

# The Future is Here

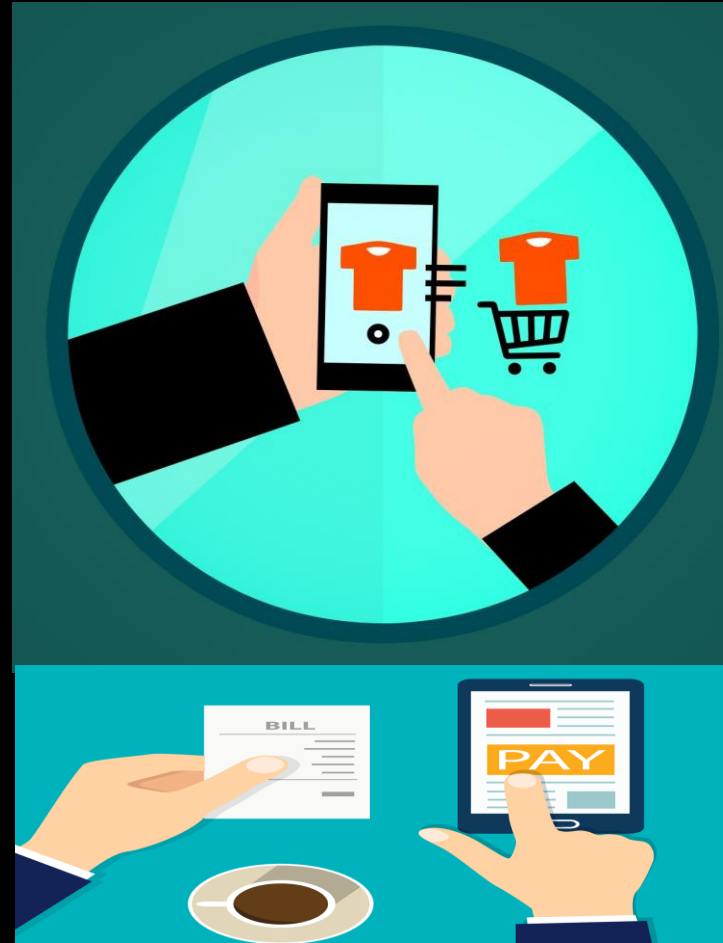
Statistics and Statisticians: Vision of the Future

Philippine National ICT Household Survey	2019
	32,915 respondents

**Study on the E-Commerce Activities of Individuals in the Philippines**

Lisa Grace S. Bersales; Manuel Leonard F. Albis; Sabrina O. Romasoc; Shushimita G. Pelayo

15 % do e-commerce



Online banking



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## Study on the E-Commerce Activities of Individuals in the Philippines

Lisa Grace S. Bersales; Manuel Leonard F. Albis; Sabrina O. Romasoc; Shushimita G. Pelayo



- not interested in online trade (61.0%)
- lack of knowledge and skills that hinder their becoming online sellers (37.2%)

