

# Finding and Resolving Performance Problems in a Multi-Application Deployment

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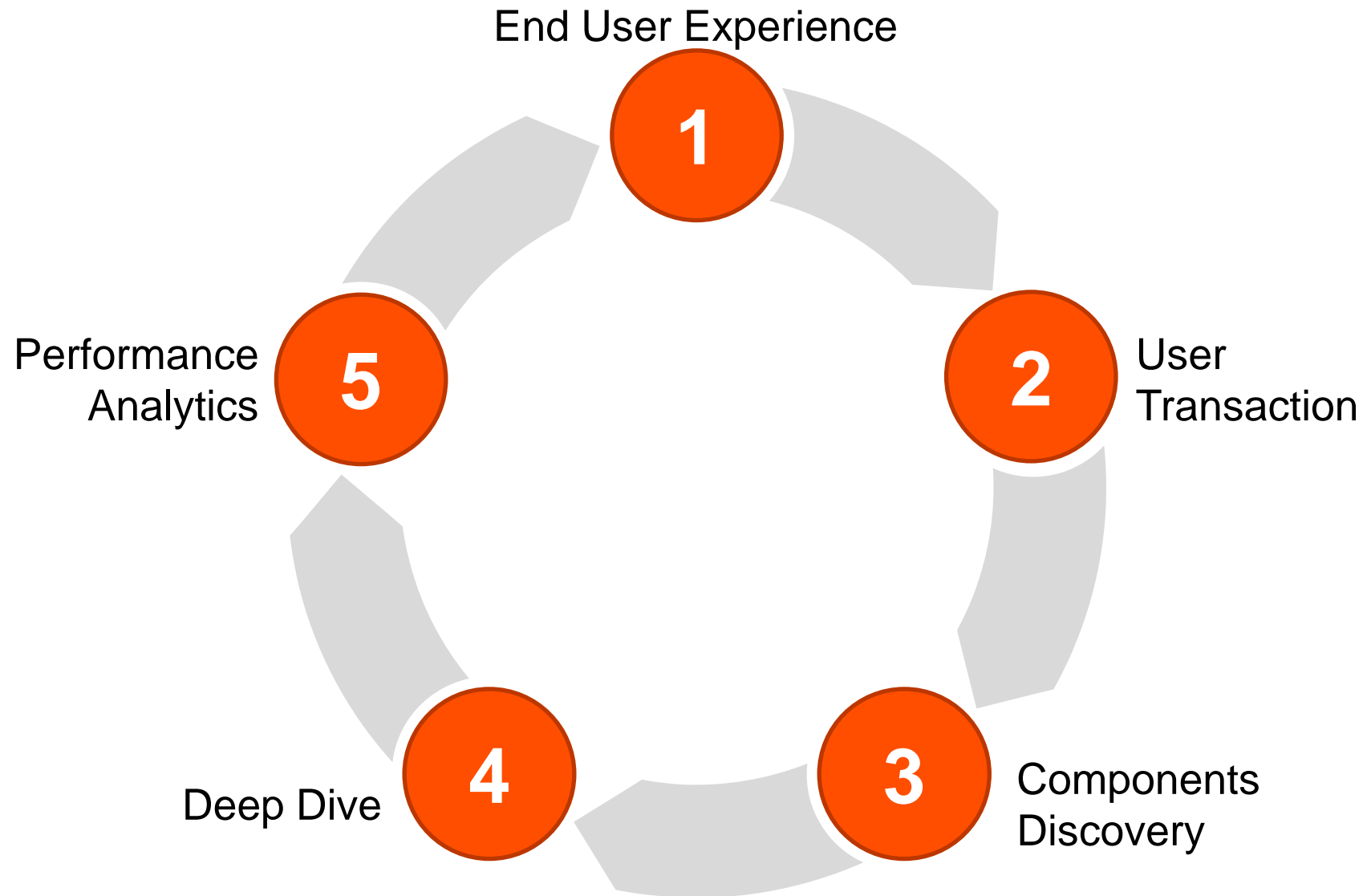
It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts.

— Sir Arthur Conan Doyle (Sherlock Holmes, A Scandal in Bohemia)



# Performance

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# Performance

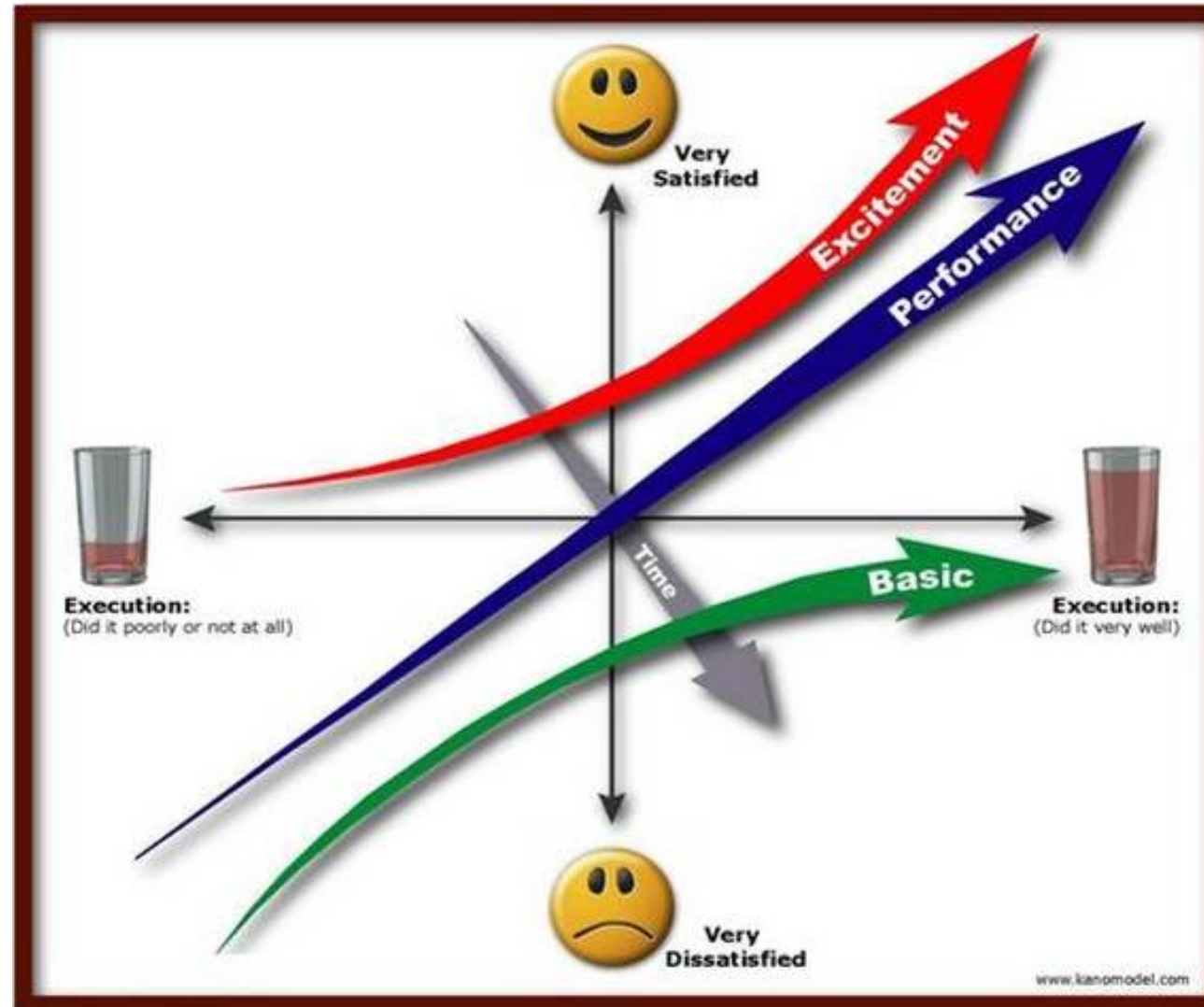
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End User Experience



# End User Experience - UX

- Functionality
- Performance
- Delighters



# End User Experience - UX

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## Basic Requirements

- Basis for entry into the consideration set
- High dissatisfaction, if requirements are not met
- Fullfilment of requirements will not increase satisfaction

## One Dimensional Requirements

- Satisfaction is proportional to the level of fullfilment
- Requirements are usually explicitly demanded
- Requirements can cause reactions ranging from dissatisfaction, through indifference, to satisfaction

