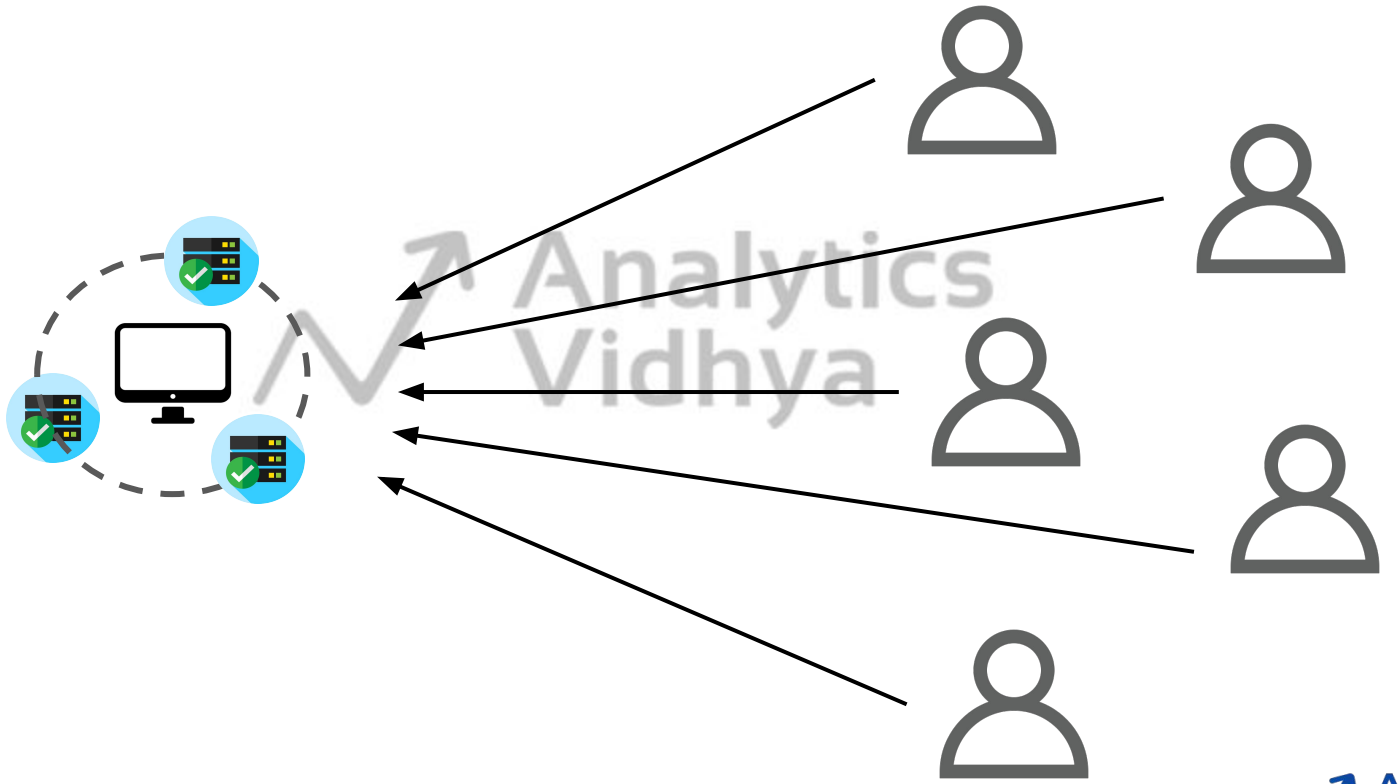
Distributed Systems

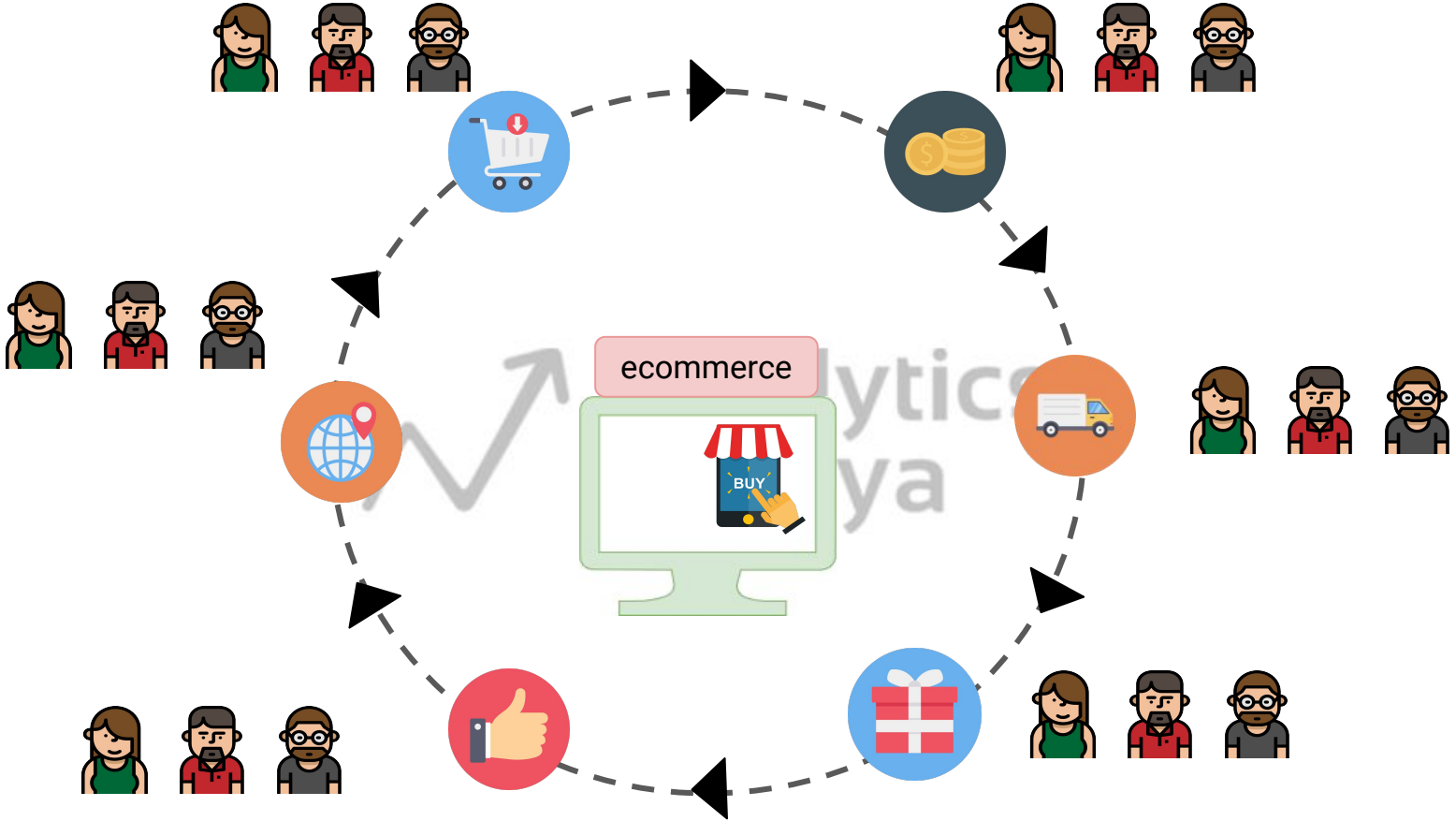
Analytics Vidhya

Traditional System

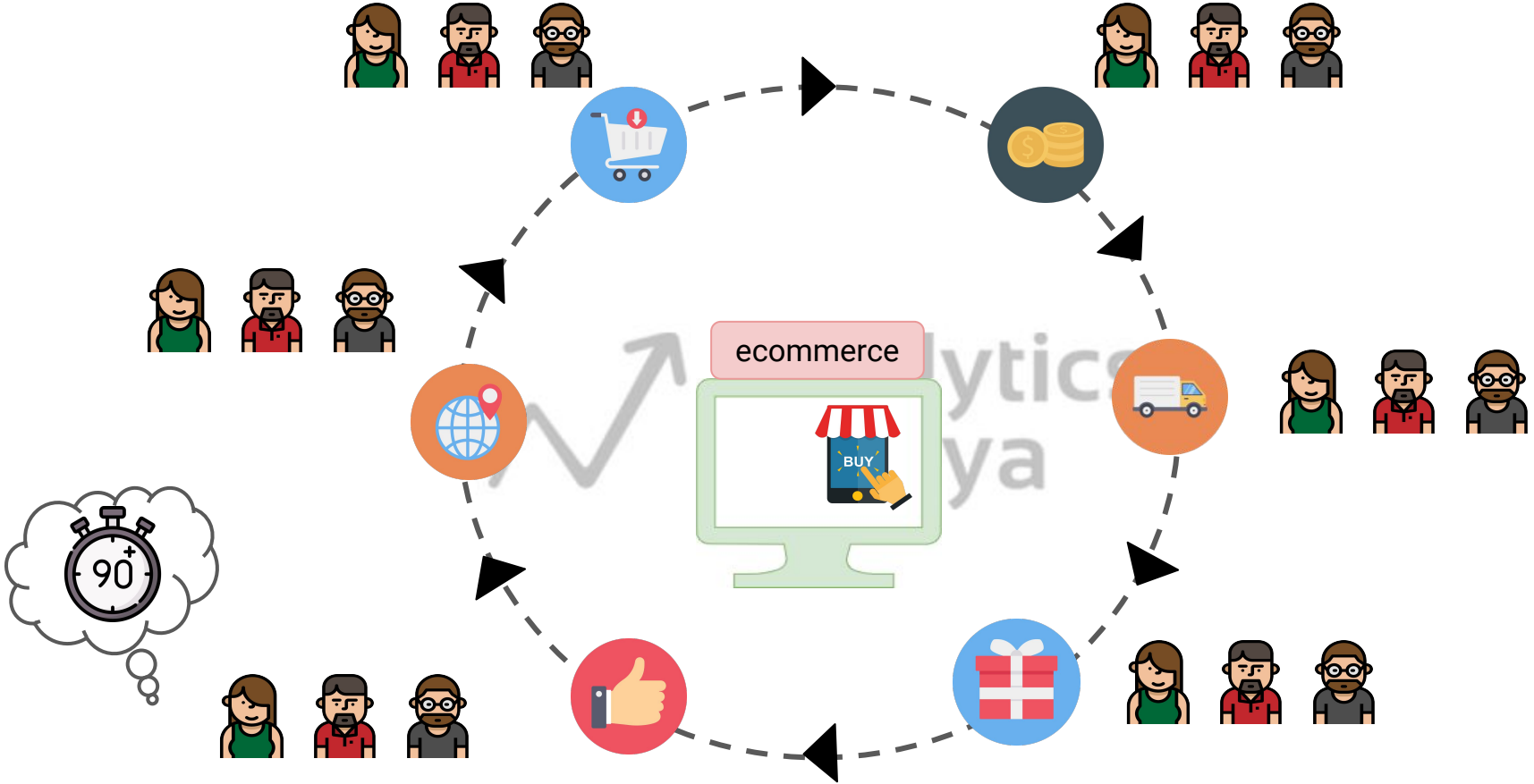


