VOORBURG GROUP

ROME
24 | 28
SEPTEMBER
2018

Mini-Presentation for SPPI on

Data Processing, Hosting and Related Activities (ISIC 6311) with Emphasis on Cloud Computing

Statistics Finland

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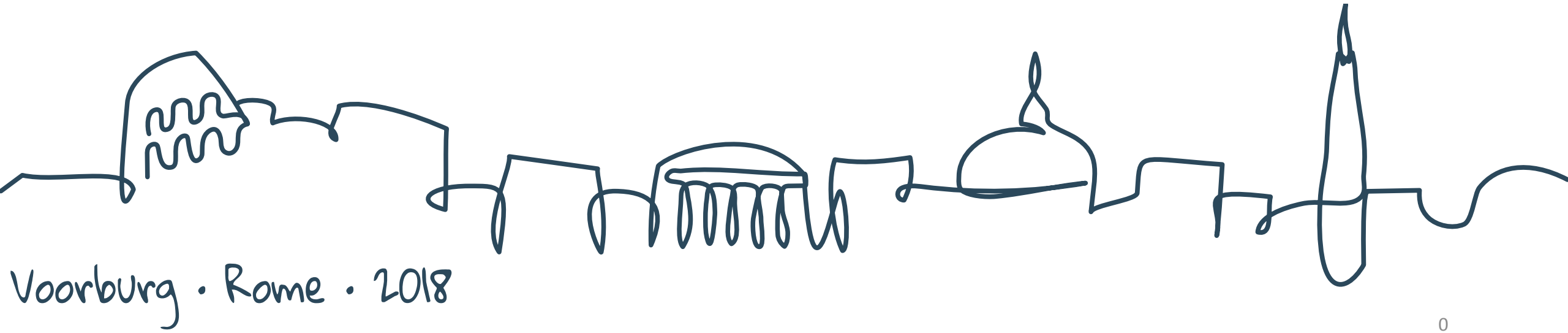

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1. Key Figures of Industry

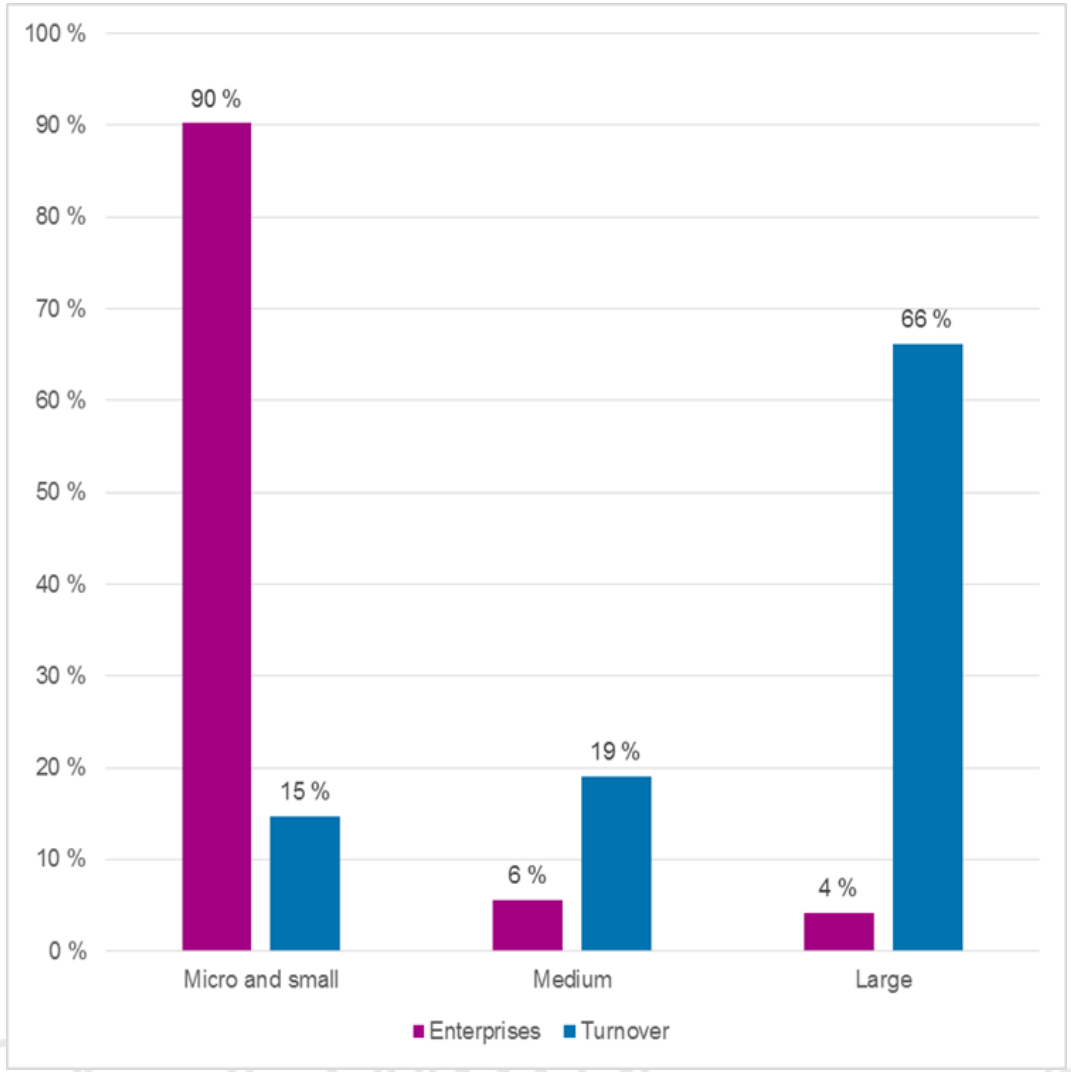
- Number of enterprises, employees and amount of turnover in ISIC 6311 in Finland, 2016