## Delighter rRequirements

- The very minimal presence can create satisfaction
- These are unexpected, thoughtful, and delightful surprises
- Not much dissatisfaction, if the requirements are less functional

# Performance

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End User Experience

1

**Benefits**

- EUE Awareness, SLA Conformance

2

User Transaction



# Performance

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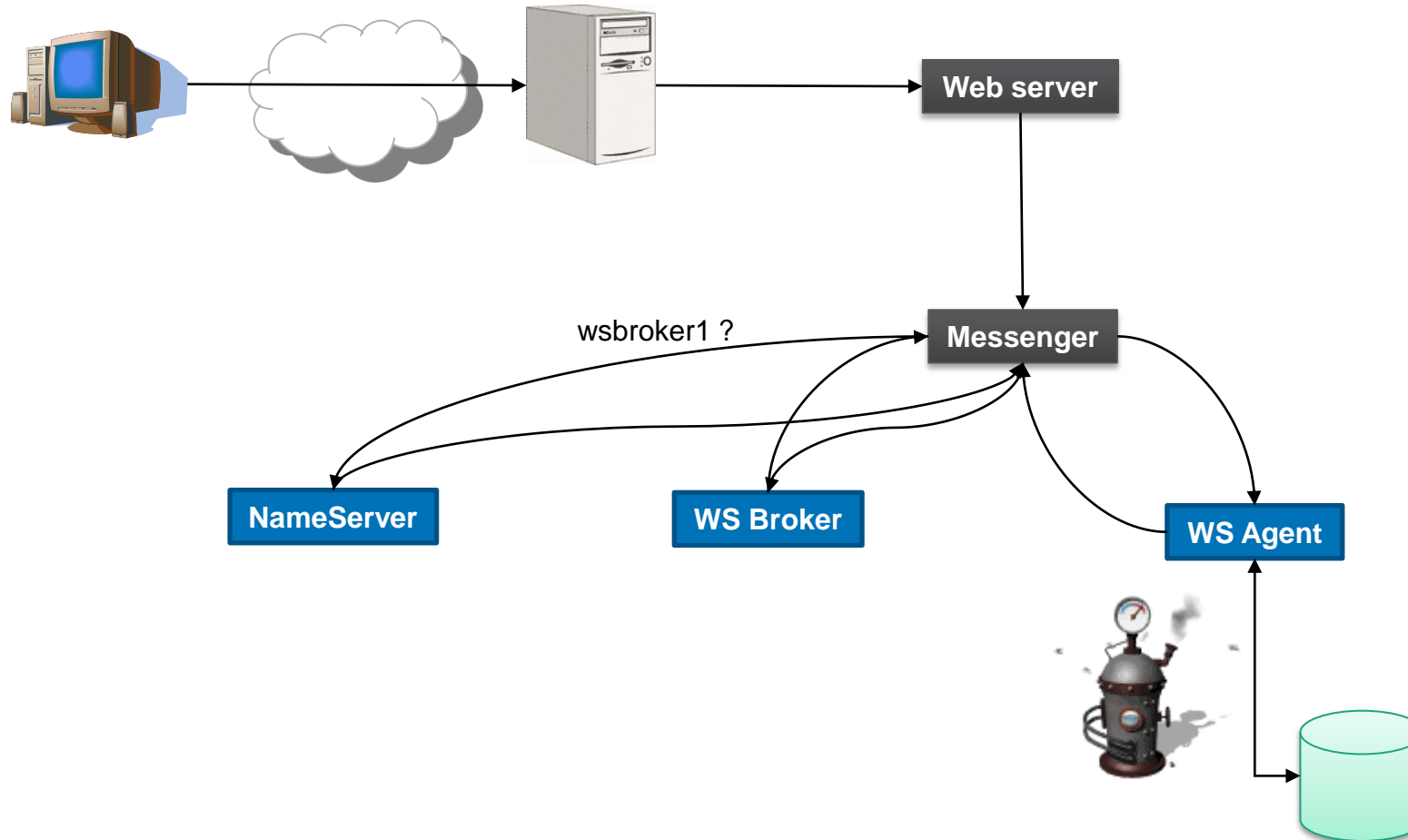
End User Experience



