MorvelHRM Management

# The expanding HRM management platform



DELIVERABLE 3: NORMALIZED SCHEMA

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# Original Relational Schema

COO (OBKey, Name)

COUNTRY\_SERVING (country\_ID, name, num\_cities)

CITY (city\_ID, city\_name, country\_ID)

DEPARTMENT (department\_ID, city\_ID, department\_name, manager\_ID)

OFFICE (city\_ID, manager\_ID, address, num\_rooms)

OPERATIONAL\_MANAGER (manager\_ID, manager\_name, dob, sex, salary, contact\_num)

REGIONAL\_MANAGER (manager\_ID, manager\_name, dob, sex, salary, city\_ID, contact\_num, office\_address, COOkey)

SUPERVISION (supervisor, supervisee)

EMPLOYEE (employee\_ID, employee\_name, sex, years\_worked, position, salary, contact\_num, department\_ID)

DEPENDENT (employee\_ID, dependant\_name, relationship)

# Functional Dependencies in the original schema

## COO:

OBKey 🡪 Name

## COUNTRY\_SERVING:

country\_ID 🡪 name, num\_cities

## CITY:

city\_ID 🡪 city\_name, country\_ID

# DEPARTMENT:

department\_ID 🡪 city\_ID, department\_name, manager\_ID

## OFFICE:

city\_ID, manager\_ID 🡪 address, num\_rooms

## OPERATIONAL\_MANAGER:

manager\_ID 🡪 manager\_name, dob, sex, salary, contact\_num

## OPERATIONAL\_MANAGER:

manager\_ID 🡪 manager\_name, dob, sex, salary, city\_ID, contact\_num, office\_address, COOKey)

## SUPERVISION:

supervisor 🡪 supervisee

## EMPLOYEE:

employee\_ID 🡪 employee\_name, sex, years\_worked, position, salary, contact\_num, department\_ID

position 🡪 salary (partial dependency to be cleared)

## DEPENDENT:

employee\_ID, dependent\_name 🡪 relationship

# Applying normalization to schema produces one relation to resolve the dependency in the employee relation.

EMPLOYEE (employee\_ID, employee\_name, sex, years\_worked, position,  
salary, contact\_num, department\_ID)

EMPLOYEE\_PAY (position, salary)

# The schema has achieved 3NF and is sufficiently normalized.