



BI Teams are Changing Forms

BI, Big Data & Analytics



About me



Director of Data and BI at EverCompliant

- *Vast experience as analyst of all types, BI developer, analytics expert, data product manager*
- *Fun Fact: Founded the 1st BI team in the 8200 unit*

When I was a BI Developer at 2007

- Analytics was on the nice-to-have-to-important spectrum, dashboards were presented in management meetings
- Big data volumes, not “Big Data”
- Queries sometimes took a while
- Data was structured
- A system team and a DBA supported the BI operation

And then.. Big Data happened

DATA GROWTH

IDC (International Data Corporation) estimates 90% of big data is unstructured data

DEMAND

- The core advantage of data is that it tells you something about the world that you didn't know before. As your competitors learn more, you'll need to learn, too
- Over 80% of the Deloitte Analytics survey respondents stated analytics is already an important competitive resource for their company

ECONOMICS

- Falling costs of storage and computing
- Easier collection methods
- Better analysis methods

Big Data Challenges



Mining unstructured data



Storing complex data structures



Processing big data



Analyzing big data

Traditional BI couldn't handle these challenges in their new forms, and so, new skill sets were required.

New Data Teams

Data Related Organizational Trends

1 – DATA STRATEGY

- Data professionals in senior positions – data driven leadership
- Considering data opportunities and limitations while planning
- Planning for measurement and optimization cycles

Data Related Organizational Trends

2 – DATA DRIVEN CULTURE

- Common metrics
- Measuring culture
- Require data driven decisions

Data Related Organizational Trends

3 – DEMOCRATIZATION OF DATA

- Reporting and self-service BI
- Simplified (aggregative) data layer
- Analytics function sharding

Data Team Roles

Data Analyst

Polymath, data artist.

Uses a wide range of tools to tackle data related issues.
Often works in a tailored approach, steering operations using his analysis results.

Loves raw data, knows when to deep dive and when to modelize, has (or will produce for you) - ALL the answers.
Technical minded persona with a proactive practical approach.

Data Engineer

Resourceful data pipelines plumber.

Paves the path, constructs scalable, maintainable and stable pipelines through which the entire organizational data flows to be analyzed.

Balances professional engineering with experimental data application requirements.

Data Scientist

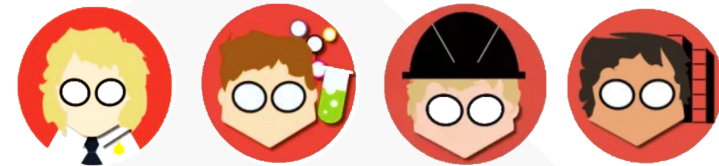
Innovator. New age Meister.

Problem solver. Researches available solutions, weight them considering the ecosystem from which the requirement came from and chooses the preferred solution. Supports implementing process of the solution. Researcher with knowledge in computer science and statistics.

Data Architect

Conductor of data flows.

Creates and maintains a cross organizational standard for data storage and consumption.
Aligns data initiatives with business goals, identifies strategic moves and optimization opportunities.
Designer of the organizational data jungle gym.



Data Team Roles



BI Analyst

Cryptologist, translates data into insights.

Produces actionable insights to induce and support decision making in the organization.

Both maintains and changes the business by analyzing data into understanding the past and predicting the future.

Reporting professional with a strong business perspective.

Data Product Manager

Business oriented data dreamer.

Identifies needs and potential advantages of data usage in and around company products.

Defines data deliverables that can either be a part of an existing product or standalone as a data product to be used by consumers.

Strategist and visionary of Data Driven products, shapes the frame in which data professionals operate.

Business Analyst (Marketing, Product, System, Financial..)

Data author and Storyteller

Less worried about collecting the data than the Data analyst and more focused on the business angle than the BI analyst, this analyst is fully committed to supporting defined business goals with data.

A data savvy business expert.