Analytics
Vidhya

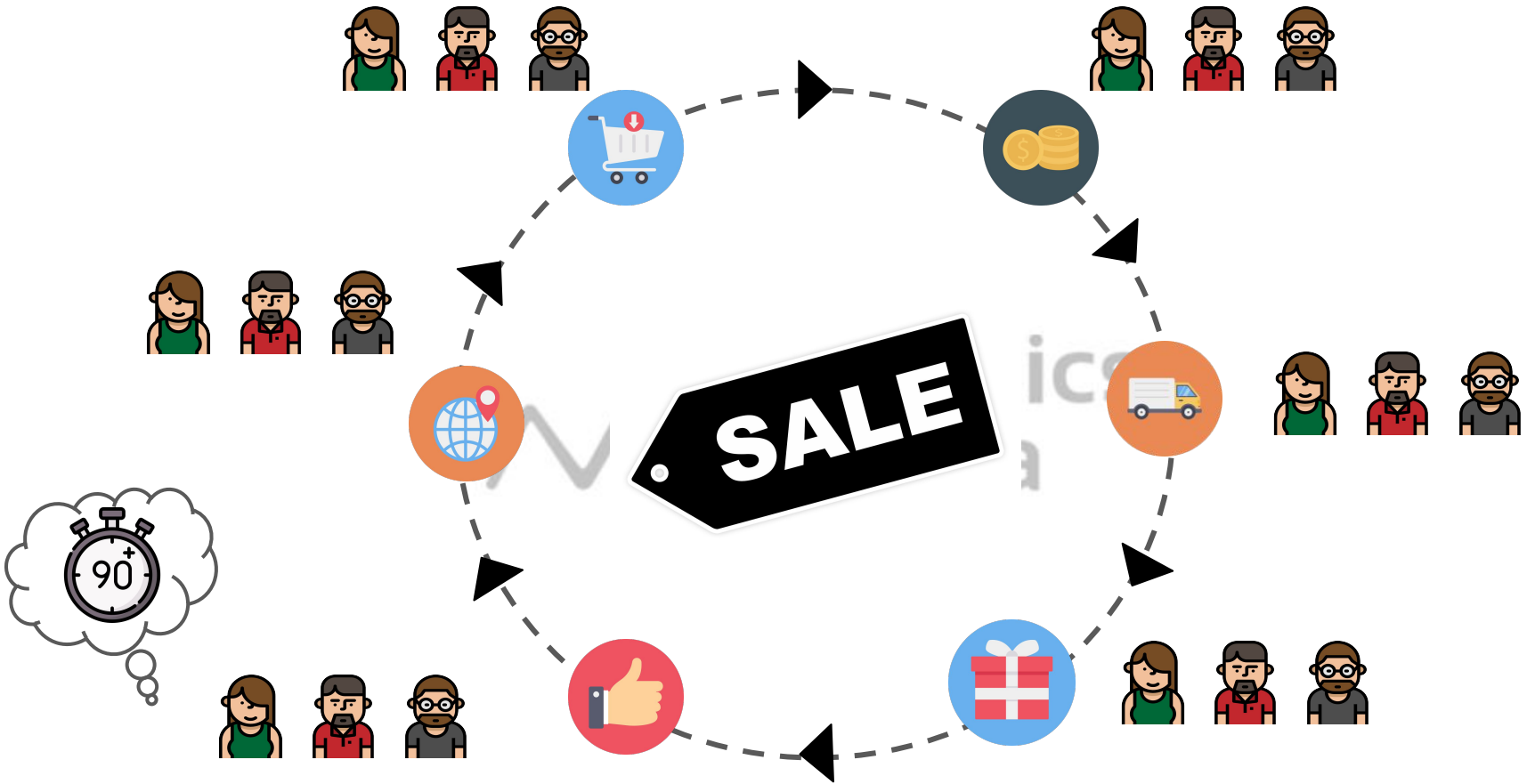
Analytics Vidhya



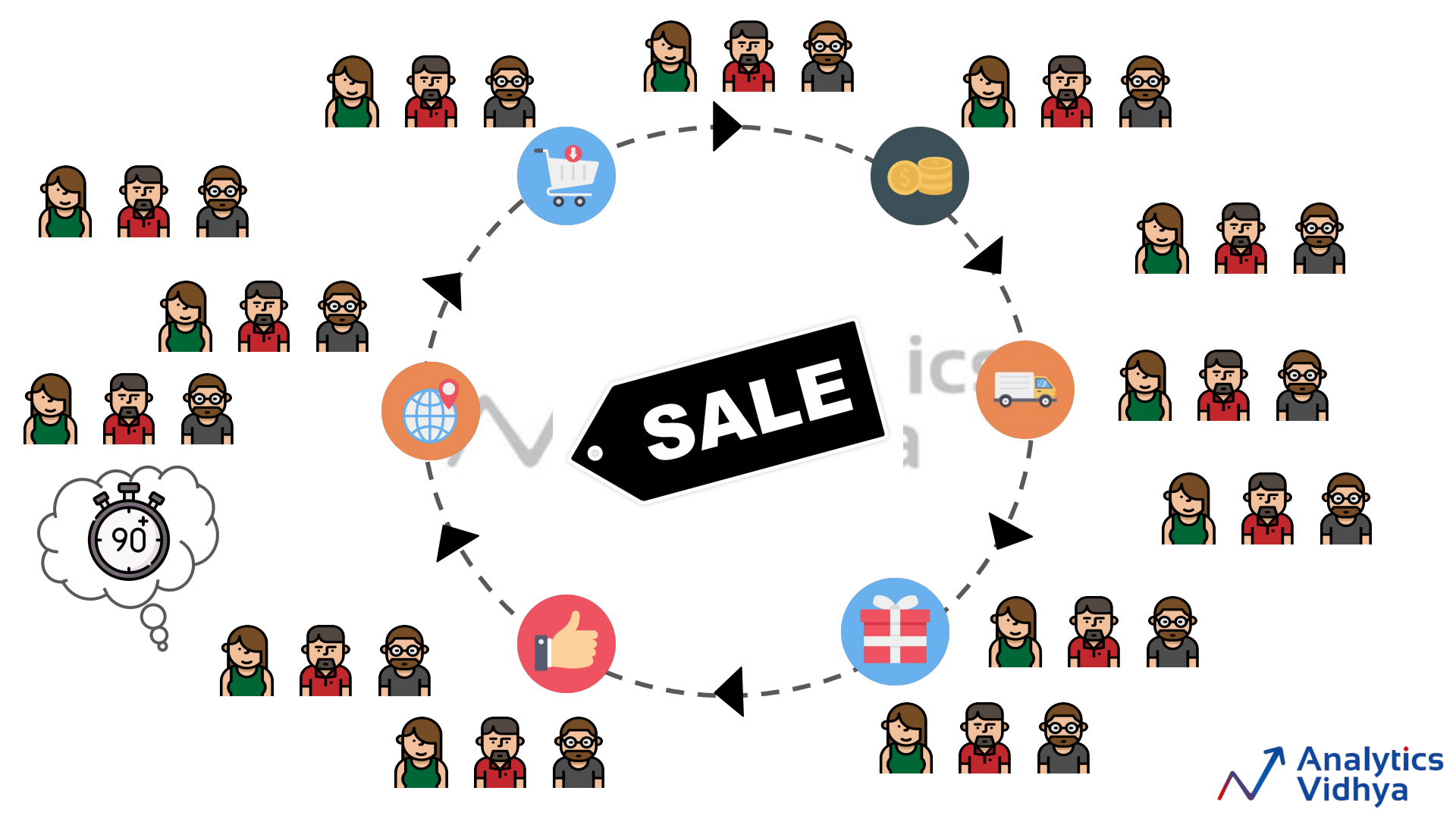
Analytics Vidhya