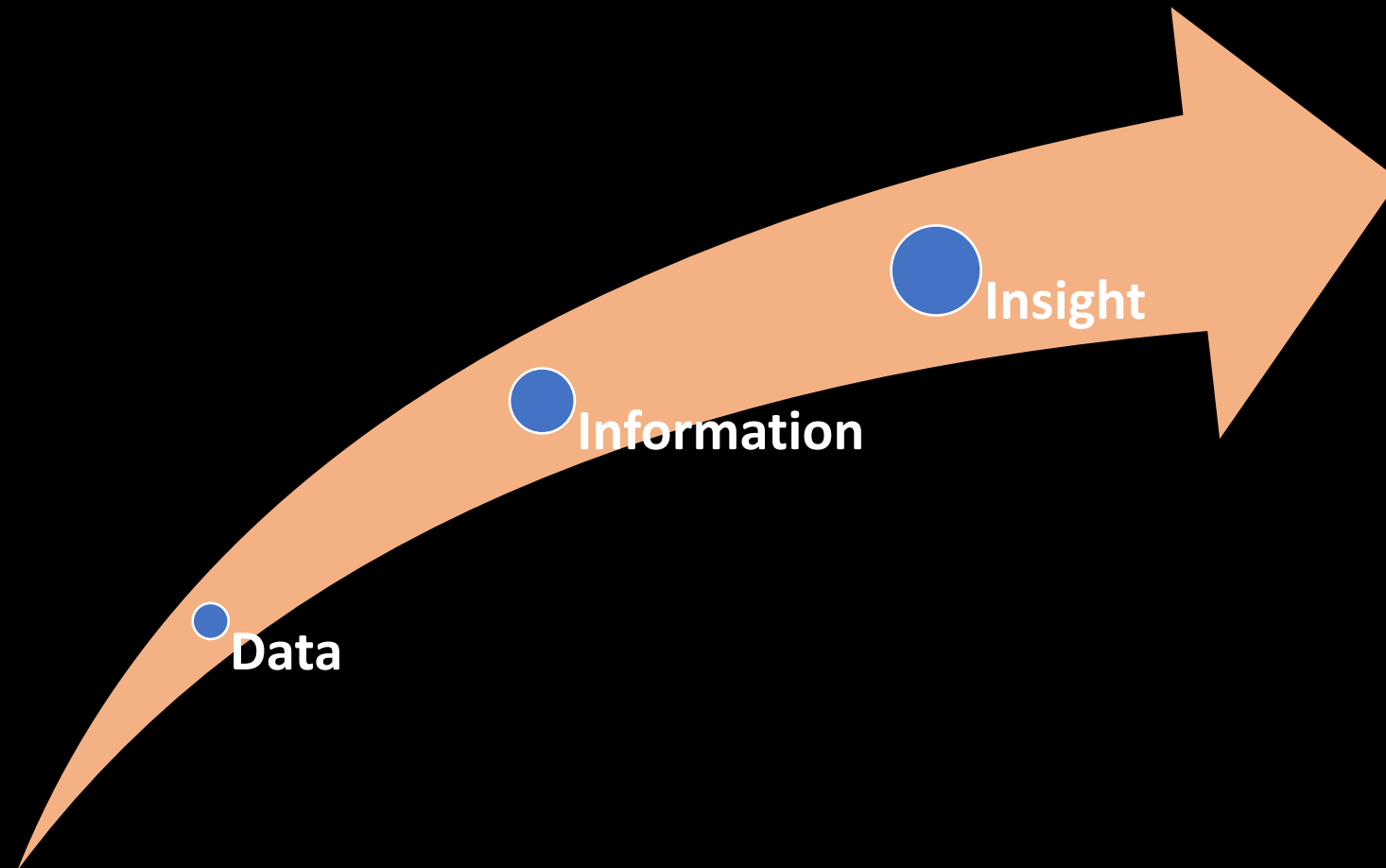


PROLOGUE

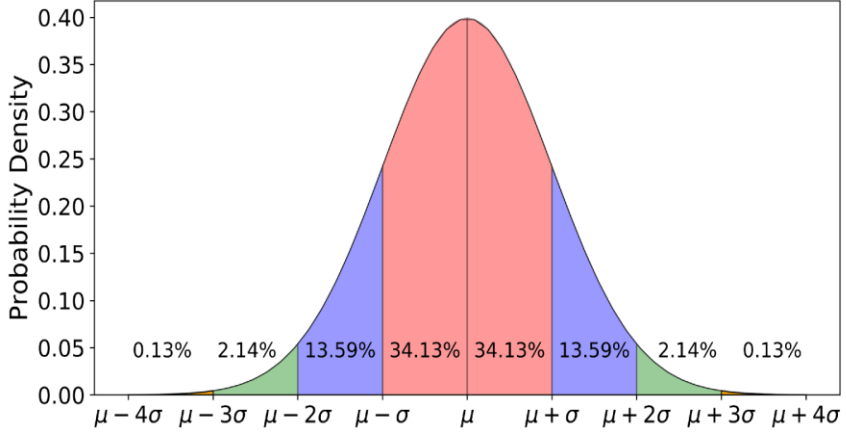
It came that winter. No one had ever heard of him or seen him before. One day, he appeared in the back of the store, a young boy with a backpack on his shoulders, looking at the shelves with a wide-eyed, curious expression. He had a small, round face and a pair of overalls that were too big for him. He looked at the shelves of all the products, from the canned goods to the fresh produce, and he seemed to be looking for something. They would all be there, but they would not be the same as they had been before.

“The goal is to turn data into information, and information into insight.”

– Carly Fiorina, former president and chair of Hewlett-Packard Co.



### Normal Distribution



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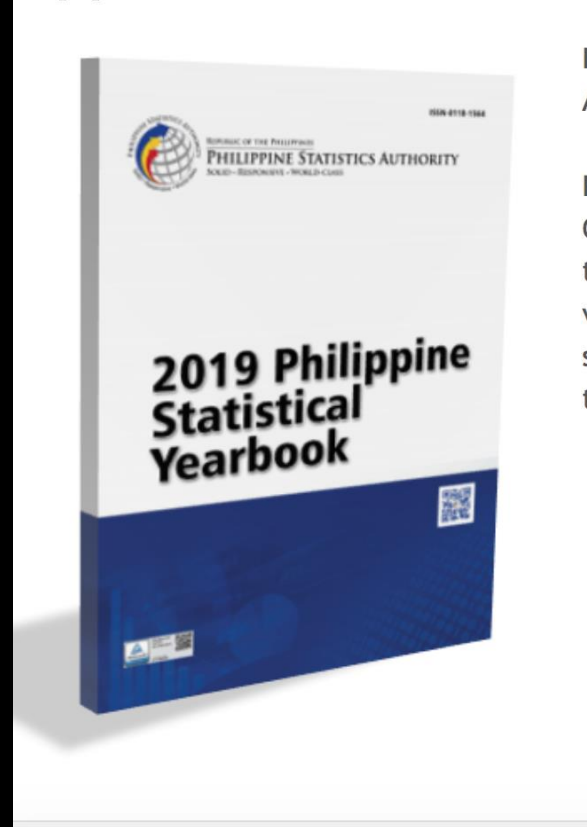
### BLUE



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### Philippine Statistical Yearbook



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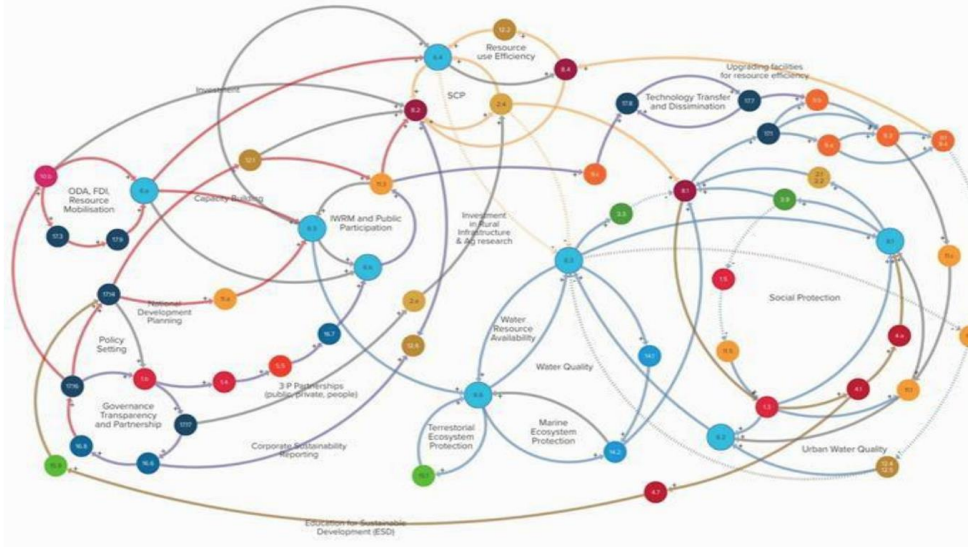
Table 1 Number of Families, Total and Average Annual Family Income and Expenditure by Region: 2018

