

### The Power of Data in Modern Product & Service Management

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February 7, 2024, Brno



### Short Bio & Disclaimer

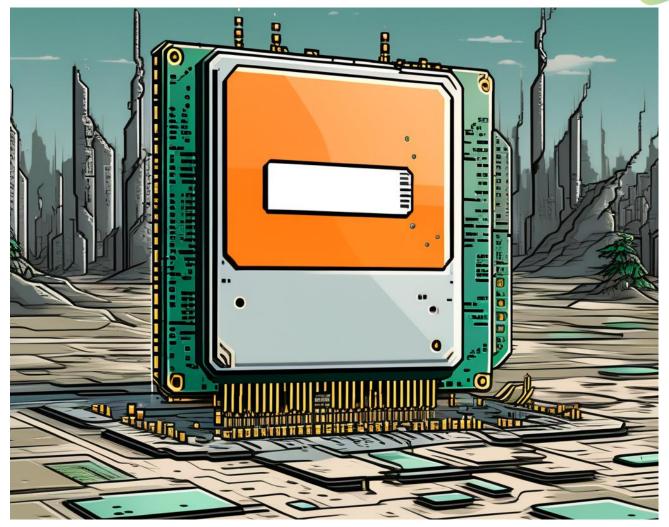


- 2005, Master degree in theoretical informatics, FI MUNI
- 2012, Doctoral degree in informatics, FI MUNI
- 2016, Master of Business Administration, University of Applied Management
- In IT industry for 25+ years
- Part of the team that established SSME curriculum at FI MUNI (led by Zdenko Stanicek)
- Start-up proven track as CTO at Flowmon Networks & Kemp Technologies
- Current responsibilities as Vice President of Technology in Progress:
  - Product management for Flowmon product family
  - Experimental development & horizon 2-3 roadmap
  - Member of the M&A team, product & engineering due diligence expert
- Disclaimer: My experience relevant for B2B, enterprise IT, product company. All the numbers and figures in the presentation are pure examples and have nothing to do with Progress products.



### Change of the software distribution paradigm

- ROM (read only memory)
- Floppy discs and CDs
- Electronic distribution
- Software as a Service
- Add true services on top





# Evolution of the software licensing paradigm

- Perpetual licenses
- Subscription model
- Hosted software (fake SaaS)
- True pay as you go & grow





### Change of the software development paradigm

- Waterfall
- Agile
- Fit for purpose



## Enablers of agile transformation

- Shortening of the delivery cycle
- Agile transformation
- Role of a product manager
- Product vision

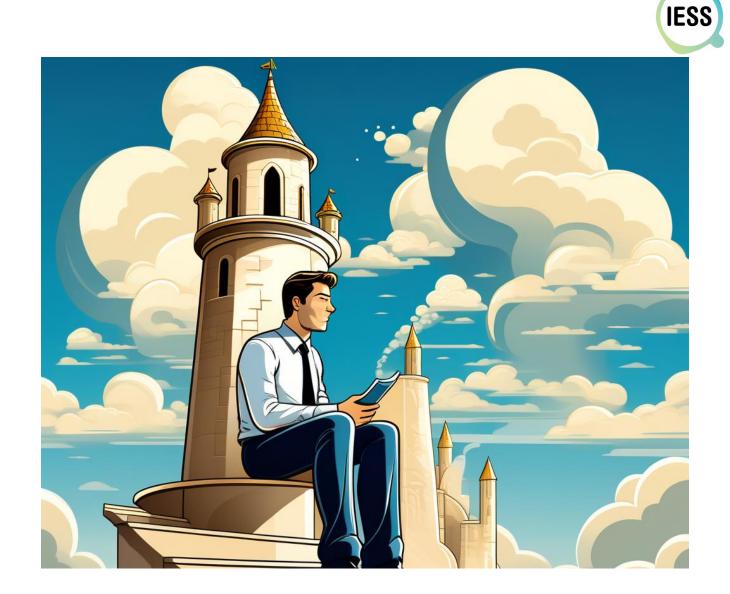


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2.4

### Data driven approach

- Lack of full scope specification
- Decision driven by data
- MVP (Minimal Viable Product)
- Continuous experimentation and validation
- Avoid "product managers dreaming in lvory towers"!
- Understand your product or service usage patterns



