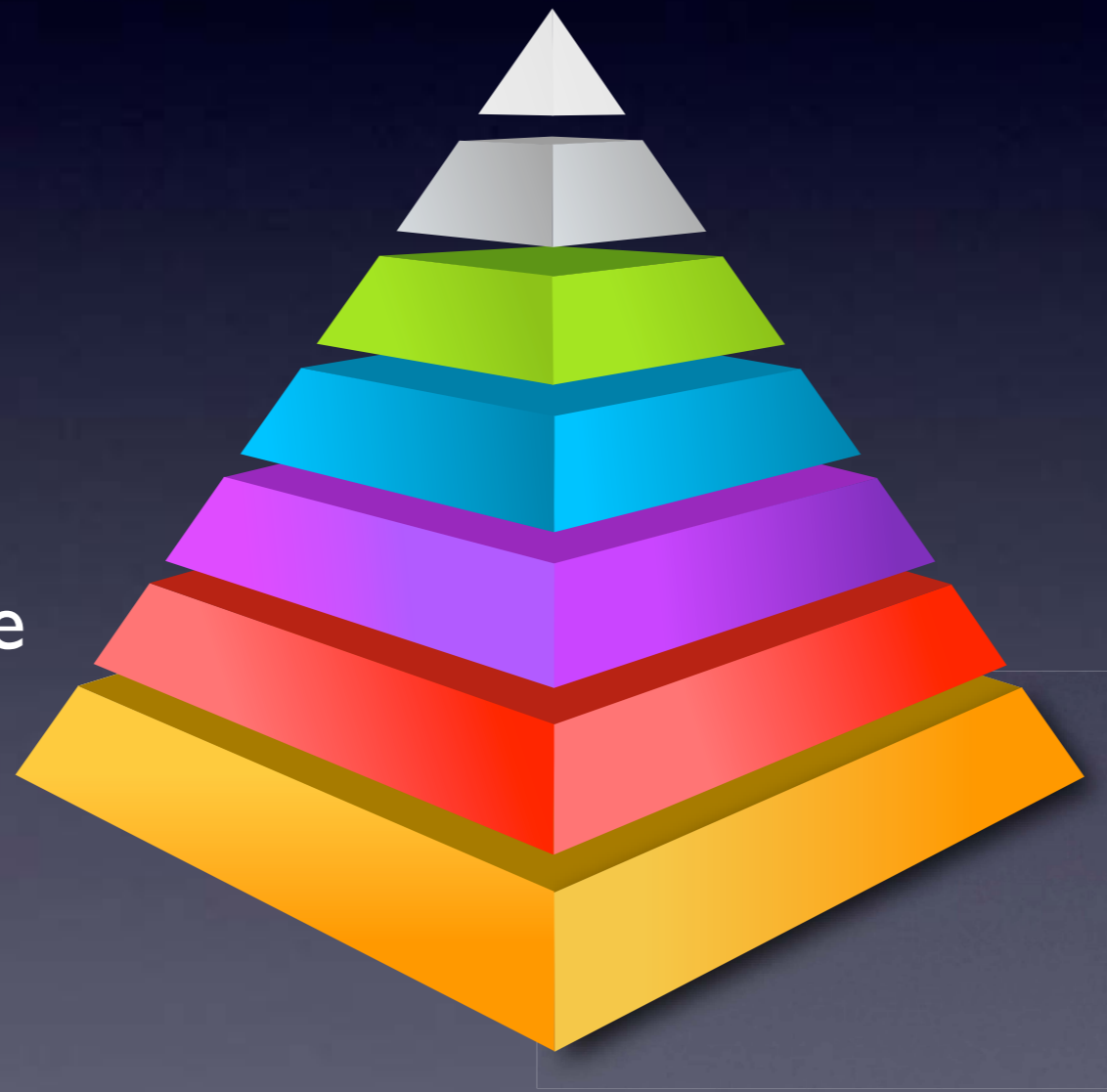
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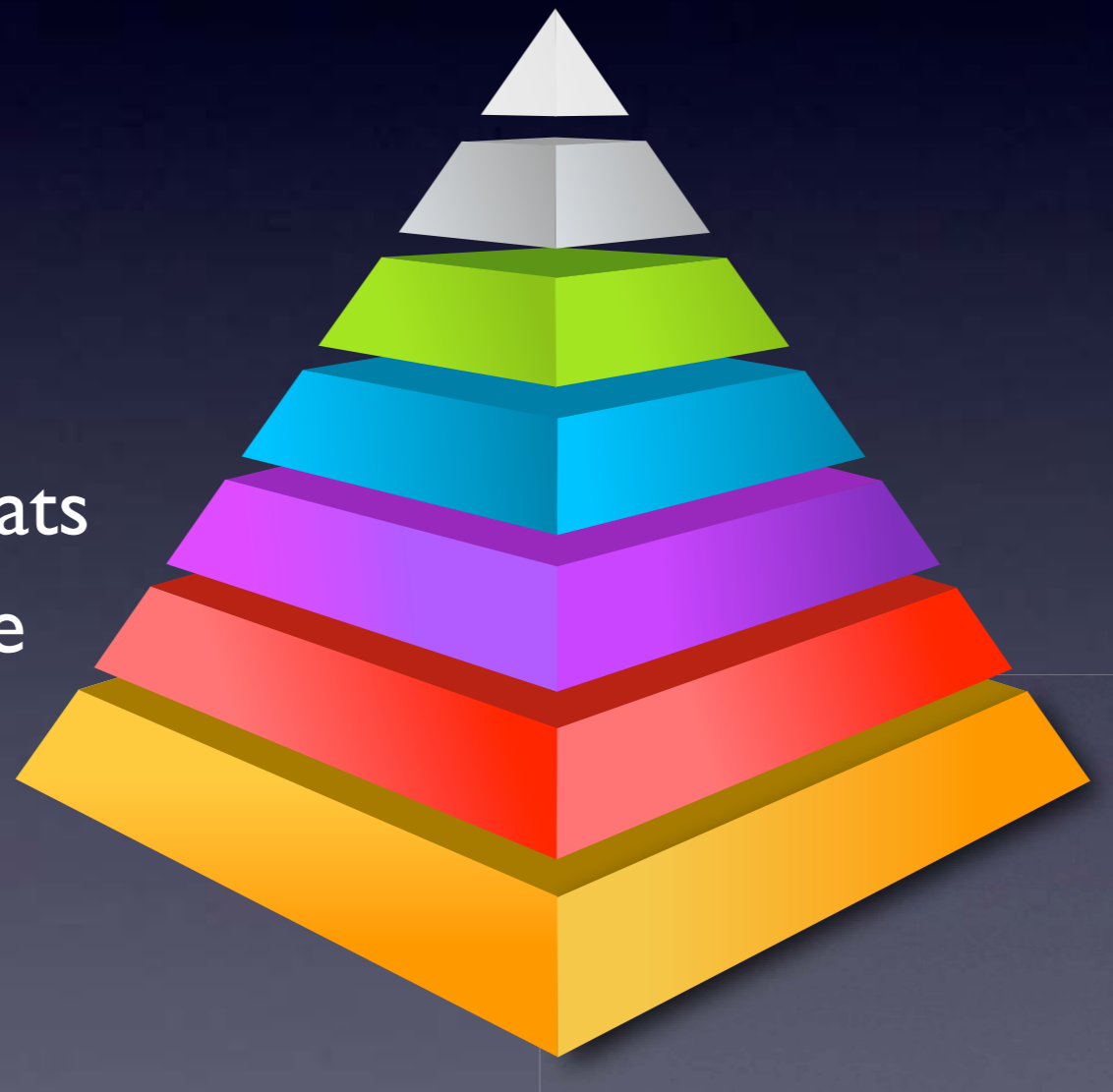
Digital data - risk levels

hardware failure
„bit rot“



