

## Online [[Transaction]] Processing

- write-heavy database workloads
- applications
  - financial
  - commercial
  - medical
- benchmarks
  - measures all processing done
- e.g. TPC-C benchmark

### ▪ Example TPC-C

- 45% New-Order
- 43% Payment
- 4% Order Status
- 4% Delivery
- 4% Stock Level

[\[http://www.tpc.org/tpc\\_documents\\_current\\_versions/pdf/tpc-c\\_v5.11.0.pdf\]](http://www.tpc.org/tpc_documents_current_versions/pdf/tpc-c_v5.11.0.pdf)

### New Order Transaction:

- 1) Get records describing a warehouse (tax), customer, district
- 2) Update the district to increment next available order number
- 3) Insert record into Order and NewOrder
- 4) For All Items
  - a) Get item record (and price)
  - b) Get/update stock record
  - c) Insert OrderLine record
- 5) Update total amount of order