



Empowering ZW Cities through data 2

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What kind of data should municipalities be using?

1. Basic WM data already exists
2. Basic ZW data: waste composition analyses

I	Opis frakcije v mešanih komunalnih odpadkih (MKO)	m _{i1} [kg]	
1	Papir in karton ter lepenka		
1,1	Papir in karton ter lepenka, ki ni embalaža (brez papirnatih serviet, brisač in robčkov)	1	5
1,2	Papirna in kartonska embalaža ter embalaža iz lepenke	2	1
1,3	Sestavljena (kompozitna) embalaža, kjer je prevladujoč material papir	3	5
2	Zelena biomasa in naravni les (odpadki z vrtov in parkov)		
2,1	Veje	4	0
2,2	Ostala zelena biomasa (listje, trava, ipd.)	5	0
3	Biorazgradljivi kuhinjski odpadki in odpadki iz restavracij		
3,1	Organski kuhinjski odpadki iz gospodinjstva (plus papirnate serviete, brisače in robčki)	6	51
3,2	Odpadki z živilskih trgov (s tržnic)	7	0
4	Plastika		
4,1	Plastika (brez OEEO in baterij)	8	1
4,2	Plastična embalaža	9	15
4,3	Sestavljena (kompozitna) embalaža, kjer je prevladujoč material plastika	10	0
5	Steklo		
5,1	Steklo	11	5

What kind of data should municipalities be using?

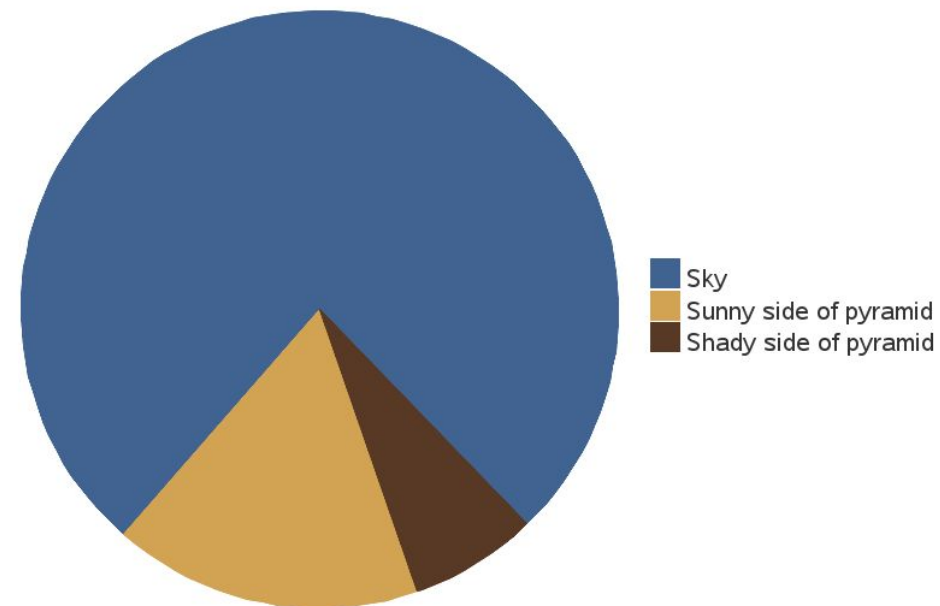
3. Whole chain - data gap
 - Upstream
 - Downstream

Other data gaps

- Sometimes spatial
- Community initiatives - business and CSO alike

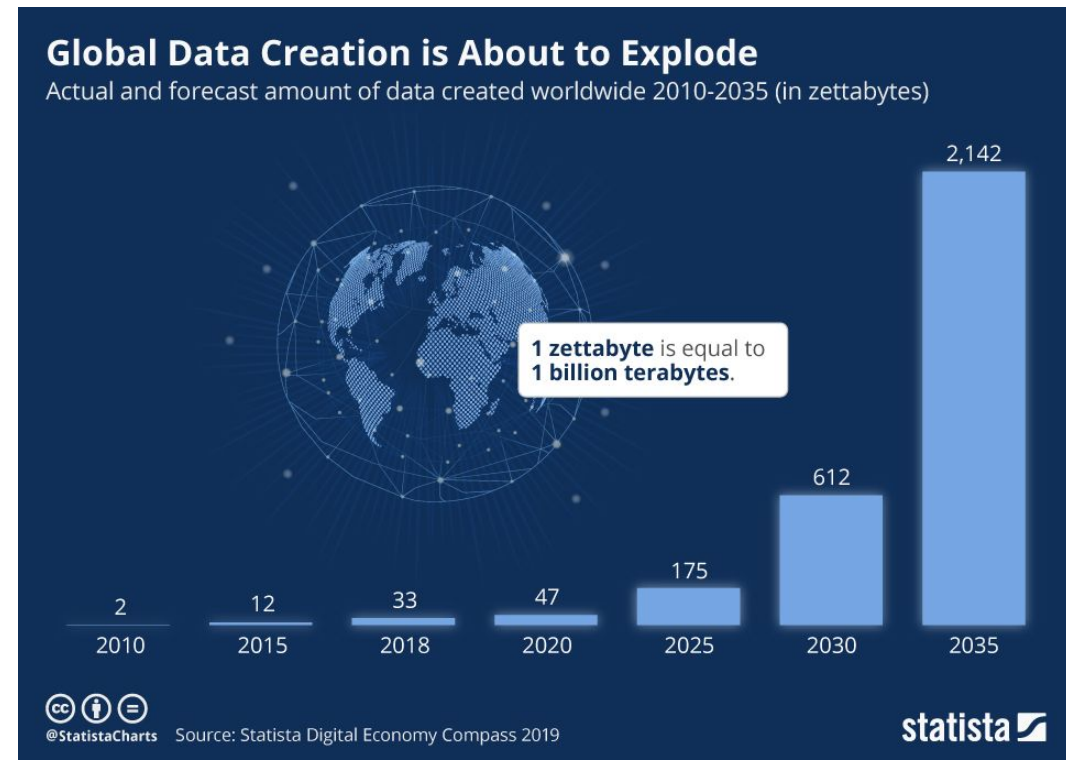
Why before what

- Data for the sake of data?
- KISS for robustness and usability
- Higher granularity, easier action



Data waste is not digital

- 90 % of data is not accessed after 3 months
- 80 % is write-only
- Companies typically analyze just ~10 % of collected data
- 90 % of sensor data is never used



Improving data accessibility

- Open data
 - Open formats & standards
 - License (ODC, CC)

Prerelease QA

- “50 % – 80 % of data scientists’ time is spent **preparing data.**”
-- New York Times
- “76 % of data scientists view data preparation as the **least enjoyable** part of their work.” -- What’s The Big Data?



FRictionLESS
DATA

Improving data accessibility

- Machine readability
- Stability
- Timeliness
- Metadata
- (API endpoints)

= Making it easy to extract value

Transparency

»Without data, you're just another person with an opinion.

«

— W. Edwards Deming





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Thanks!

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