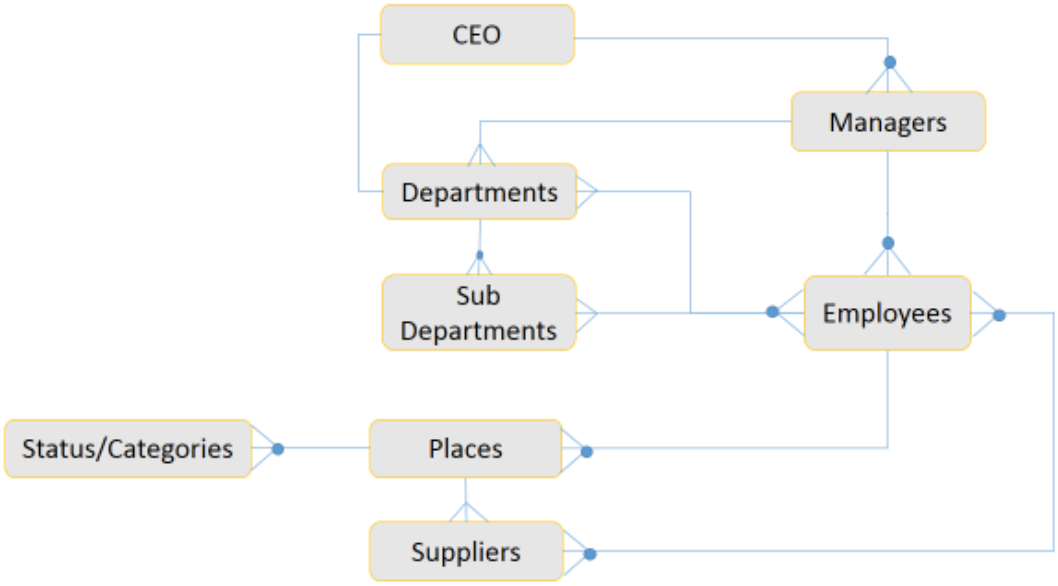
ERD Names Inc.



ENTITIES

Employees	index	Type	Size
ID_employeeNumber (internal key)		numeric	10
firstName	Btree	character	50
lastName	Btree	character	50
Birthdate	Btree	dateFormat MM/DD/YYYY	
Sex		male/female	
taxIdNumber		IRS_TAX_Number	
hireDate		dateFormat MM/DD/YYYY	
Salary		numeric	
paymentCurrency	Btree	character (US, Euro, Yeng)	
Bonus		numeric	
department Internal Key		numeric	
isEmployee Manager		True/false	
status (active-inactive)	Bitmap	Active / Inactive	
country	Btree	character	
homeAddress	Btree	character	
phoneNumber		numeric	
emailAddres	Btree	character	100

Suppliers	index	Type	Size
ID_supplierNumber (internal key) unique consecutive Identifier asigned per database		numeric	10
supplierName	Btree	character	50
emailAddres		character	100
taxIdNumber		IRS_TAX_Number	
country	Btree	character	
Address	Btree	character	
phoneNumber		character	
emailAddres		character	
monthy Productivity	Bitmap	number of places that provide	
reliability Indicator	Bitmap	internal Calification type A-F score	
Status	Bitmap	Active / Inactive/ Prospect	

namePlaces	index	Type	Size
ID_Place Number (internal key) unique consecutive Identifier asigned per database		numeric	10
Place Name	Btree	Unicode	50
Country	Btree	Unicode	
Language	Btree	Unicode	100
Latitude	Btree	Coordenates, numeric	
Elevation			
Population			

Status Place	index	Type	Size
ID_Place Number (internal key) unique consecutive Identifier asigned per database			
nameStatus (obsolete, historical, colloqial, current, proposed, etc)		Character	
typeOfPlace		List	

** I recommend create this table, because the status list might grow (ETC in the needs) so is better build a separate table and keep tracking of status in a separate way

Departments	index	Type	Size

ID_department (internal key)		Numeric – can be utilized in future as Cost Center	10
Key ID employee Number		Numeric	
department Name	Btree	Character	50
department ID employee number, who will be the Manager			

** ** Currently the company has 6 departments or areas (Company Officers, HR, Marketing, IT, Engineering, Sales), I recommend create a department table, to keep track of departments as the company needs it (creating or eliminating them)

Sub – Departments	Index	Type	Size
ID_Sub_ department (internal key)		Numeric	10
Key ID employee Number		Numeric	
sub department Name	Btree	Character	50
sub department ID employee number, who will be the Manager			

** Currently the company doesn't have sub-departments or areas but might need them in the future.

QUERIES

N°	Department	Queries Report
1	HR	list of employees, with name, employee ID, tax ID, country of employment, hire date, birth date, home address, salary and bonus
2	Marketing	Generate list of suppliers by country, with indication of their reliability, monthly productivity and contact information
3	Executives-Managers	Monthly disbursements, employee totals, current financial status.

ACCESS RIGHTS

N°	Table	Access Rights
1	HR	Only qualified HR employees can be able to make changes to the HR information
2	HR	HR department must have access employees list

3	Executives	Only able to see monthly disbursements, employee totals, current financial status
4	Executives	only executives can be able to see monthly increases by language in the number of places in the inventory and also make ad-hoc queries to access current inventory information
5	Managers	Only can only see his departments employee information
6	Managers	Only can only have an Administrative assistant
7	Marketing	Only qualified marketing/purchasing employees can have access to see the specific name information contributed by each supplier
8	Marketing	Only Marketing department can be able to initiate generation of monthly statistics

Business Constraints

1. Customer and pricing information will not be kept in this database

2. Marketing shall be able to initiate generation of monthly statistics.