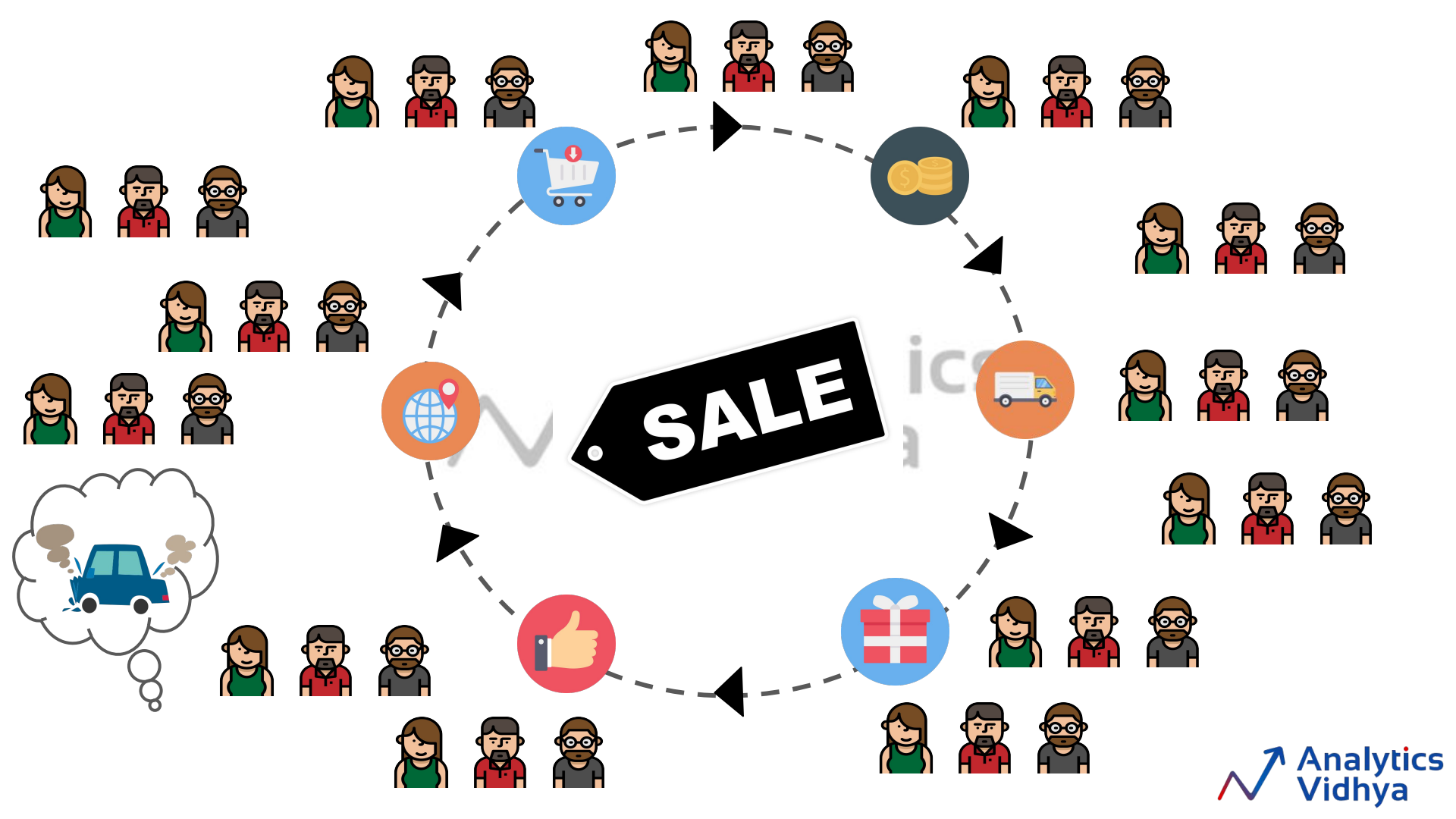


Analytics Vidhya

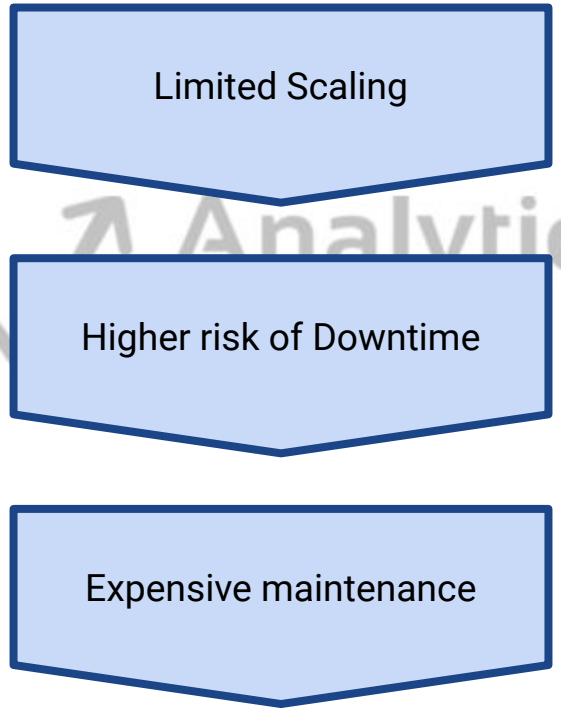


Analytics Vidhya


SALE
90

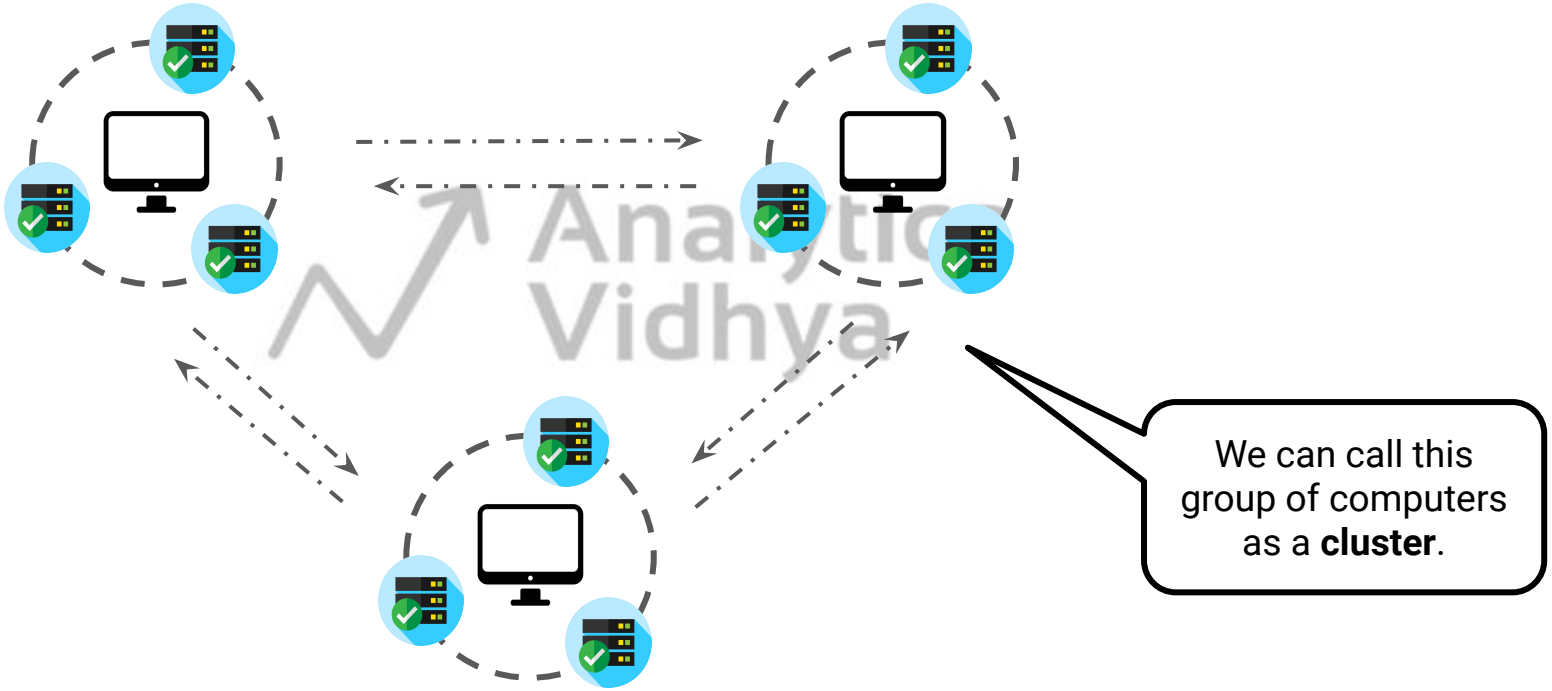

SALE