Region	Number of Families (In thousands)	Income		Expenditure	
		Total (In millions)	Average (In thousands)	Total (In millions)	Average (In thousands)
Philippines	24,747	7,754,486	313	5,905,688	239
National Capital Region (NCR)	3,318	1,527,770	460	1,223,445	369
Central Administrative Region (CAR)	422	149,519	354	97,290	230
Region I (Ilocos Region)	1,213	348,097	287	248,059	205
Region II (Cagayan Valley)	853	225,945	265	148,503	174
Region III (Central Luzon)	2,785	929,598	334	752,116	270
Region IV-A (CALABARZON)	3,760	1,444,429	384	1,145,420	305
MIMAROPA Region	737	189,684	257	128,792	175
Region V (Bicol Region)	1,280	300,778	235	247,626	193
Region VI (Western Visayas)	1,832	486,534	266	370,758	202
Region VII (Central Visayas)	1,839	566,572	308	375,362	204
Region VIII (Eastern Visayas)	1,059	239,889	227	189,091	179
Region IX (Zamboanga Peninsula)	839	191,059	228	136,256	162
Region X (Northern Mindanao)	1,120	280,508	250	195,666	175
Region XI (Davao Region)	1,284	344,108	268	243,347	189
Region XII (SOCCSKSARGEN)	1,131	273,827	242	205,013	181
Region XIII (Caraga)	619	150,299	243	115,659	187
Autonomous Region in Muslim Mindanao (ARMM)	657	105,870	161	83,284	127

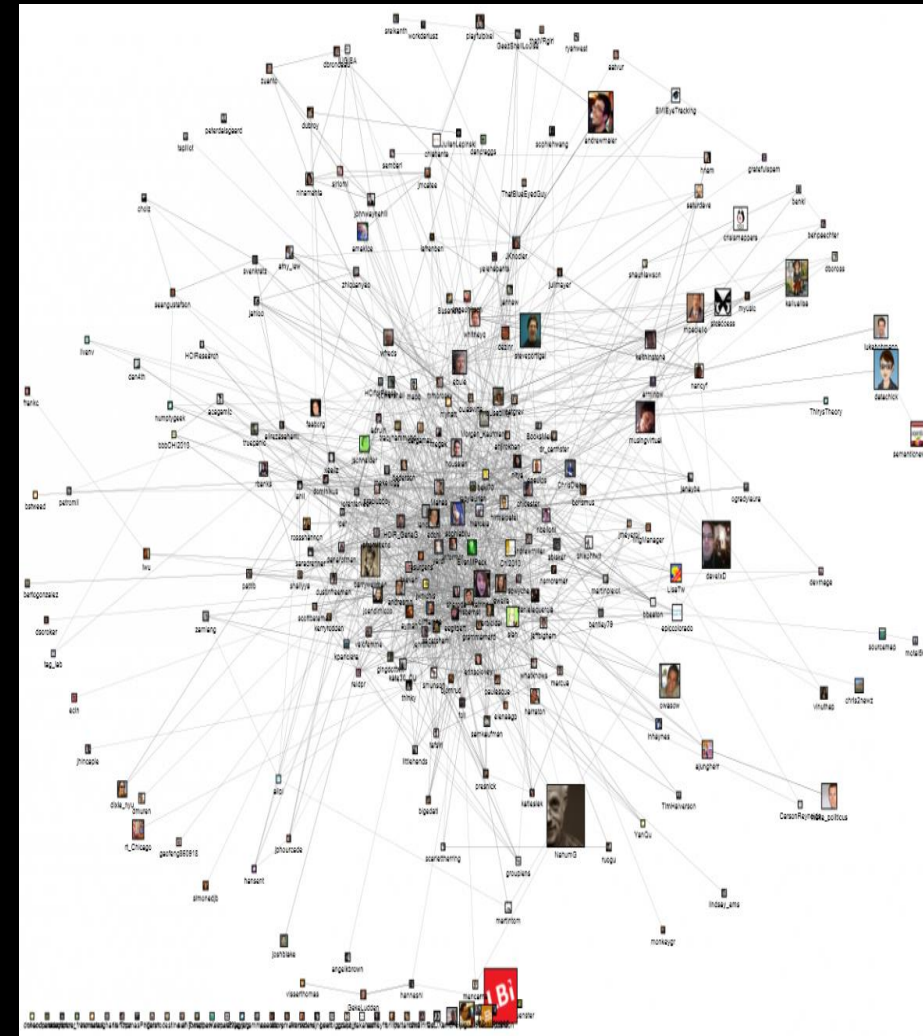
Note: Details may not add up to total due to rounding.  
Source: Philippine Statistics Authority, 2018 Family Income and Expenditure Survey



### Developing causal Loop Diagram based focused on SDG 6 targets



Nikolova and Suleimenova, Overview of the ESCAP Methodology for the Integration of SDGs:SDG6 at the Core

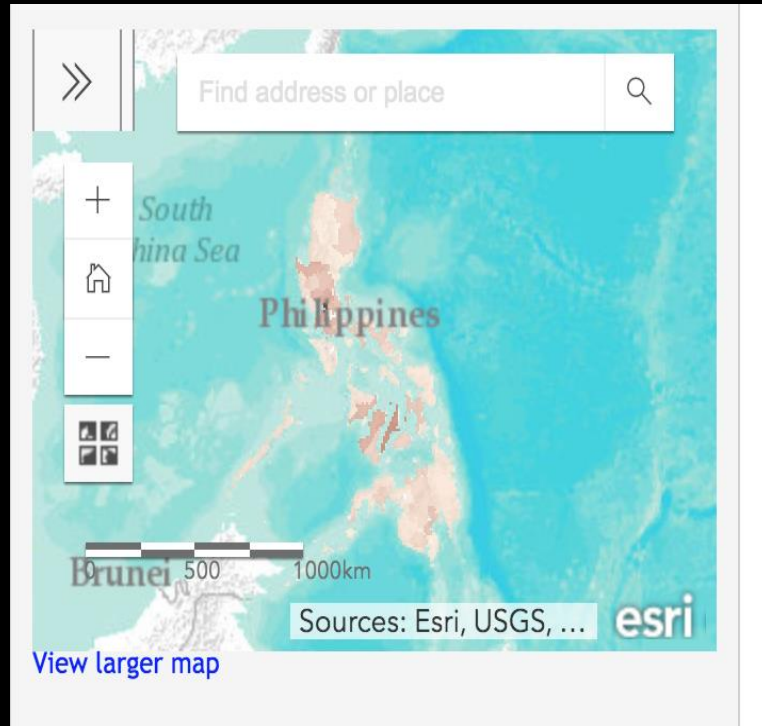


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## COMPUTATIONAL STATISTICS

**Database Portal**

**OpenSTAT**

The image shows a logo for "OpenSTAT". It features a bar chart with four bars of different colors: blue, yellow, red, and grey. Above the bars is a line graph with four points connected by lines, also in the same color sequence. The text "OpenSTAT" is written in a bold, blue, sans-serif font below the chart.

