# Process Analysis

Strategisches Prozessmanagement







## Agenda

Business Process Reengineering

Heuristics for Business Process Analysis

Analysing Business Process Models

Quiz

Outlook

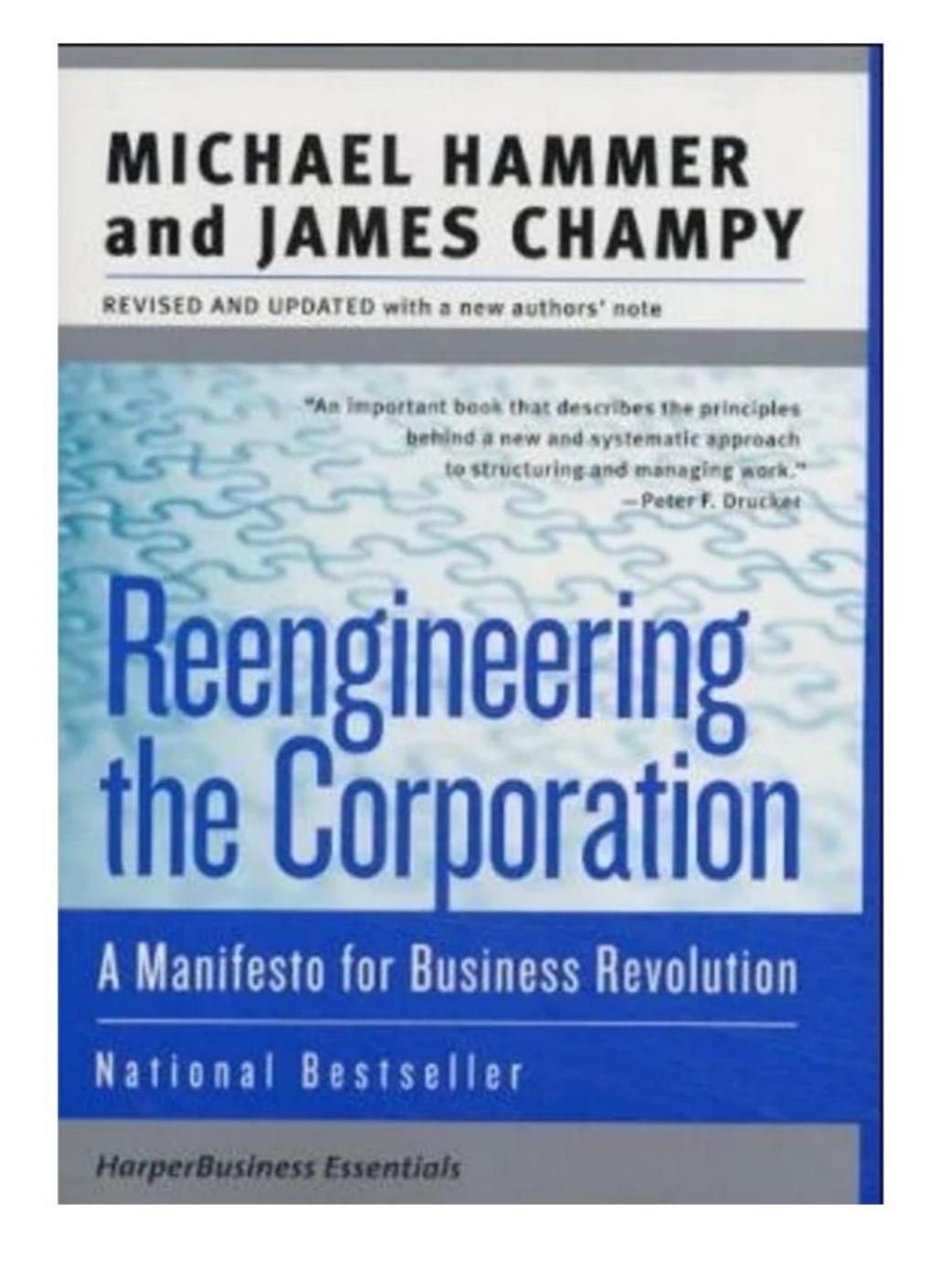








## Business Process Reengineering











# Example: IBM Credit

Receive new financing request	Check credit- worthiness	Provide loan covenant	Calculate interest rate	Create quote
<ul> <li>Sales representative sells large quantity of hard- and software (mainframe)</li> <li>Sales rep makes call with request to financing</li> <li>Person accepting the call makes notes on a sheet of paper</li> <li>Bring paper to credit department</li> </ul>	<ul> <li>Specialist enters data into computer</li> <li>Calculate borrowers credit-worthiness</li> <li>Specialist writes result on paper</li> <li>Bring paper to business practices department</li> </ul>	<ul> <li>Enter data into computer system</li> <li>Modify standard covenant</li> <li>Print covenant</li> <li>Add to standard request</li> <li>Bring paper to pricer</li> </ul>	<ul> <li>Key data into spreadsheet application</li> <li>Determine interest rate</li> <li>Write interest rate on paper</li> <li>Bring all papers to clerical group</li> </ul>	<ul> <li>Turn information into quote letter</li> <li>Send quote letter to sales rep via FedEx</li> </ul>









# What's wrong with the process?

unconnected systems

paperwork

zu viel papier- zu wenig digital

Manueller Aufwand ist hoch

Receive new financing request läuft noch über Papier ab. Das könnte man digitalisieren

Änderungen können nur schwer berücksichtigt werden

Zu viele beteiligte Personen/Abteilungen

Viel Fehlerpotential durch ständiges Ausdrucken und Eintippen von versch. Personen

Prozess ist sehr "getrennt" was Abteilungen/Mitarbeiter betrifft

kein Papier - Digitalisierung













### IBM Credit: Issues



#### IBM Credit: Issues with existing process

- Average processing time: 6 days (losing customers)
- Maximum processing time: 14 days
- Distributed responsibility ("Where is my deal?")
- Error prone (multiple data entry)
- Media clash (media doscontinuity)

#### First fix: adding control desk

- Recording completion of each step
- Adds additional processing time

Time essentially working on request: 90 minutes!