	Number of enterprises	Total number of employees	Turnover (€ million)
Micro and small enterprises	341	901	213
Medium enterprises	21	1138	275
Large enterprises	16	1768	955
TOTAL	**378**	**3 807**	**1 442**

Source: Statistics Finland, Structural Business and Financial Statement Statistics, 2016

1. Key Figures of Industry

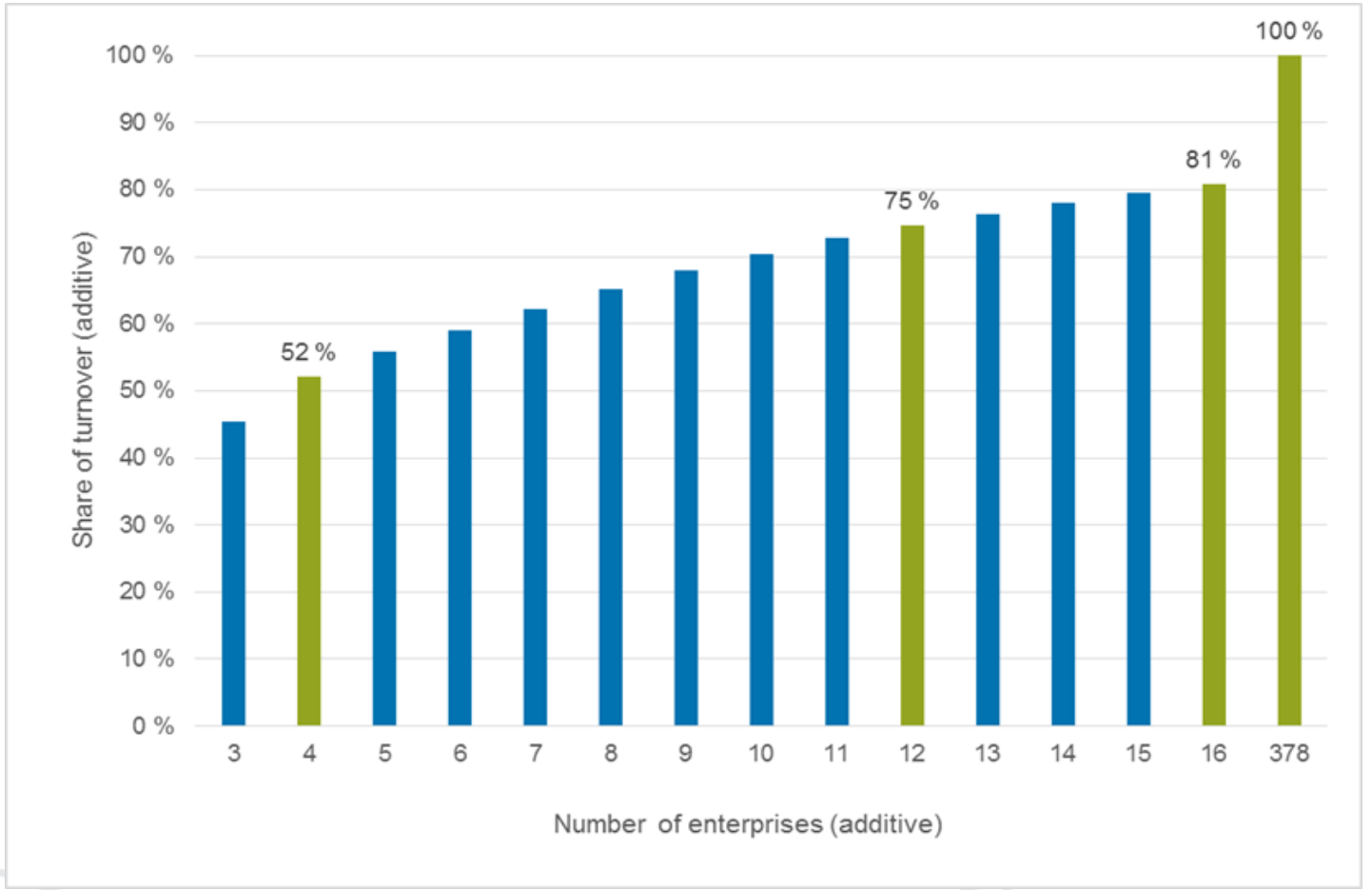
- Industry concentration in ISIC 6311 in Finland in 2016, size defined by number of employees