Drawbacks of Traditional Systems



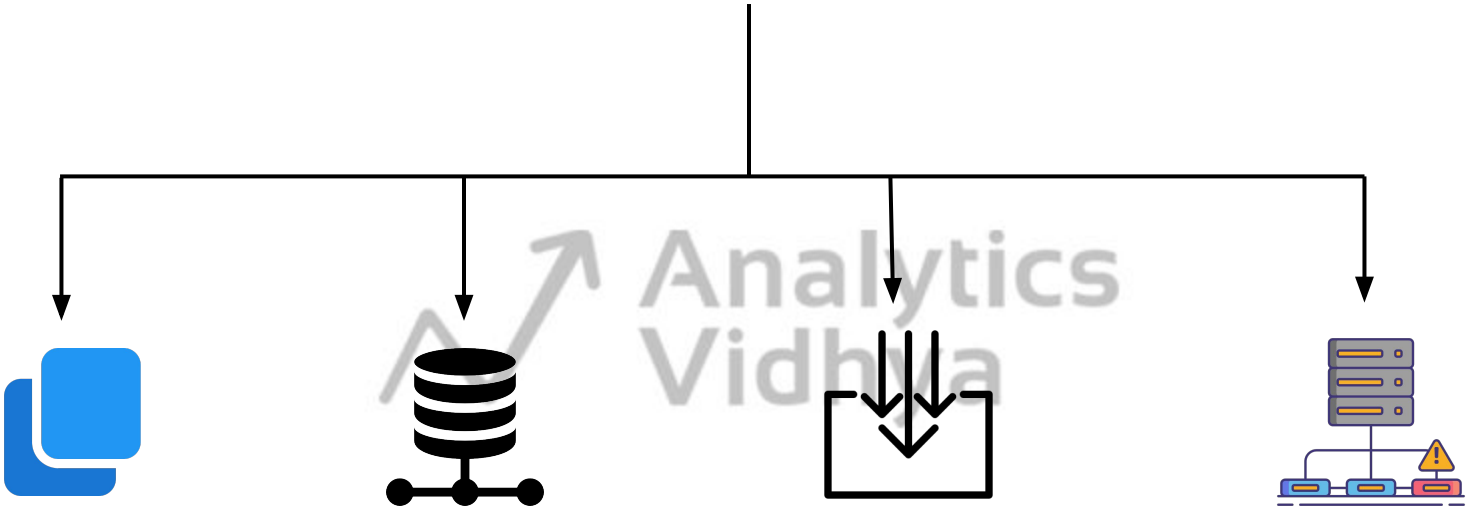
Analytics Vidhya

Distributed Systems



Analytics Vidhya

Distributed Systems



Replication