User  
Transaction

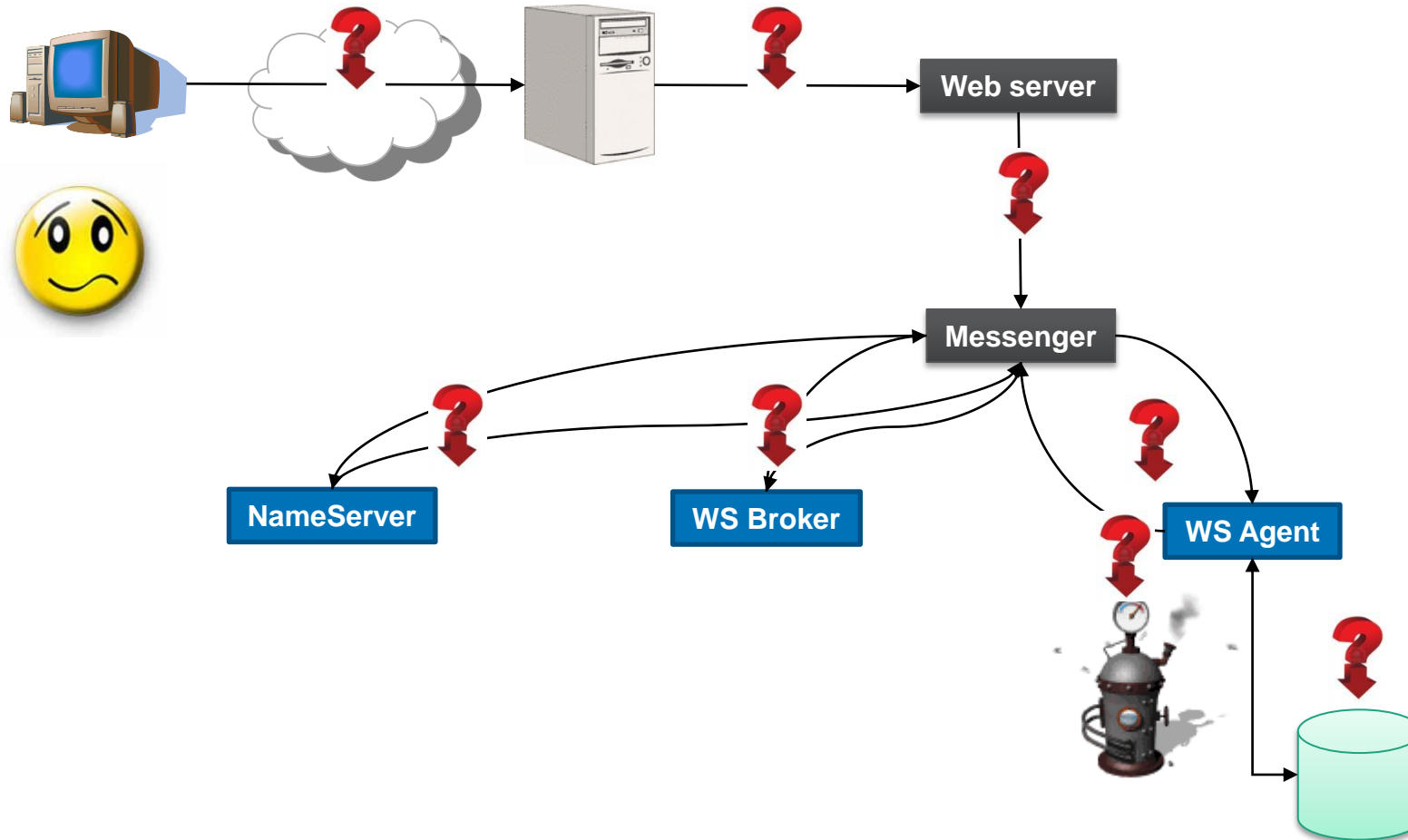
# User Transaction

## Application request round trip in multi-tier environment



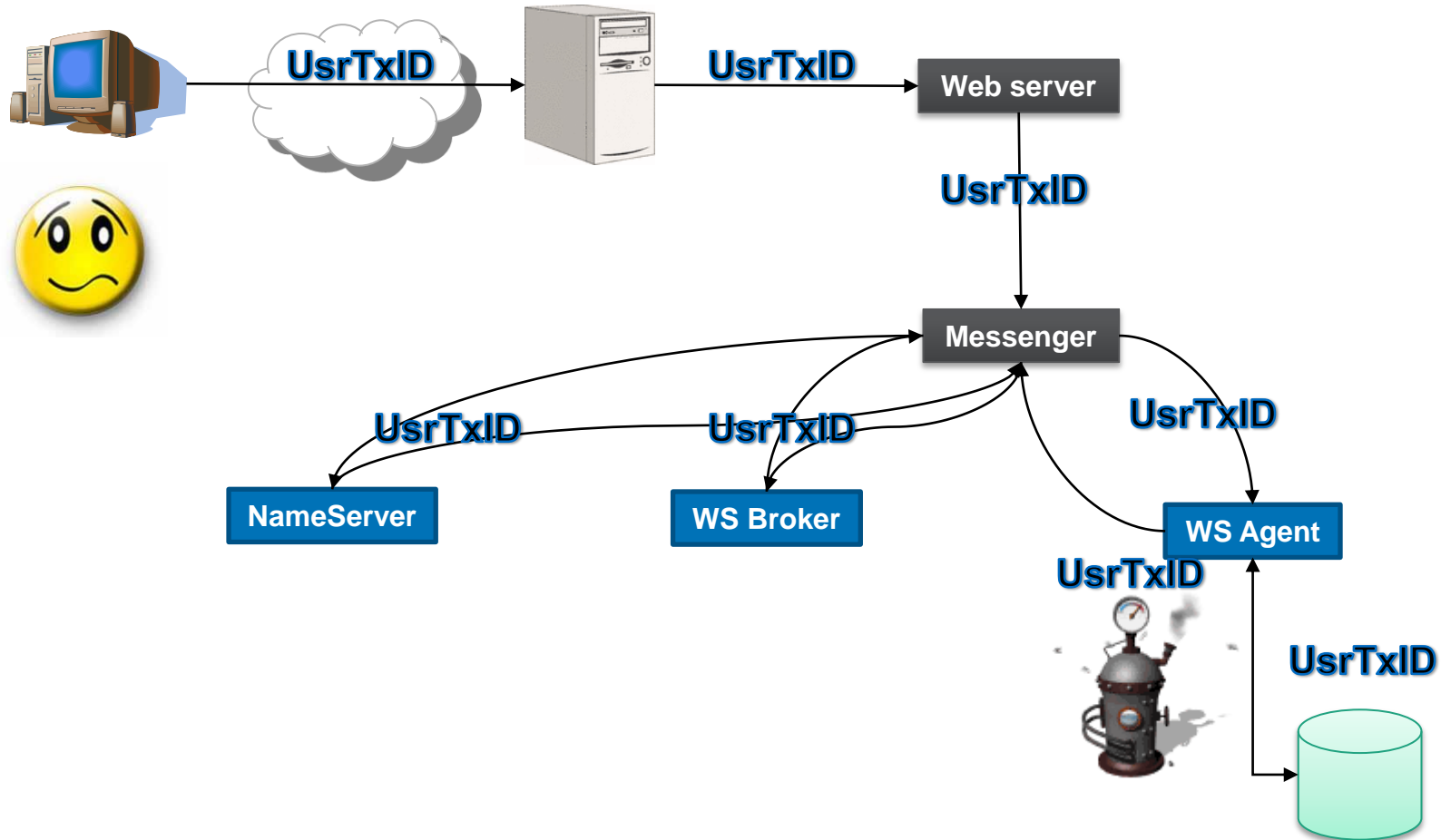
# User Transaction

## Application request round trip in multi-tier environment



# User Transaction

## Application request round trip in multi-tier environment



# Performance

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## End User Experience

1

### Benefits

- EUE Awareness, SLA Conformance