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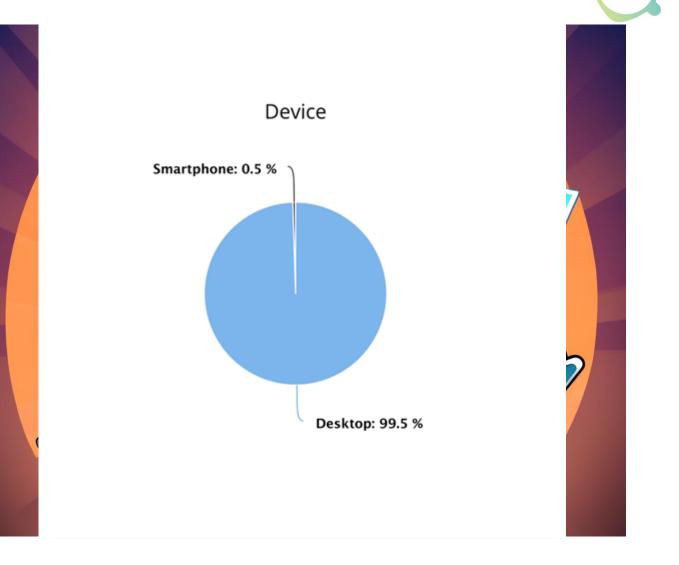
### Qualitative vs. quantitative approach

- Can we remove a feature?
- Let's ask the sales team
- Let's ask the customer
- Asking the right question the right way
- Measured vs. observed



### Example: your software does not fit on my phone!

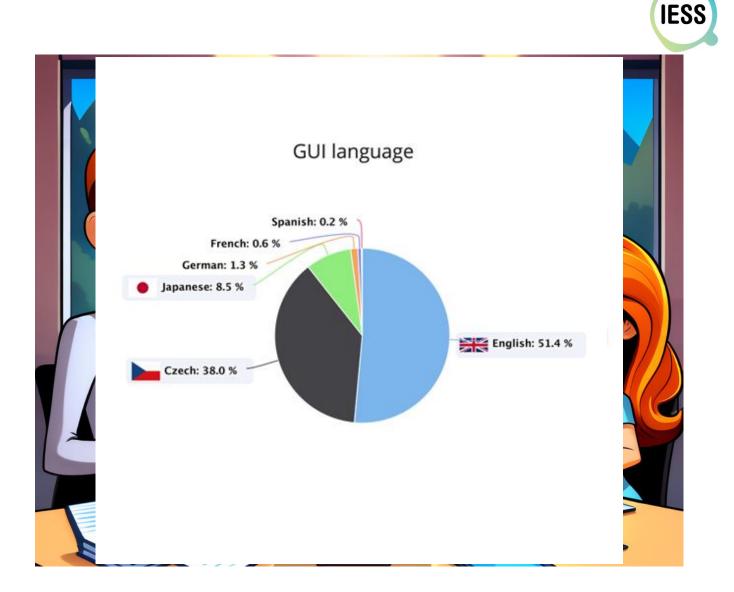
- How may users is using the software on a smartphone?
- Track device types and collect that information in your call home data
- Support your arguments with the data



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# Example: you need to localize your user interface!

- How may users are using the existing software localizations and how much does it cost to maintain those?
- What is the required one time investment as well as cost of continuous maintenance of a new localization?
- Bring the hard data on the table for a business decision



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## Pandora's box of product metrics

- Individual data points require contextualization and interpretation
- Product and feature adoption
- Time to value
- Feature funnels and completion rate
- Make sense and use of the data
- In product guidance and feedback loop

Ch	loose from number of prese	ts the one that fits your ne	eds best.
	Q Type some keywords		
DNS		Mail	
	ned for monitoring DNS protocol in the provides various insights into the DNS	pring various mail protocols provides insight into the	
		×	
	STEP 2 OF 4		Select
	Presets		
	Presets are a great way to simplify F	-	
SMTP Application protocols	specific use case such as Office 36 analysis, and many others. Applying	-	
This preset is des	configuration on the Flowmon side au dashboard tab which is populated wit		g TLS protocol in the
network.The prese	use case.	in data, and a report for a specific	insights into the TLS
			Select
_		Next	

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# IESS 2.4

# Time for a qualitative feedback

- General product opinions
- Feature specific feedback
- Frequent use cases
- Job title
- Usually combined with quantitative "satisfaction" rate