NO-CONTACT POLICY

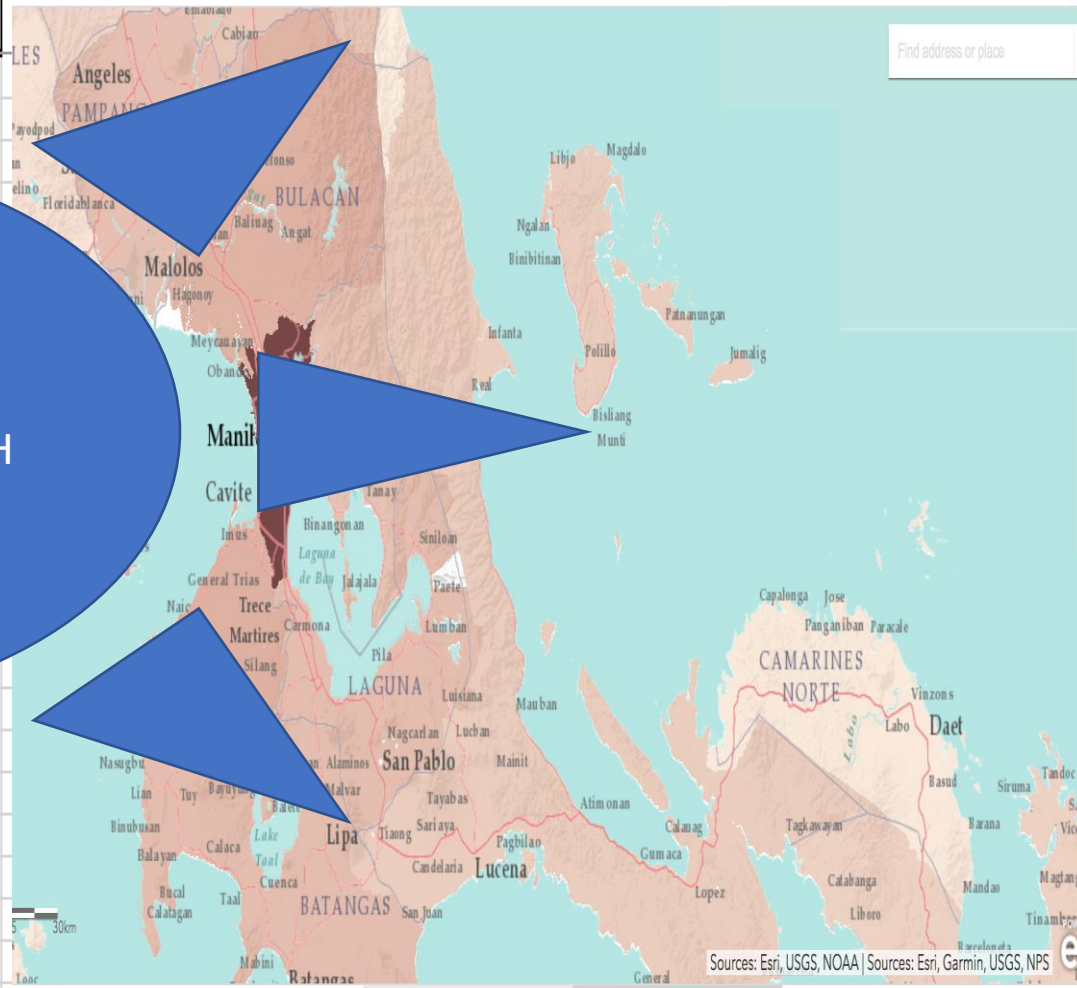
WORK FROM HOME

BLENDED LEARNING

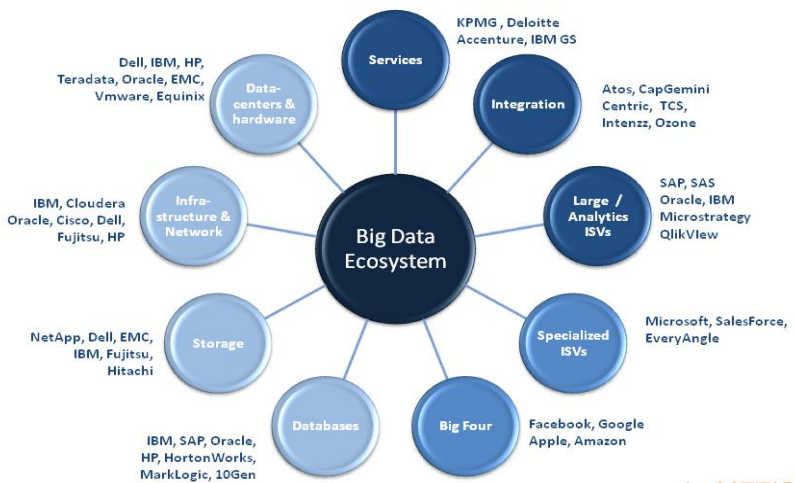
**Table 1. Projected Mid-Year 2020 Population 60 Years Old and Over in the Philippines**

Region/ Province	Total Population	Male	Female	60 Years Old and Over		
				Total	Male	Female
PHILIPPINES	108,771,978	54,935,141	53,836,837	9,468,416	4,246,222	5,222,194
National Capital Region	13,804,656	6,816,668	6,987,988	1,209,302	581,547	688,055
Cordillera Administrative Region	1,807,738	920,040	887,698			
Abra	247,402	126,280	121,122			
Apayao	123,898	64,058	59,840			
Benguet	848,552	426,938	421,614			
Ifugao	210,669	107,737	102,932			
Kalinga	244,404	122,202	122,202			
Mountain Province	243,898	121,949	121,949			
Region I - Ilocos	5,270,807	2,635,713	2,635,094			
Ilocos Norte	613,422	308,210	305,212			
Ilocos Sur	715,811	360,066	355,745			
La Union	828,193	417,521	410,672			
Pangasinan	3,113,381	1,573,771	1,539,610			
Region II - Cagayan Valley	3,657,741	1,860,211	1,797,530			
Batanes	17,875	8,938	8,937	2,065	866	1,199
Cagayan	1,273,319	636,659	628,024	130,578		72,282
Isabela	1,685,736	858,067	827,669	158,172		85,766
Nueva Vizcaya	482,893	246,249	236,644	44,676		24,086
Quirino	197,918	101,588	96,330	16,789		8,884
Region III - Central Luzon	12,313,718	6,221,441	6,092,277	1,142,471	509,135	633,337