Higher Scalability

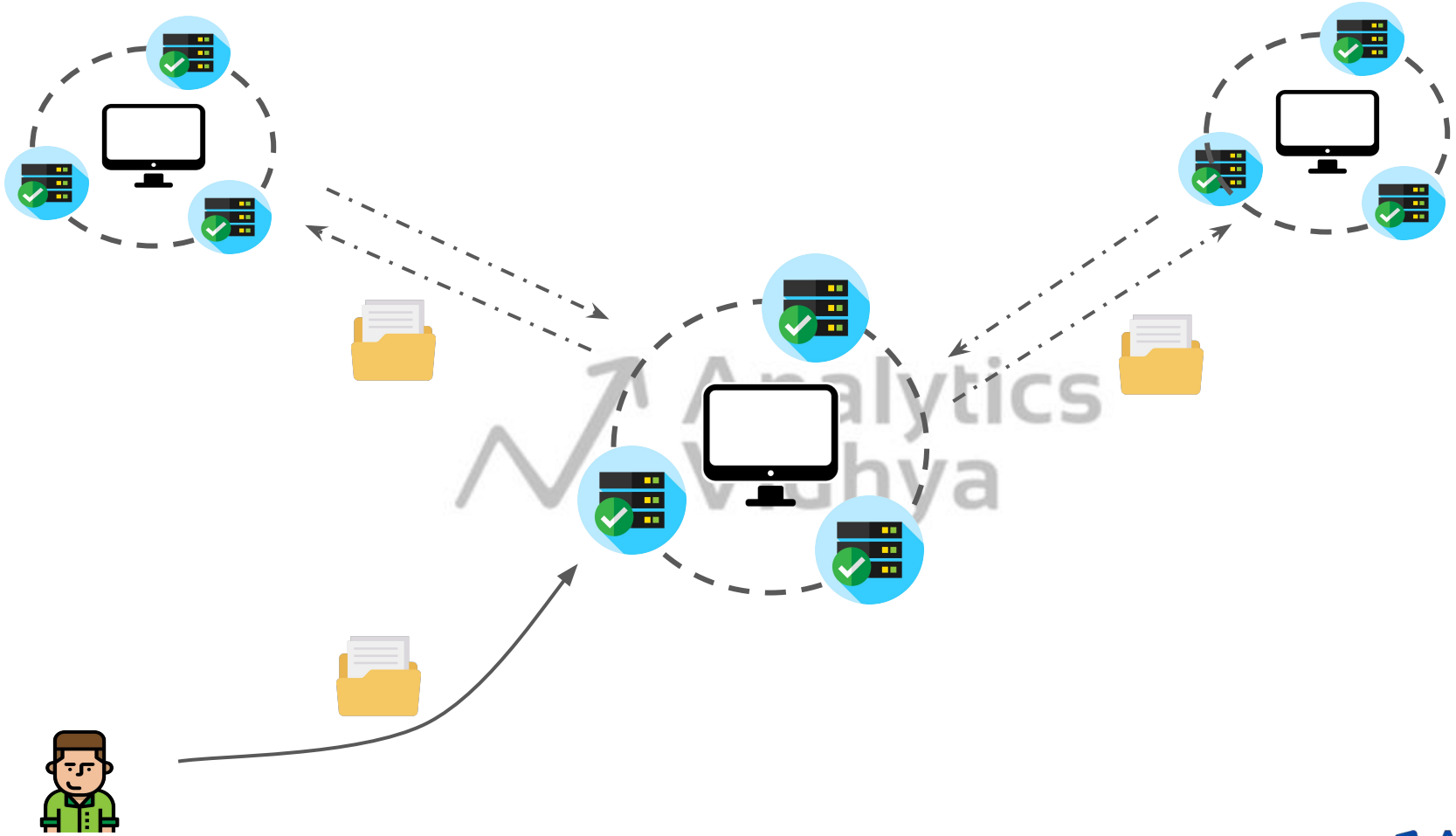
Higher Concurrency

Fault Tolerance

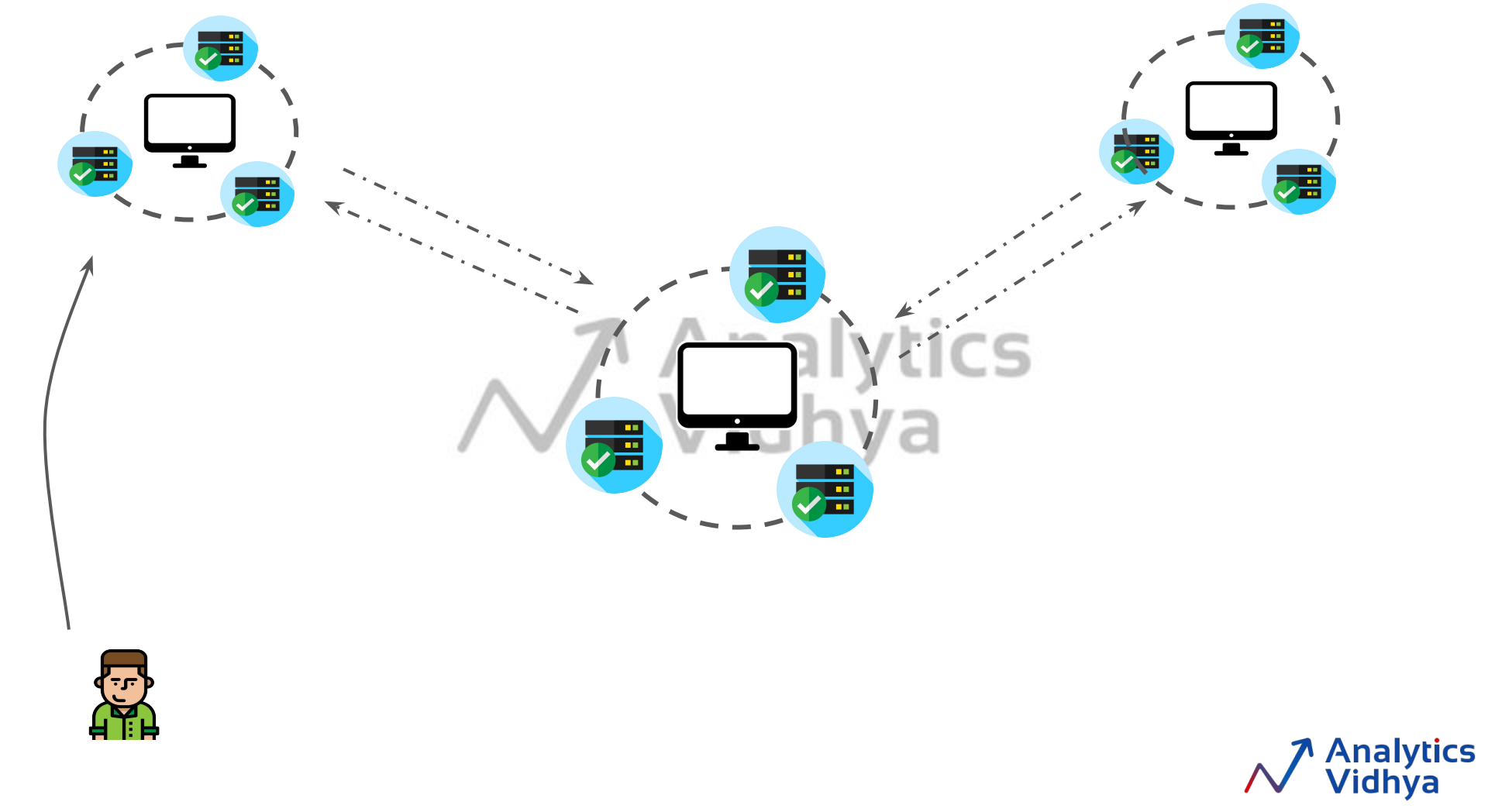
Analytics Vidhya