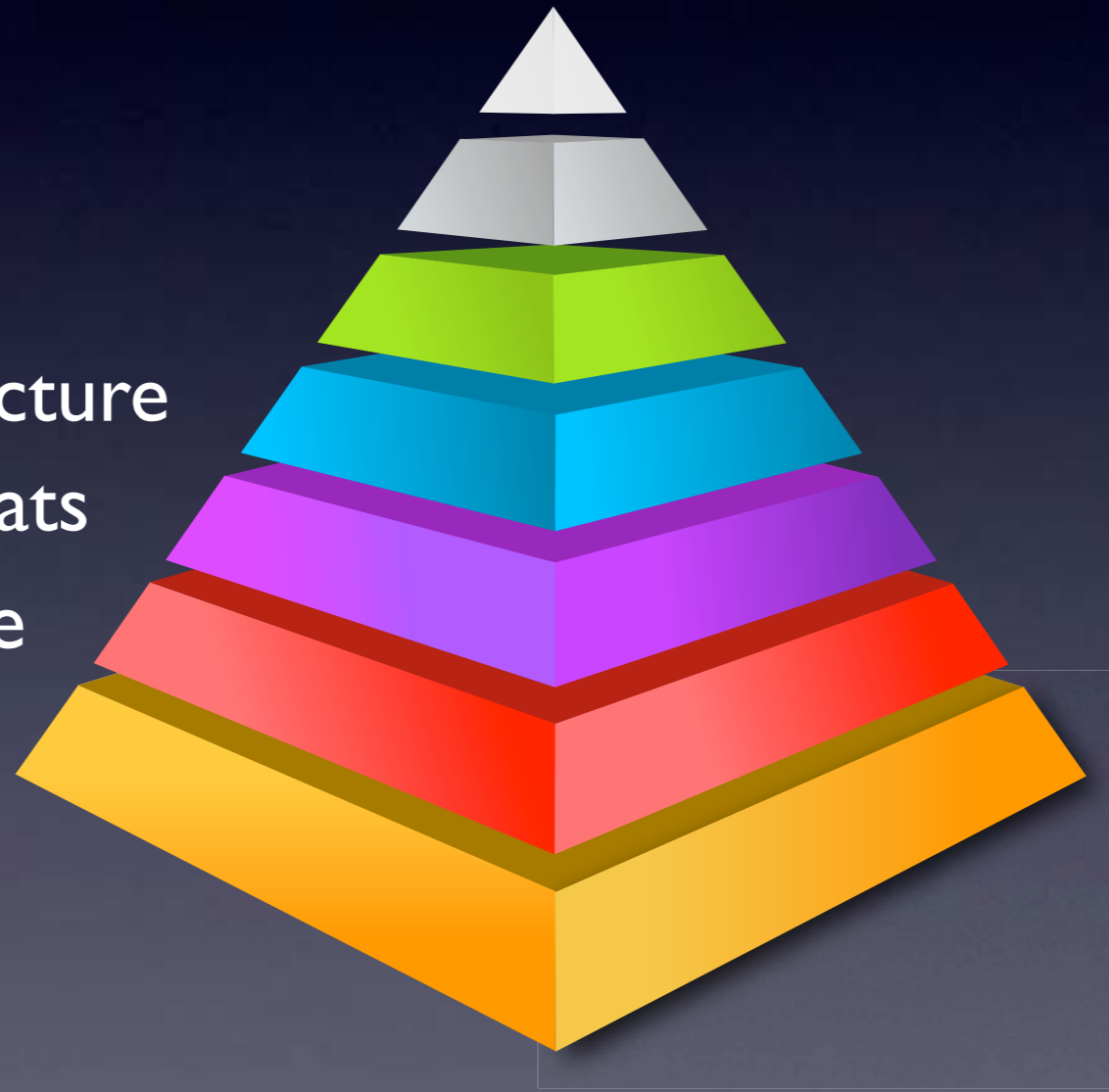
Digital data - risk levels

obsolete formats
hardware failure
„bit rot“

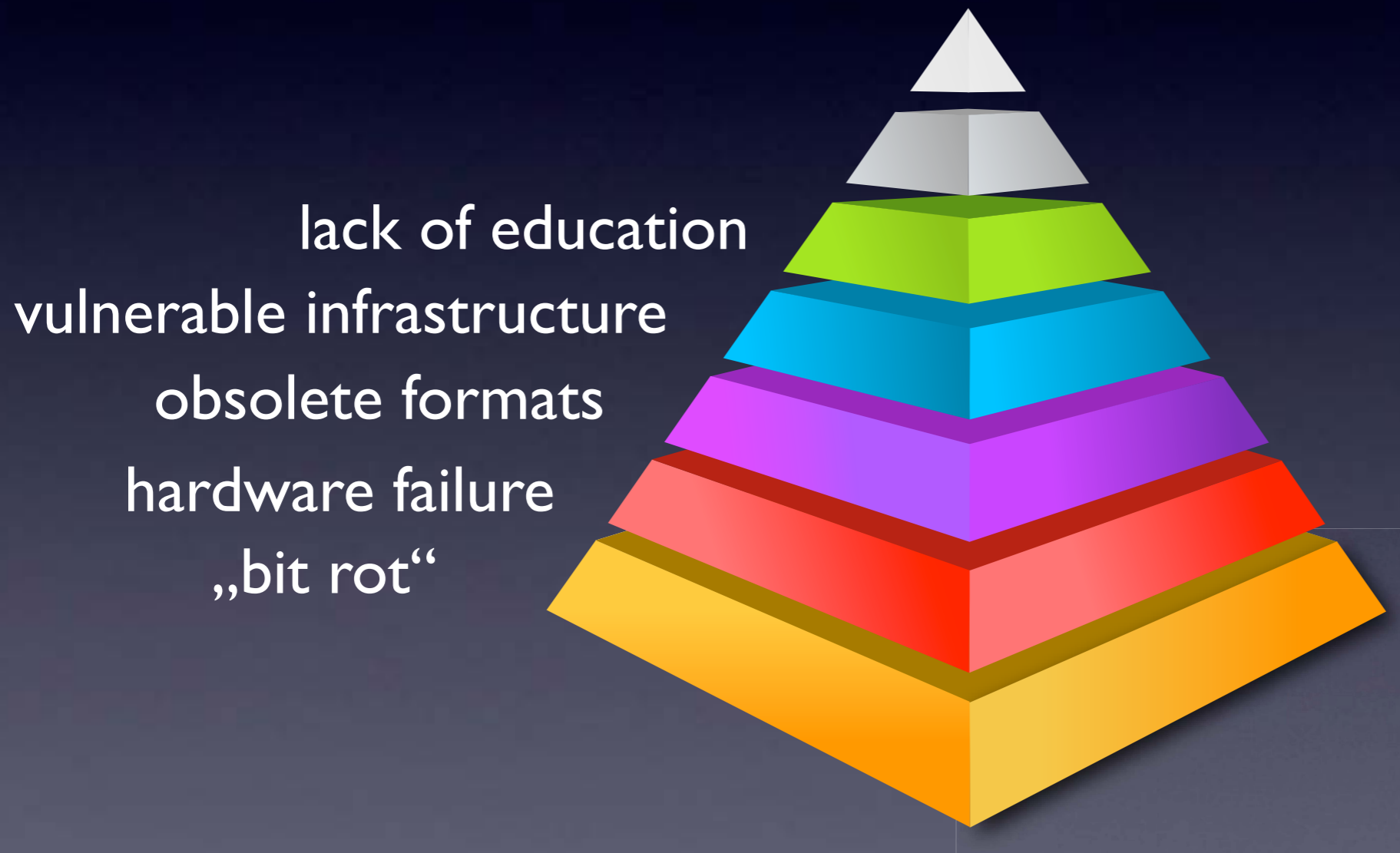


Digital data - risk levels

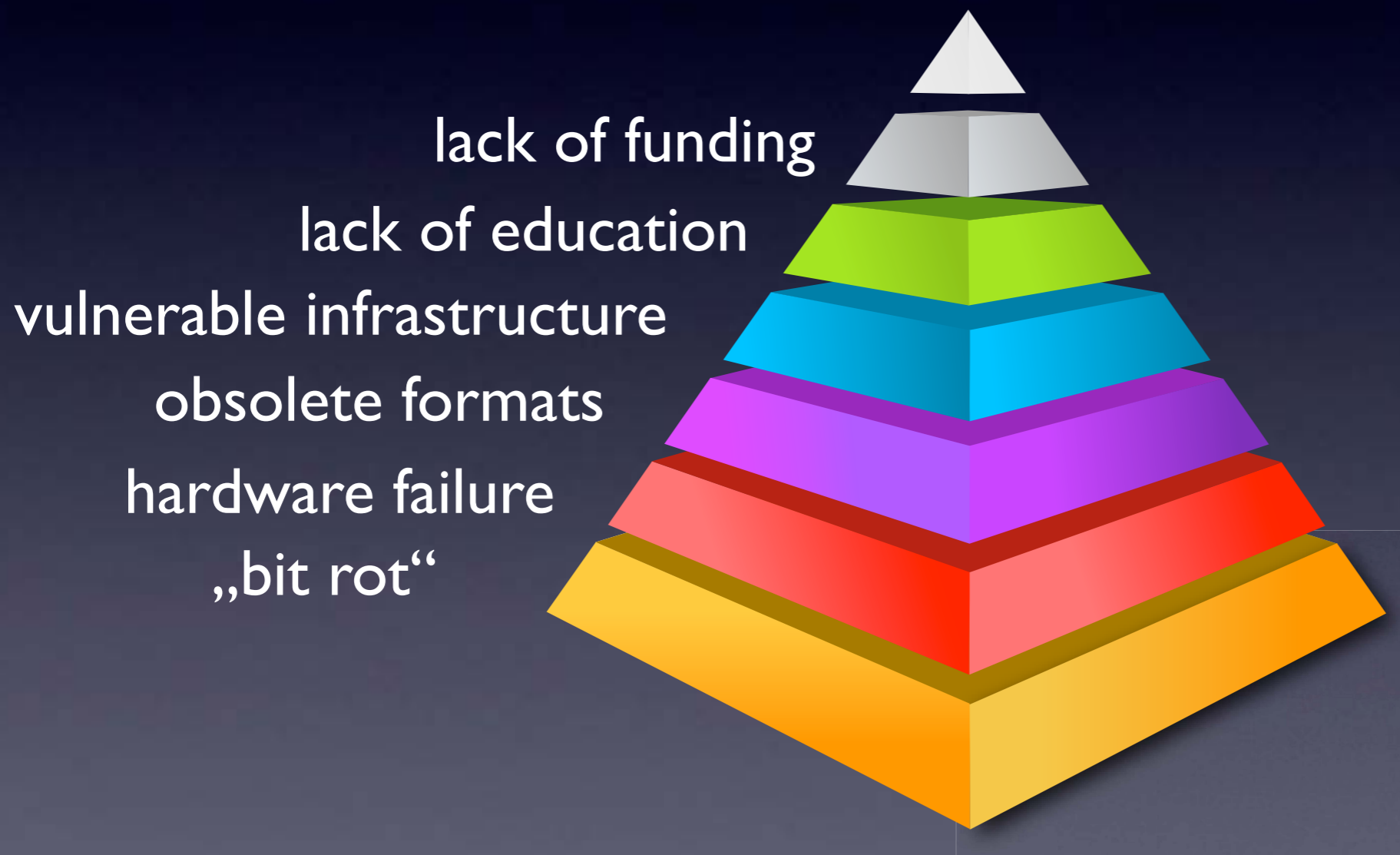
