

Custom Scorecards Are A Credit Union's Best Tool To Maximize Profit And Mitigate Risk

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CALLAHAN
ASSOCIATES
the credit union company

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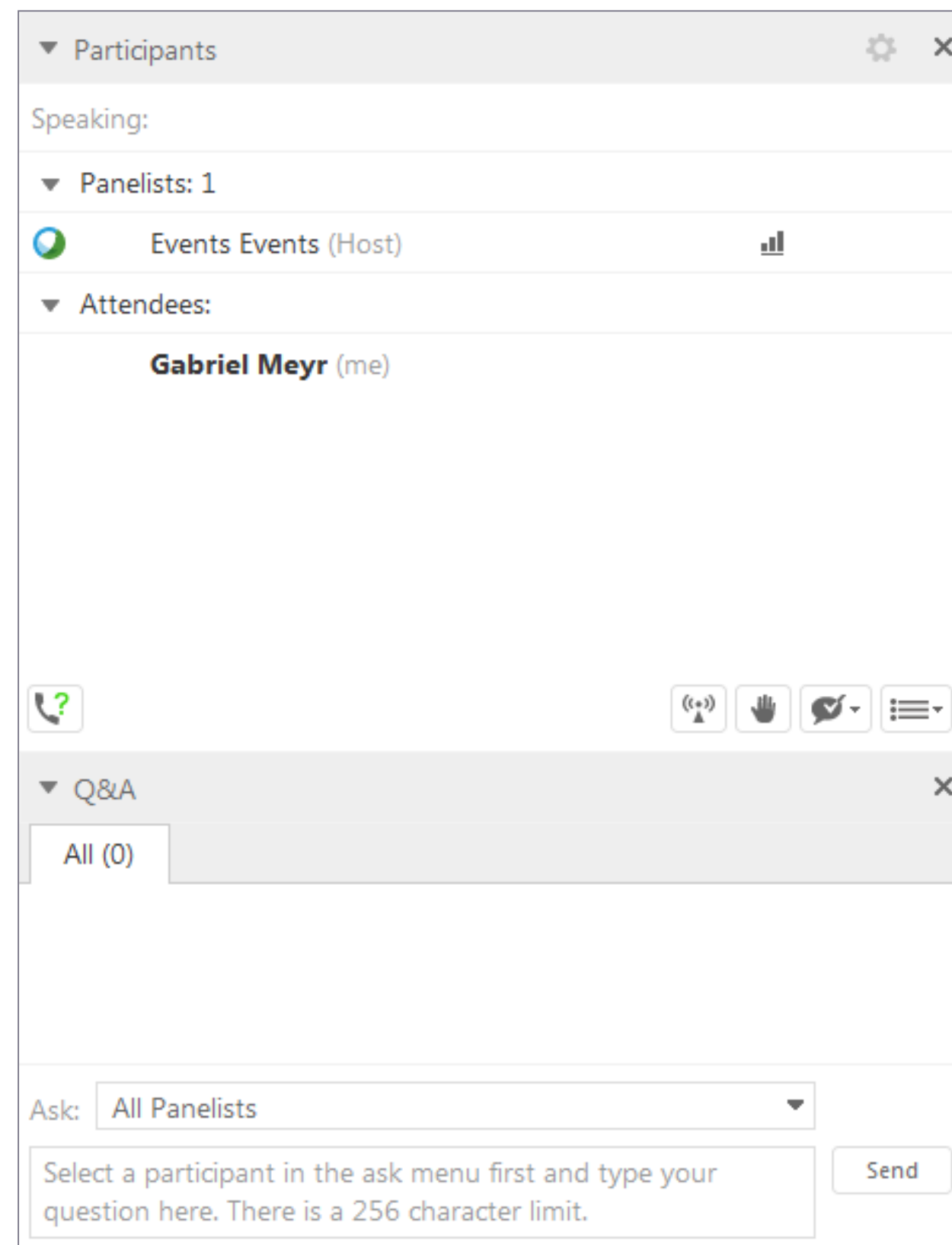
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Slide Link

Today's slides can be found online at:

<http://bit.ly/10-17-custom-scorecards>

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The logo for MeridianLink, featuring the word "MeridianLink" in a bold, italicized sans-serif font. A white arc with a five-pointed star at its end curves over the "i" in "Link".

MeridianLink

Custom Scorecards

ACHIEVE ANALYTICS & BUSINESS CONSULTING TEAM

Achieve

Agenda

Team Overview

What is a Custom Scorecard?

