

A computing system is successful when...

- It fulfills all requirements (+1)
- Compliant with regulations like GDPR
- It has to be useful
- Stakeholders are satisfied

- It is not unnecessarily complex
- It can be updated to prevent errors.
- Output is as expected.

- Being user-friendly and self-explanatory interface
- Can handle complicated task in a easy and understandable way
- It is easy enough for anyone to use.
- Could be understood, reasonable, and be well explained.

- Efficient and affordable.
- Cost effectiveness

- Perform all its tasks with high robustness

- It doesn't has any logically paradox on design.

- It has to be meaningful.

- It can be applied for future use.
- Could be compatible with different data sources.

CLUSTER 1

- Being user-friendly and self-explanatory interface
- Can handle complicated task in a easy and understandable way
- It is easy enough for anyone to use.
- Could be understood, reasonable, and be well explained.

How to measure

- User surveys
- Interview several volunteers(which used the computing system)
- Also consider first time user experience
- Usability testing
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- Take user feedback to improve usability
- Measure time of specific tasks made by the users - try to identify which tasks might need refinement
- Count the number of user-computer (click, keyboard search, ...) needed to achieve one task

CLUSTER 2

- It is not unnecessarily complex
- It can be updated to prevent errors.
- Output is as expected.

How to measure

- Test cases for code
- Full software development cycle
- Use less fixed settings as we can
- For users: UX testing for
- Could be revised easily
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CLUSTER 3

- It fulfills all requirements (+1)
- Compliant with regulations like GDPR
- It has to be useful
- Stakeholders are satisfied

How to measure

- Requirements Engineering (Requirement Elicitation, Analysis and Validation)
- KPIs

- Stakeholder Satisfaction can be measured with surveys, interviews or depending on their function directly
- Don't break
- Testing
- Ask product manager
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CLUSTER 4

- Efficient and affordable.
- Cost effectiveness

How to measure

- Count time spent
- Check power/memory required (related to cost)
- Sequential vs parallelizable
- The space the system requires
- Amount of recursion happening
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CLUSTER 5

- It can be applied for future use.
- Could be compatible with different data sources.

How to measure

- Case Studies
- Examine whether it leaves enough space for updating
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CLUSTER 6

- Perform all its tasks with high robustness

How to measure

- Load testing
- Systematic testing
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CLUSTER 7

- It doesn't has any logically paradox on design.

How to measure

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CLUSTER 8

- It has to be meaningful.

How to measure

- Public survey
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