vulnerable infrastructure
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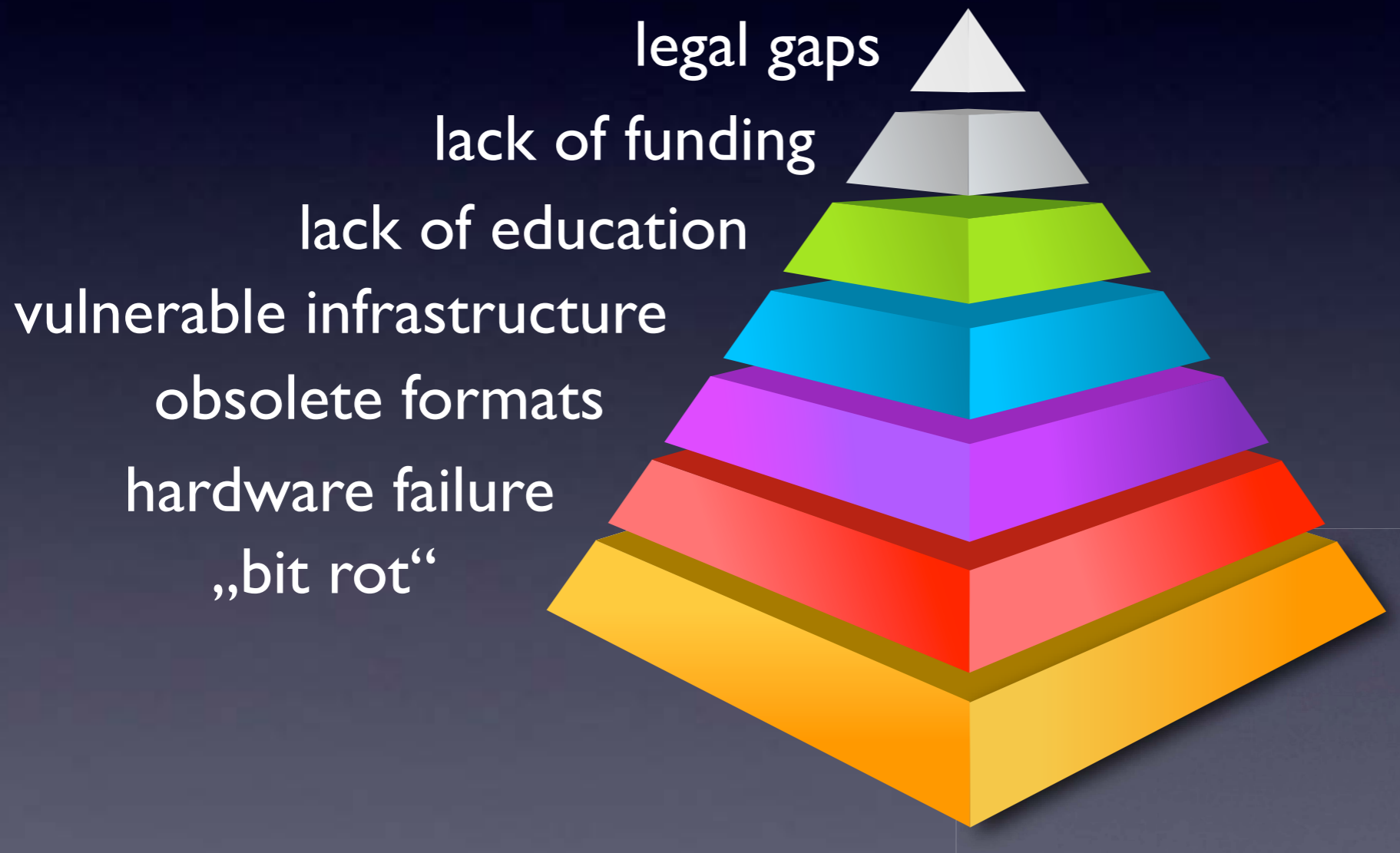
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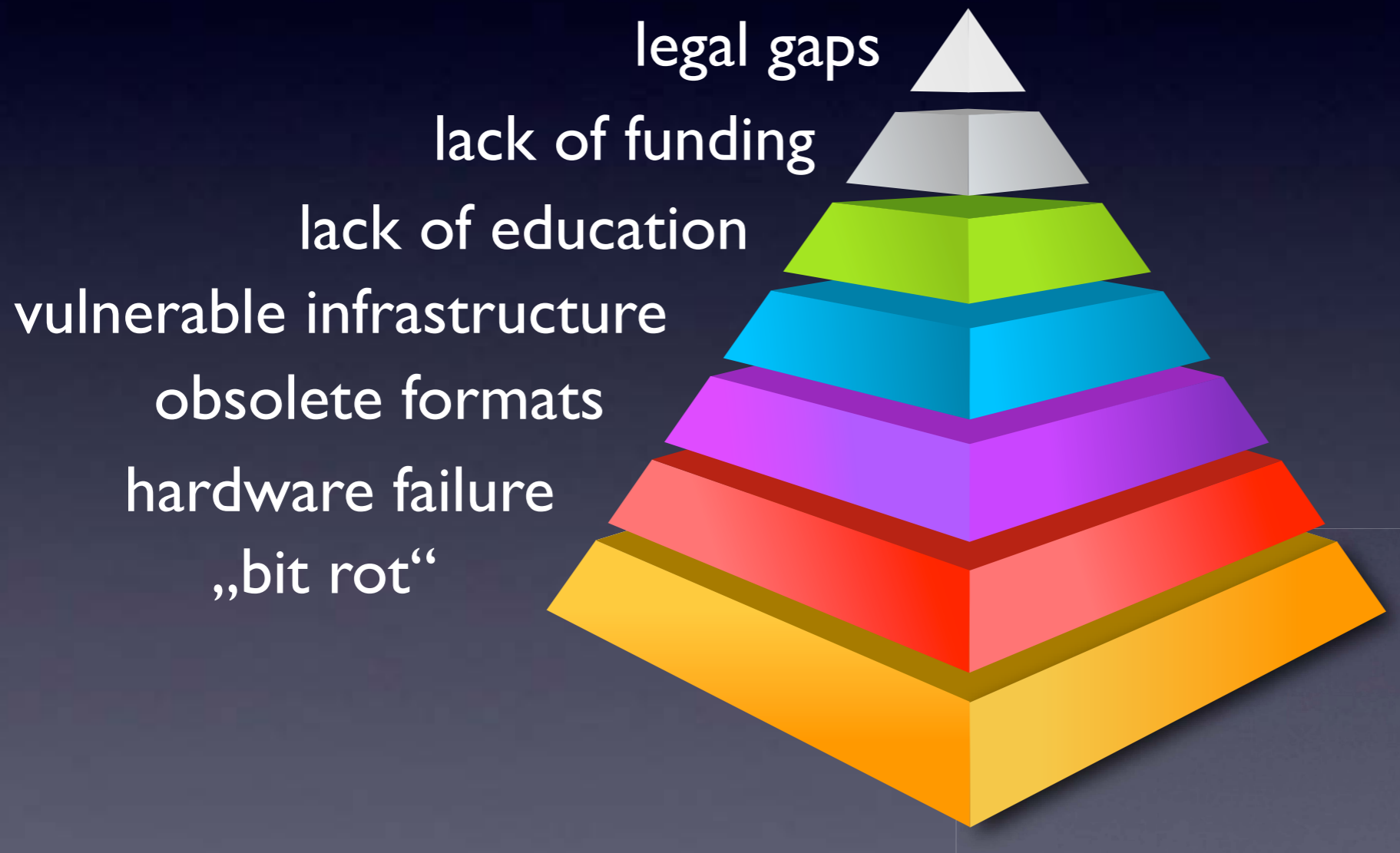