How we build a Custom Scorecard

How we design strategies to leverage a Custom Scorecard

Data used to develop a Custom Scorecard

Benefits

Business Case

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The Achieve Analytics and Business Consulting Team

The Scope

We provide **analytics and consultancy** aimed at maximizing the value of a Credit Institution in each phase of the credit process: **Origination > Monitoring > Collection**

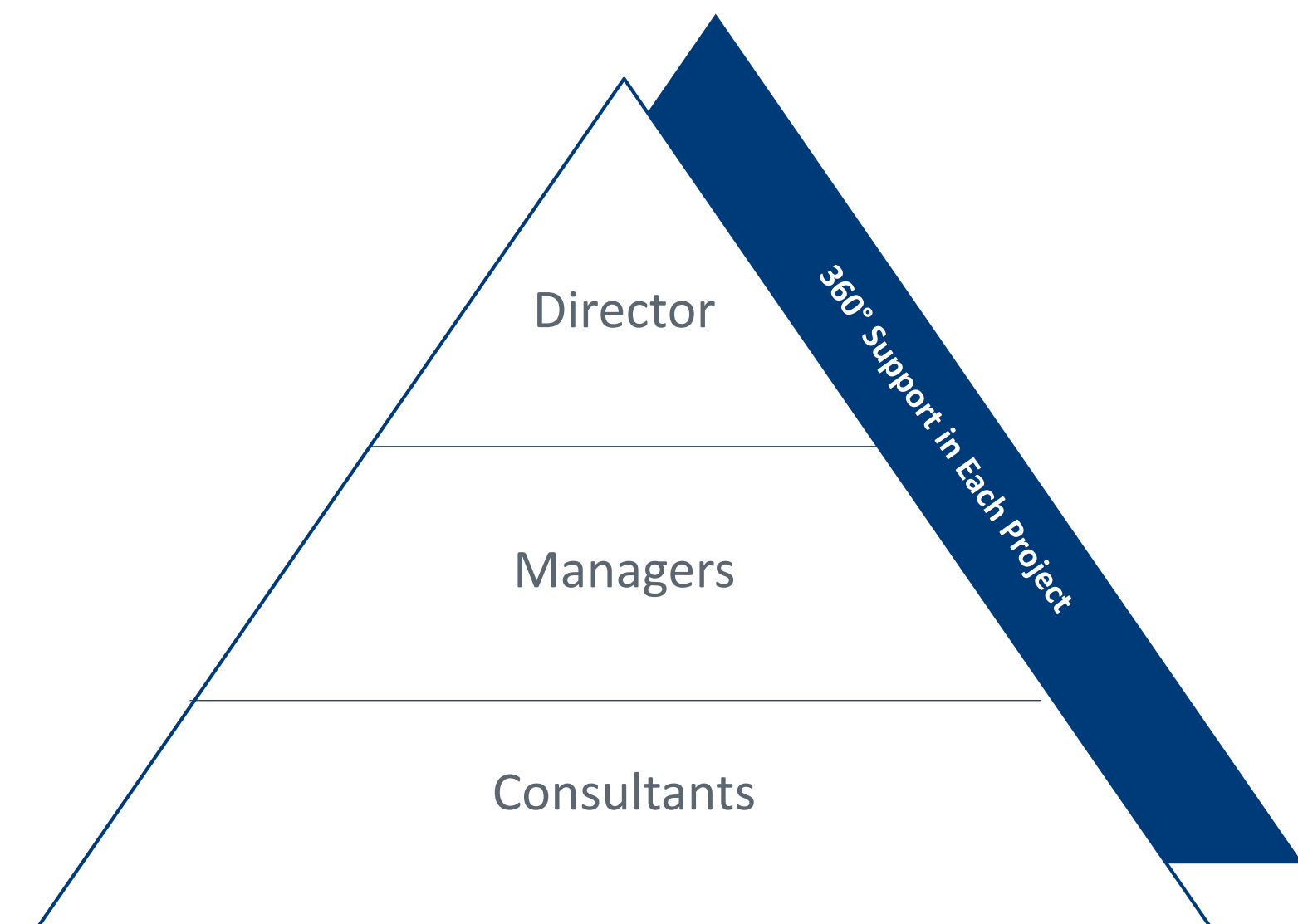
We support MeridianLink's **data and software solutions** in order to maximize the value generated by MeridianLink for their partners

The Mission

Our mission is to provide our clients with **the utmost satisfaction, value, and quality**

We strive to create and maintain a **100% level of client satisfaction** in every project