- Reduce Complexity, Time to Solve

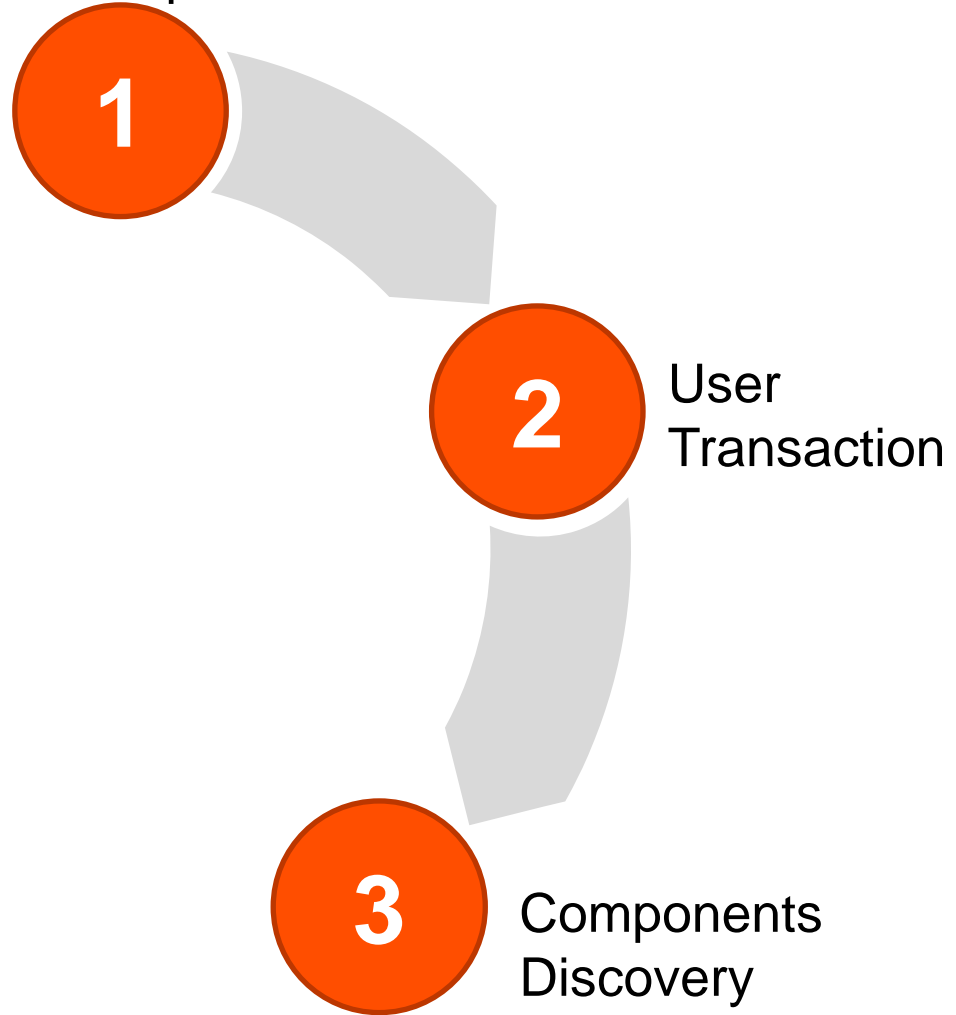
2

User Transaction

# Performance

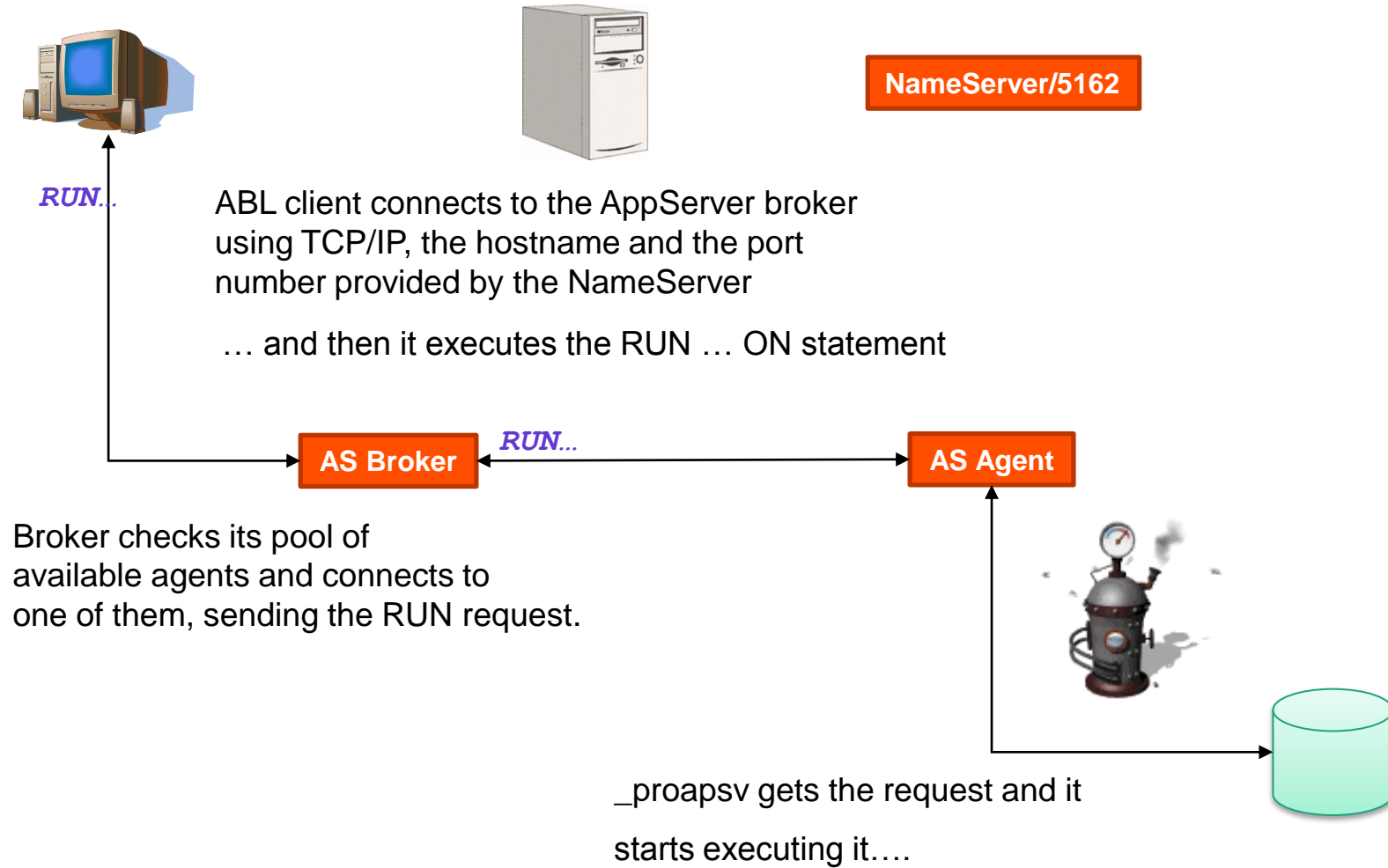
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End User Experience



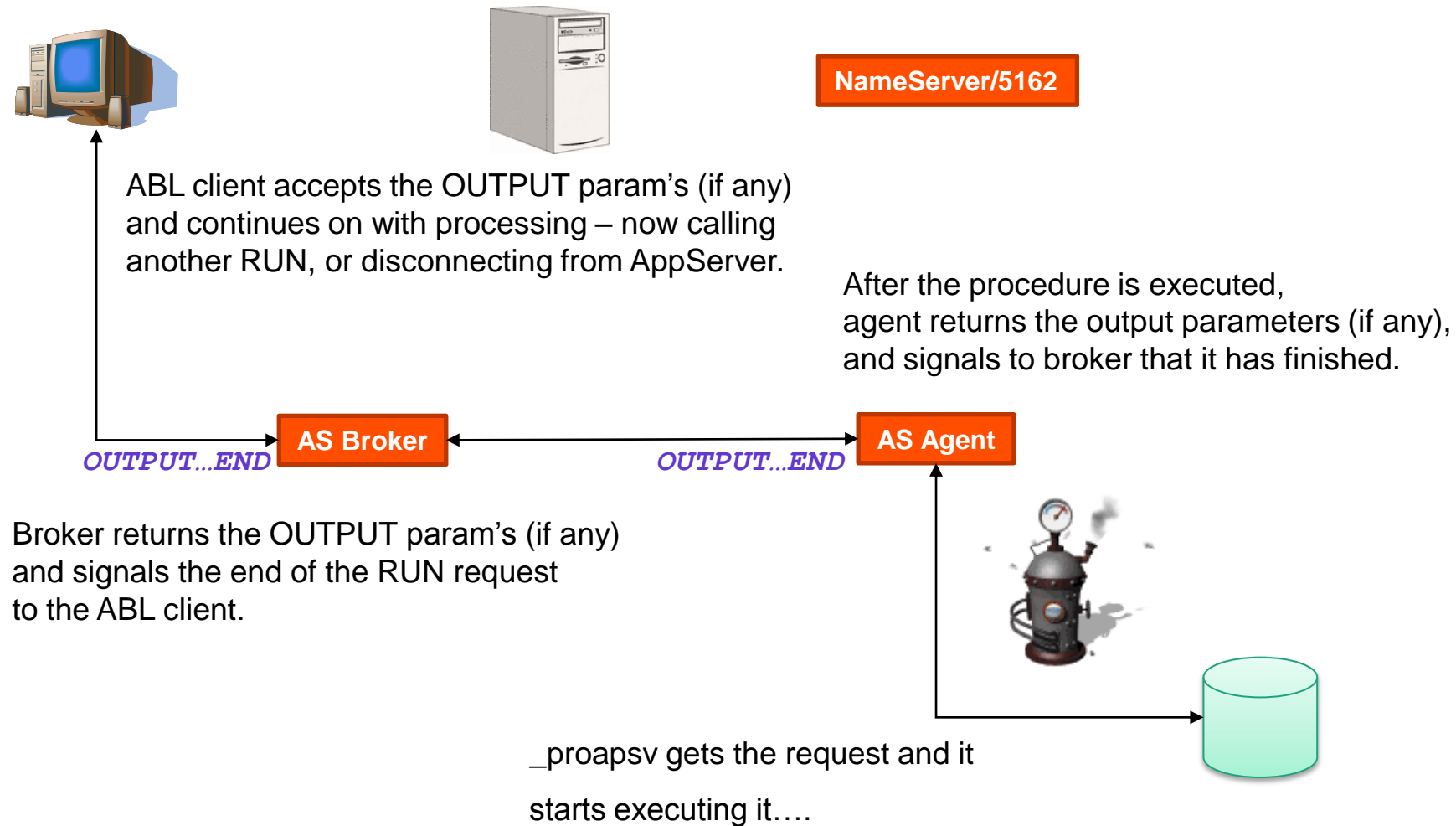
# Components Discovery

## Stateless & StateFree AppServer round trip



# Components Discovery

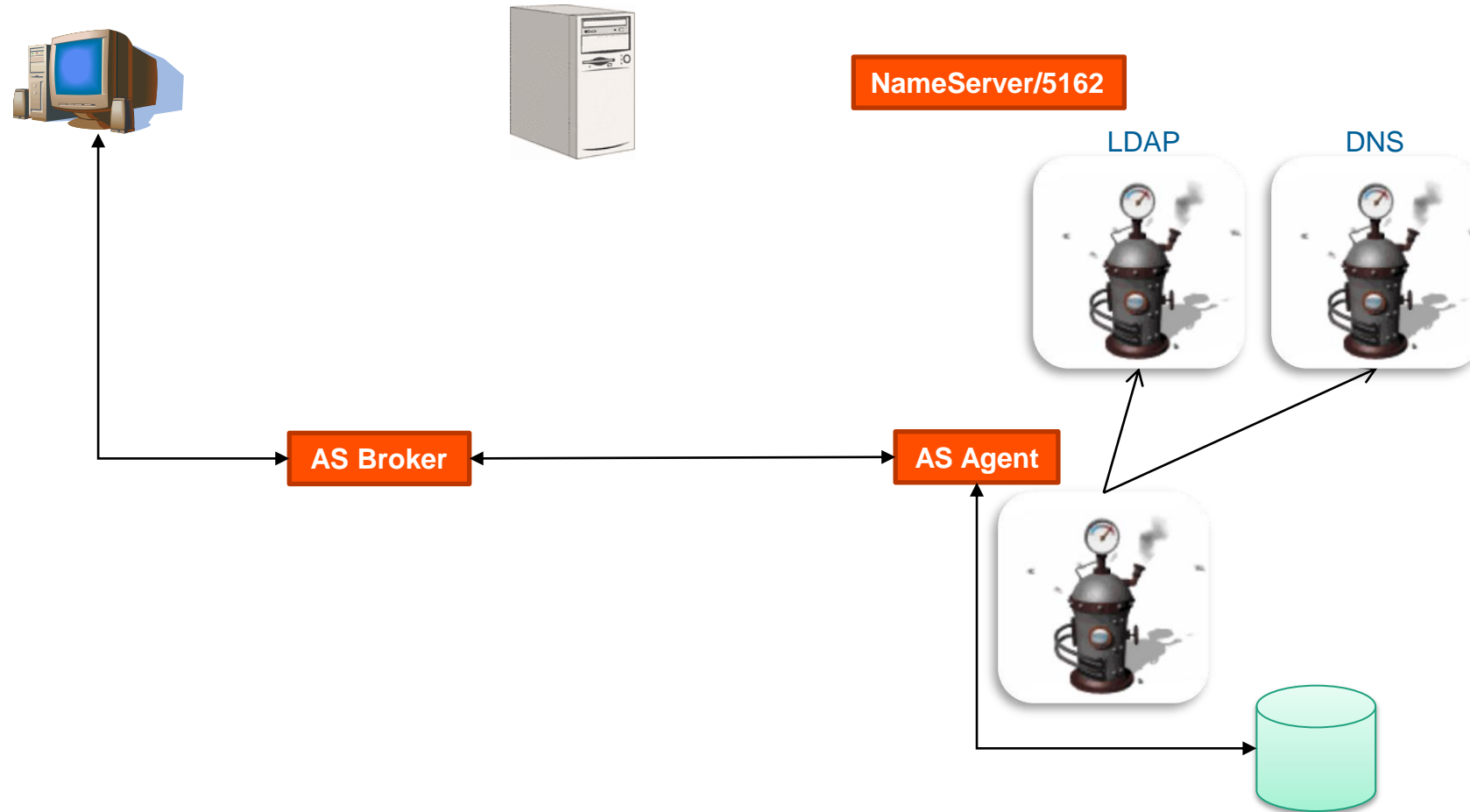
## Stateless & StateFree AppServer round trip