## How can we fix the process?

use a unified system (avoid media clash)

Change Management

Der kunde kann bsp die Daten eingeben

Transportweg verbessern (an Moderene anpassen, bspw. E-Mail, Brieftauben, etc.) Eine Person erledigt nicht nur einen Teil, sondern den ganzen Prozess

Dateneinträge vereinfachen / reduzieren (Datenreduktion)

Kommunikation und Arbeit auf einem einheitlichen System durchführen, sodass Anfragen, Probleme, Fortschritte schneller bearbeitet werden können





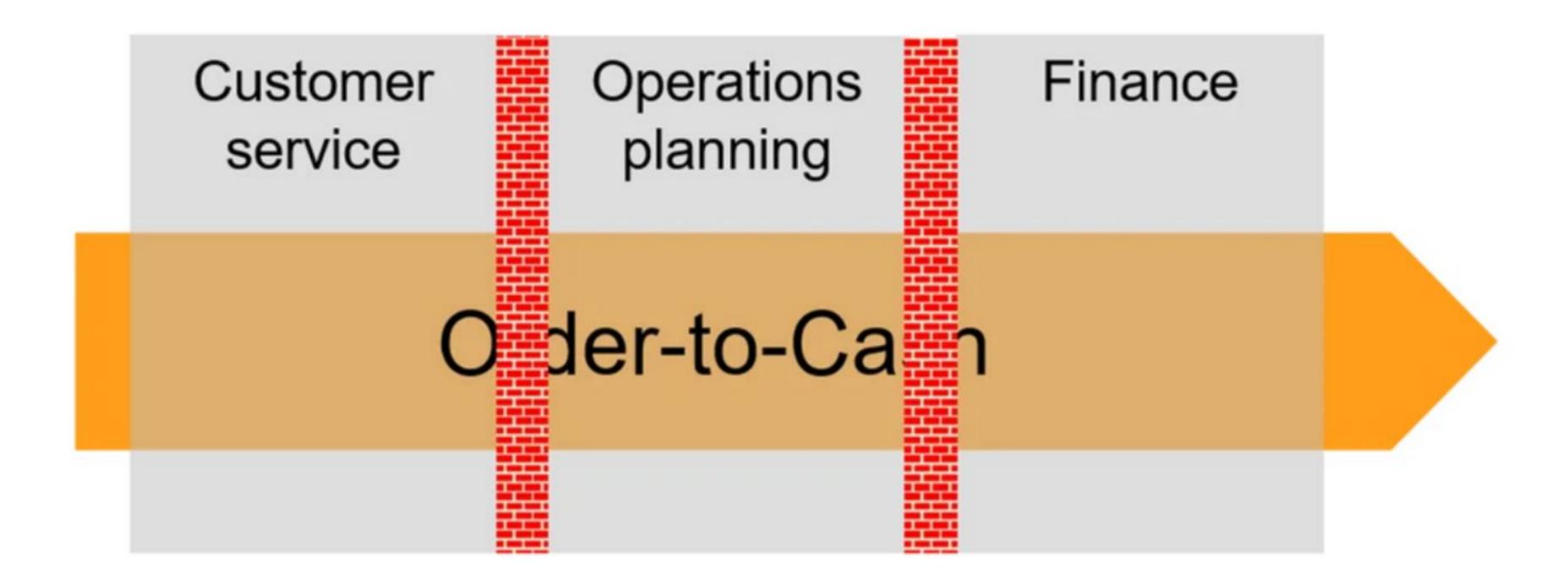






### Focus on E2E Process

E2E processes foster a cross-functional view on business processes.



- Functional organisations tend to focus on their individual process
- Frictions between organisational units hamper process quality
- There is big optimisation potential by optimising the whole chain







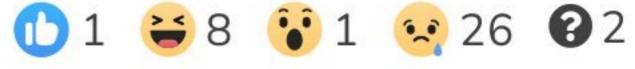






Business Process Reengineering (BPR) aims at a holistic redesign of a business process. Its main characteristics are:

- Customer focus
- End-to-end view
- Revolutionary (big bang)
- May imply organizational change









### IBM Credit: Solution

Generalist processing single request

- Single responsibility (by case)
- Single point of contact (SPOC)
- Initial disbelief: each credit request is unique
- Supported by specialists

Integrated computer system

- Data entry as early as possible
- Less data entry
- No media clashes
- Standard calculations by system

New processing time 4h











# Can we fix any process with BPR?

Nein, es gibt z.b. Prozesse welche vorgegeben sind (z.b. gesetzlich)













### **BPR: Drawbacks**

#### Concept misuse

- BPR just a label for change
- Not applied to processes
- Operational improvement not always the focus
- Downsizing (reduction of workforce)

#### Consequence

Resentment by middle management and operational staff

#### Over-radicalism

- "re-design has to be radical"
- "Don't automate, obliterate!" (i.e. destroy utterly, wipe out)

#### However

- Radical changes only realistic in some cases
- Many cases require iterative approch
- ➤ No silver bullet!