Source: Statistics Finland, Structural Business and Financial Statement Statistics, 2016

1. Key Figures of Industry

- Industry concentration in ISIC 6311 in Finland in 2016, enterprises sorted by size based on their turnover, additive (%)



Source: Statistics Finland, Structural Business and Financial Statement Statistics, 2016

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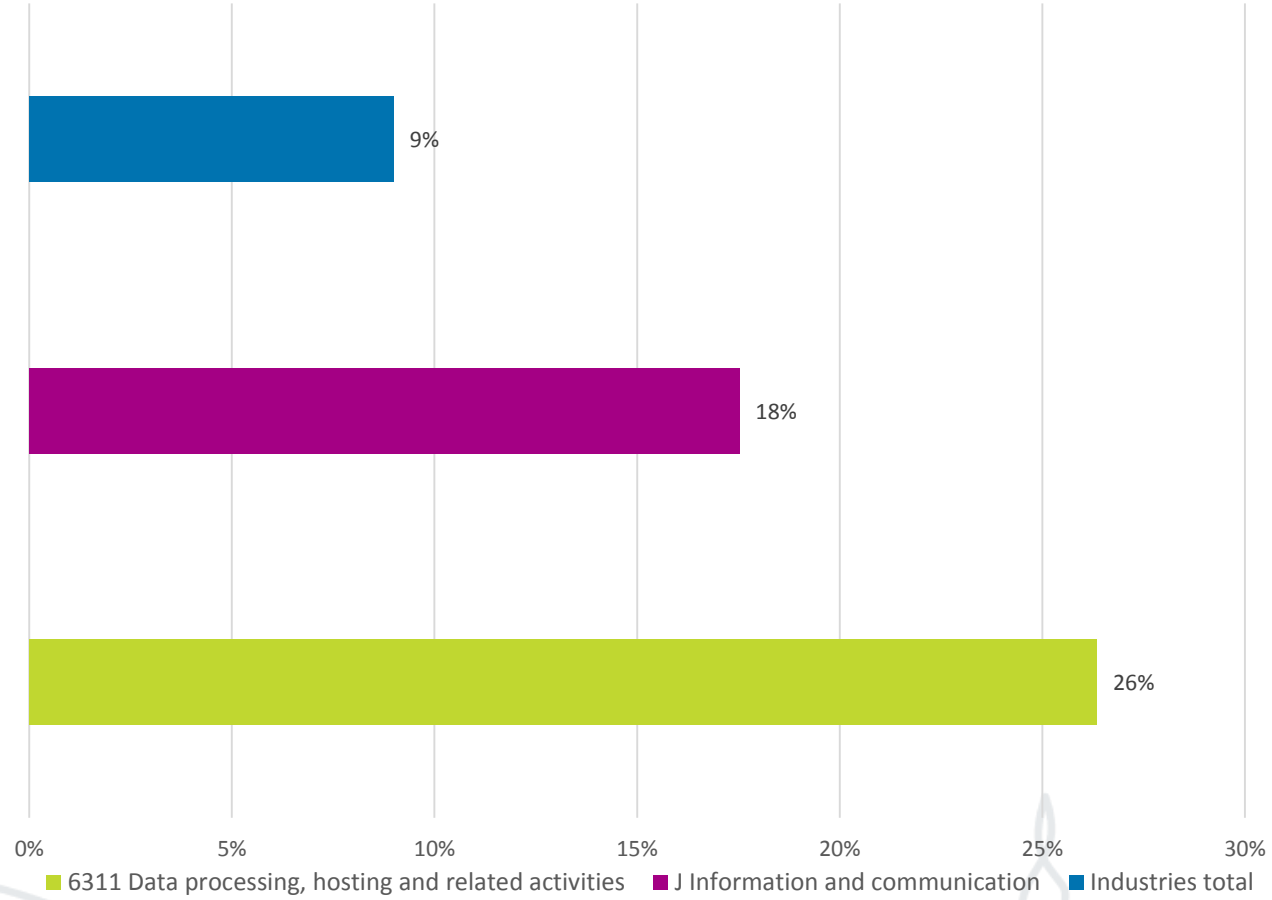
1. Key Figures of Industry