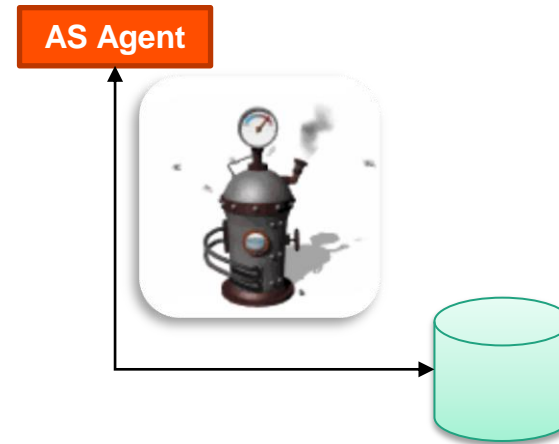
# Components Discovery

## Stateless & StateFree AppServer round trip



# Components Discovery

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# Components Discovery

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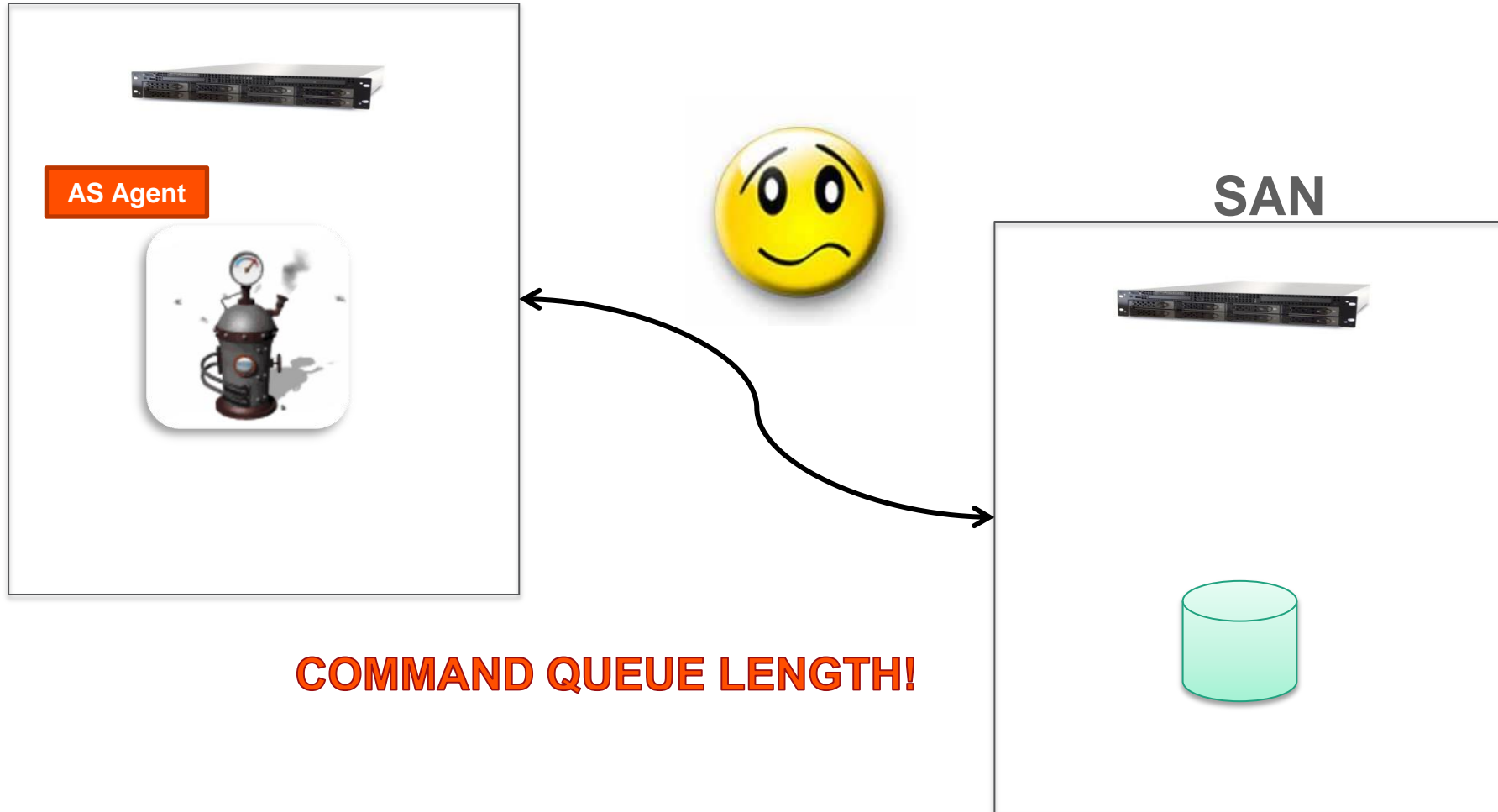
# Components Discovery

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# Components Discovery

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# Performance

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## End User Experience

1

### Benefits

- EUE Awareness, SLA Conformance
- Reduce Complexity, Time to Solve
- Pinpoint Hotspots, Directed Action