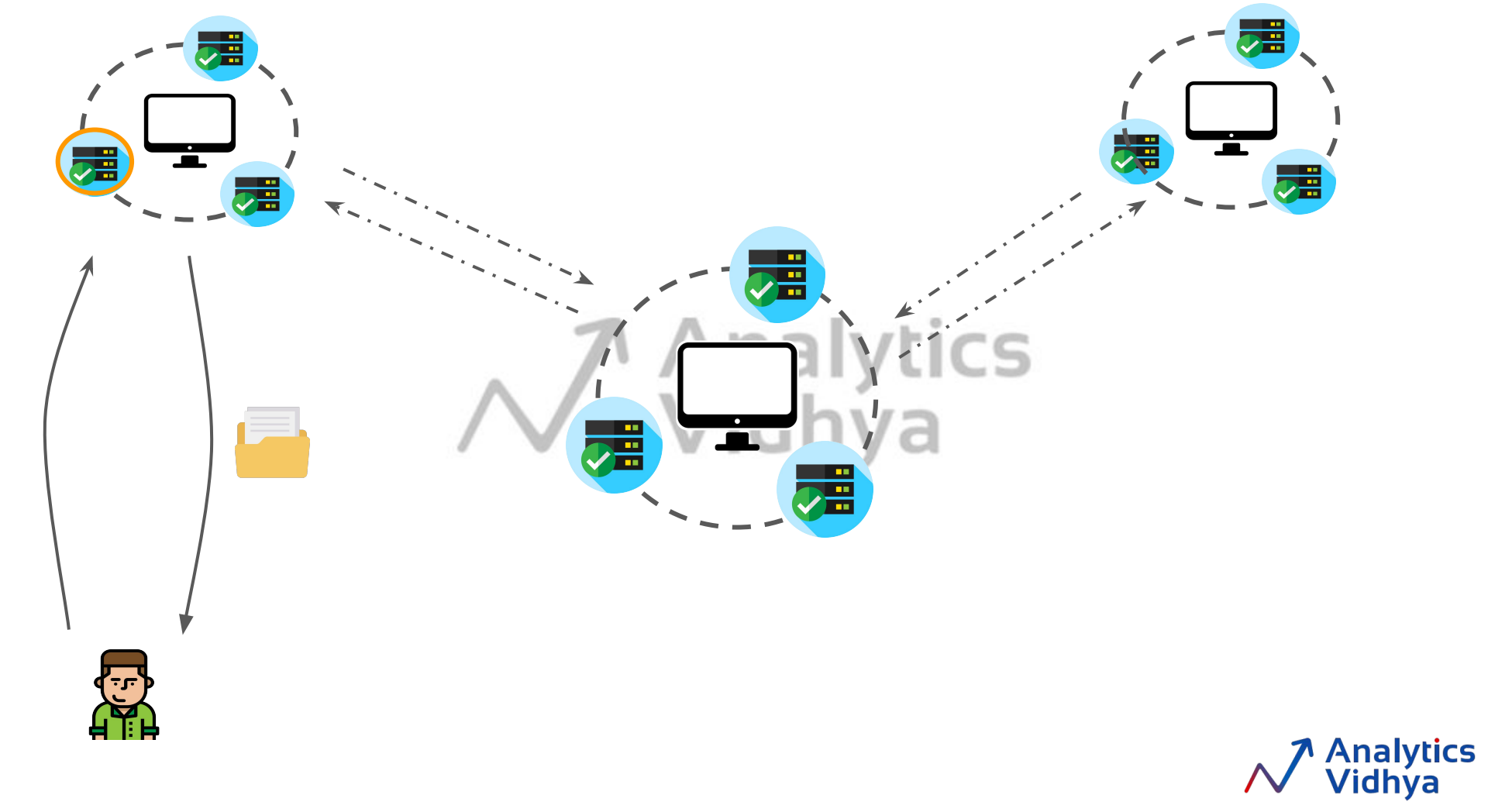
Replication

Analytics Vidhya



Analytics
Vidhya


Analytics
Vidhya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Higher
Scalability