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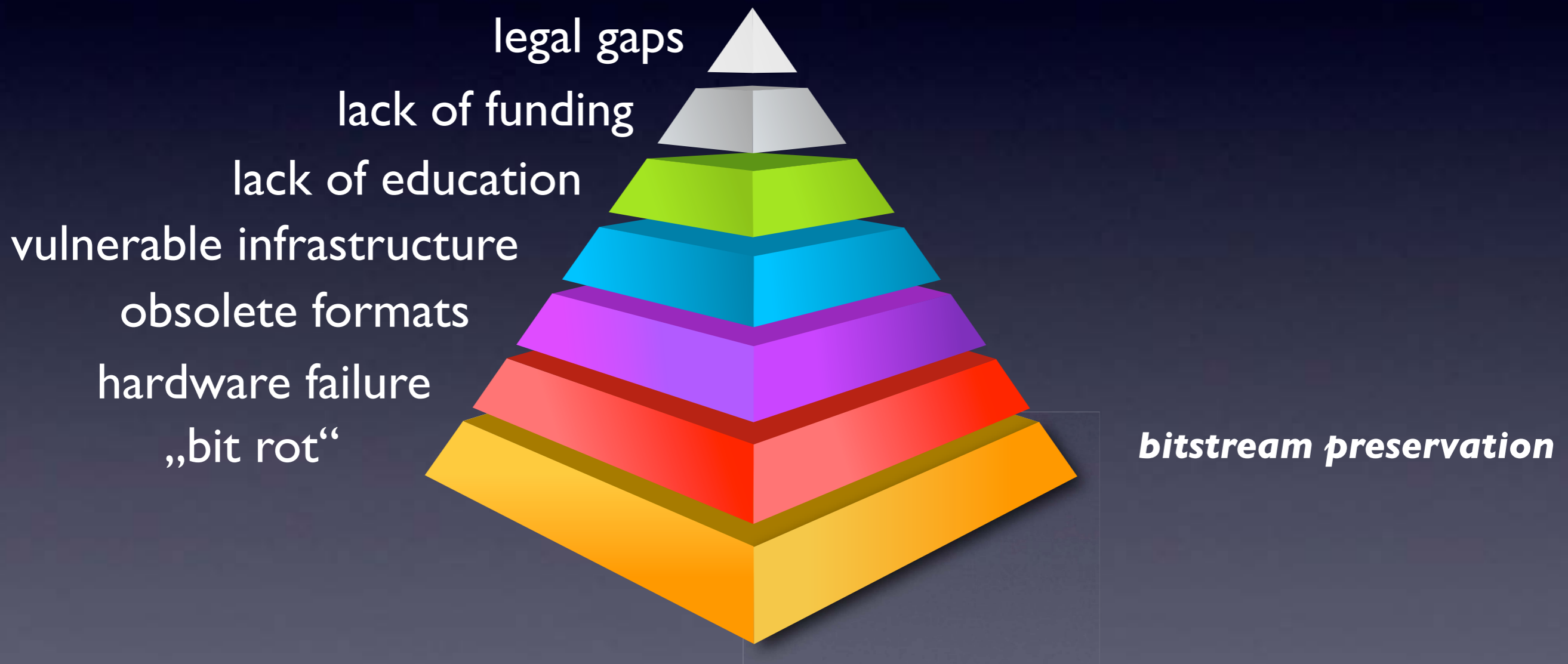
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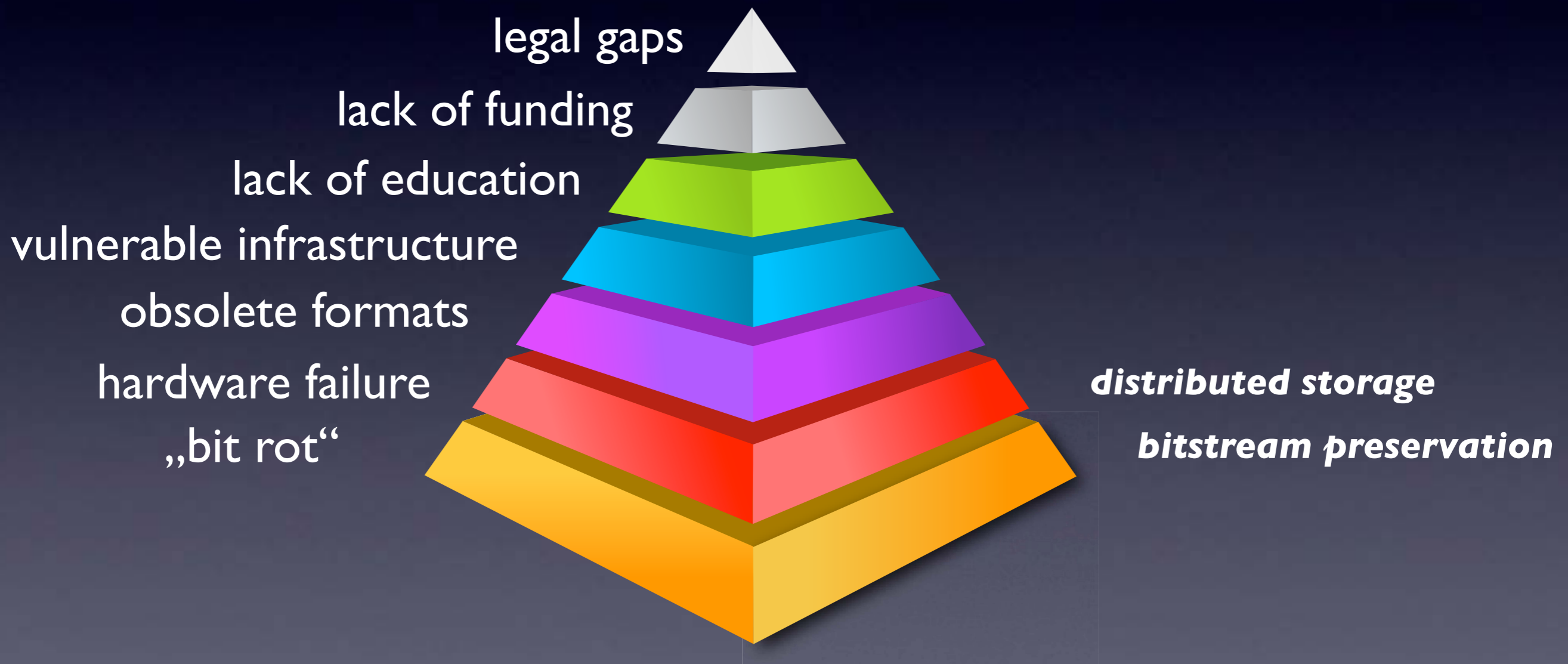
Digital preservation strategies