- Operating margin, per cent, industries total, ISIC section J and class 6311 in Finland in 2016



Source: Statistics Finland, Structural Business and Financial Statement Statistics, 2016

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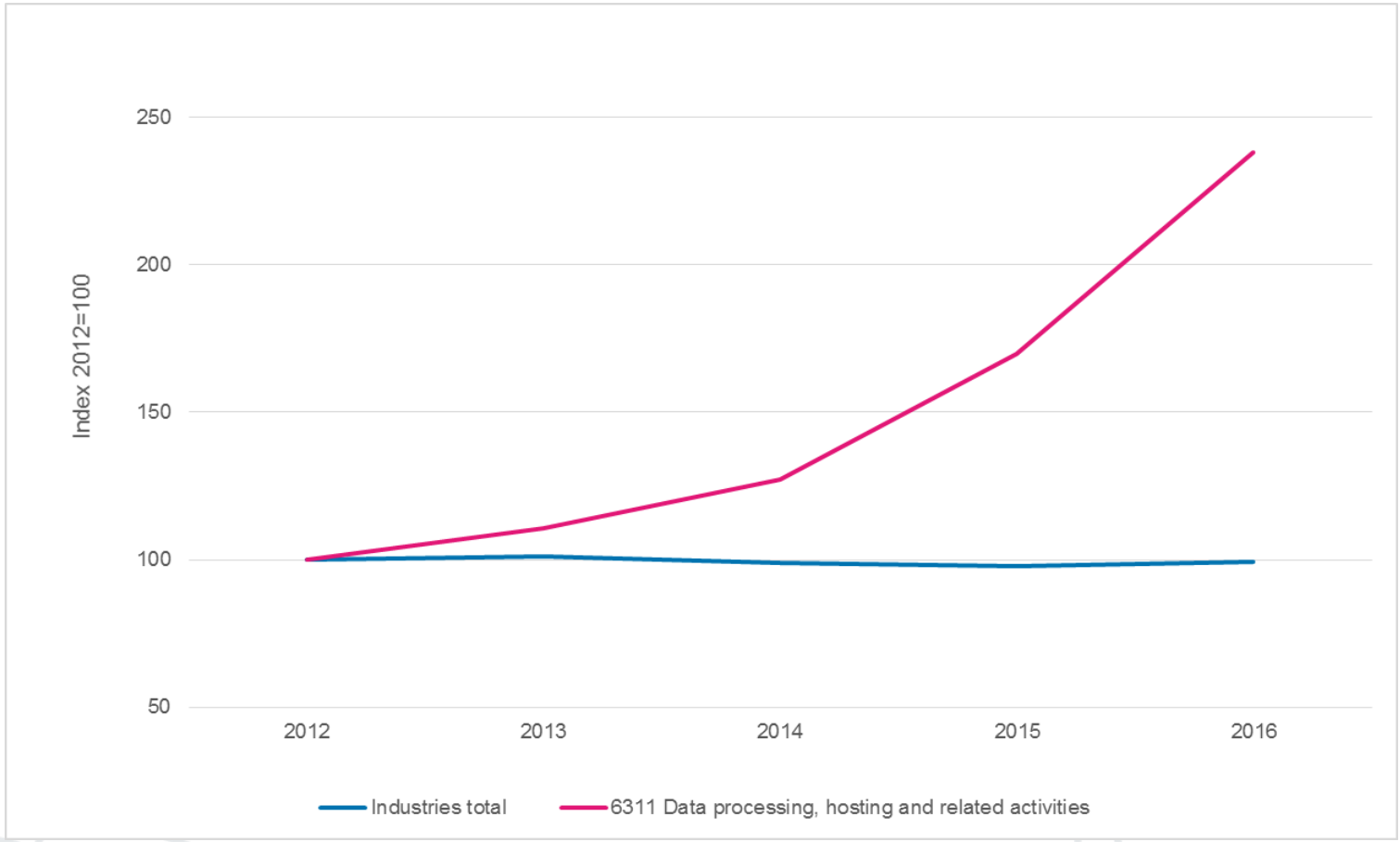
1. Key Figures of Industry