Analytics Vidhya

Vertical Scaling

4 CPU, 4GB RAM,
2TB Storage

2 CPU, 2GB RAM,
1TB Storage

1 CPU, 1GB RAM,
500GB Storage

Horizontal Scaling

1 CPU, 1GB RAM,
500GB Storage

1 CPU, 1GB RAM,
500GB Storage

1 CPU, 1GB RAM,
500GB Storage

1 CPU, 1GB RAM,
500GB Storage

1 CPU, 1GB RAM,
500GB Storage

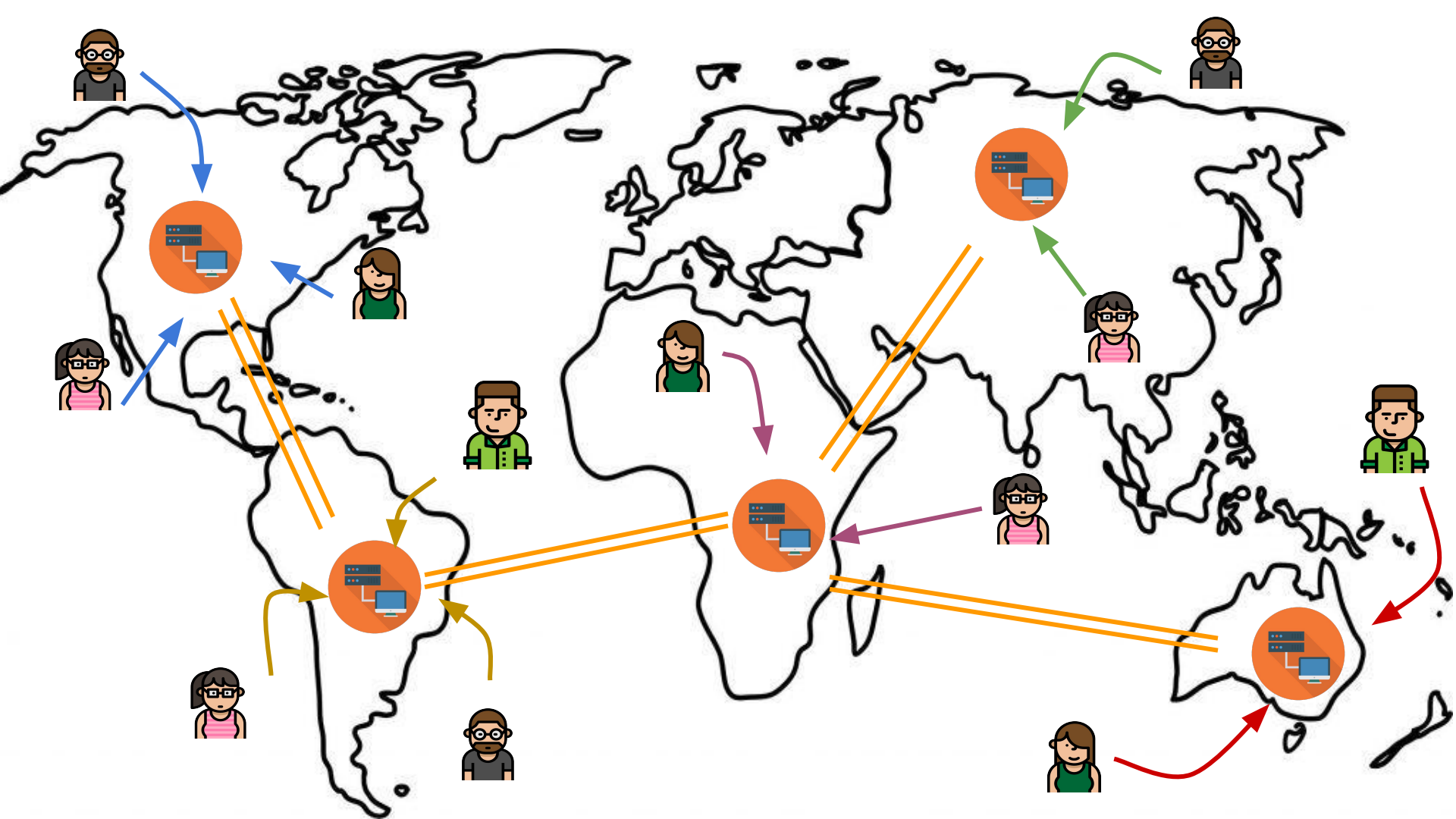
1 CPU, 1GB RAM,
500GB Storage

1 CPU, 1GB RAM,
500GB Storage

Analytics Vidhya

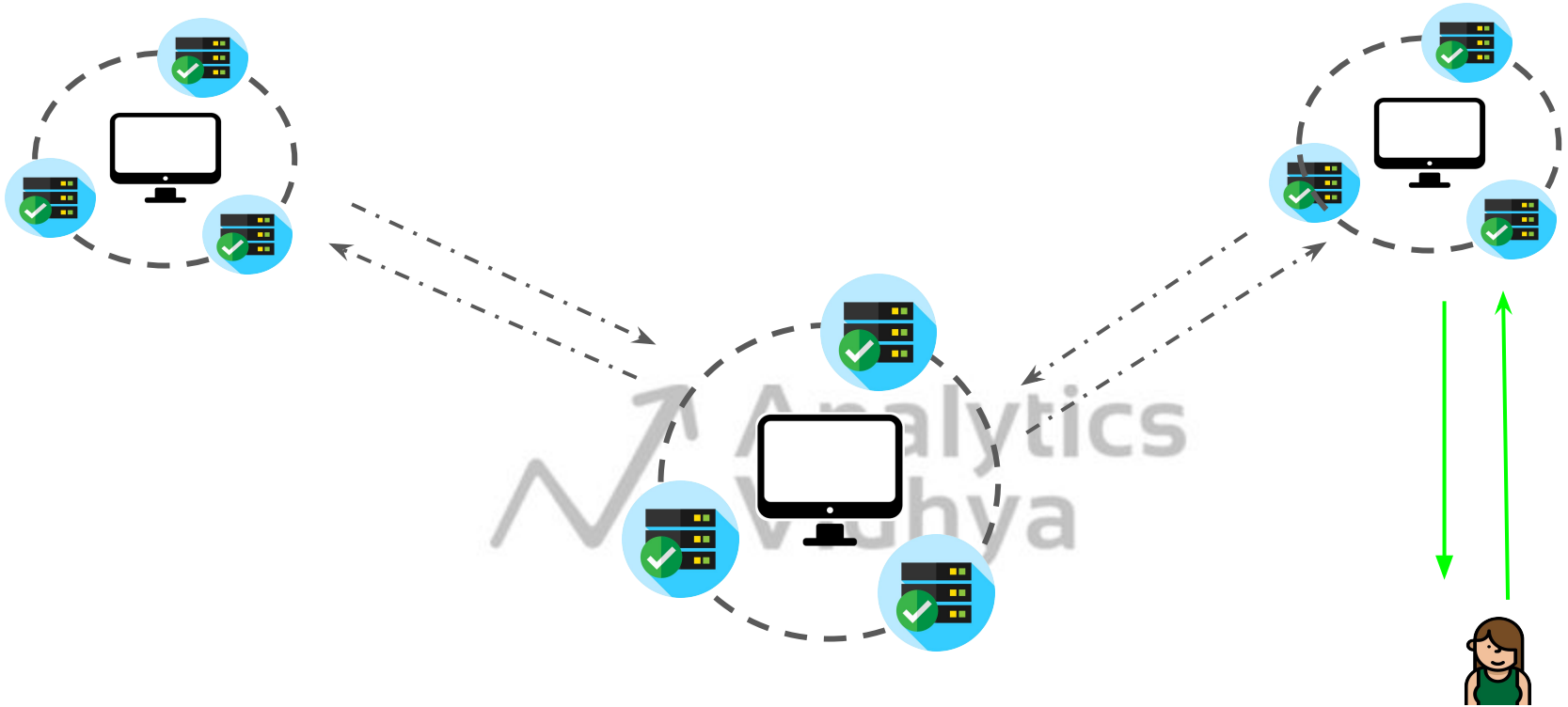