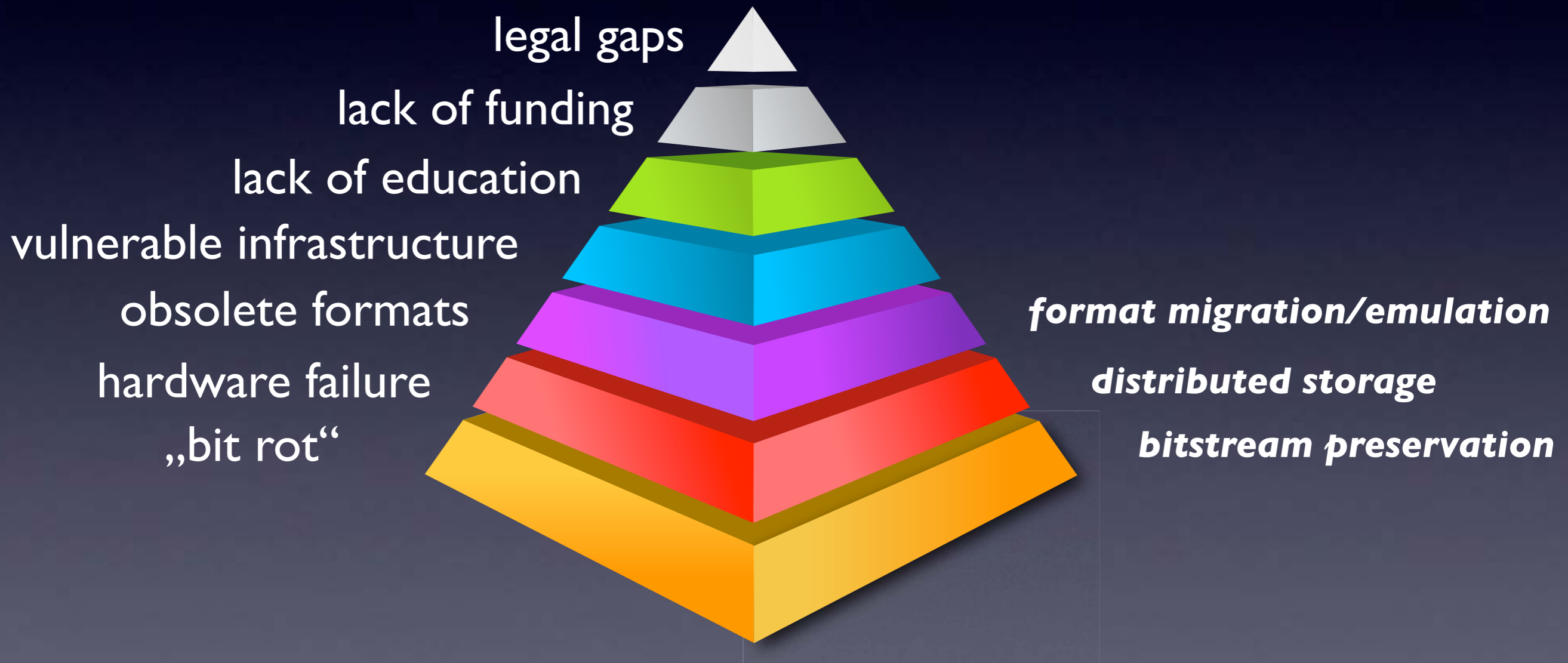
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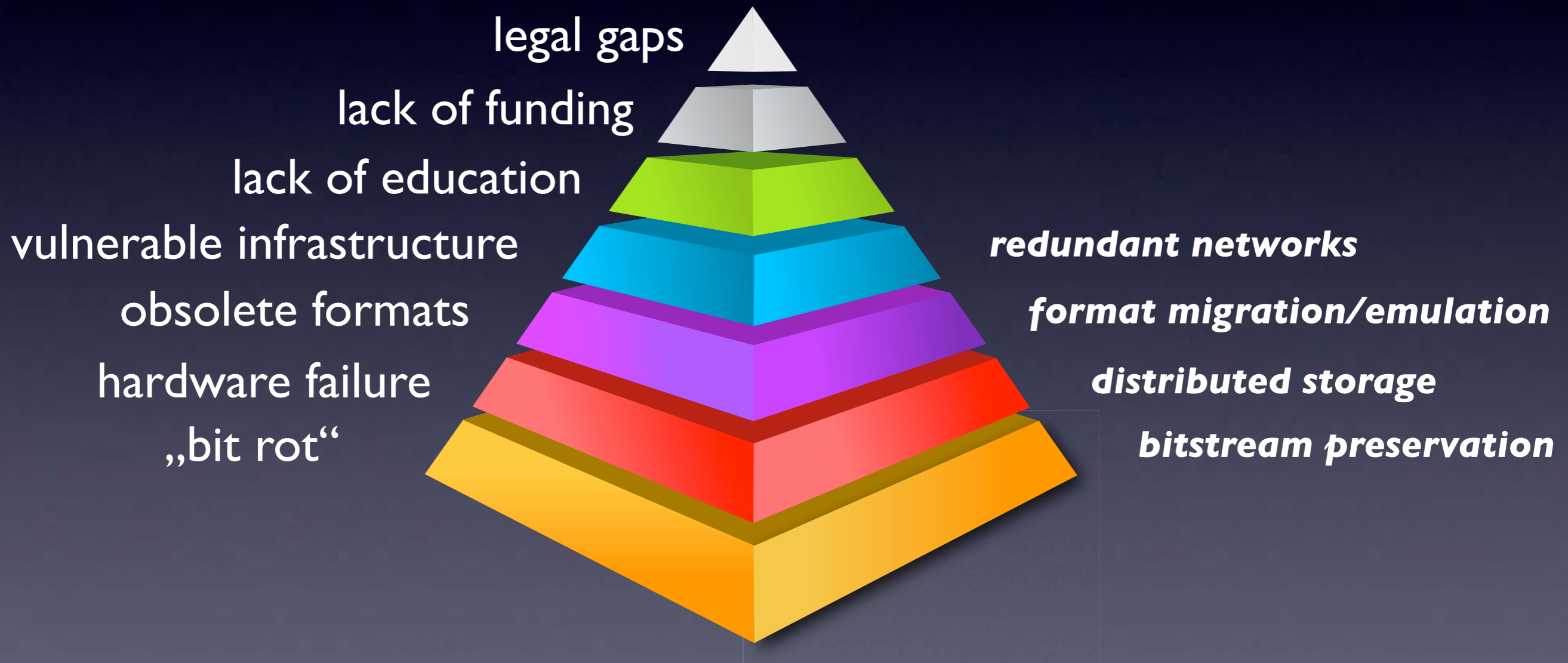
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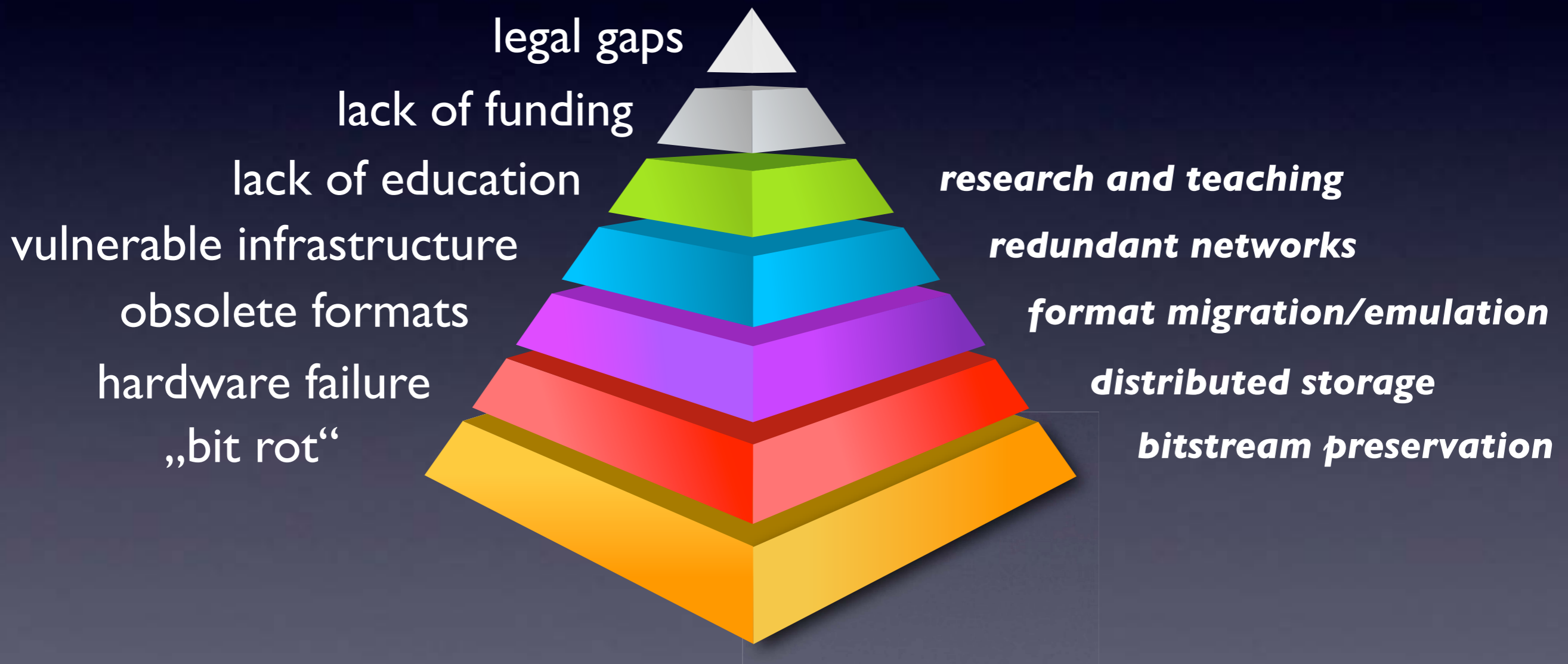