- Development of turnover, industries total and ISIC 6311 in Finland in 2012-2016 (2012=100)



Source: Statistics Finland, Structural Business and Financial Statement Statistics, 2016

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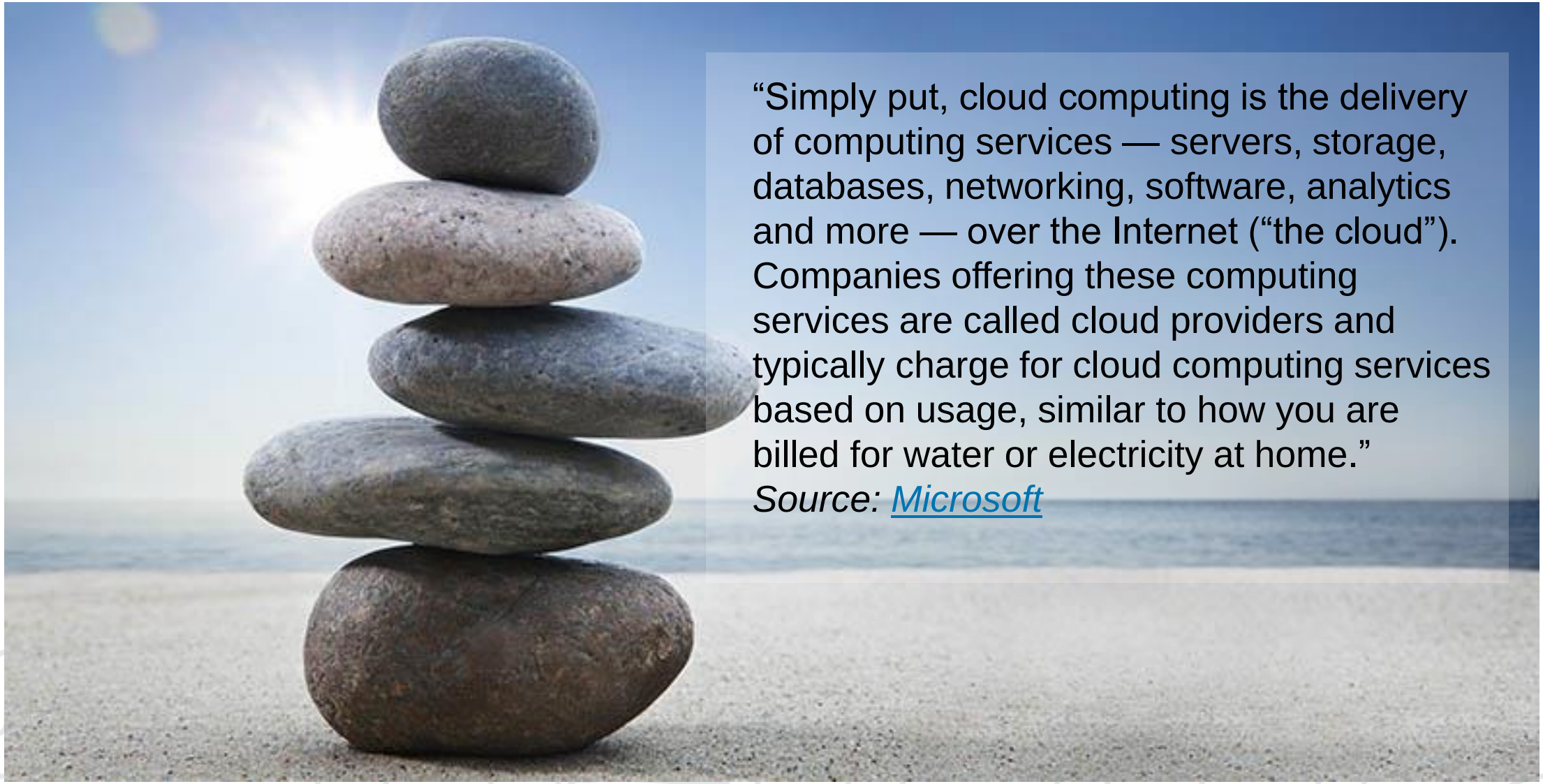
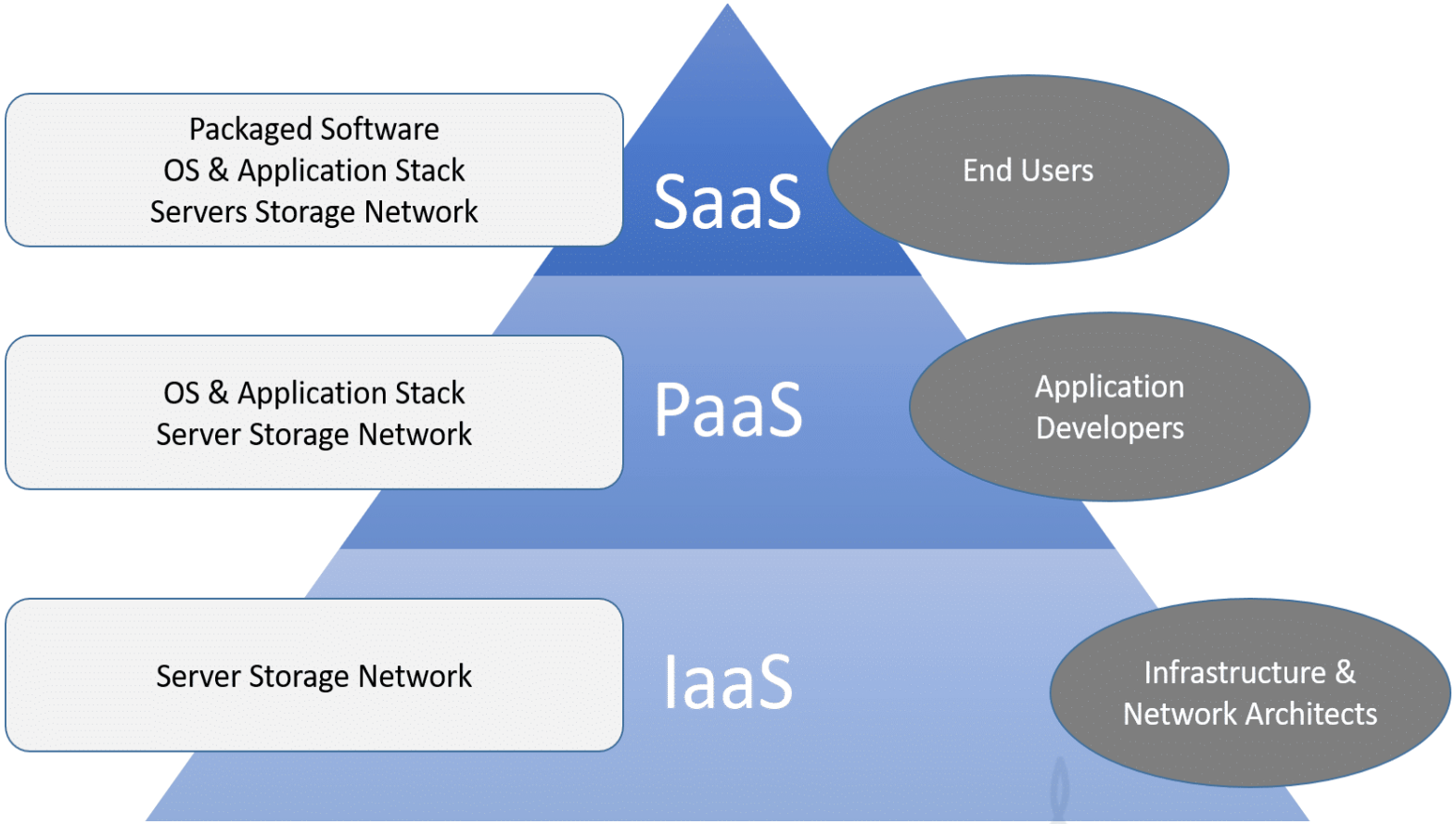
2. Definition of Service



"Simply put, cloud computing is the delivery of computing services — servers, storage, databases, networking, software, analytics and more — over the Internet ("the cloud"). Companies offering these computing services are called cloud providers and typically charge for cloud computing services based on usage, similar to how you are billed for water or electricity at home."
Source: Microsoft