Higher
Concurrency

Analytics Vidhya

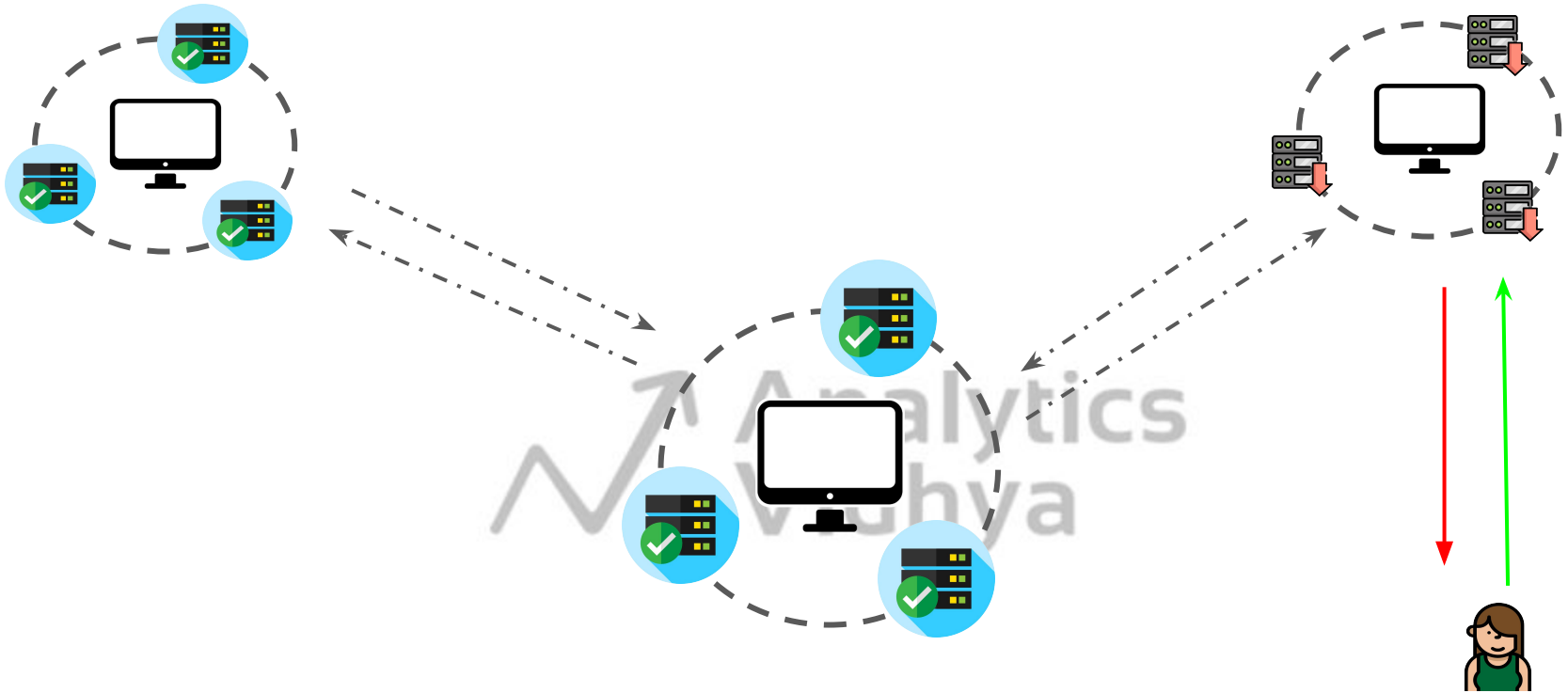


Fault
Tolerance

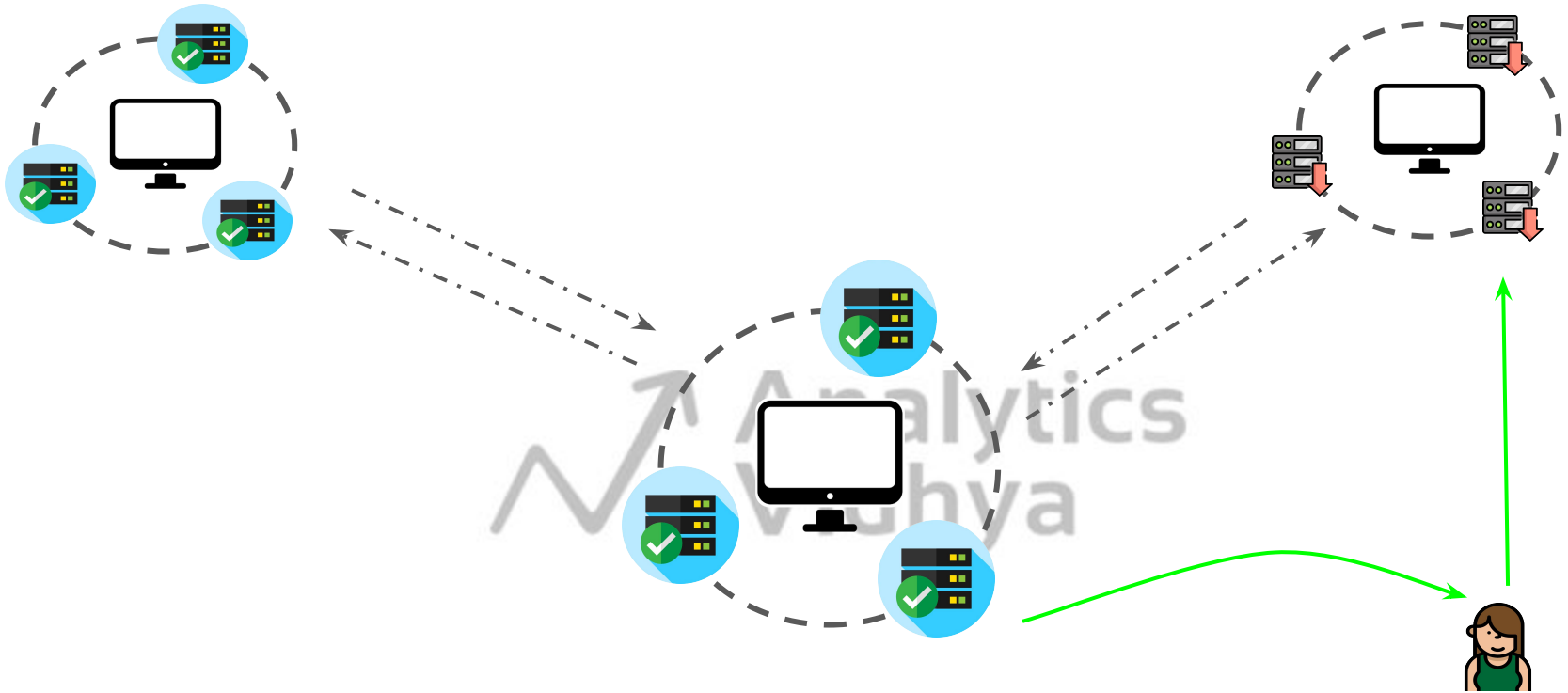
Analytics Vidhya



Analytics
Vidhya



Analytics
Vidhya



Analytics
Vidhya

What next?

- Store data in distributed manner.
- Perform computations on data.
- Manage the overall distributed system.

Analytics Vidhya

1. Store
2. Process
3. Scheduling

Analytics Vidhya

Thank You!!

Analytics
Vidhya