#### Support immaturity

- Required tools or resources not available
- Existing resources not adequate
- Change effort unreasonable
- Example: Logic hard-coded in IT systems

#### Consequence

Frustration due to lacking infrastructure

Source: Duma/La Rosa/Mendling/Reijers: "Fundamentals of Business Process Management." Springer 2013, p. 12





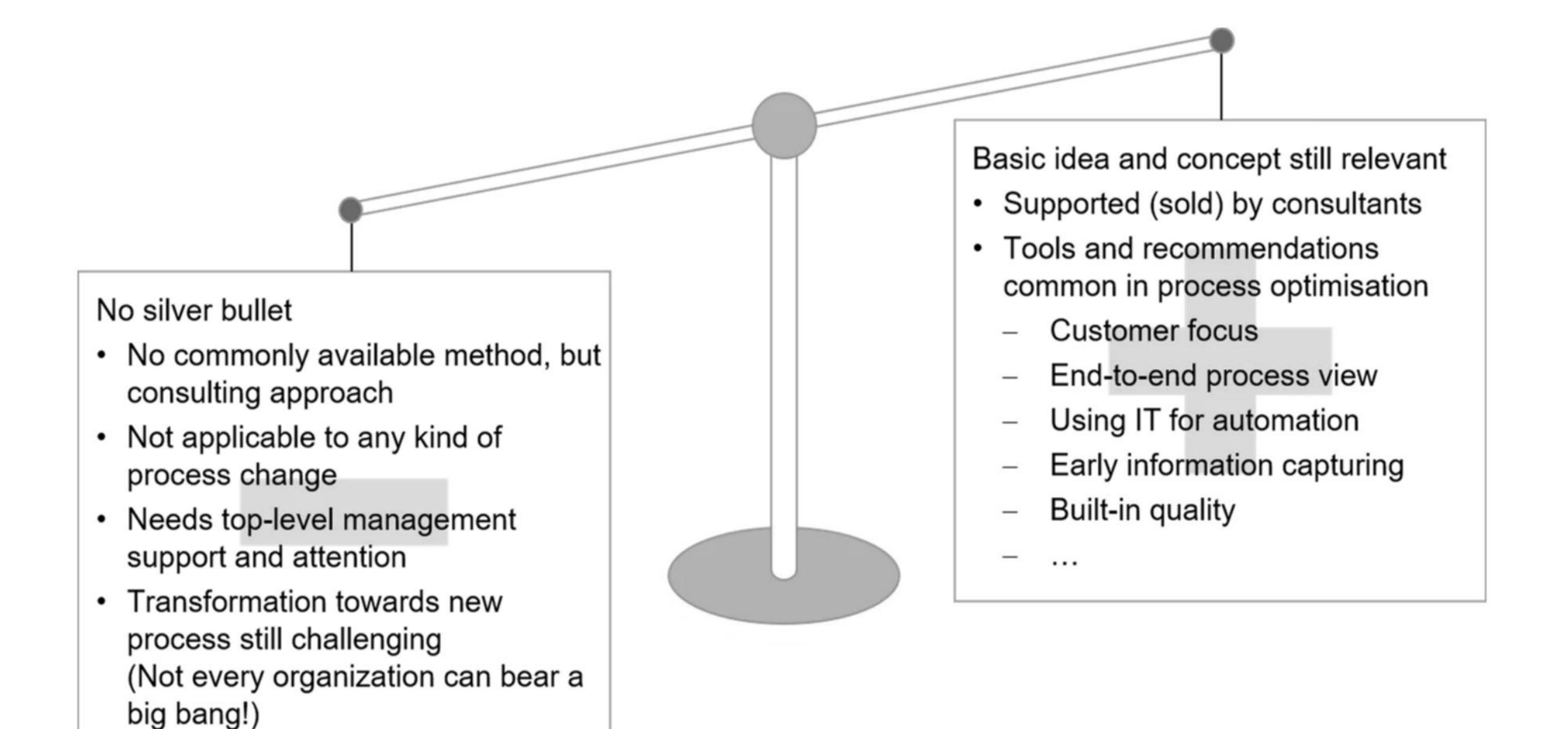








#### Pluses and Deltas

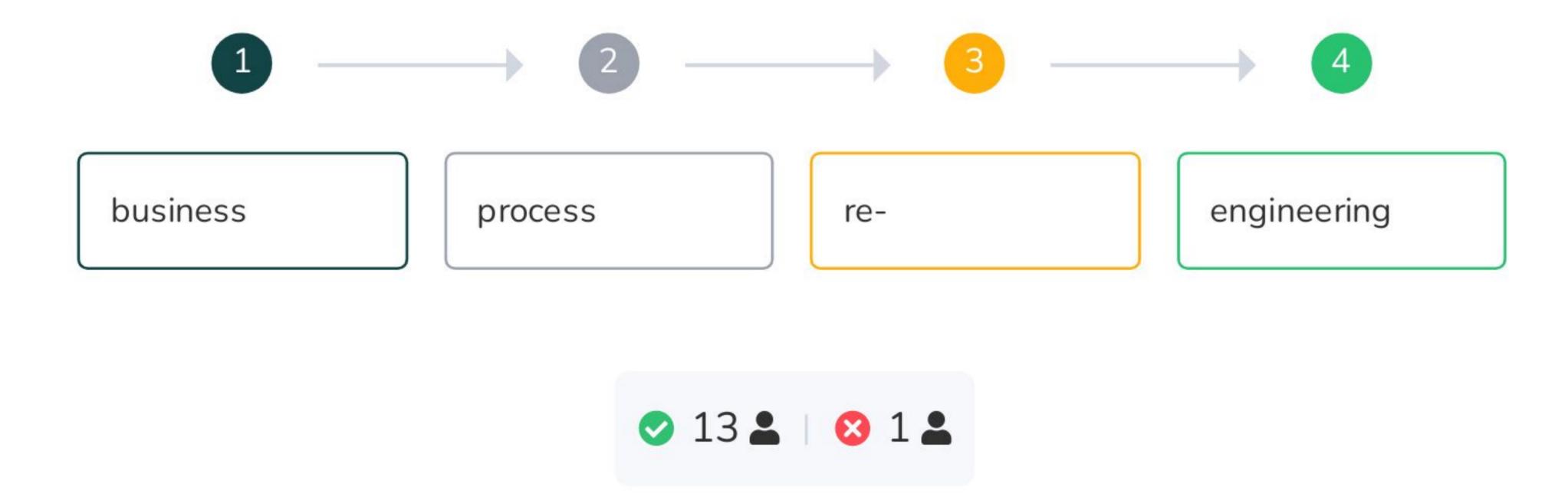








### Put the word into the correct order.





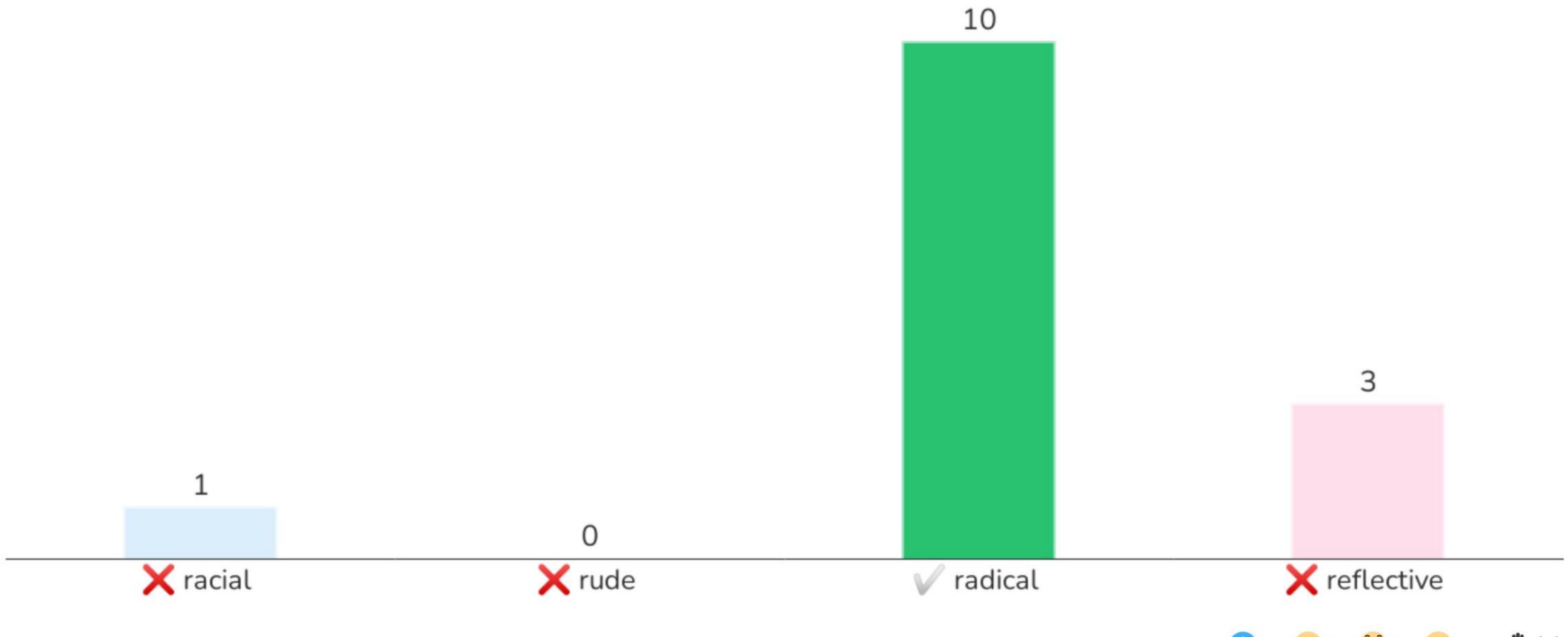
## Leaderboard

14 players





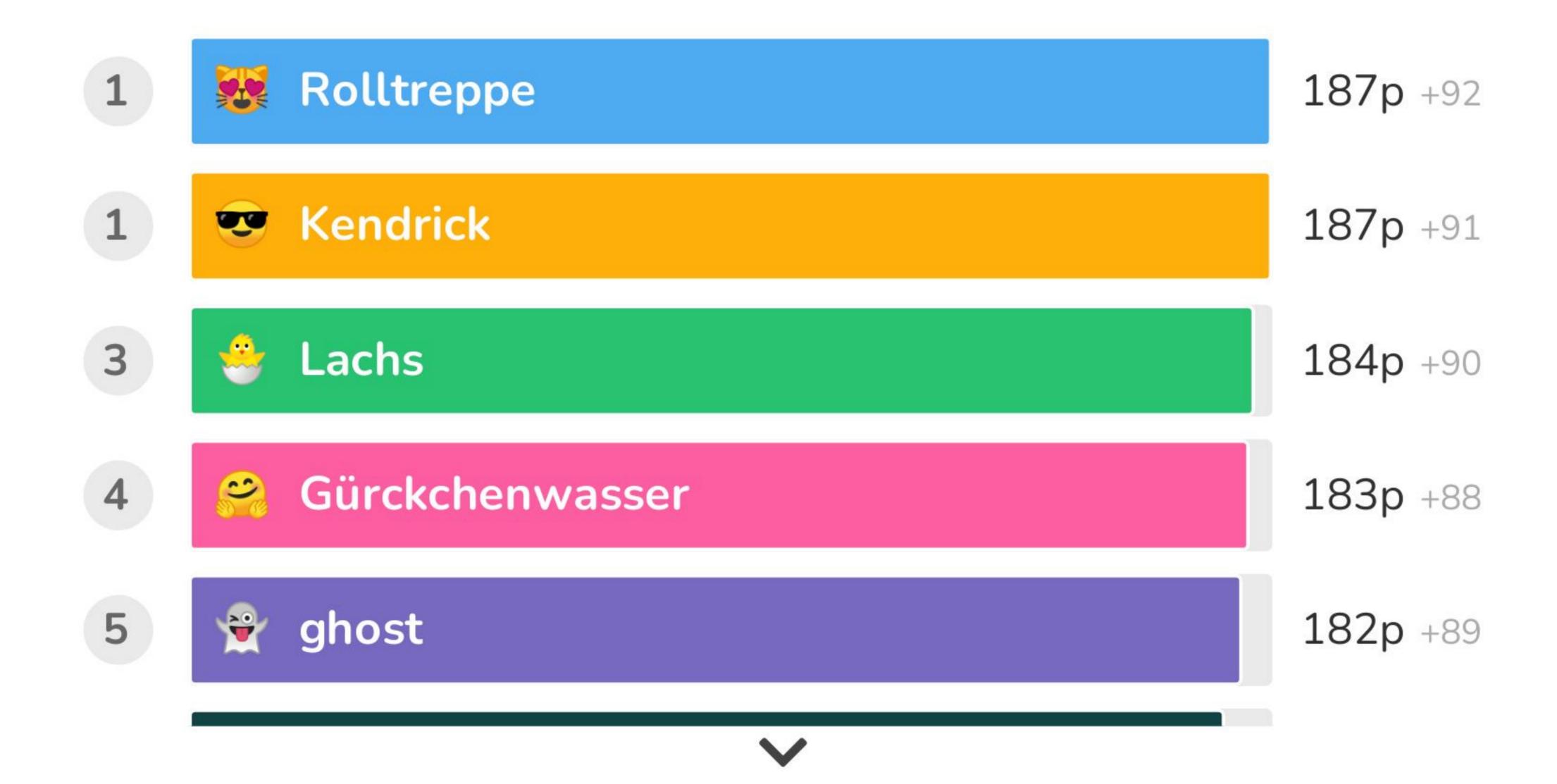
# The BPR approach is known as being ...