2i. Cloud Service Models



Source: https://www.uniprint.net/en/7-types-cloud-computing-structures/, accessed July 17, 2018

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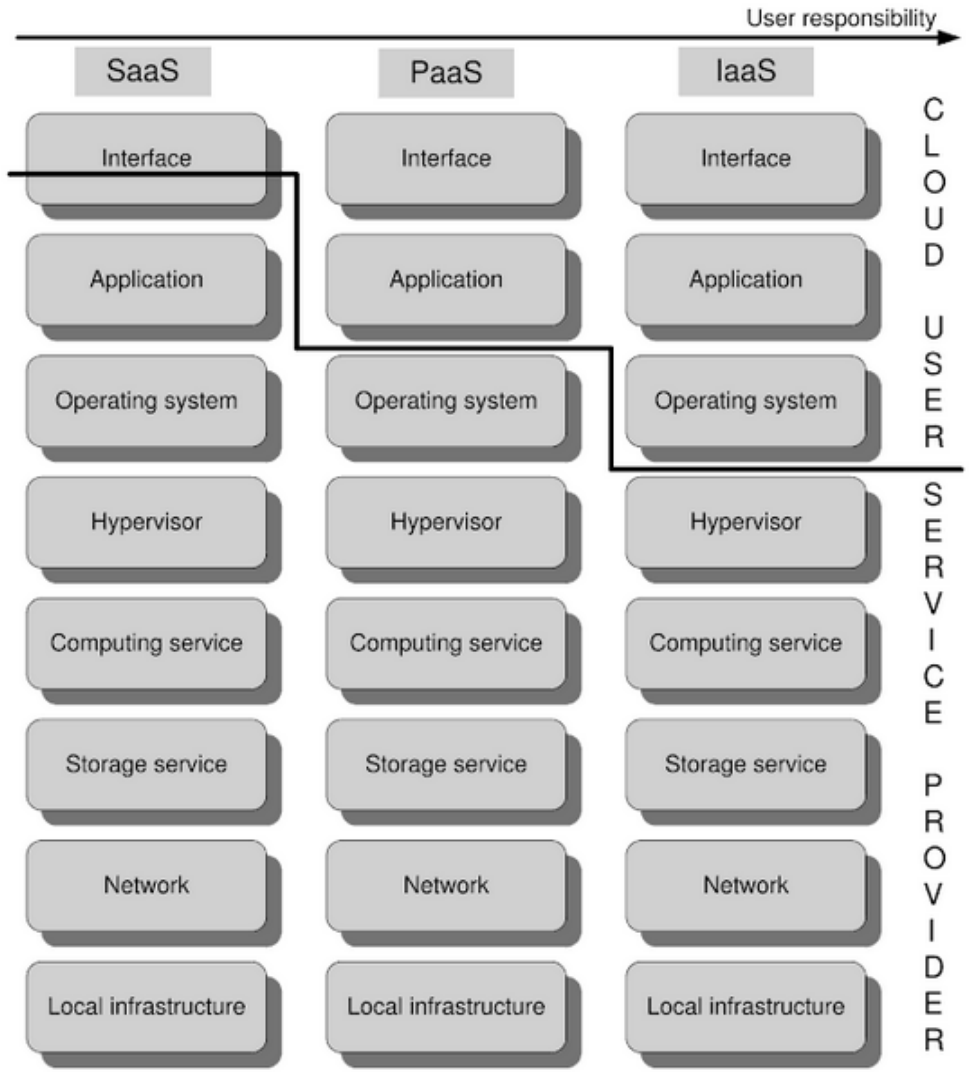
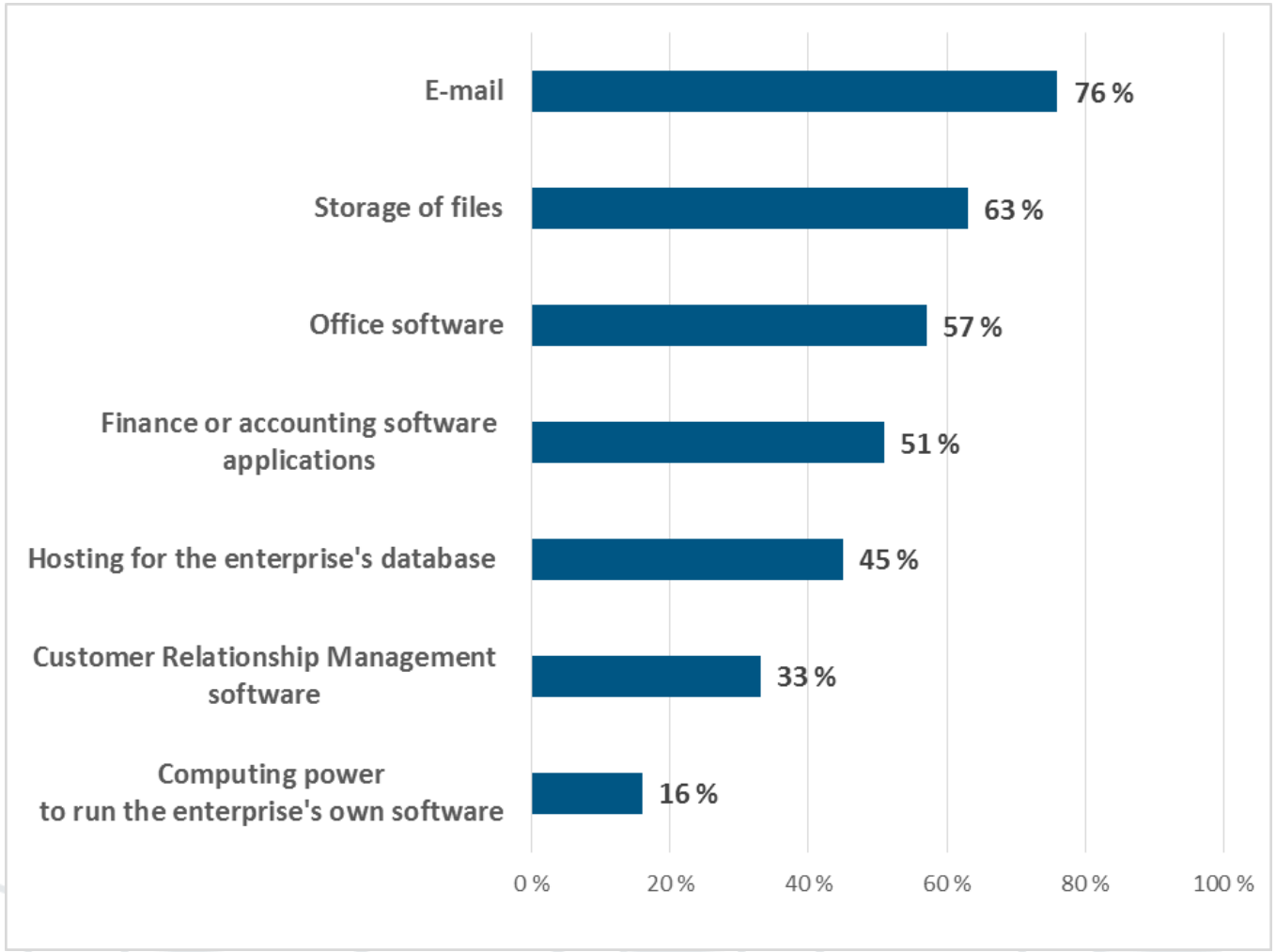
2ii. Responsibilities between a User and the Provider