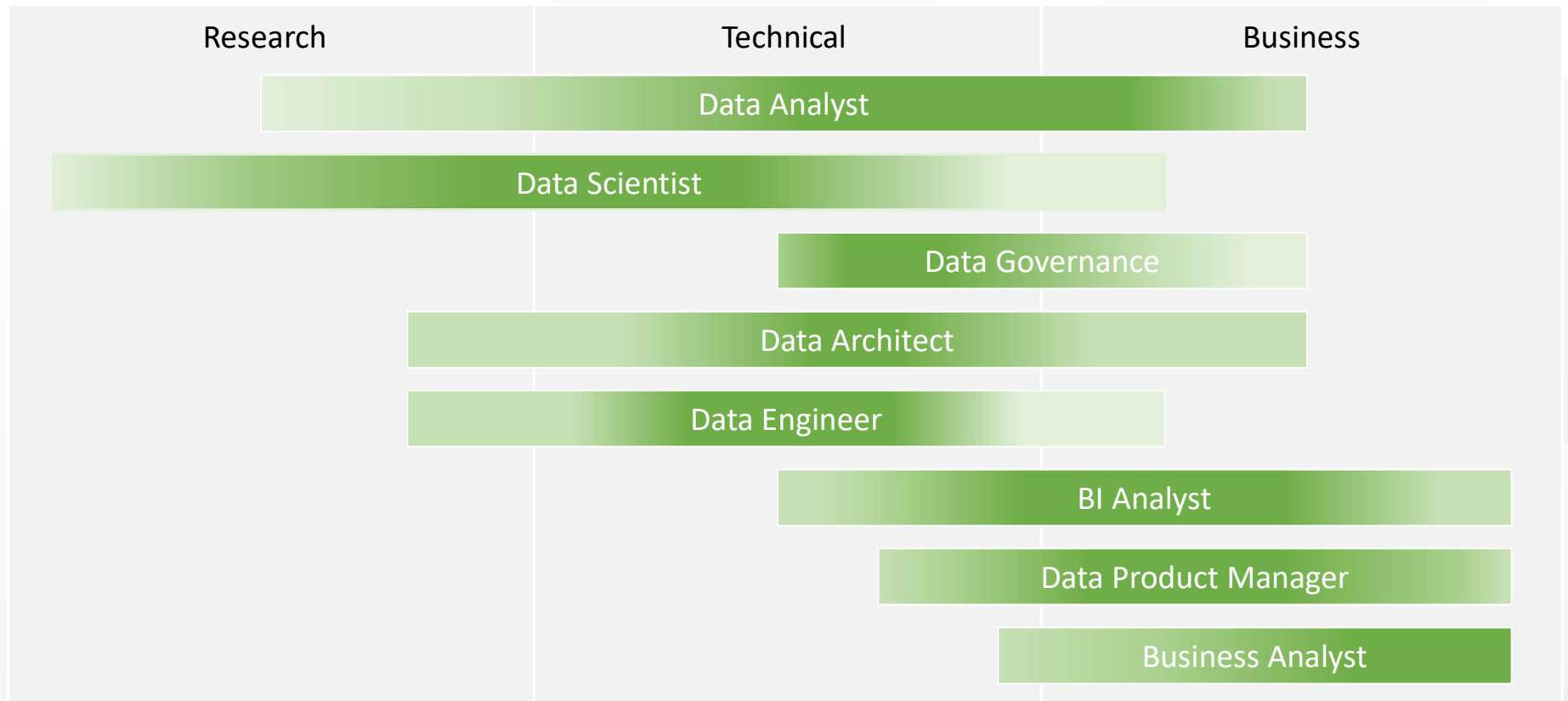
Data Governance Analyst

Gatekeeper of organizational data.

