Connect › Support › Advance

The Institute of Internal Auditors Australia

Keynote 2
Analytics: Using data to drive your decision making

Presented by

Robert Overell PMIIA CIA
Chief Internal Auditor
Brisbane City council

Analytics: Using data to drive decision-making

Bob Overell
Brisbane City Council
Assurance Services

Dedicated to a better Brisbane

Analytics: Using data to drive decision-making

- **Using business intelligence platforms**
- **Combining datasets**
- **Automation reducing risk**
- **Deriving information and trends from data**
- **Power of visualisation**

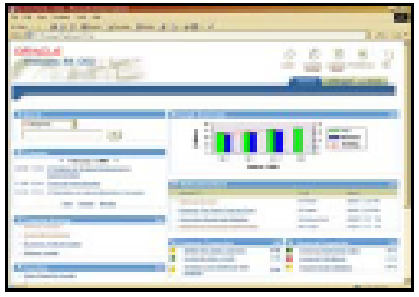
Producing Quality Information

Transformation

Data → Information

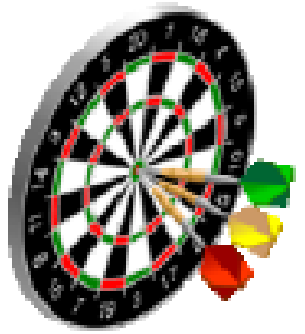
(*quality* information)

