


# QlikSense Analytics Development

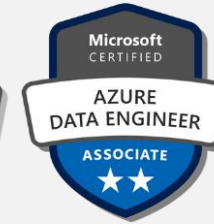


# Presenter



 /arifmazumder

**Mohammed Arif, PhD**  
**Lead Data Scientist**  
Big Data | Machine Learning | AI

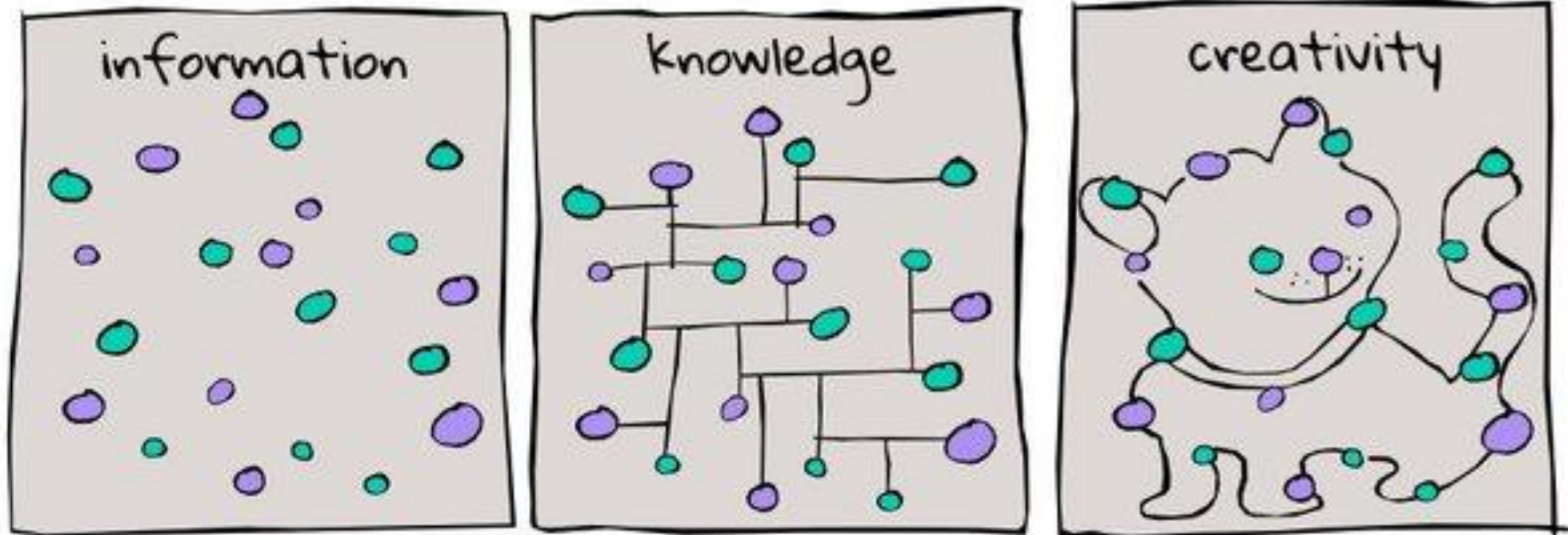


Mohammed Arif has more than sixteen (16) years of working experience in Information Communication and Technology (ICT) industry. The highlights of his career are more than six (7) years of holding various senior management and/or C-Level and had five (5) years of international ICT consultancy exposure in various countries (APAC and Australia), specially on Big Data, Data Engineering, Machine Learning and AI arena.

He is also Certified Trainer for Microsoft.