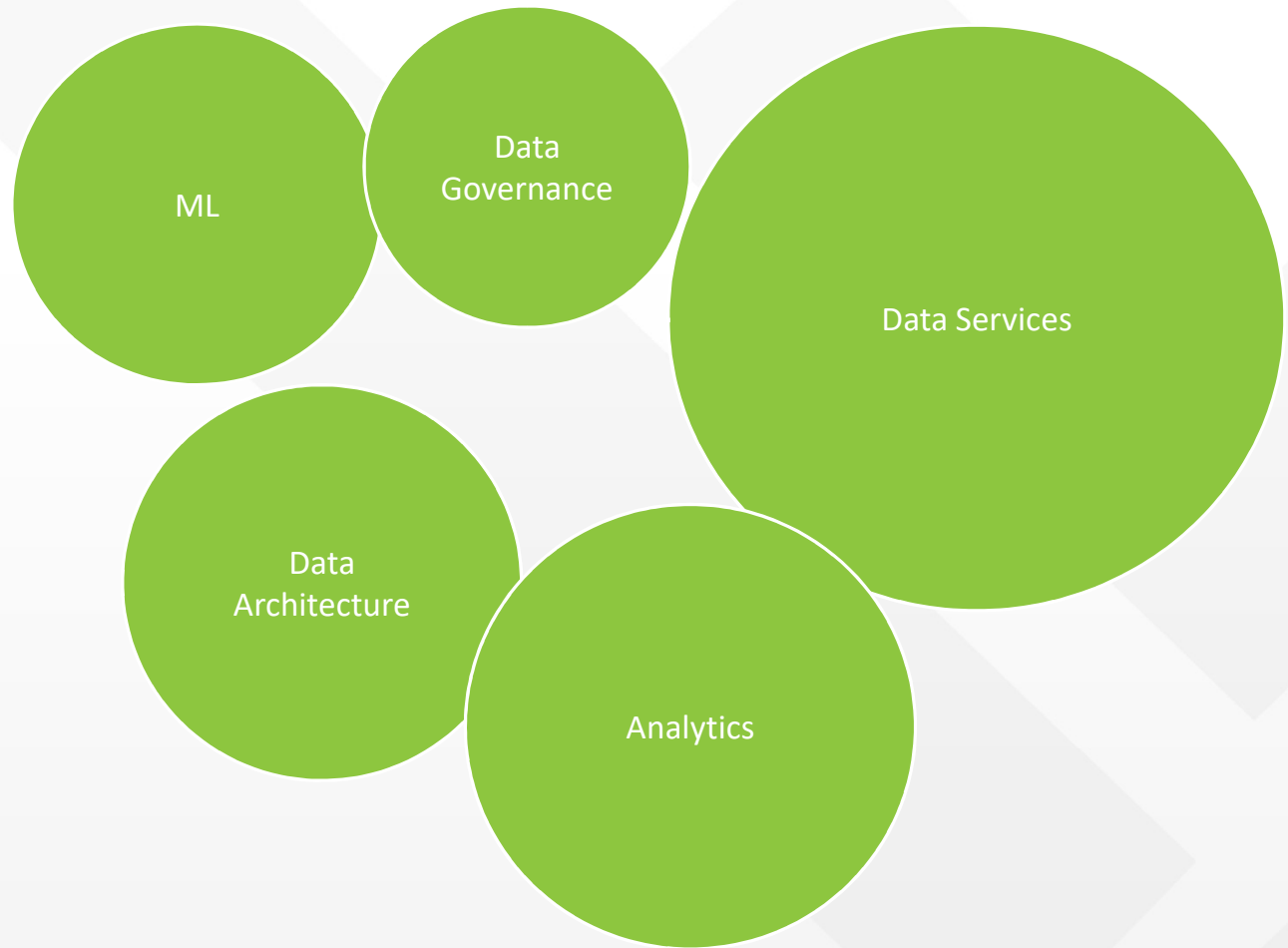
Monitors Organizational data cross systems and sources.

Analyses issues such as data discrepancies, availability and consistency to improve confidence in decision making. Quality oriented controller of data flows.