Business intelligence →

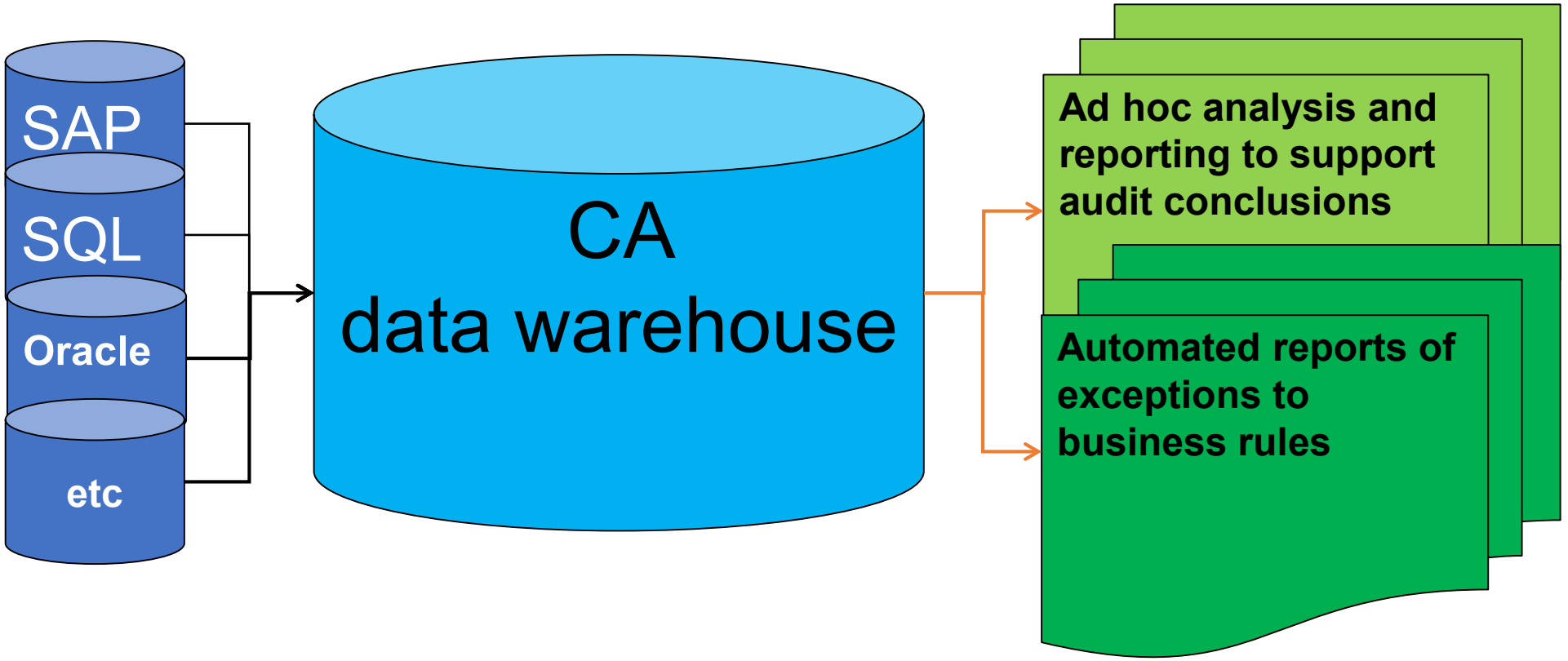


Knowledge

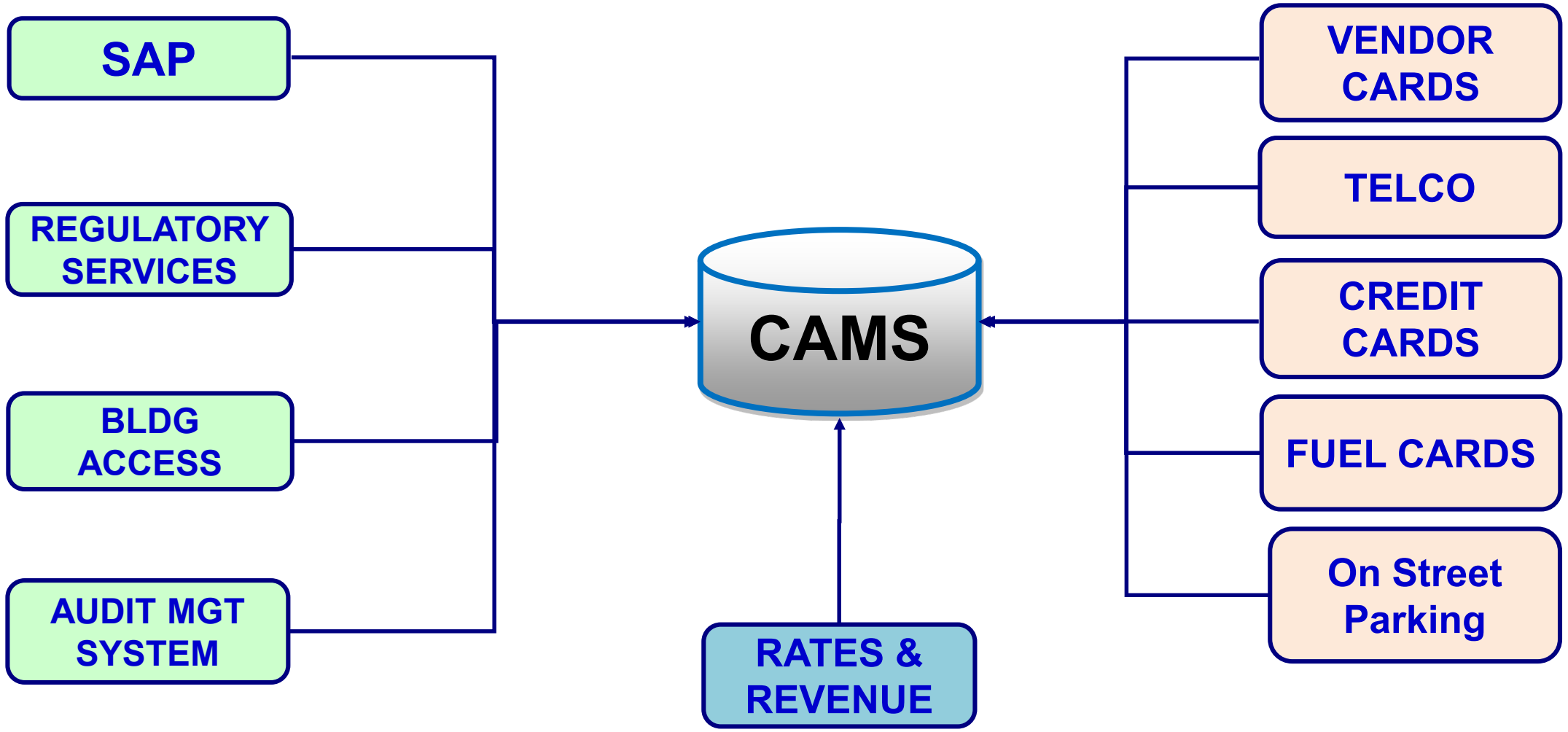
Action →



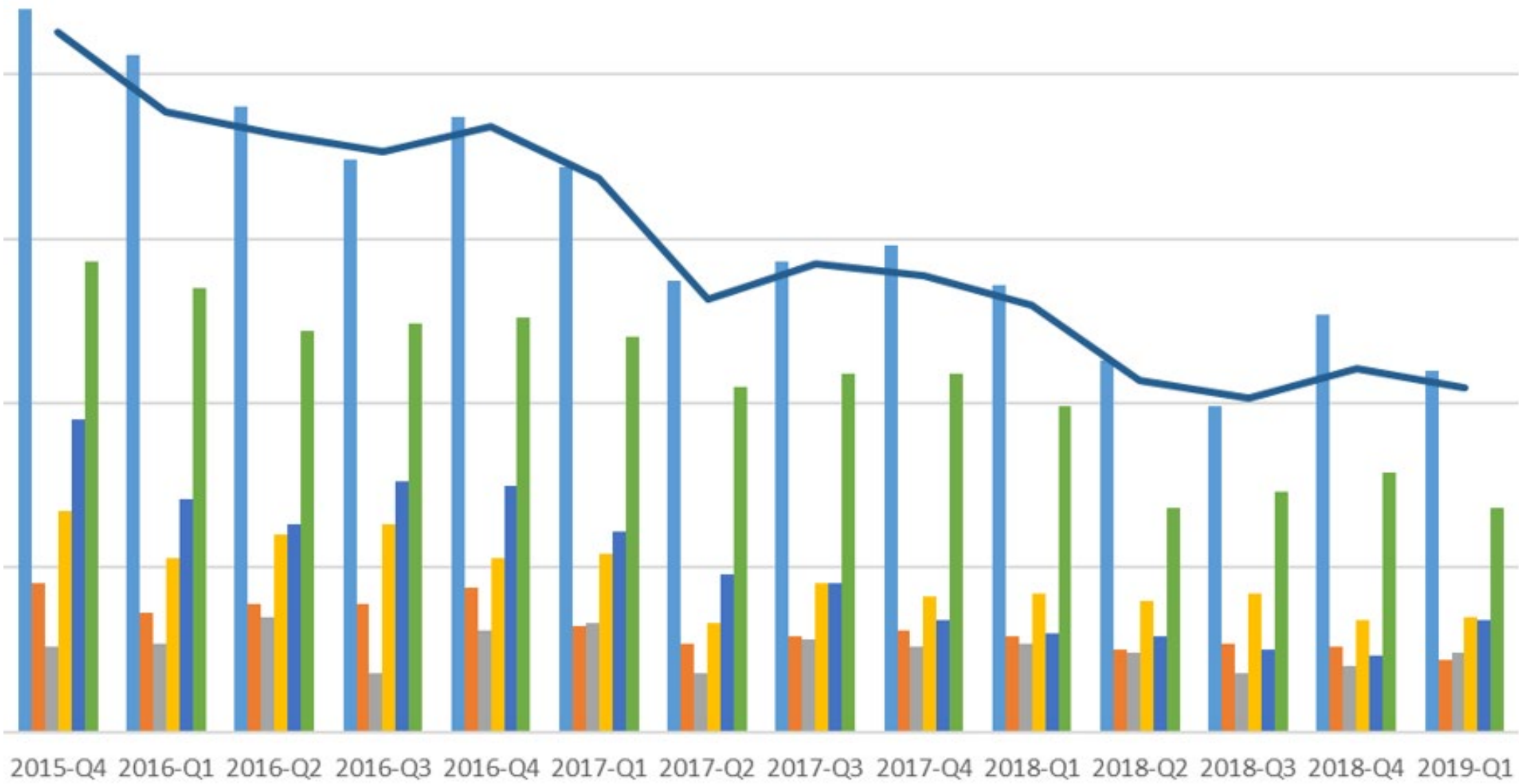
How it works


SAP
SQL
Oracle
etc
CA
data warehouse
Ad hoc analysis and reporting to support audit conclusions
Automated reports of exceptions to business rules