**INSIGHT!**  
 WHERE SHOULD HEALTH SYSTEM BE PROVIDING RESOURCES?



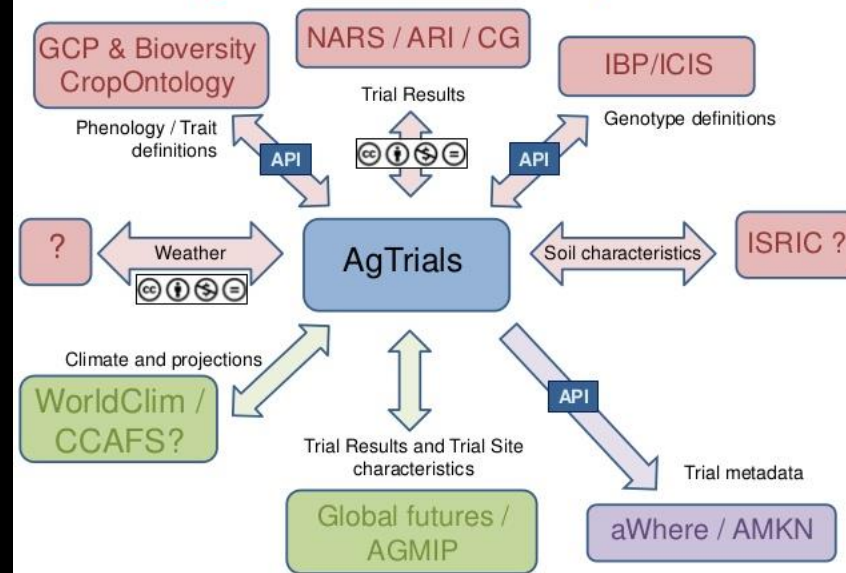
# Big Data Ecosystem



theMETISfiles  
source to success



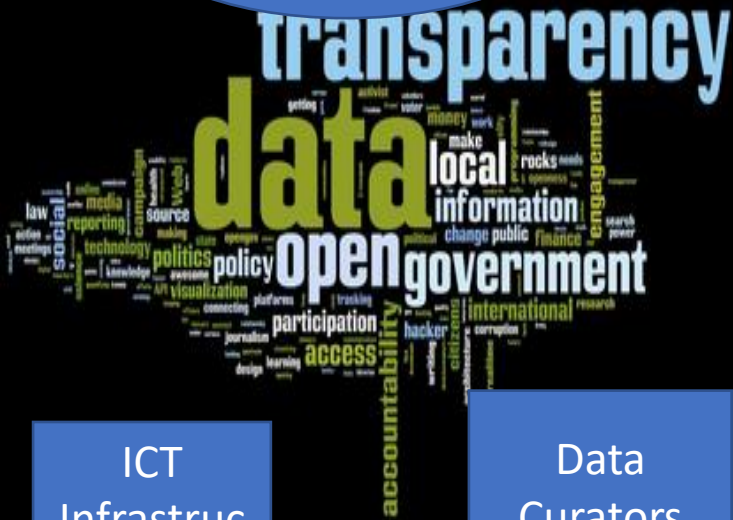
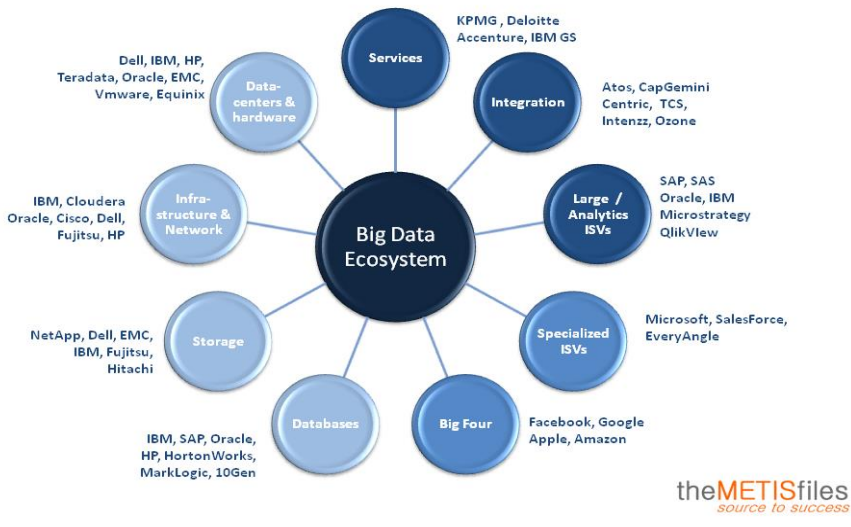
# Agricultural data ecosystem