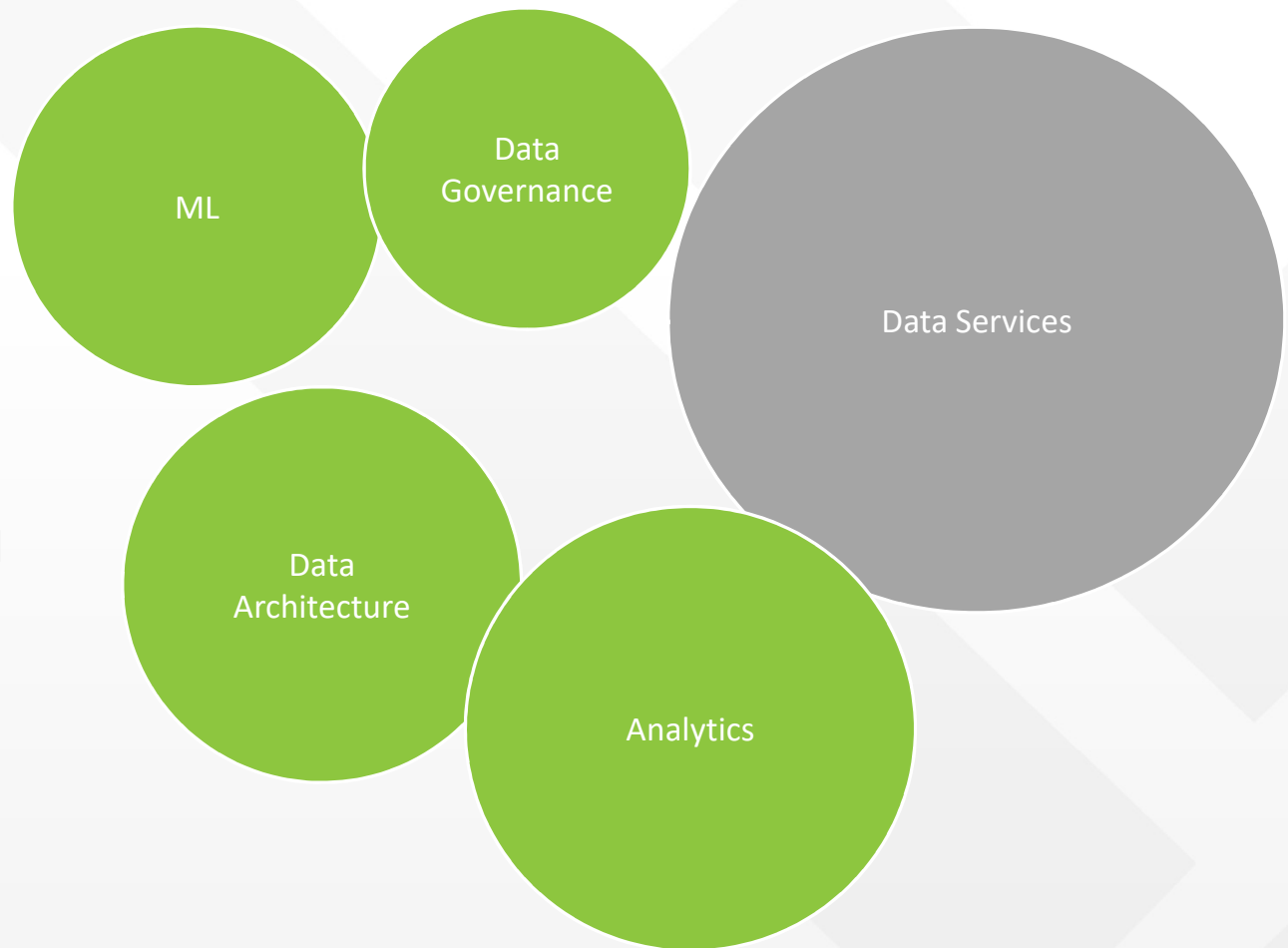
Data Team Roles



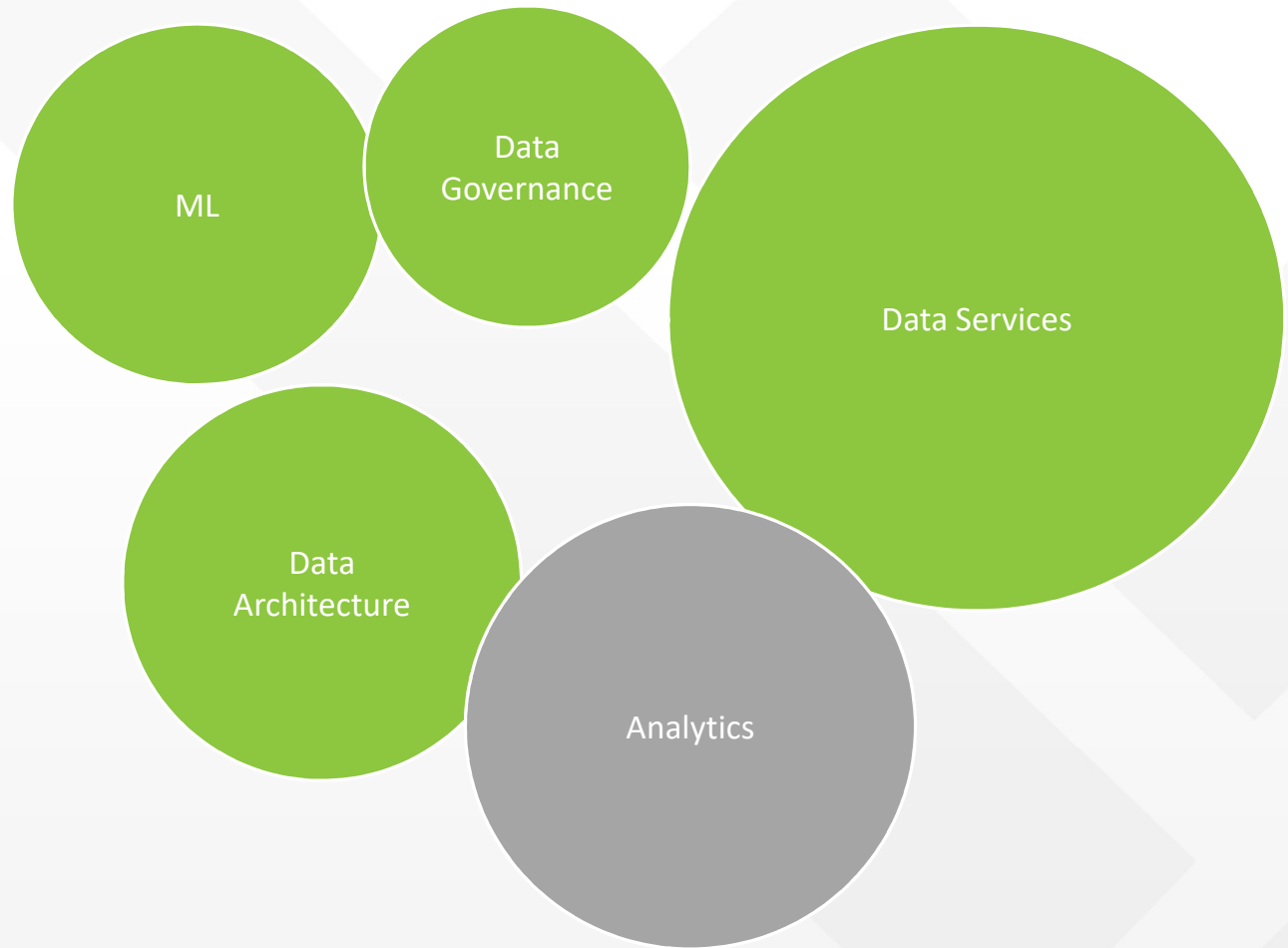