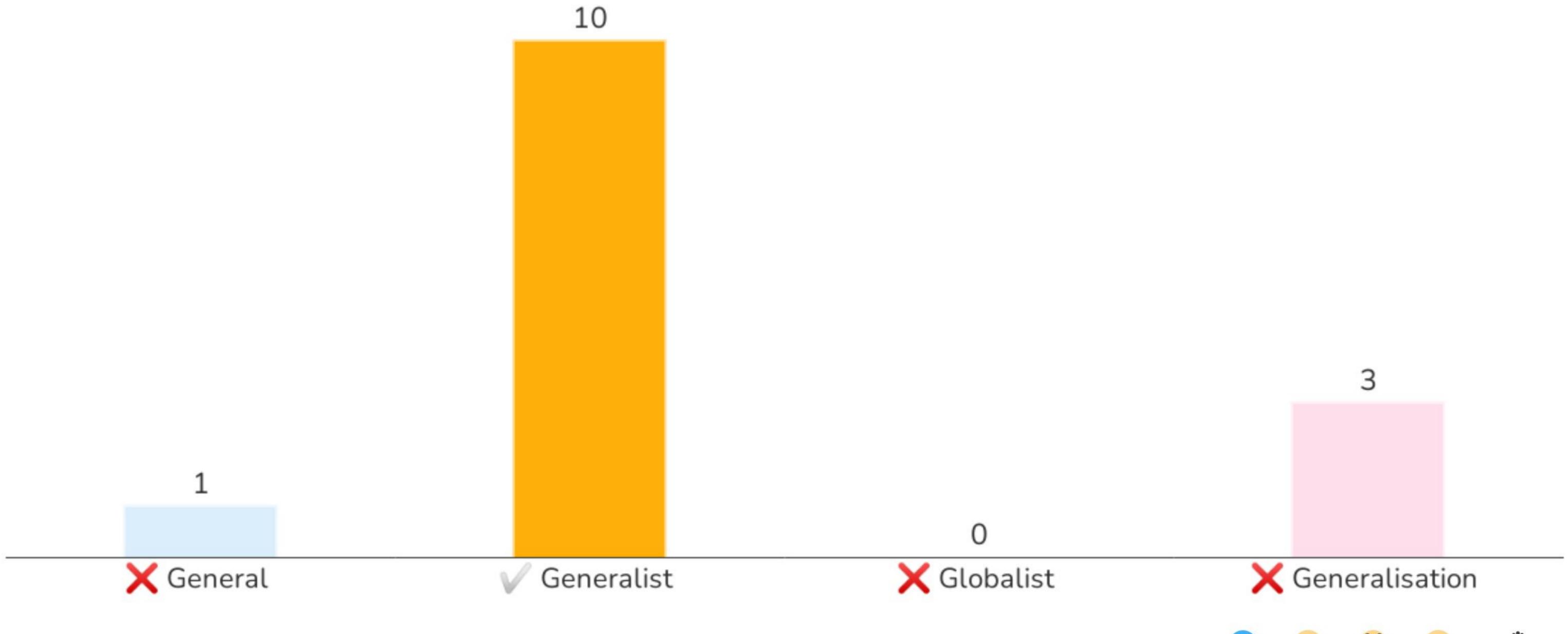


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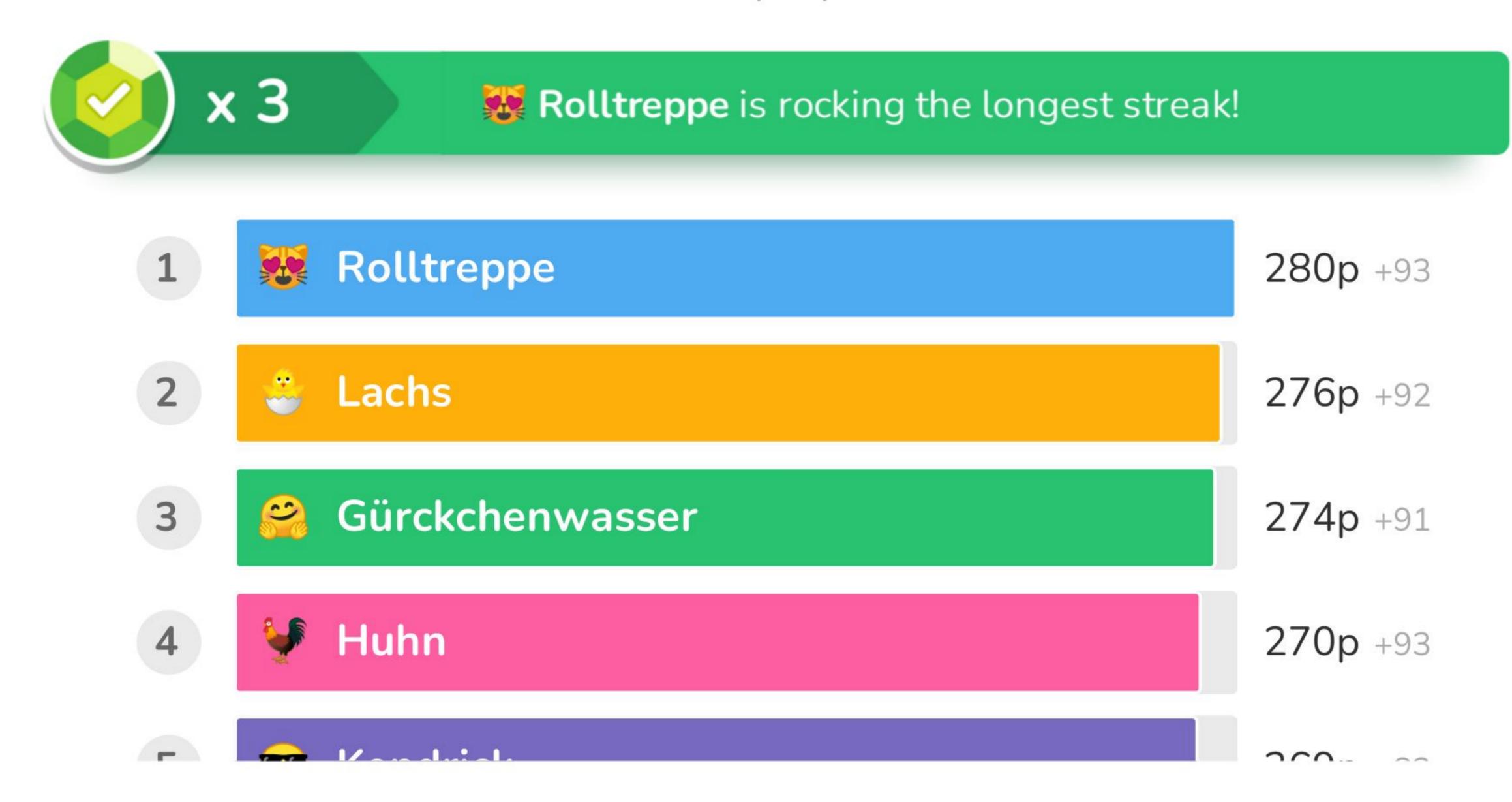
## Part of the solution for the IBM Credit case is a ...





## Leaderboard

14 players



# Heuristics for Process Analysis







# Heuristics Provided by Hammer/Champy



- Organize around outcomes, not tasks.
- Have those who use the output of the process perform the process.
- Subsume information-processing work into the real work that produces the information.
- Treat geographically dispersed resources as though they were centralized.
- Link parallel activities instead of integrating their results.
- Put the decision point where the work is performed, and build control into the process.
- Capture information once and at the source.











# What's wrong with this process?



## Heuristics (1)

#### Demand-driven

- Produce only what is really required
- Quality is determined by customer
- Customer triggers demand
- Customer decides on quantity

#### Collaboration

- Simplify interfaces with customer
- Move controls to customer
- Integrate business processes and IT

#### Organisation

- Implement case manager as single point of contact (SPOC)
- Build cross-functional customer teams
- Make assignments flexible

Customer orientation











# What's wrong with the process?



# Heuristics (2)

#### Focus on value-add

- Process should only include value-adding activities
- Design process for typical cases
- Reduce checks and approvals
- Isolate exception handling

#### **Built-in quality**

- Avoid quality checks and error corrections at the end
- Avoid errors locally
- Design process so that errors won't occur
- Make process robust

#### Flow optimisation

- Eliminate waste
- Resequencing
- Parallel execution
- Dynamic task assignment
- Generalist work with specialists

Process Performance













# What is the average processing time?



# What is the average processing time?



# Model-based Process Analysis

- Documentation of models needed anyhow as common reference
- Various standardized modeling languages available
- Tool support available for
  - Modelling
  - Analysis
  - Simulation
  - Execution
- Applications (examples)
  - Flow and time analysis
  - Activity-based costing
- Resource usage

#### Deltas

- Effort for creating detail business process models
- Effort for keeping models up to date
- High level of detail required
- Wrong or missing details may negatively impact the result's quality
- Requirements
  - Correctness
- Completeness
- Actuality
- Limited relevance of results for reality ("garbage in, garbage out")