Digital preservation strategies



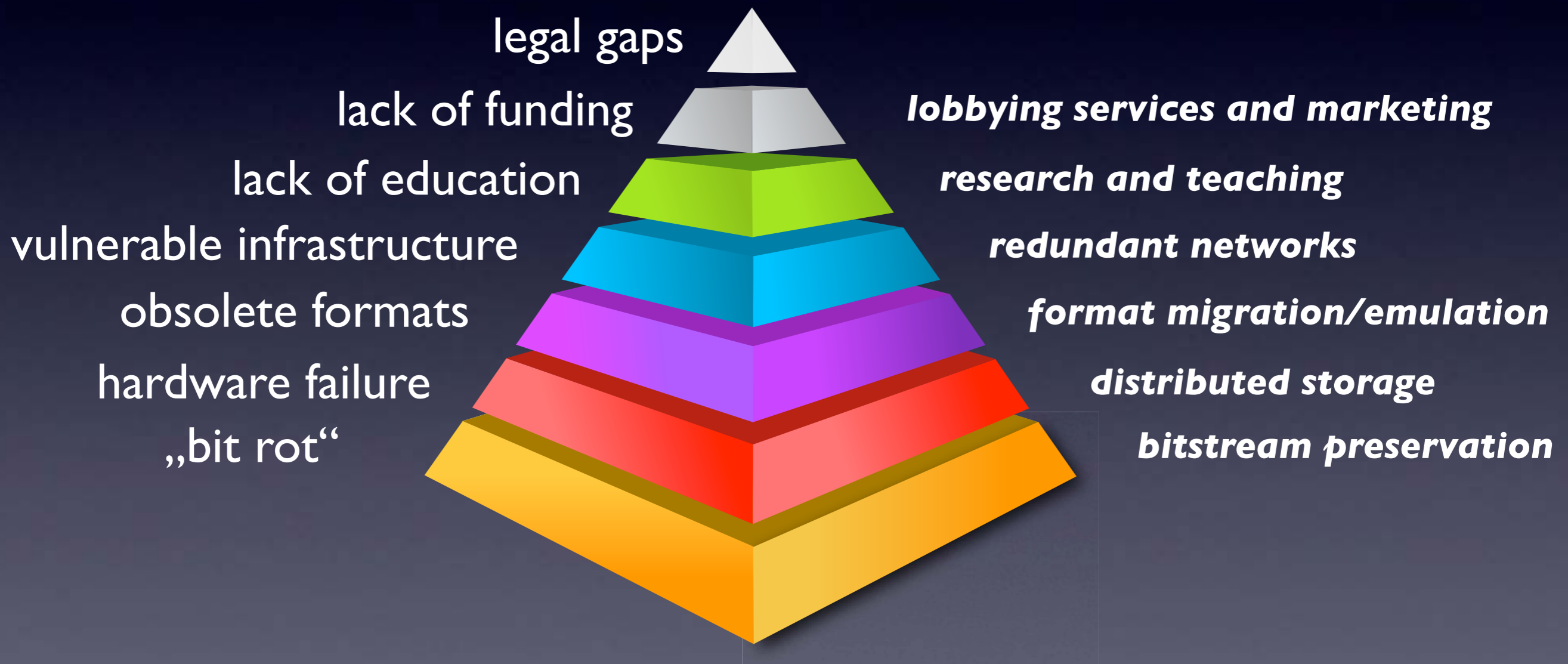
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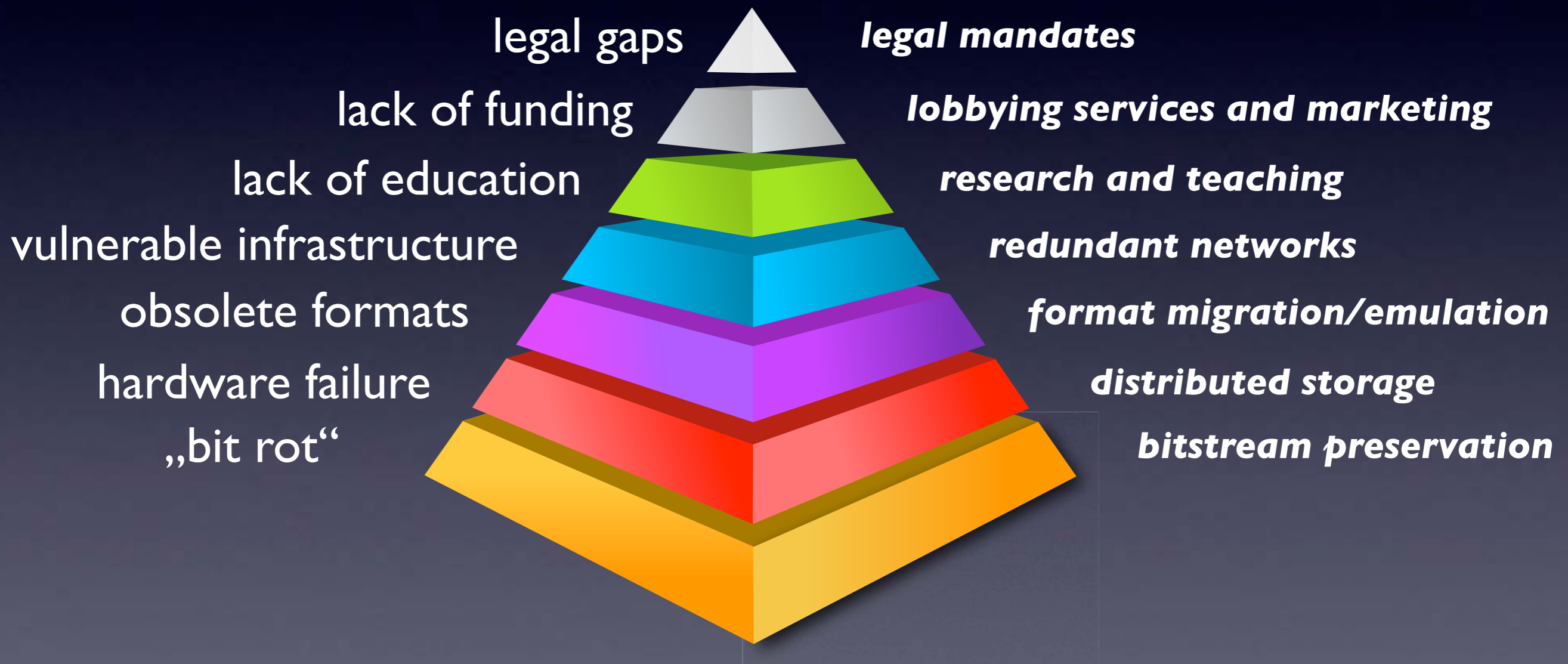
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Digital preservation strategies

Digital preservation strategies

- emphasis on research & development

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- digital preservation strategy (2009)

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 - (nestor, PLANETS, Digital Preservation Coalition, ...)

Thank You :)

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ePublishing systems