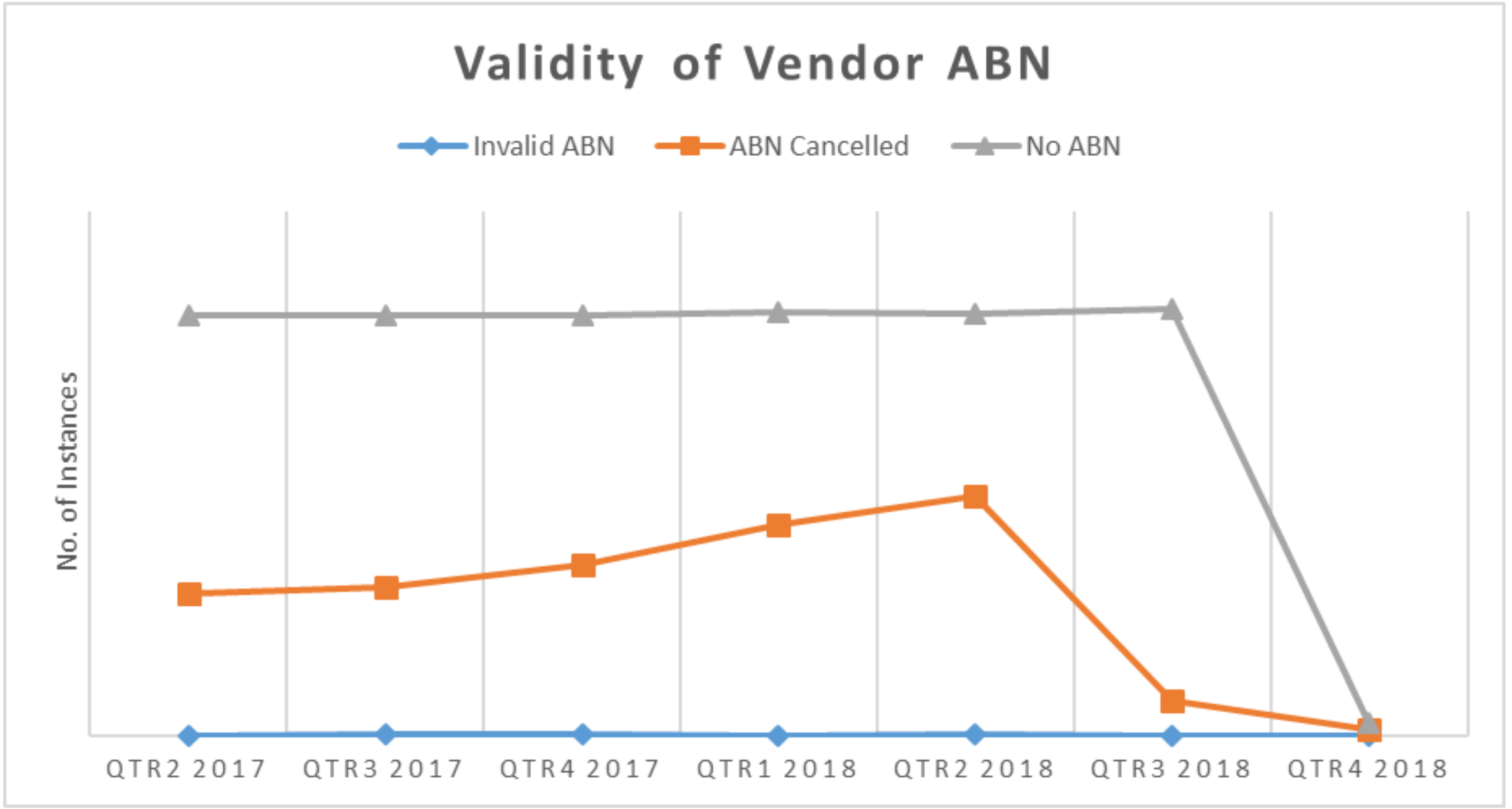
Where are we now?



Annual Leave Balances Reduced



Improved vendor master data management



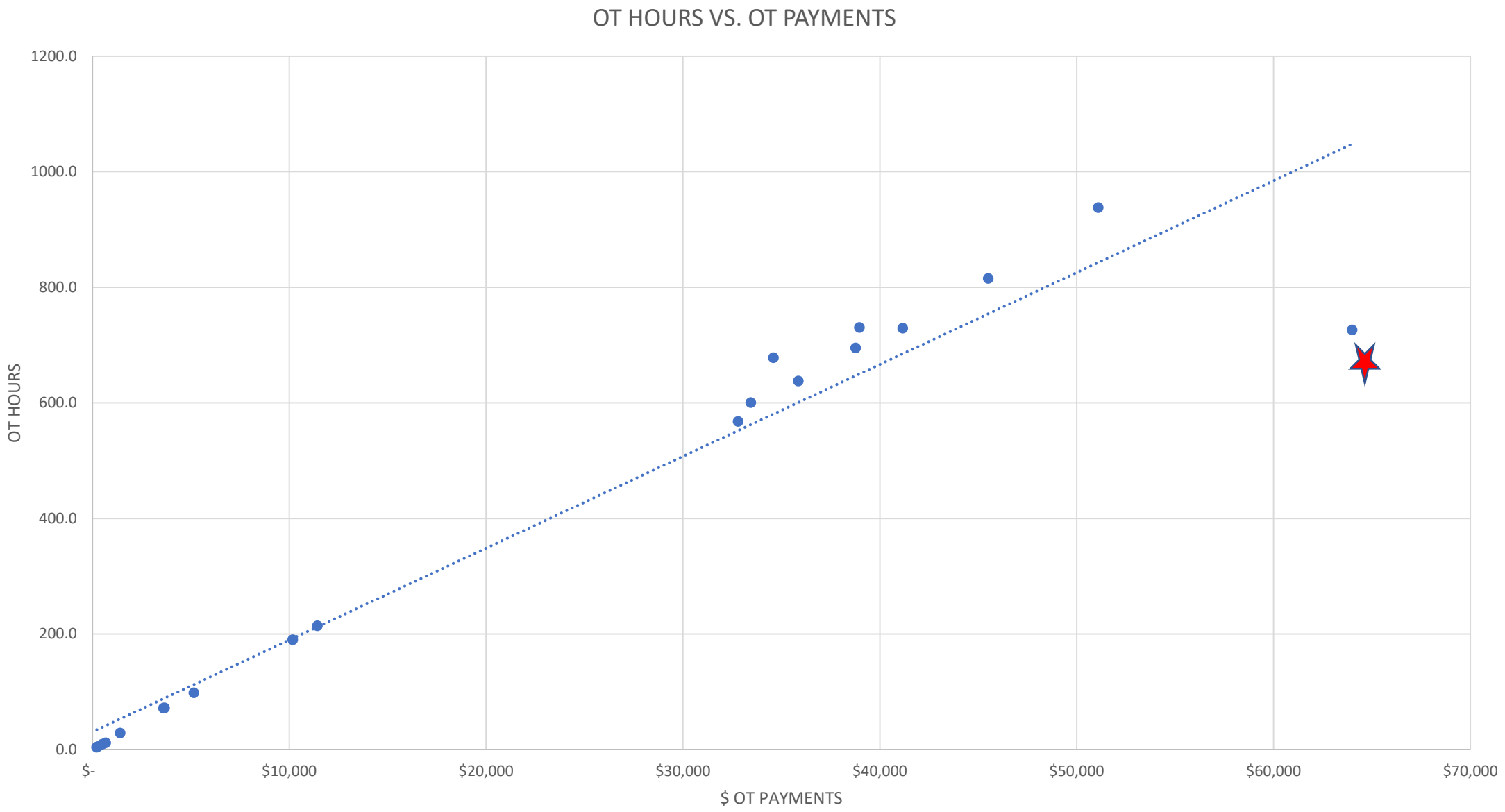
What information or trends can we derive from data?