Source: Marinescu, D. (2016)

2iii. Use of Cloud Services

- Commonly used cloud services in Finnish enterprises in 2017



Source: Statistics Finland, Use of Information Technology in Enterprises, 2017

3. Classification Issues

SaaS

- 58.20, 62.01 or 63.11?
- Who has the copyrights? Is the software customized or not?

PaaS

- 62.01, 62.02 or 63.11?
- Service provider manages the operating system

IaaS

- 63.11?

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4. Price Determining Characteristics of the Service

- Initial costs
- Lease period
- Age of resources
- Cost of maintenance
- Location
- Quality of Service, such as the availability of service, data privacy, the power of the processor, the amount of RAM, and the amount of disk space allocated and operating system

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5. Typical Pricing Methods

- Pay-as-you-go pricing
- Subscription
- Hybrid pricing
- List prices

Fixed pricing models

- Cost-based pricing
- Competition-based pricing
- Customer-based pricing

Dynamic pricing models

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6. Concluding Remarks

- There are many challenges to measure the price development of data processing, hosting and related activities such as cloud computing
- Essential to stay up to date and understand what kind of services emerges in the market

  → Sample and price collection should be updated whenever needed
- Classification issues may need to be discussed and solved

  → Coherency
- Alternative price collection methods might be preferable for this kind of technically advanced industry

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Thank You!

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