Pluses











## Put the decision where the ...

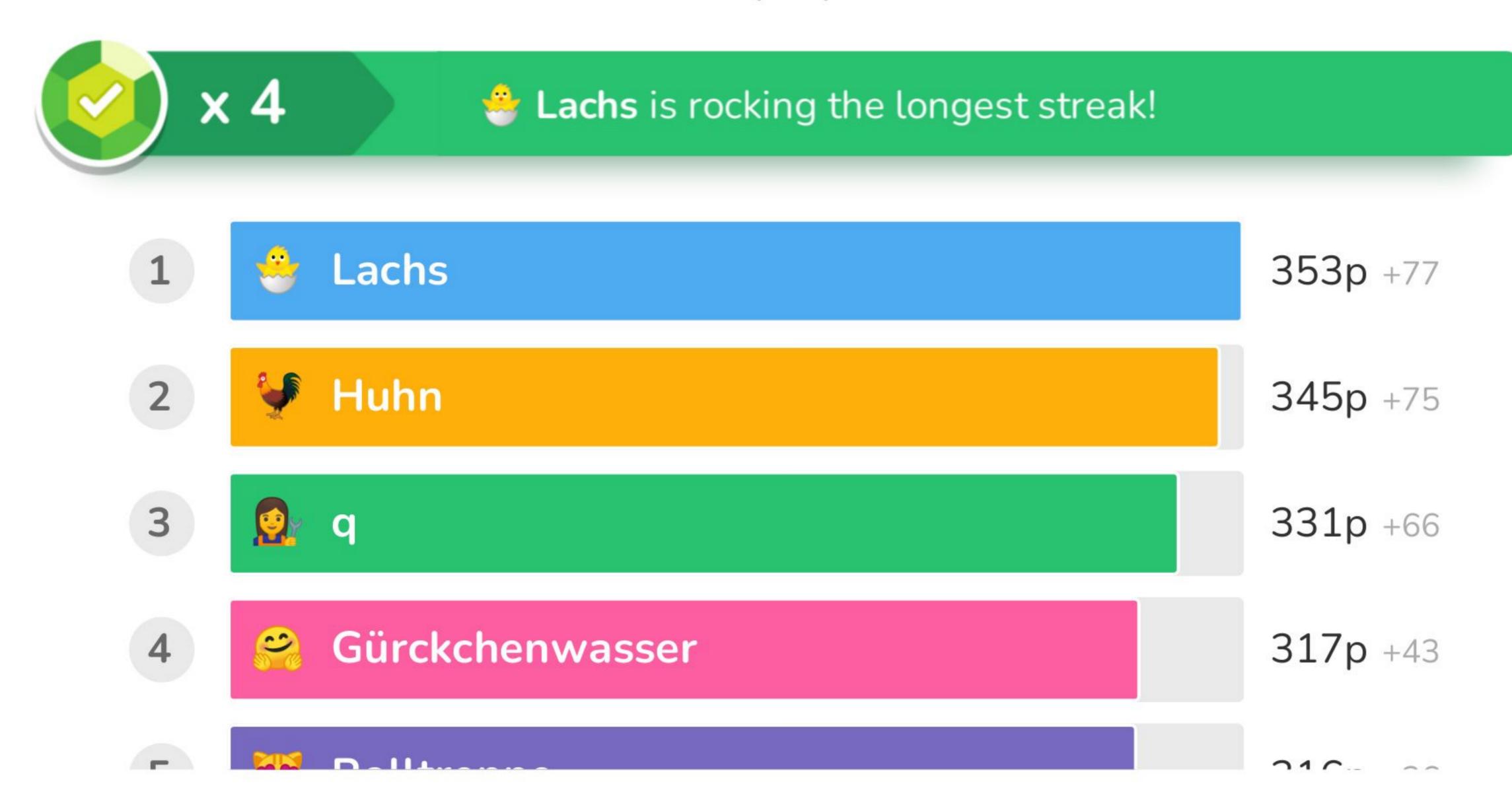






## Leaderboard

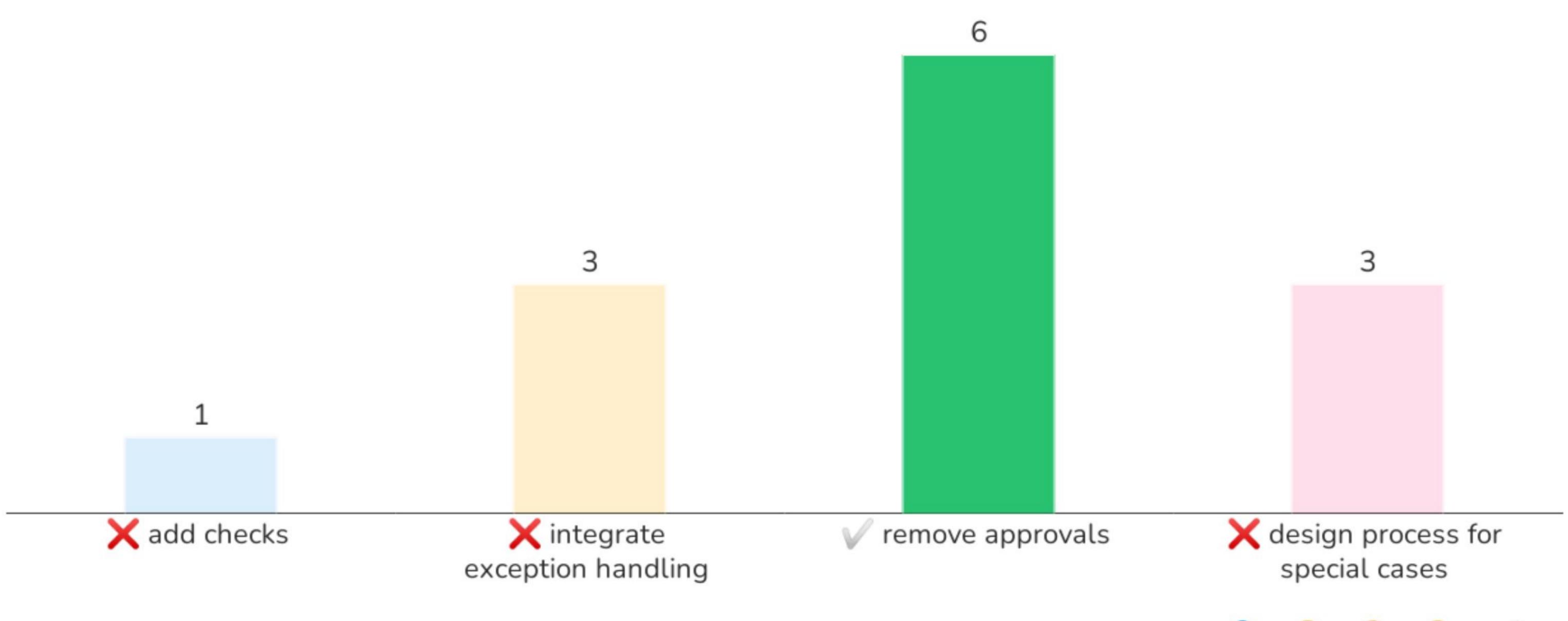
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## How can we focus on value-add?