- Time-Attendance v Transaction
  - Were the transactions performed when user not present?

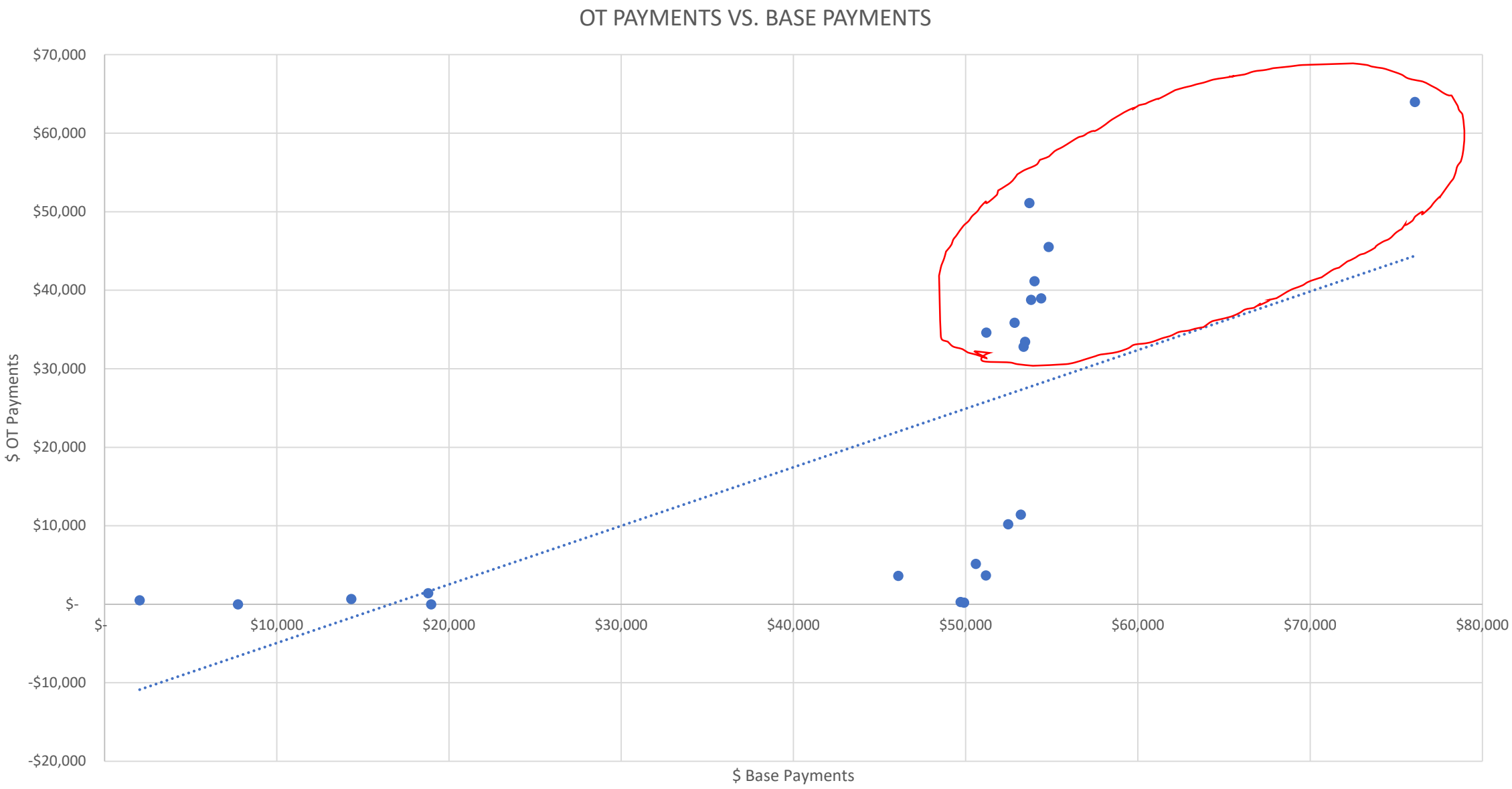
What information or trends can we derive from data?