EC Data Team



1. Research
2. Data Driven Development
3. Algorithms Development and Optimization



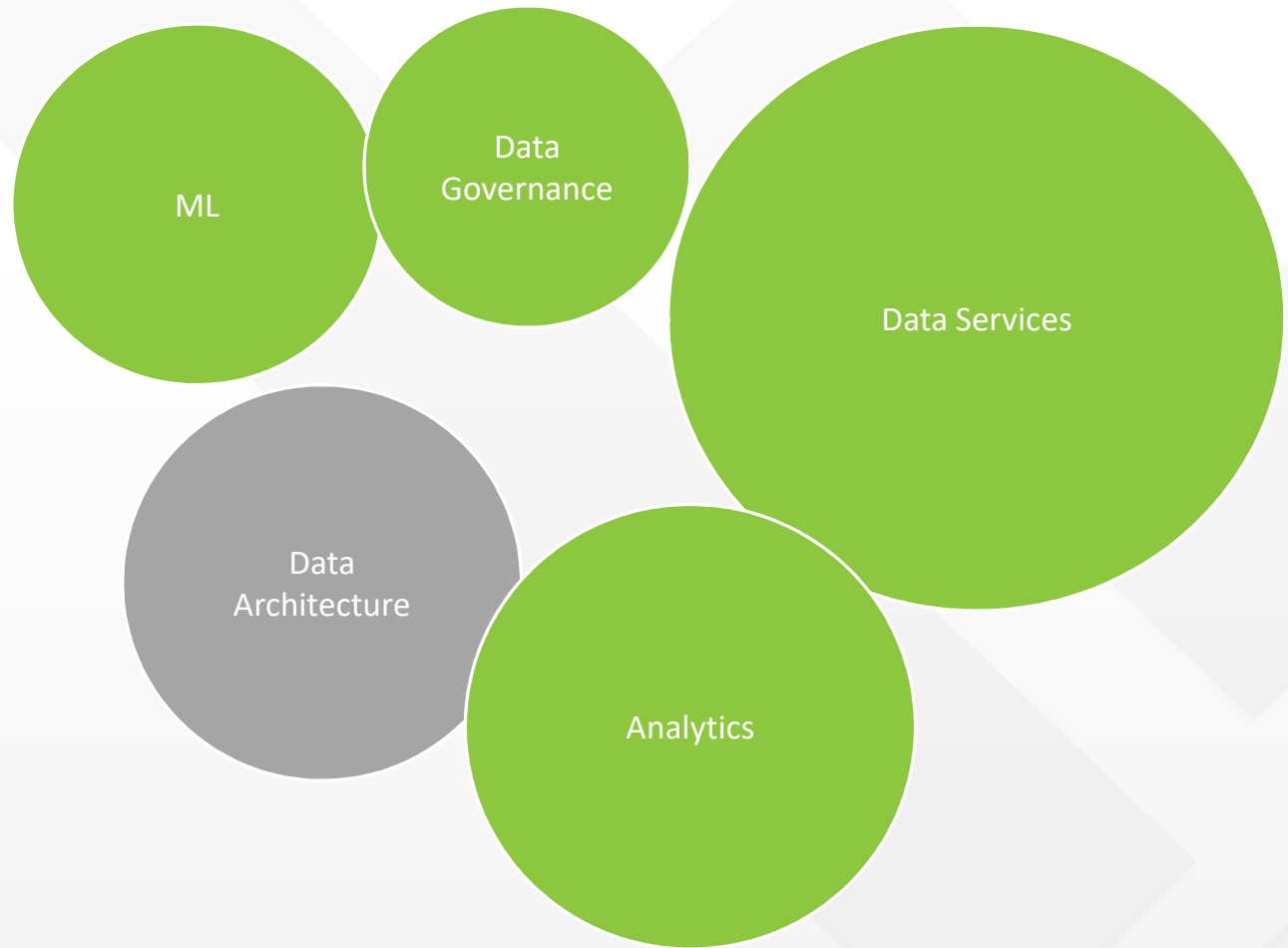
1. DWH, SSoT
2. Business Insights
3. Metrics and Measurement
4. Product Support