Legal Frameworks

# Data Steward

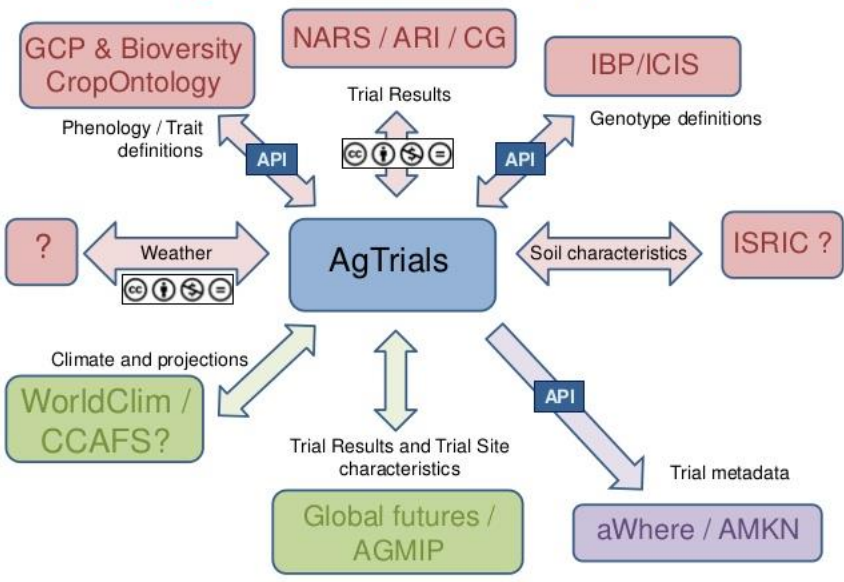
## Big Data Ecosystem



ICT Infrastructure

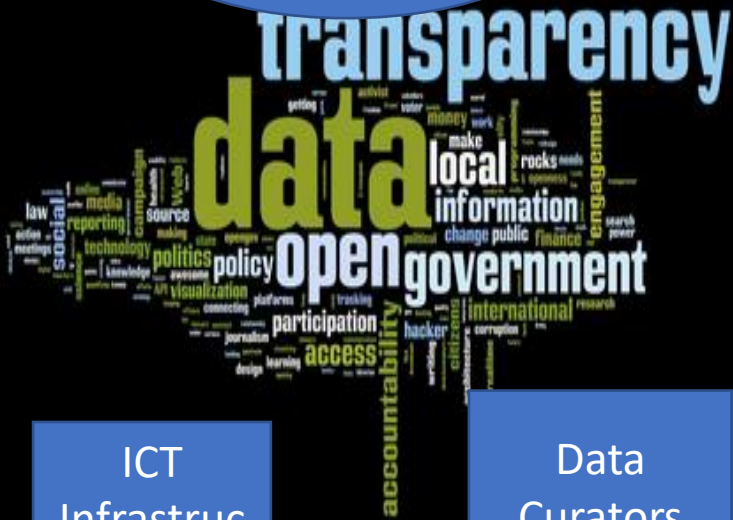
Data Curators

## Agricultural data ecosystem



Legal Frameworks

# Data Steward



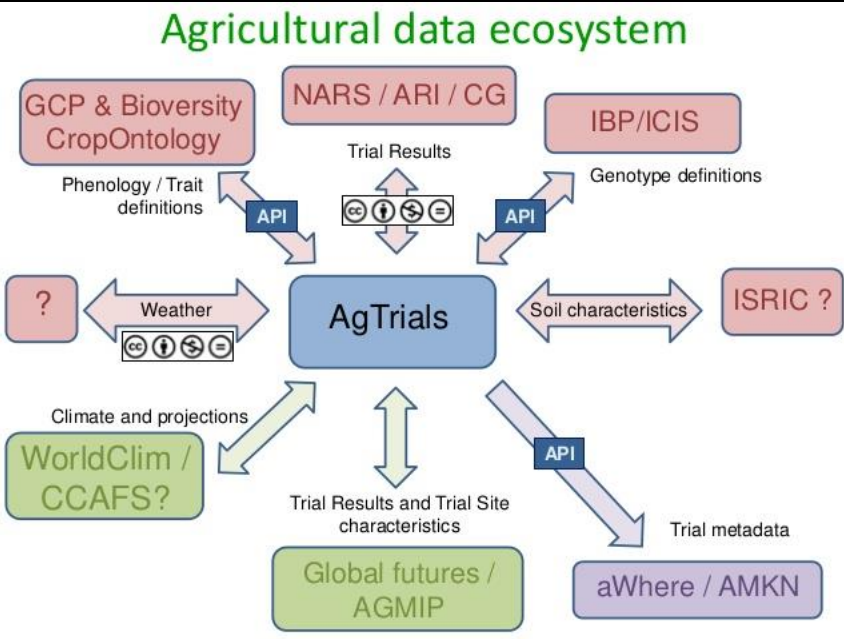
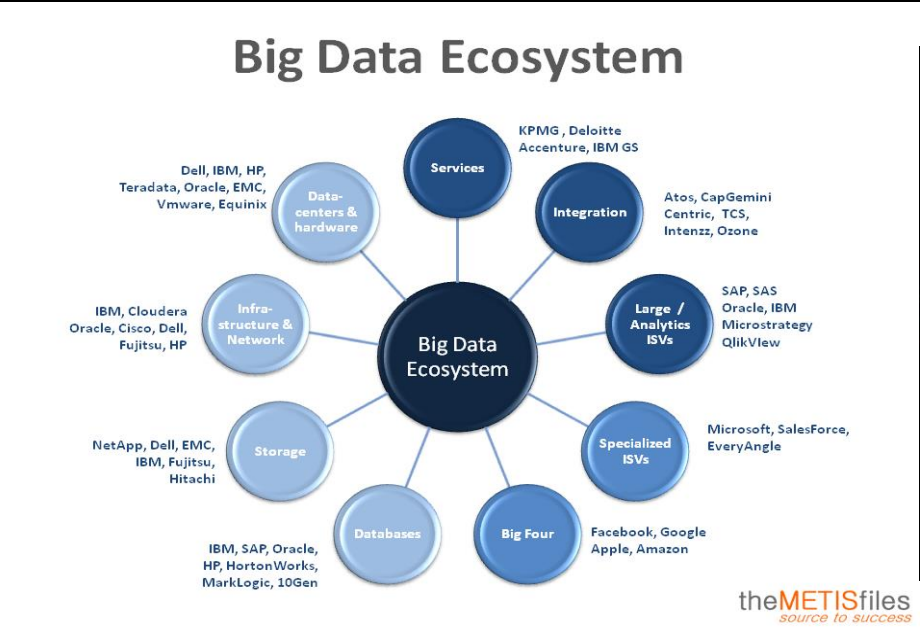
ICT Infrastructure

Data Curators

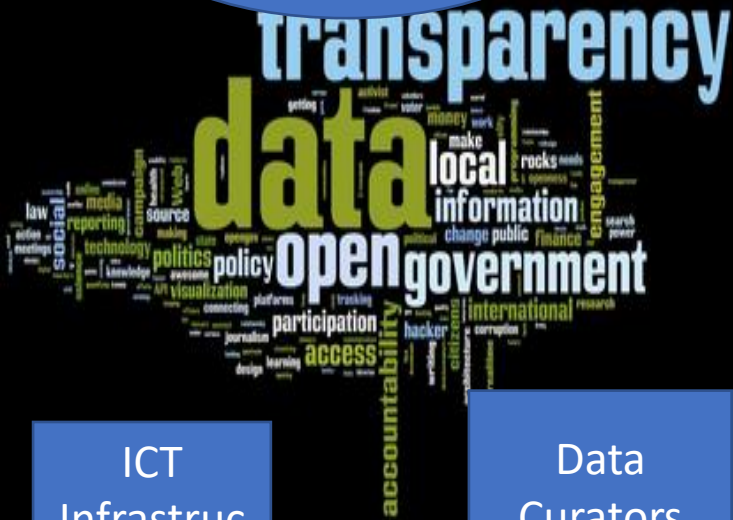
Legal Frameworks

Standards and Quality Assurance

Private sector, CSOs  
Satellite agencies(NASA)