- Physical & Logical access
  - Physical access vs employment dates?
  - Logical (ICT) access vs employment period?
  - Payments vs employment period?

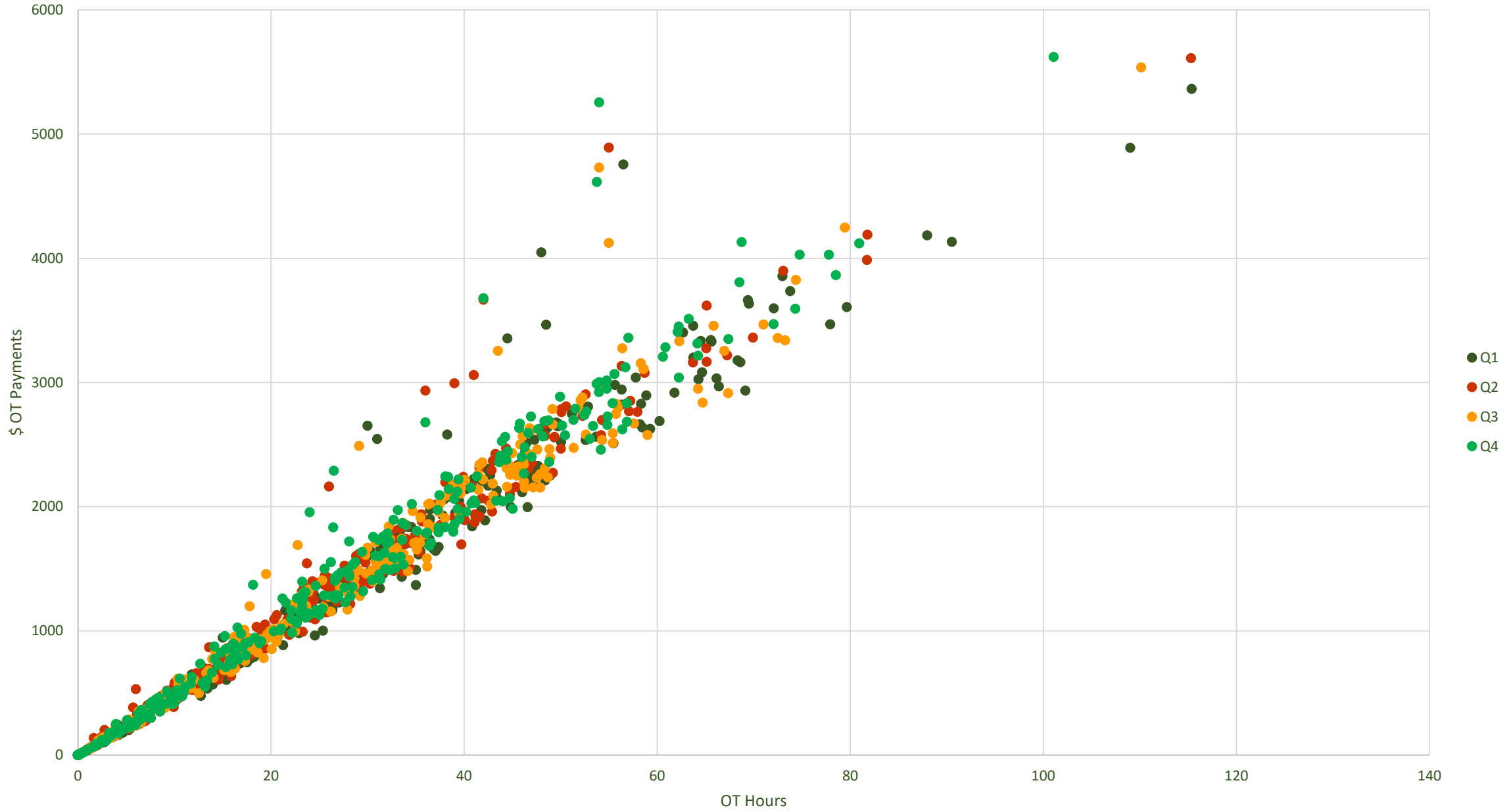
Illustrative Example: Overtime



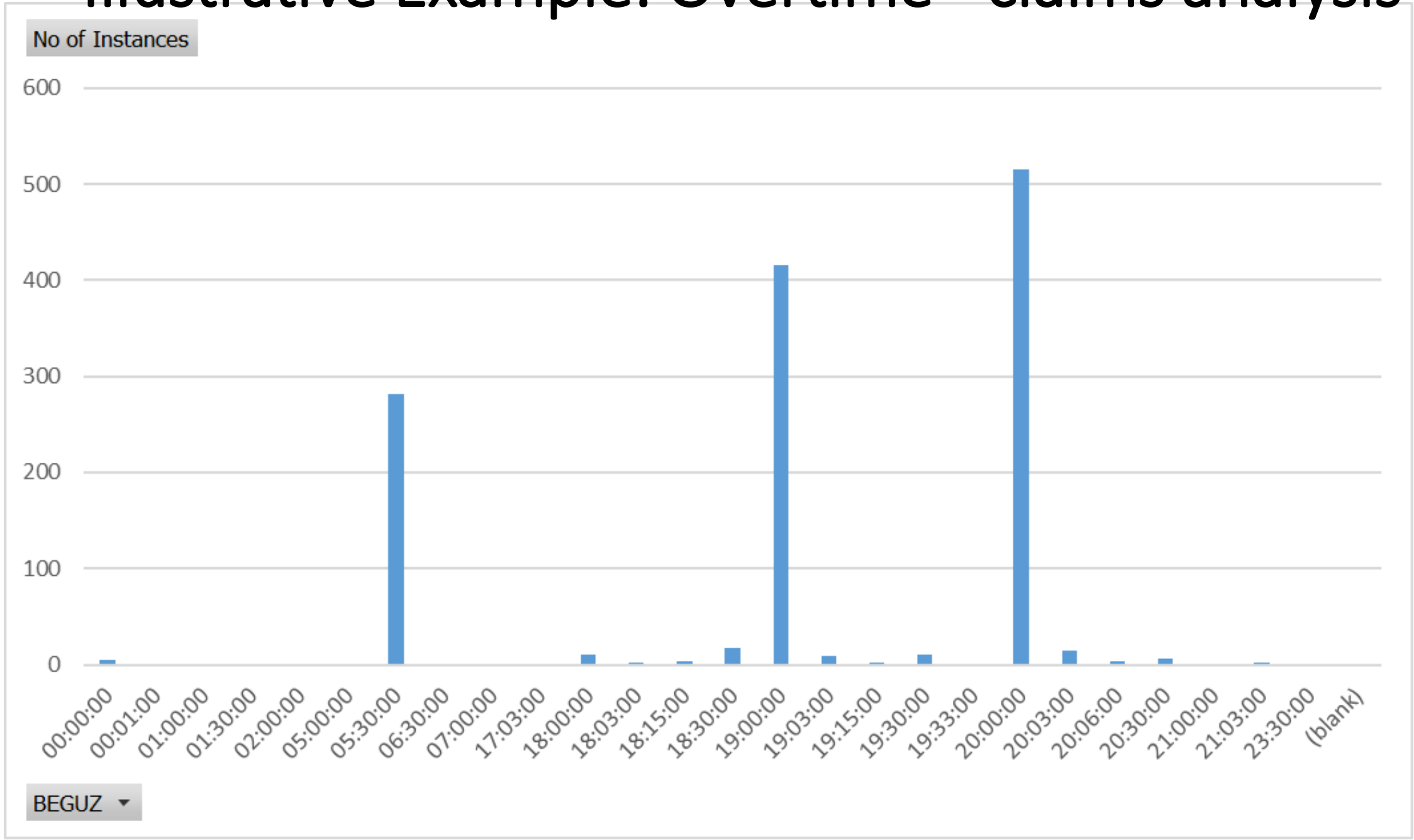
Illustrative Example: Overtime



Illustrative Example: Overtime



Illustrative Example: Overtime - claims analysis



Potential Outcomes

- Control weaknesses in overtime approval process:
  - Employee constantly starts roster 1-hour early without consulting team leader. Timesheets approved without scrutiny.
  - Individual employee nearly always on-call, incurring overtime and allowances.
- Internal change management to review work structures and workloads within the business area.