Resources Links : <http://arif.works/qlik>



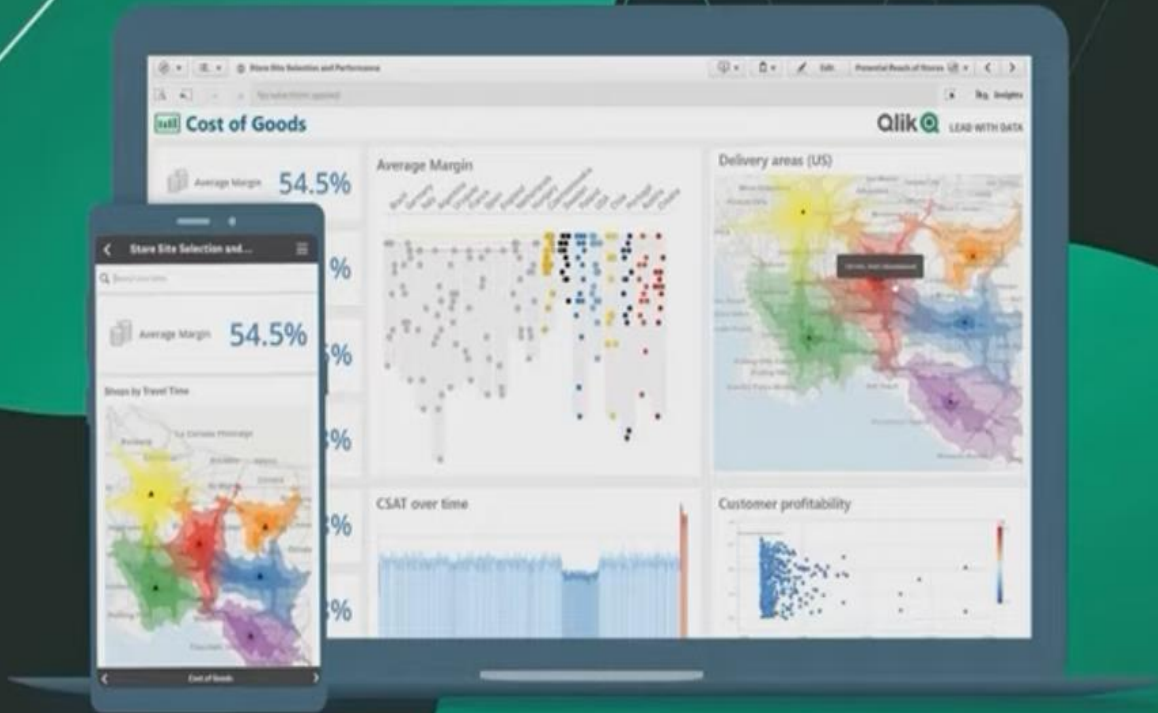
The background is a dark charcoal grey. It features three large, semi-transparent teal circles of varying sizes. Two thin, light grey diagonal lines cross the frame: one from the bottom-left towards the top-right, and another from the top-right towards the bottom-left.

**What is QlikSense?**



# QlikSense

Self-Service Business Intelligence  
and Visual Analytics Platform.



# Advantages of using Qlik Sense



MAKES  
ANALYTICS  
EASY



INSTANTLY  
OUTPUTS  
INSIGHTS



EFFICIENT  
COLLAB



EMBEDDED  
ANALYTICS



SECURE,  
CENTRALLY  
MANAGED AND  
CAN SCALE  
ACROSS  
THE CLOUD

Cloud Computing

scalability

programming

web

online systems

architecture

security

hardware

term

wordcloud

browser

device

telecommunication

cluster

client

providers

metaphor

storage

application

computer

server

communication

internet

large

maintenence

alphabet

network

interface

business

# Qlik Sense Environments



Qlik Sense Desktop



Qlik Sense Enterprise



Cloud Editions of  
Qlik Sense





- Single User Solution
- Can be downloaded & installed for free
- No App sharing feature
- No Autosave function
- Dynamic views are not supported
- Duplicating apps is not supported

# Qlik Sense Desktop



- Organization-wide Solution
- Multi-cloud: Server-based or SaaS
- Needs a license
- All applications are centrally located on a server
- Automated Data refresh & rule-based security
- Admins are the only ones that can upload apps

# Qlik Sense Enterprise



- SaaS Service
- Does not have a central dedicated server
- Users can share, collaborate & create their dashboards via web browser
- No Data refresh function
- All organizations users can see each app created

# Cloud Editions of Qlik Sense

# The Language

## Metric

A Metric is a quantifiable measure that is used to track and assess the status of a specific business process

Our business is flooded by metrics e.g. Sales value, Customer count, Stock on hand, Online click through count, conversion rate etc. etc.