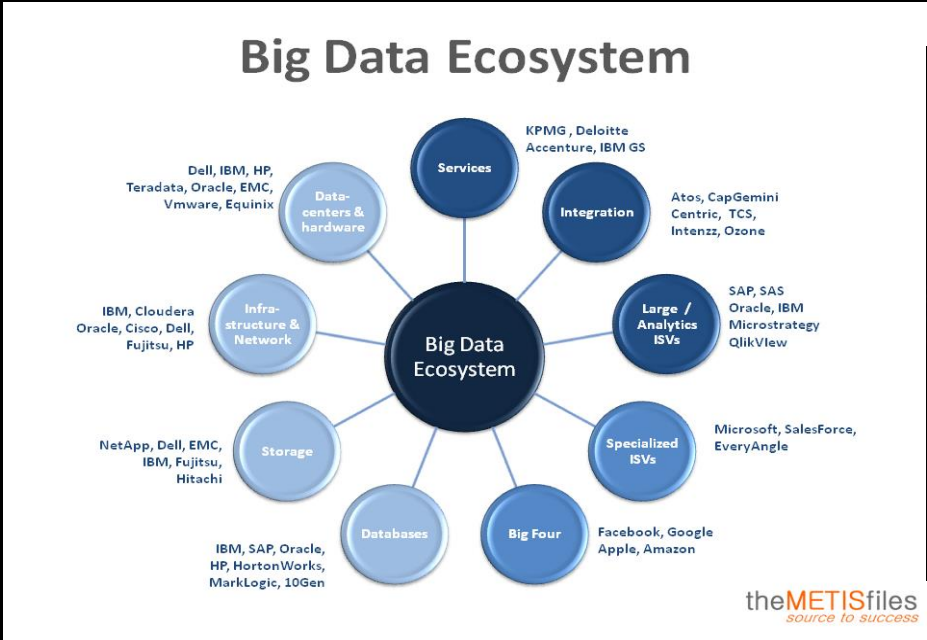
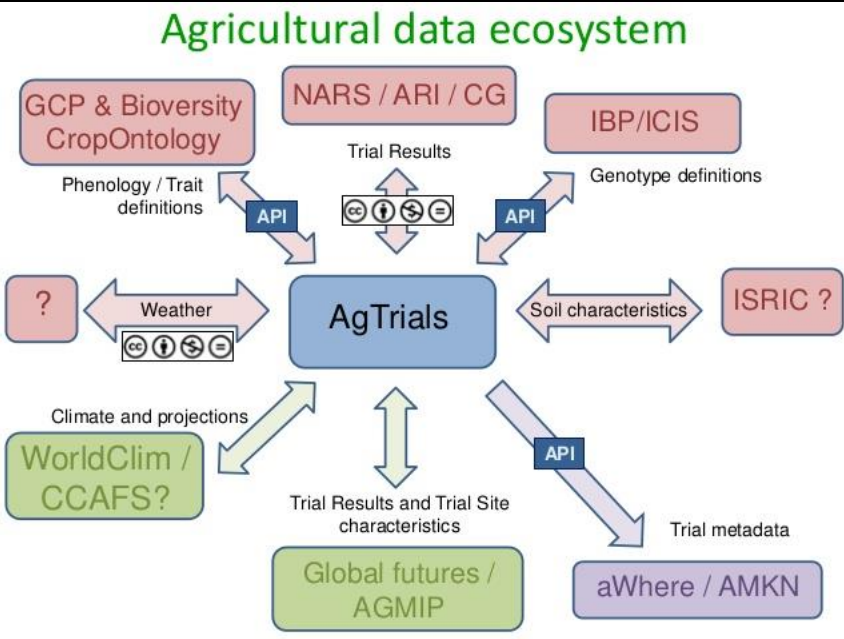


# Data Steward



ICT Infrastructure

Data Curators



Legal Frameworks

Standards and Quality Assurance

Data Privacy

Private sector, CSOs  
Satellite agencies(NASA)