2

User Transaction

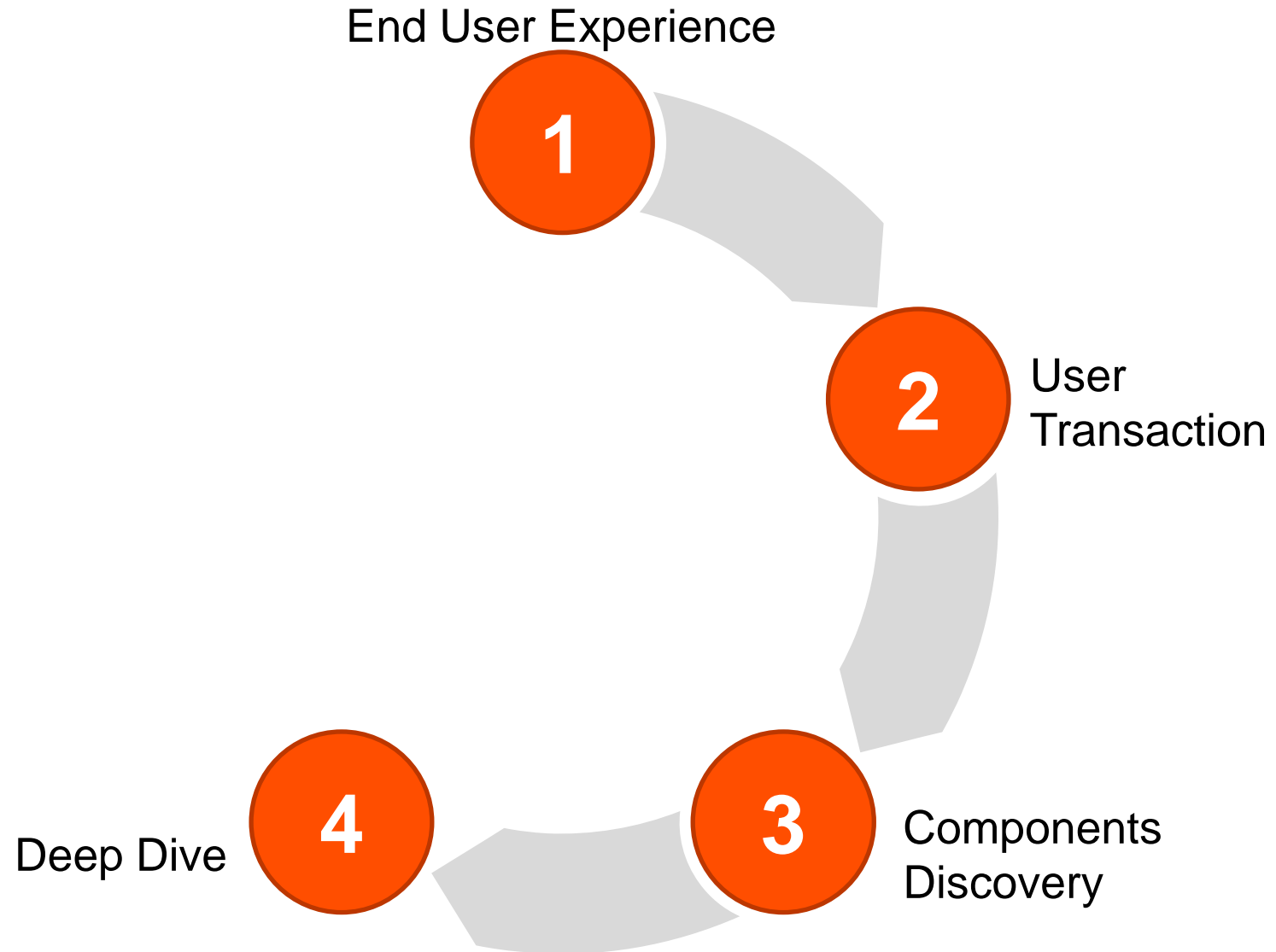
3

Components Discovery



# Performance

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# Deep Dive

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- 1 Focus Your Efforts
- 2 Performance is Raw Data
- 3 Health – ‘Good’ vs. ‘Bad’ performance

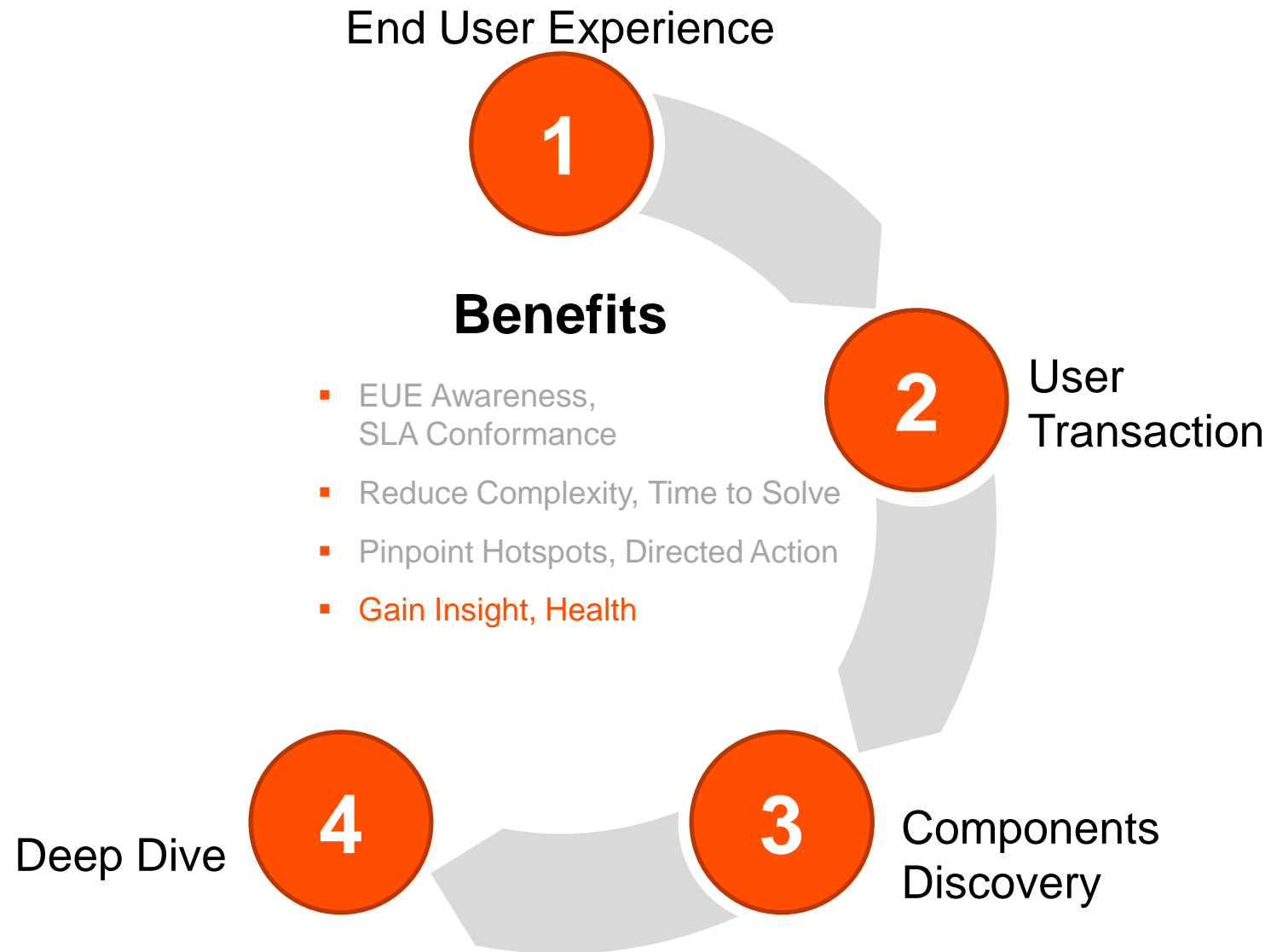
# Deep Dive

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1	Database Management Systems
2	Application Server
3	Messaging Systems
4	Virtual & Network Infrastructure