Visualisation

- Purpose of visualisation?
  - Easier for ALL parties to understand
- Outcome of visualisation for BCC?
  - Investigation of outliers and exceptions
  - Extrapolation into process and behaviour lessons and improvements

Visualisation

- What should be included?
  - Consider the audience
  - Consider the message
  - Consider the data

Lessons learned

- Know the business
- Know the risk
- Know the rules
- Know the process
- Know the data

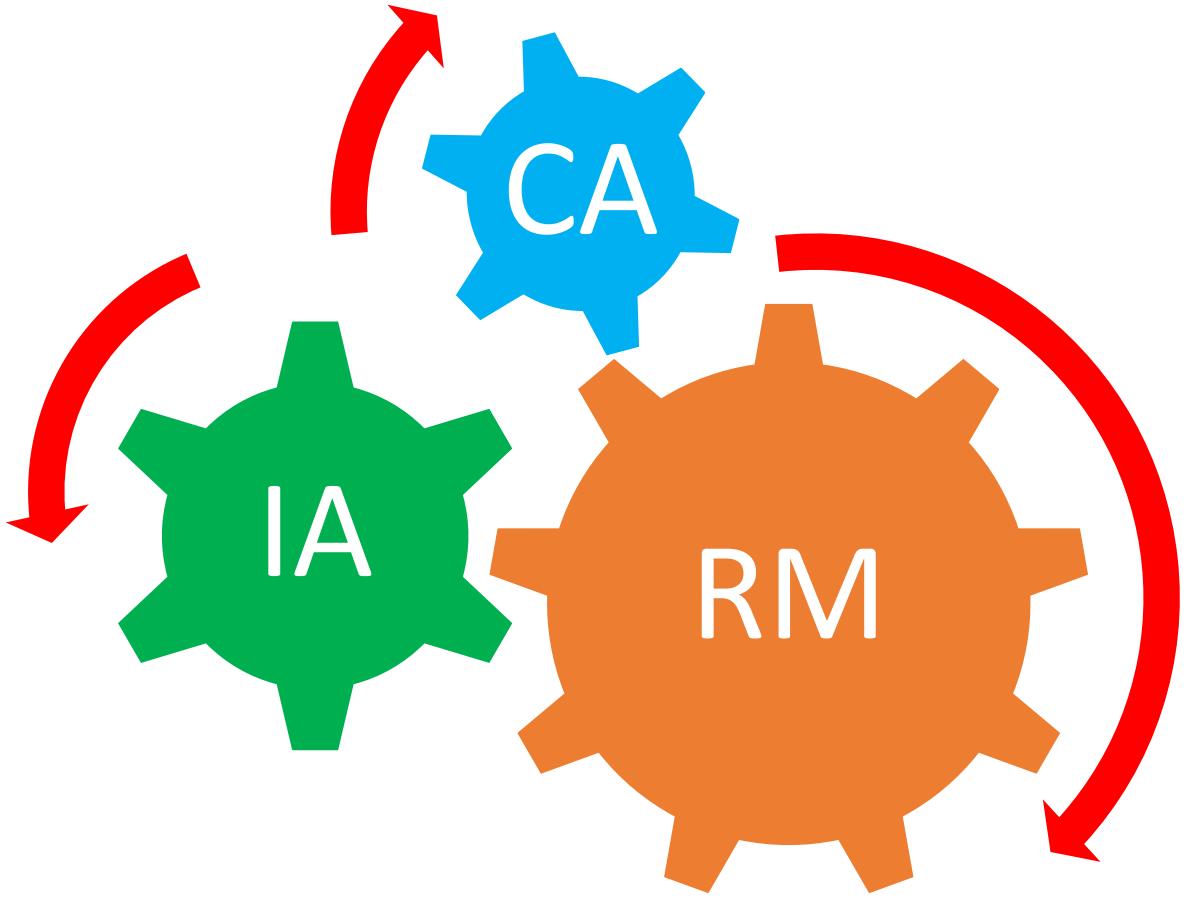
Lessons learned

- KNOW THE QUESTION

Road Ahead - CA

- Risk re-assessments
- Communication – ALL directions
- Better practice models
- Priorities
- Infrastructure and tools
- Communication – YES, AGAIN

Road Ahead – IA & RM



- Risk data informs IA Planning
- CA informs IA Planning
- IA outcomes inform CA
- IA + CA inform Risk Management
- Assurance Mapping