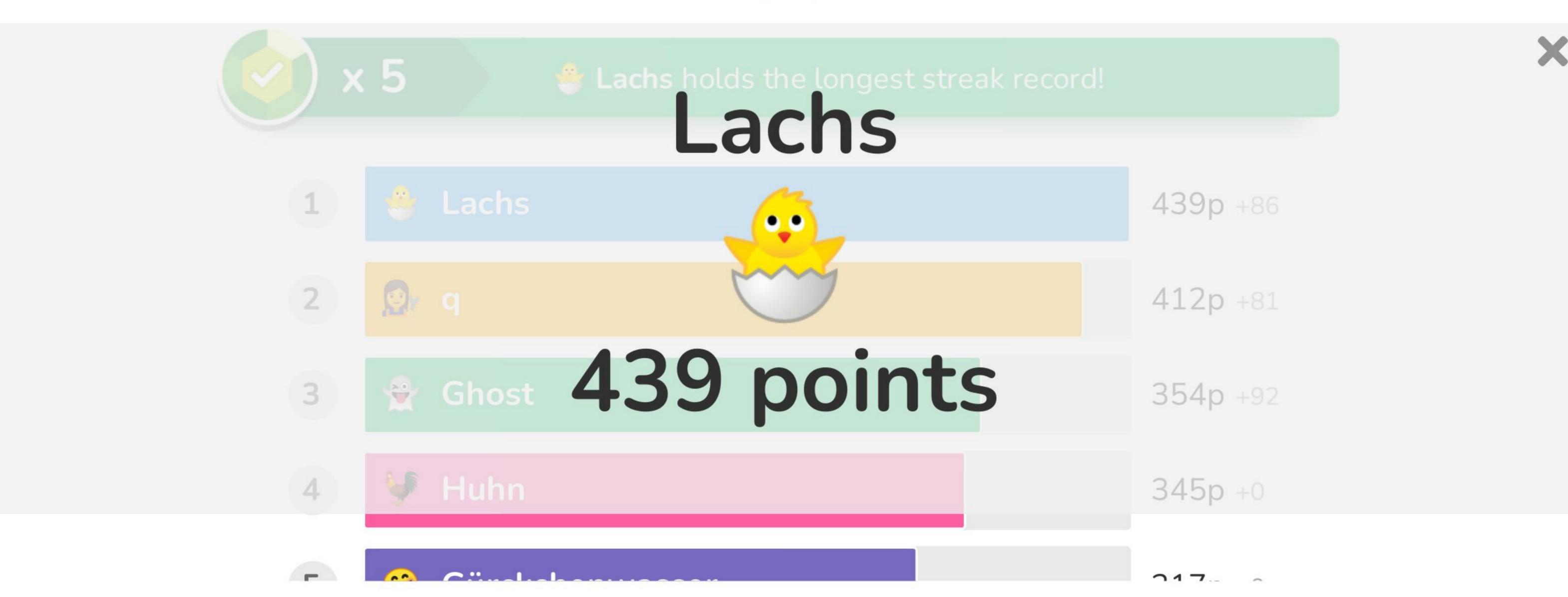






### Leaderboard

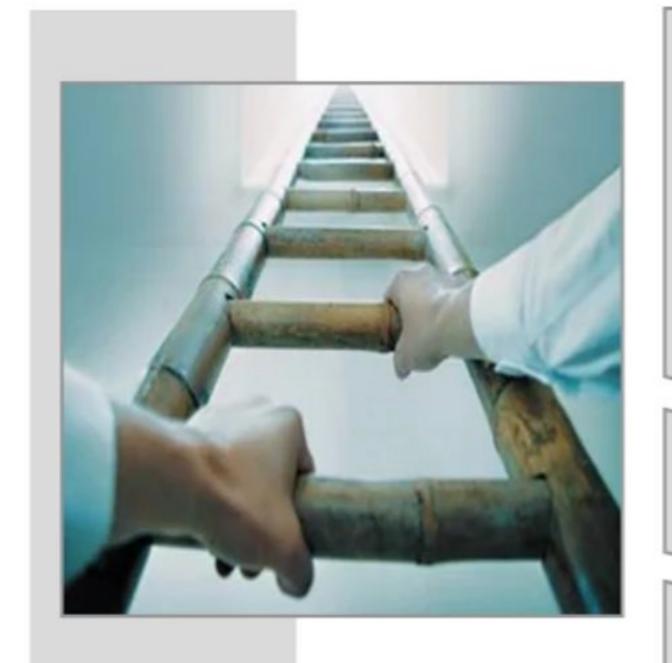
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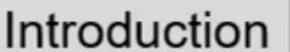






## Story so far ...





- Digital Transformation and Process Management
- Strategy and Management
- Strategic Process Management

#### Describe

- Describing business processes
- Business process models and documentation

#### Measure

- Quality management and business processes
- Key Performance Indicators



- Methods and tools for analyzing processes
- Improving business processes

#### Change

- Managing process changes
- Changes in an organisation

#### Sustain

- Implement corporate process management
- BPM Centre-of-Excellence

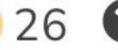
















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# Questions and Answers

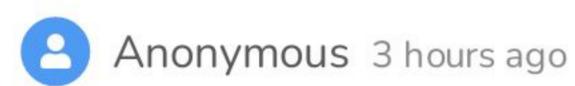
#### Top questions (2)

Pinned

Newest

Oldest

Answered



Wenn mehrere Abteilungen in einem End to end Prozess integriert sind wer sind dann der Prozessverantwortliche?



Thema Dienstreise: Bei uns werden die Verkehrsmittel und Hotels von den Mitarbeitern herausgesucht und dann von der Reiseabteilung gebucht. Es gibt jedoch Einschränkungen hinsichtlich Budget.