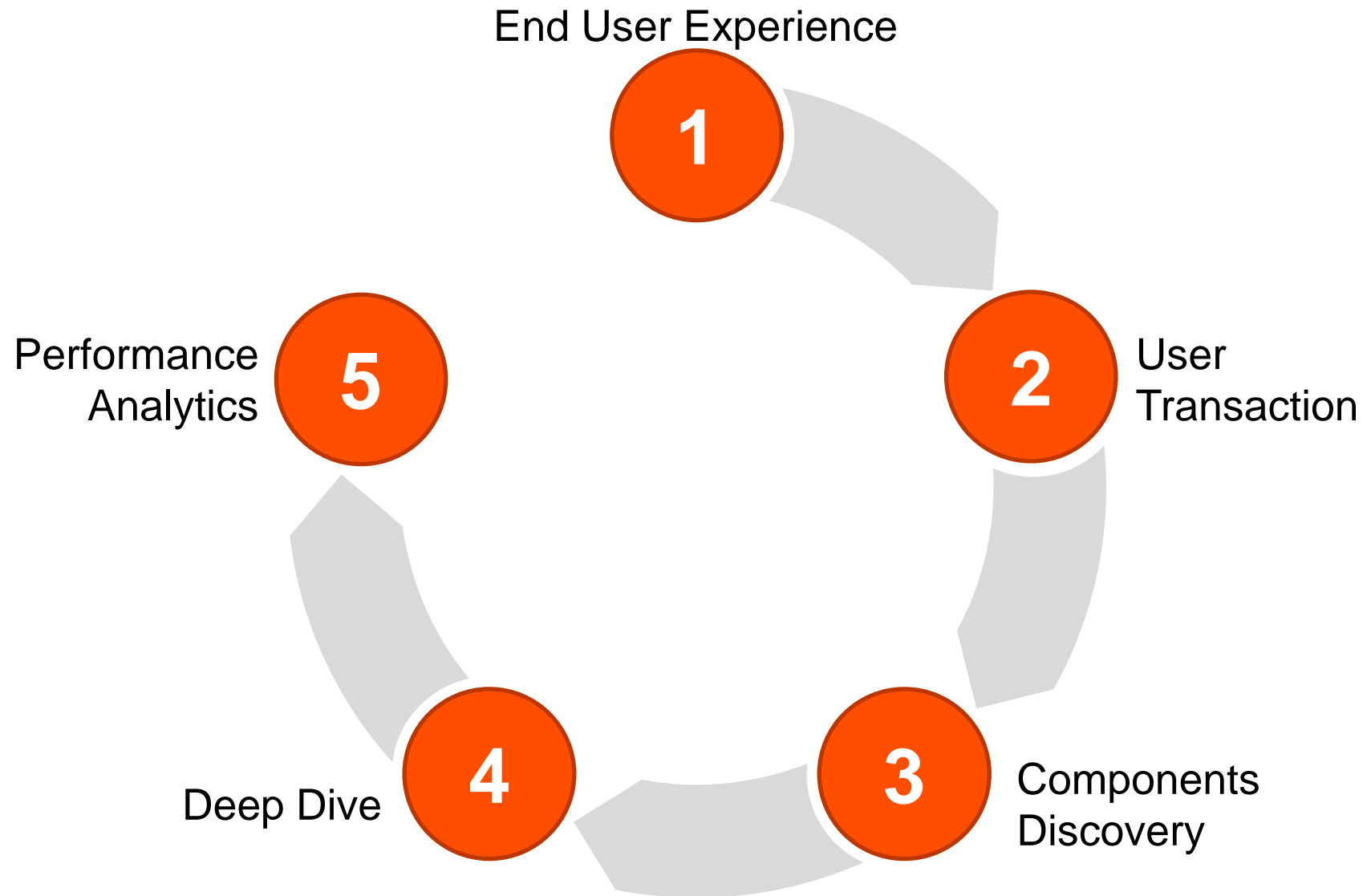
# Performance

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# Performance

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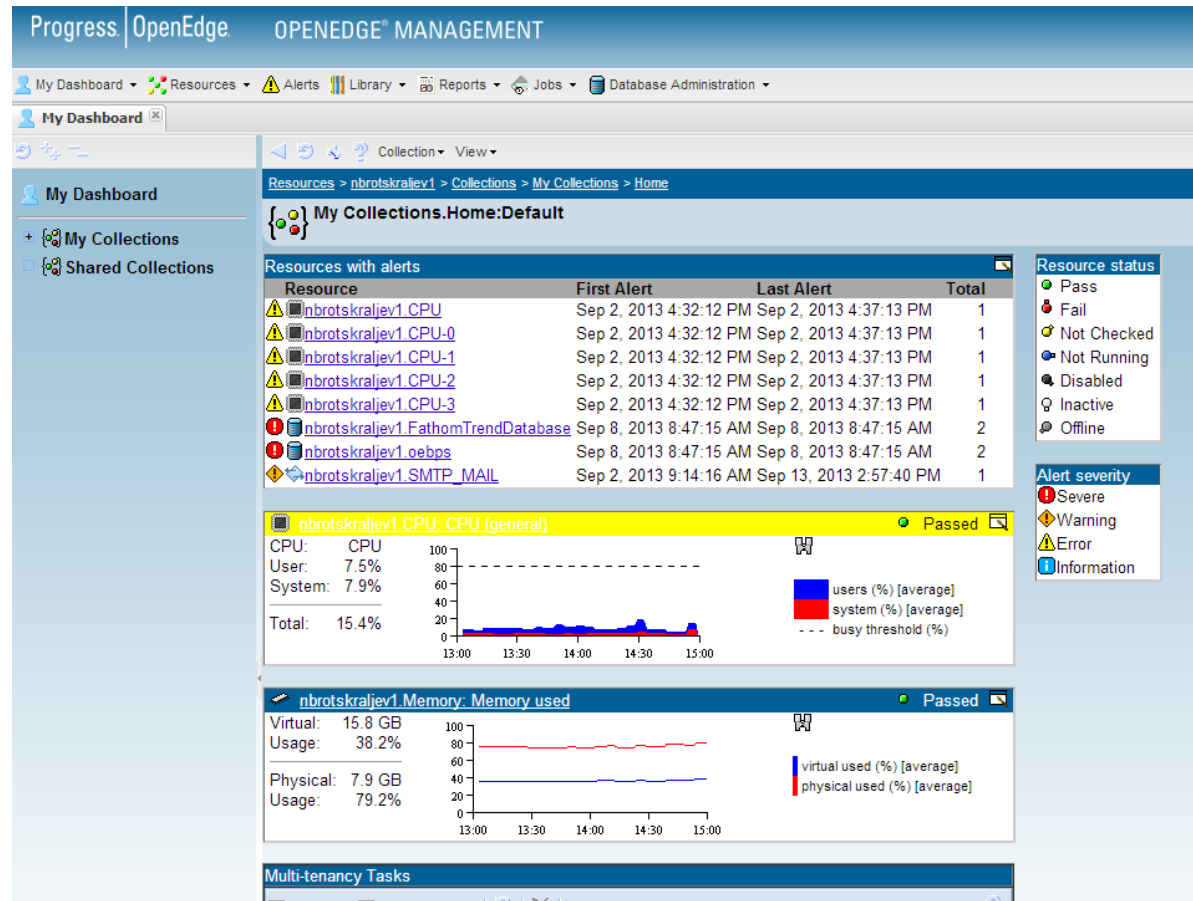
# Performance Analytics

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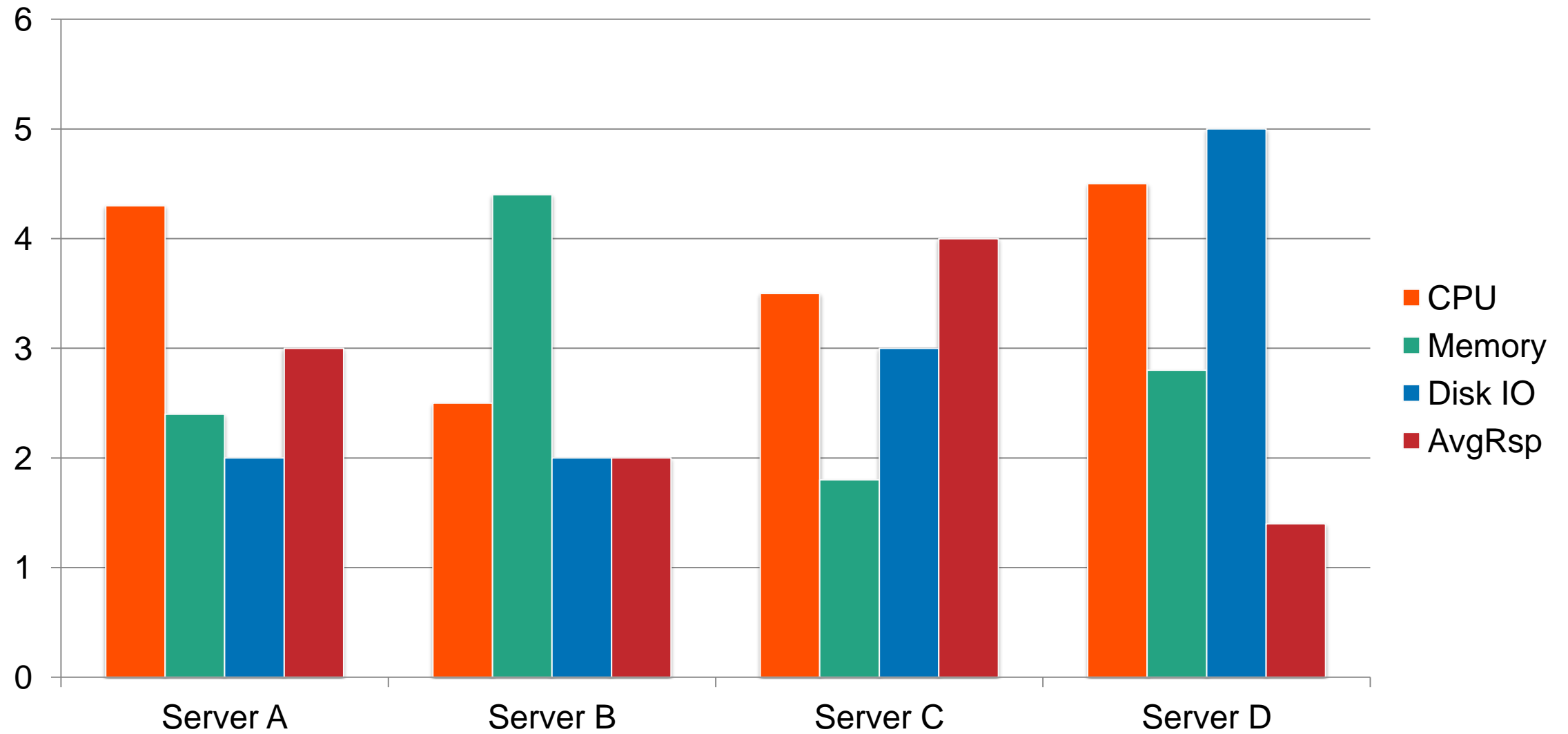
1	Continuous Monitoring
2	Alerting
3	Reporting
4	Baselining