# The Language

## Metric

We ask questions to reveal metrics e.g.

How many new customers were acquired today ?

How many sales this week?

How did our sales staff perform ?

Is my stock low ?

Should I order more stock ?

How many bad debts were there ?

# The Language

## KPI

It would be more than once that I have talked with a client that is very enthusiastic about metrics and KPI's, so much so they end up measuring every little thing and then wrap them up in KPI's

So much information can drown you, how do you make decisions with so many KPI inputs?

# The Language

## KPI

It would be more than once that I have talked with a client that is very enthusiastic about metrics and KPI's, so much so they end up measuring every little thing and then wrap them up in KPI's

So much information can drown you, how do you make decisions with so many KPI inputs?

# The Language

## KPI

Apply the SMART principle to your KPI definition

### Specific

The more specific the KPI, the easier it will be to track.  
E.g. Customer acquisition target per day (200)

### Measurable

Define what is being measured. Use a number or % to demonstrate an increase or reduction e.g. 85% of the sales target for today was met

### Achievable

Is the team motivated to achieve the defined KPI ?  
75% of support calls were successfully solved and closed!

### Relevant

Every KPI needs to align to your business goals, both for the short term and long term and should be crucial to achieving the goal  
E.g. Customer satisfaction rating should be above 85%

### Time-Bound

Having a set time-frame for KPIs to be completed helps focus the start up / business team to complete the goal e.g. reduce waste by 45% by the end of the first quarter



# Dimensions

Definition : The dimension is a structure that categorises/describes facts & measures

For example a *date* is a dimension as it categorises a measurement (aka fact) into a temporal representation e.g. the date a sale of a product took place

The *product* that was sold is also a dimension as it describes what was sold

The dimension can be organised into a hierarchy .

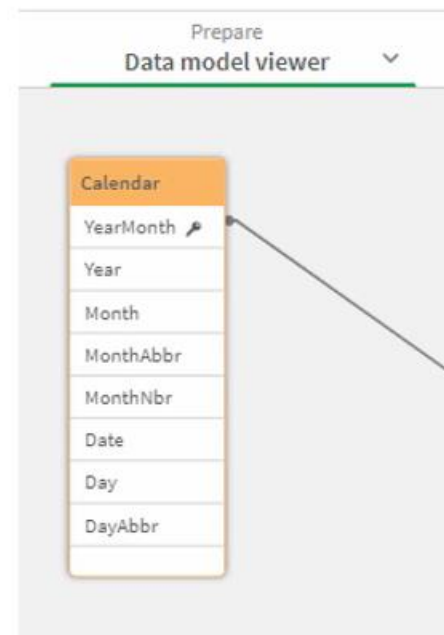
In a Qlik Sense data model we would have dimension tables to store these values

Calendar is an example of a hierarchy

Date -- Fine grain (i.e. The lowest point)

Month -- Dates grouped into months

Year -- Months grouped into years



# Measures / Fact

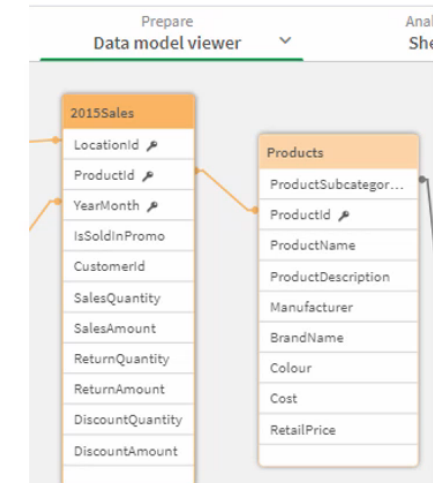
Definition : A measure is a property on which calculations can be made for example sum,avg,count and so forth

Hence for example when a product is sold it is recorded in a table and this table is known as a Fact table

The sale is recorded with properties (aka dimension columns) that a calculation can be made

The Sale Amount is one such property that can be aggregated via a sum to establish the total sales for a product

In a Qlik Sense data model we would have a fact table(s) to store these events



# Hands-on

## Executive Dashboard