	_	"Historical Trends" feature explored!						
	You've used our new feature, which offers an easy ch for past-vs-current network traffic volume comparis							
2:00	4:00	"Historical trends" are available on each <b>Profile page</b> and o the <b>Analysis page</b> by enabling the <b>3 weeks average</b> checkb under the traffic chart. How useful are "Historical Trends" to you?						
								u?
		1	1	2	3	4	5	
	STATISTICS	Use	less				Very use	ful
E		How clear and easy are they to use?						
		1	I	2	3	4	5	
		Diff	icult				Great	
		"Historical Trends" aims to improve your efficiency, and we love to hear your feedback to make it even better. 🚀						
		Type your feedback here						

# What software development metrics to consider?

- Thousands of metrics available
- It's hard to understand or improve what you do not measure
- Shape of a release as the ultimate mirror and a chronicle of the development team

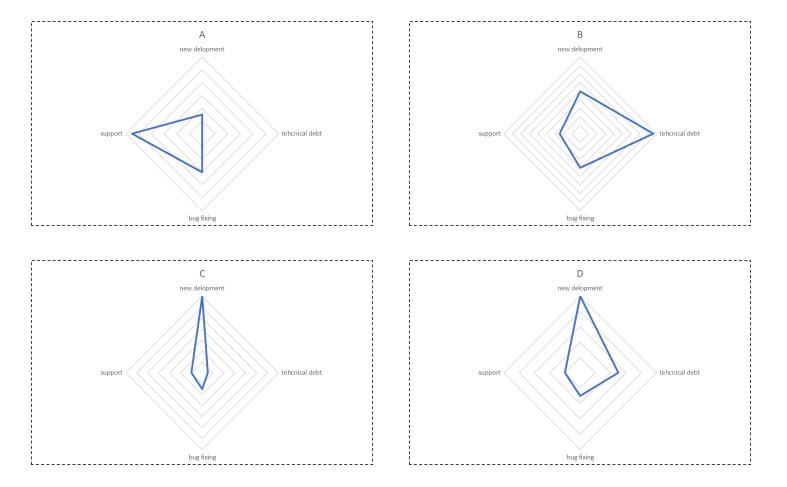


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### Shape of a release

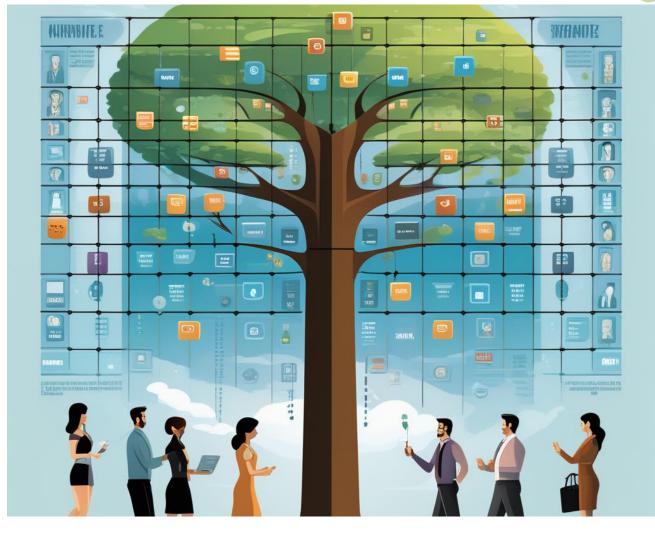
- What is your shape of release?
- Which one is a wrong shape of release?
- A: Last release was a disaster, we are now jumping from one support case to another and fixing bugs extensively.
- **B**: We have accumulated technical debt that we are now dealing with.
- **C**: We are focusing on getting the MVP out as a public beta.
- D: Business as usual, mixture of new development and technical debt removal with a bit of support and bug fixing here and there.





### Data driven culture

- Through data you keep close touch with reality
- Always consider
  - External data
  - Internal data
  - Difference between quantitative and qualitative
  - People



#### Thank you!

#### **Pavel Minarik**

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Special thanks to Prashanth Nanjundappa my colleague and VP, Product for Chef product line in Progress for his thorough review and feedback.

All cartoon images were generate using Al. That was the most time consuming part of preparing the session. ~15 usable pictures took 100+ attempts. This last one was generated using prompt "Cartoon style image. Thank you." and I did not have power to click "Generate" again.



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