# Performance Analytics

- Document: Findings, Changes, Effect of Changes
- Bonus: Use Early Warning Detection and Pre-Emptive Actions

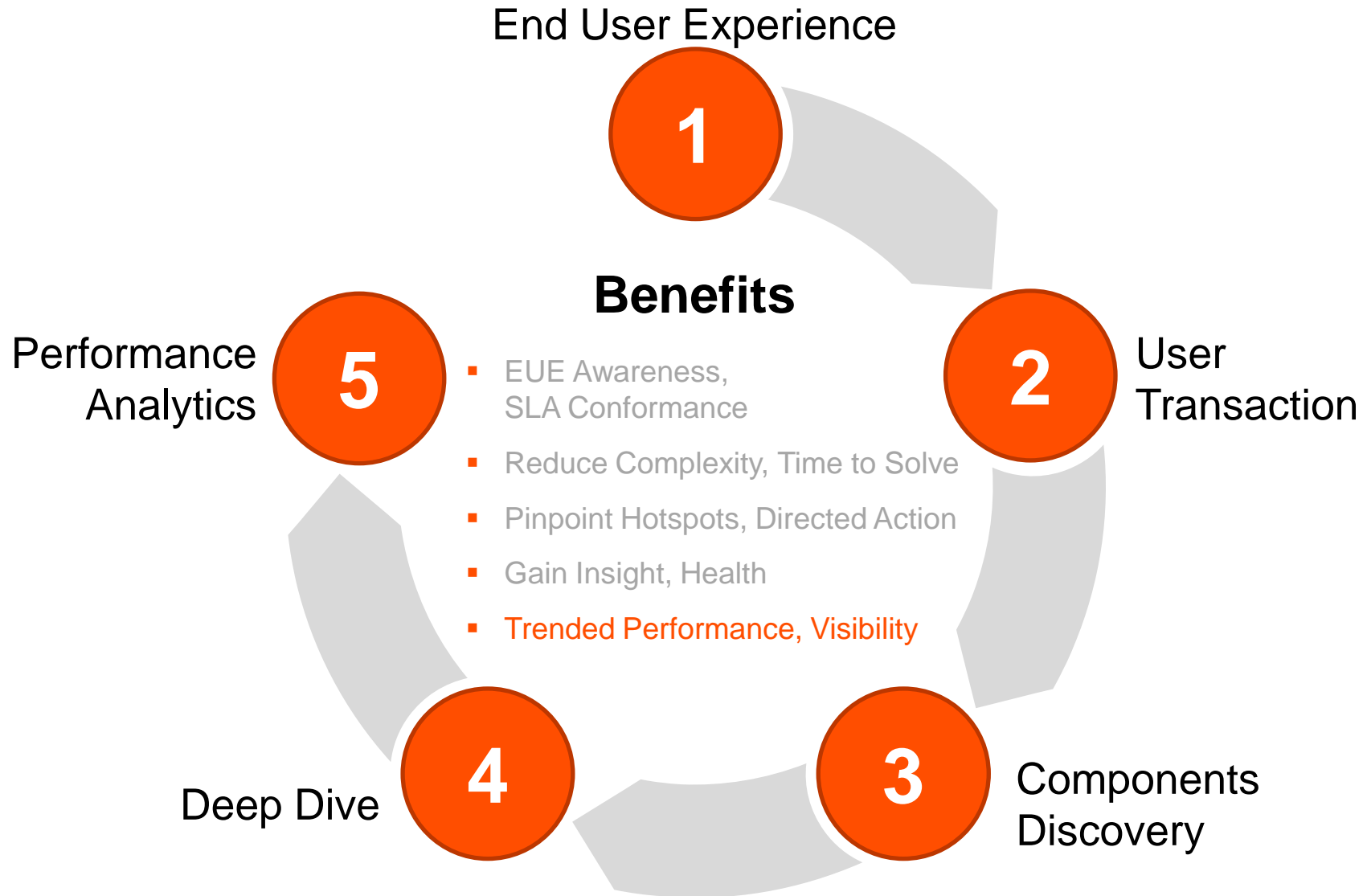


# Performance Analytics



# Performance

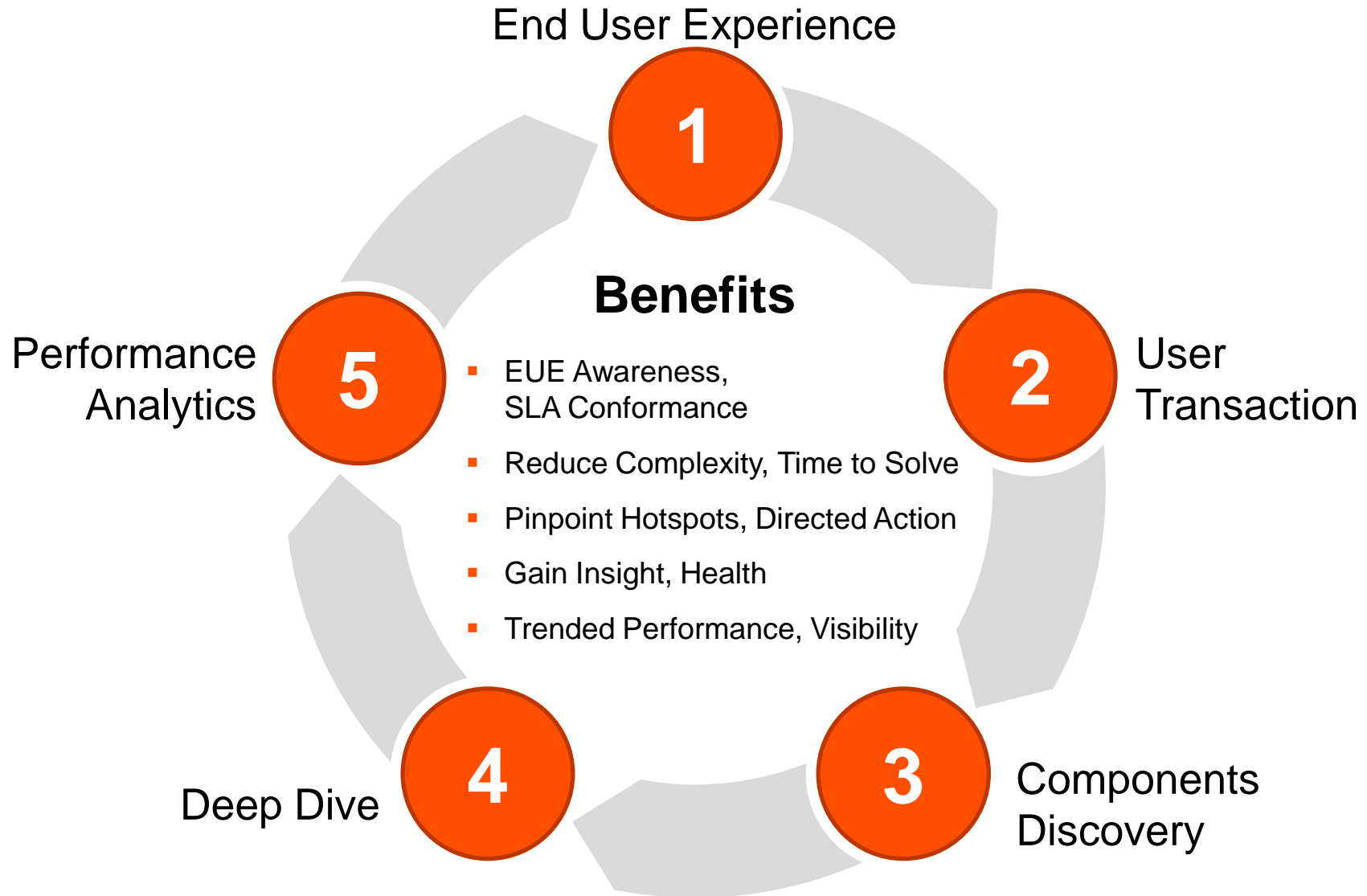
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# Performance

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# You will be able to Say it Yourself!

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1

**No Surprises**

2

**10x Better End User Experience**

3

**25x Saving \$\$\$ & time for troubleshooting**







**PROGRESS**