

MIS602 Data Modelling and Database Design

Assessment 2 Data Implementation - Case Study

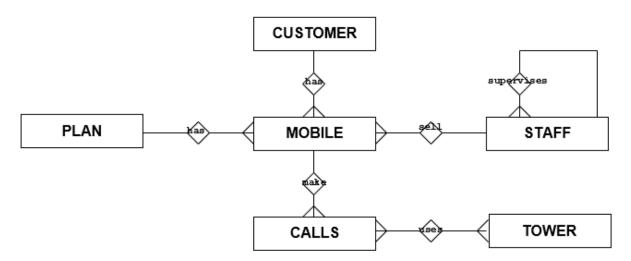
The following case study models a mobile phone company. The company has a number of phones that are sold by staff to various clients. Each phone comes with a plan and each plan has a number of features specific to that plan including:

- a call charge in cents per minute (this does not apply to all plans)
- a plan duration in months
- a break fee if the customer leaves the plan before the end of the plan duration
- a monthly data allowance in gigabytes

Assumptions that are made for the assignment are:

• mobile phones are locked to a plan for the length of the plan duration

Entity-Relationship Diagram



Relational Model

CUSTOMER	CALLS	MOBILE	STAFF	TOWER	CONNECT	PLAN
CustomerID	<u>CallsID</u>	MobileID	<u>StaffID</u>	<u>TowerID</u>	ConnectID	<u>PlanName</u>
Surname	MobileID	PhoneNumber	Surname	Location	TowerID	BreakFee
Given	CalledNumber	BrandName	Given	Bandwidth	CallsID	DataAllowance
DOB	CallDate	Joined	DOB	MaxConn		MonthlyFee
Sex	CallTime	Cancelled	Sex	SignalType		PlanDuration
PhoneHome	CallDuration	PlanName	Joined			CallCharge
PhoneWork	DataUsage	PhoneColour	Resigned			
PhoneFax		CustomerID	Address			
Address		StaffID	Suburb			
Suburb			Postcode			
State			Phone			
Postcode			SupervisorID			
			Commission			
			RatePerHour			