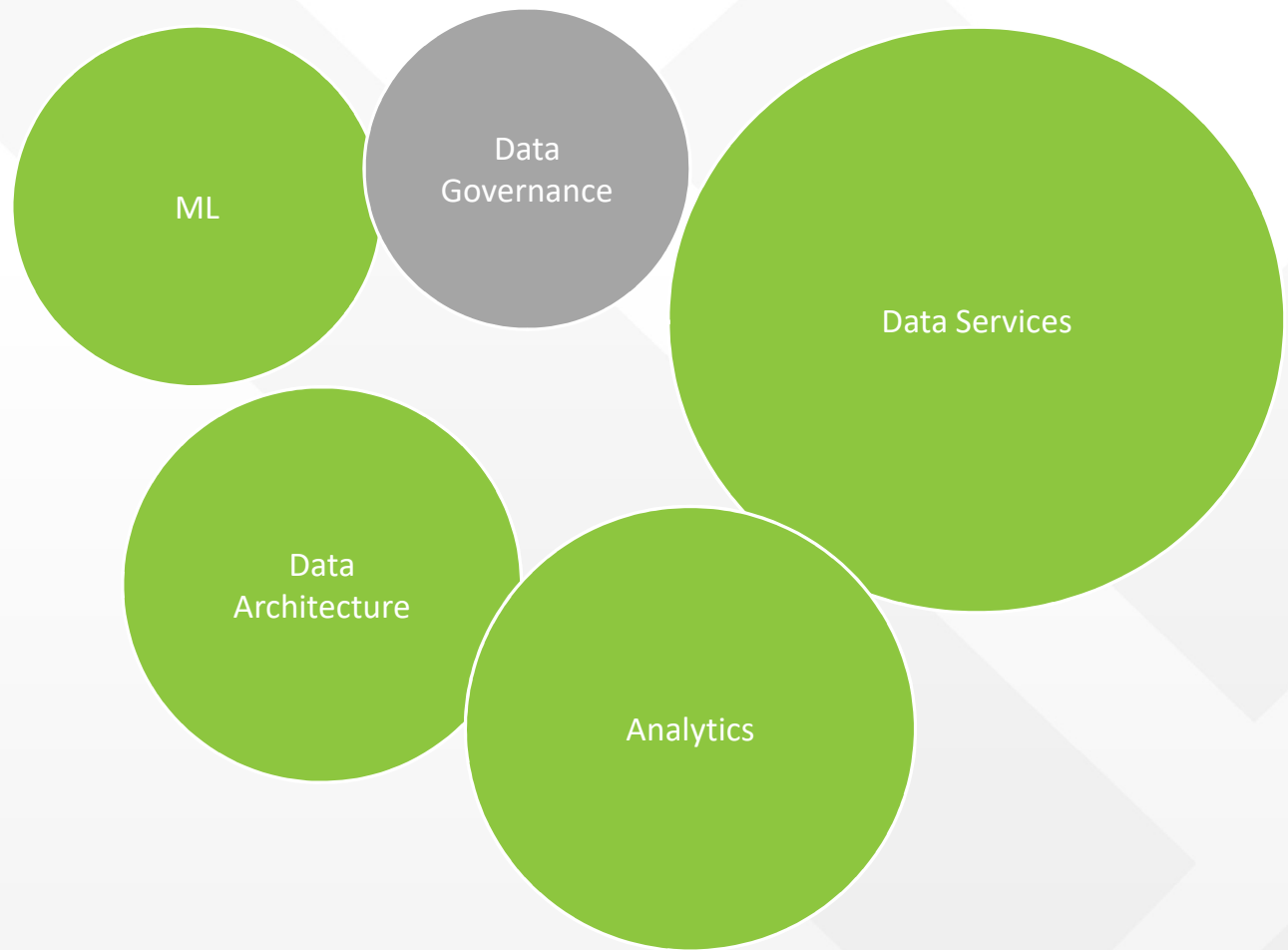
1. Data Enrichment

- ❖ New Requirements
- ❖ New Opportunities

2. ETLs



1. Availability
2. Integrity
3. Usability



1. Modeling

2. Feature Extraction

3. Classification

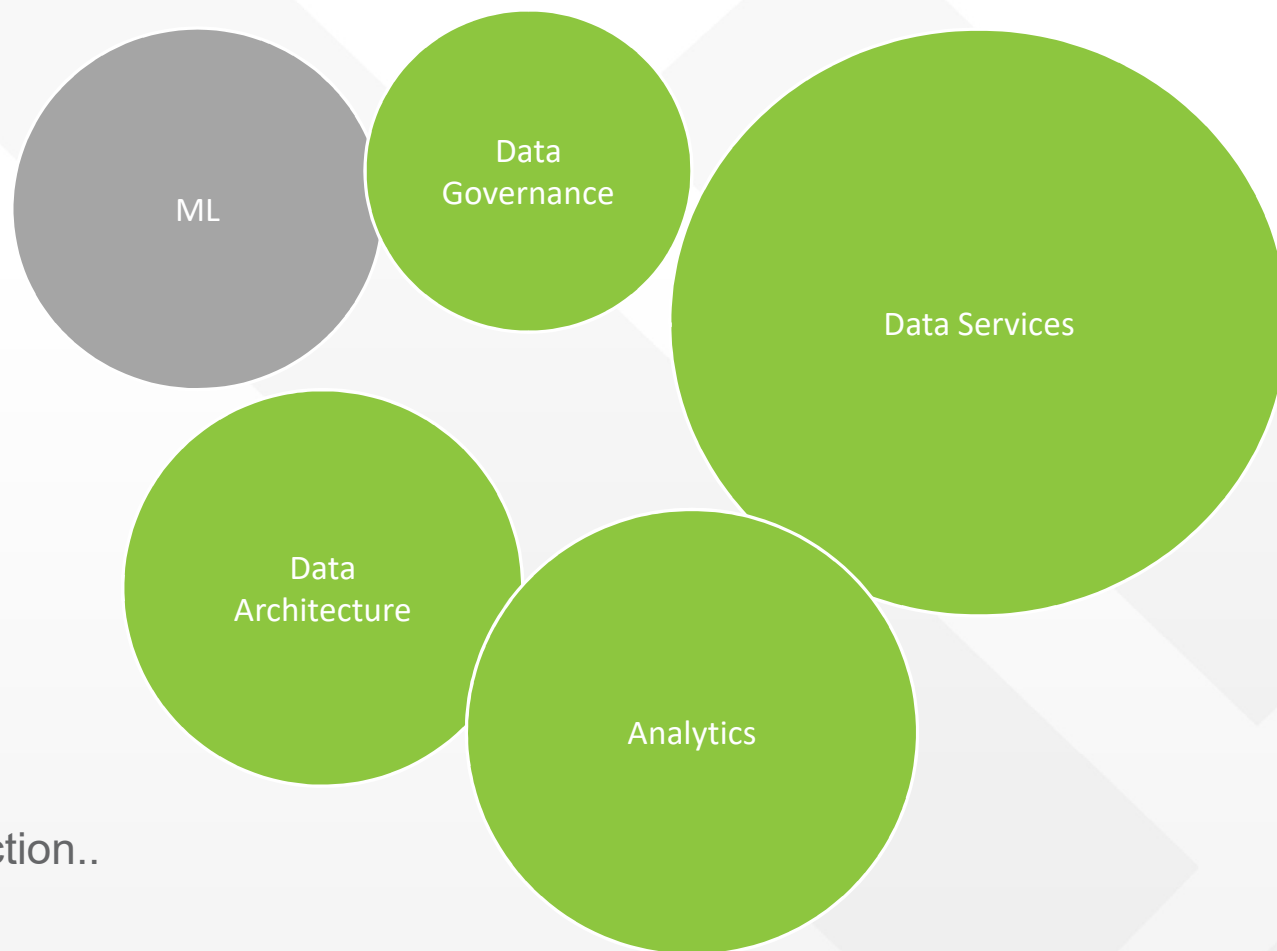
- ❖ Data collection

- ❖ Training

- ❖ Testing

4. Advanced Analytics

- Clustering, Anomaly Detection..





Thank You!



John J. Morgan

Evelina K. Lippert

52.1.253.68
Jonathan M. Hines

202-555-0100
Michael H. Fry

967 Rose Street
Cahyon Country, CA 91397

ac-mwcpmtn19@xajoh28y.com

158.69.217.163

186.251.6.14

400 Denwood Drive
Randallstown, MD 21133

52.32.21.15

pcd@w58pvlpxj2h.com

250.33.72.17

07052emf00a0zph2.com
52.1.253.68

th2em

202-555-0145

72
Irm

pcd@w58pvlpxj2h.com

933 Laurel Street
Tampa, FL 33604