New Methodologies



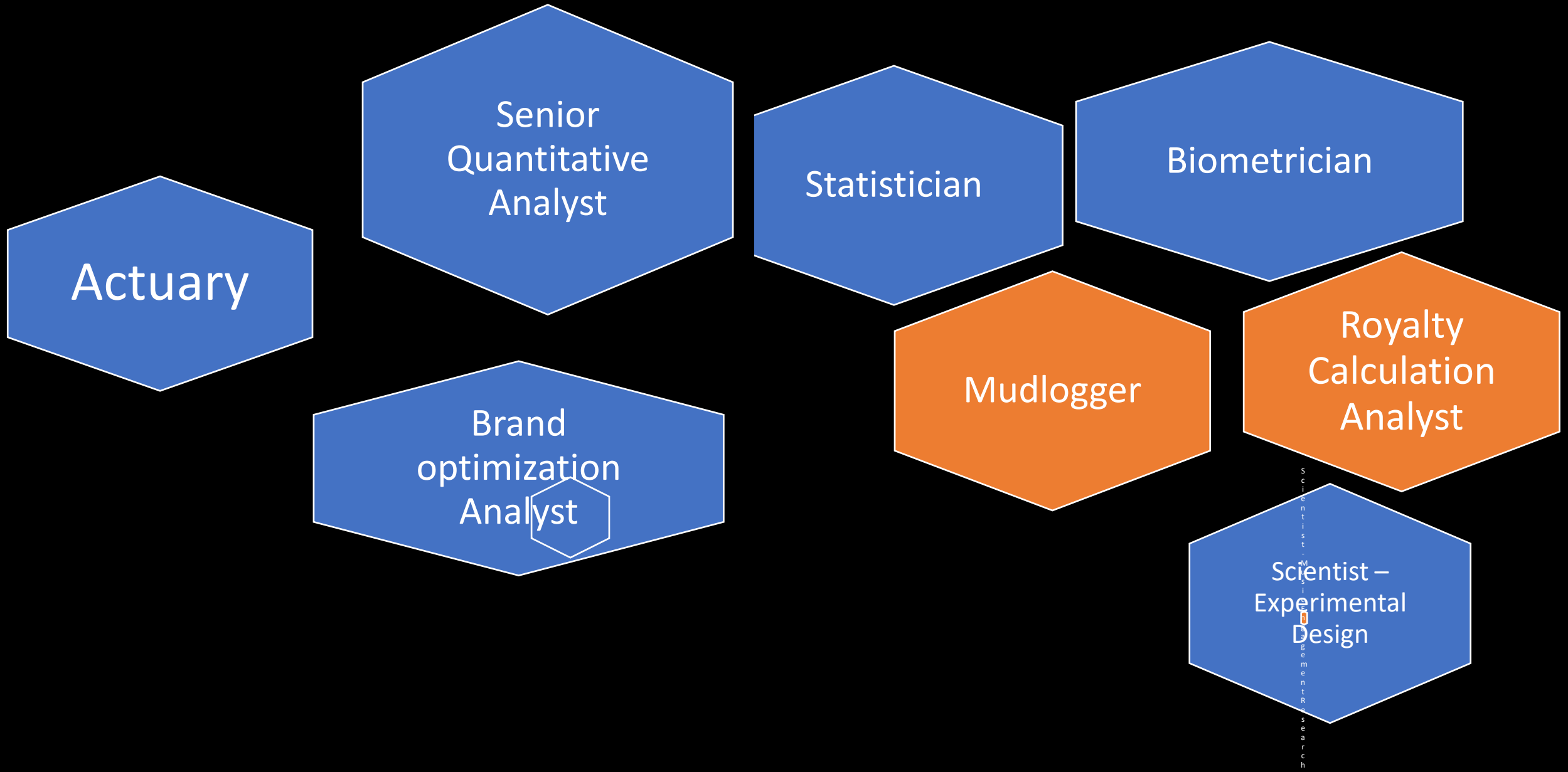
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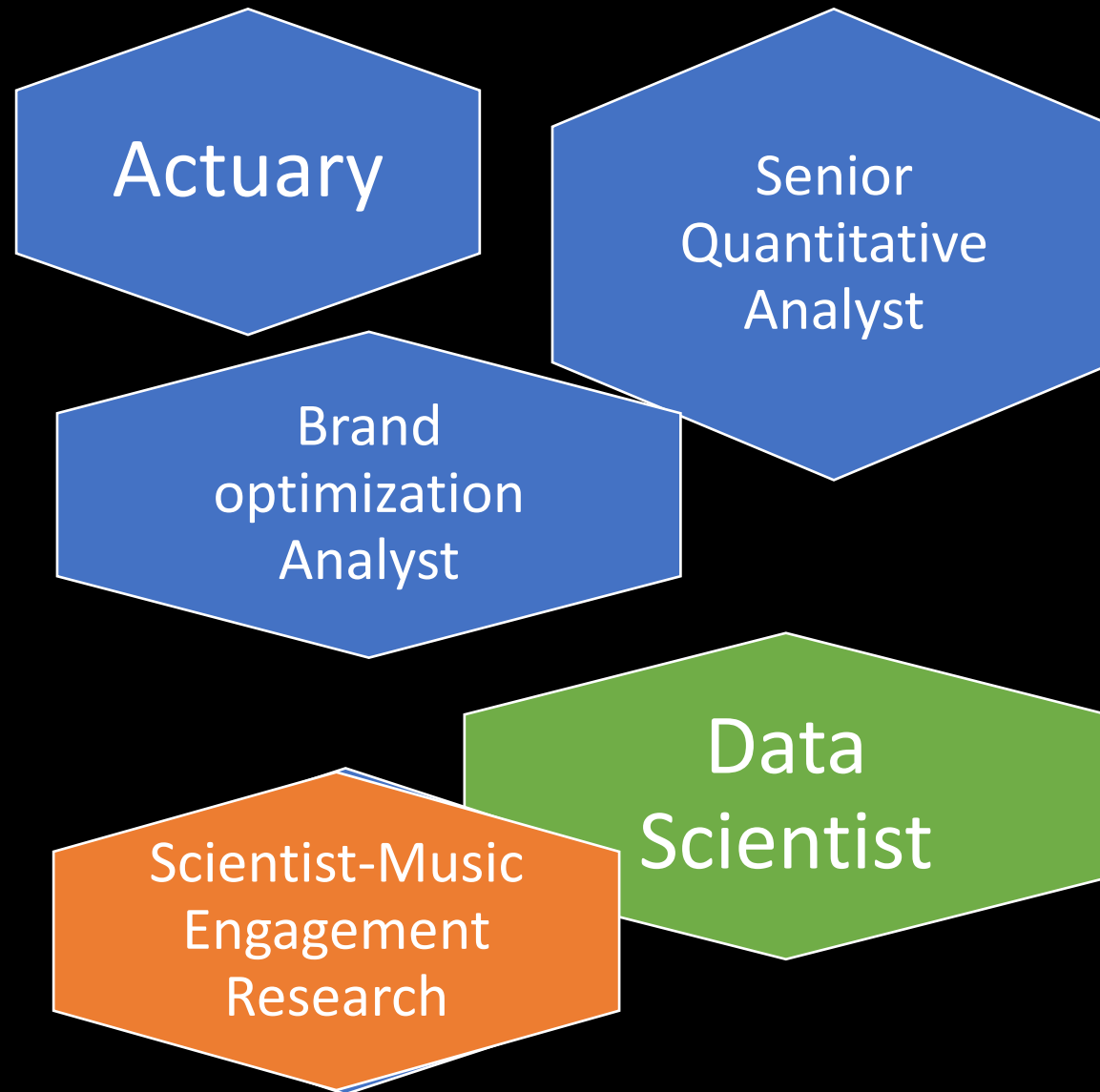
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The future  
of  
statisticians







# Data Science

- Multidisciplinary discipline
- Three pillars - information, technology , communication
- Usually paired with big data
- Should be in the context of the data ecosystem

# The Future is Here



Thank you!