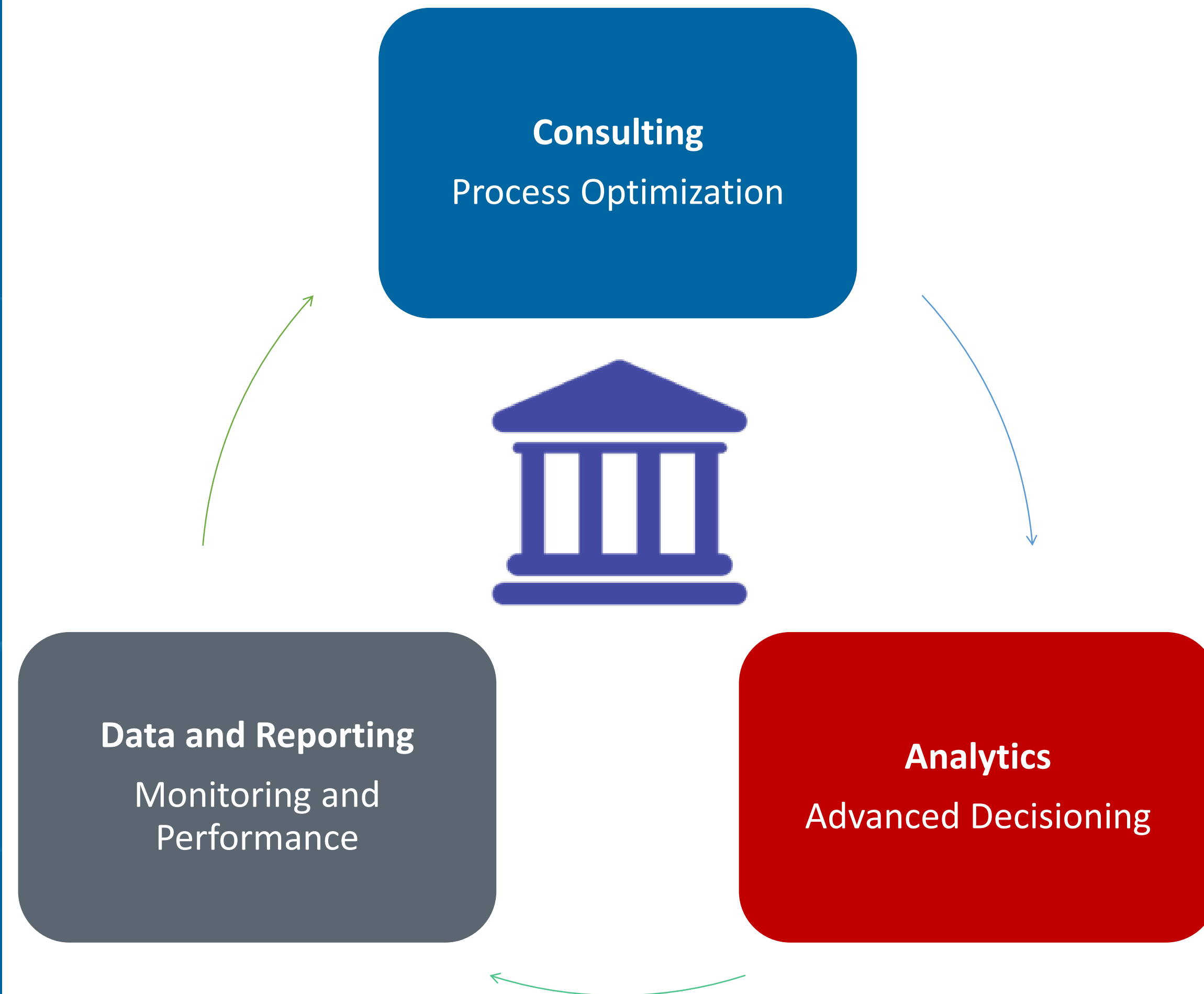
The Organization



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Analytics & Business Consulting

A Unique proposition for a challenging environment



- ❖ **360° Approach:** from day to day operations to portfolio projections
- ❖ **Personal trainers for banks and credit unions employees:** ad-hoc recommendations based on advanced analytics and best practices
- ❖ **Innovative services:** machine learning algorithms, data analytics and reporting, WHAT-IF simulations, Champion-Challenger
- ❖ **Thought leaders for our Partners:** recurring papers on topics like industry trends, regulations, analytics, etc.

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Our Experience

One team with extensive experience

The team has extensive experience in the US, Canada and Mexico. Here are some project examples:



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The Achieve Analytics and Business Consulting: Our Services

One partner to enhance your loan portfolio value



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The Achieve Analytics and Business Consulting: Our Services

The value of our most common services

Enhanced Implementation

Measurable Benefits

Up to 150 person days saved!

Indirect Benefits

- Optimized workflow
- Optimized decisioning
- Documentation

Custom Scorecards

- **Up to 80% of auto-decisioning**
- **Up to 35% more business**

- Increased book-ratio
- Better customer experience

WHAT-IF simulator

- **Up to 60% of autodecisioning**

- Increased book-ratio
- Better customer experience

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MeridianLink proposal for
decisioning

How we help you optimize
your credit decision strategy

1 What is a scorecard?

A scorecard (or a model) is a mathematical function, developed using statistical techniques, which weigh variables (or characteristics) and output a score that represent the prediction or probability of a future event (i.e. default, non-payment, etc.)

2 How does a custom scorecard differ from a generic score?

- Specific customer characteristics of the institution's portfolio
- Application and loan specific details
- If available, it will leverage additional sources of information (for example, CRM information or other external information)

3 Will it also improve the business?

- Custom scorecards facilitate significant improvement in:
 - The optimization of the loan risk levels (risk-appetite)
 - The improvement of auto-decisioning
 - Ability to better price loans

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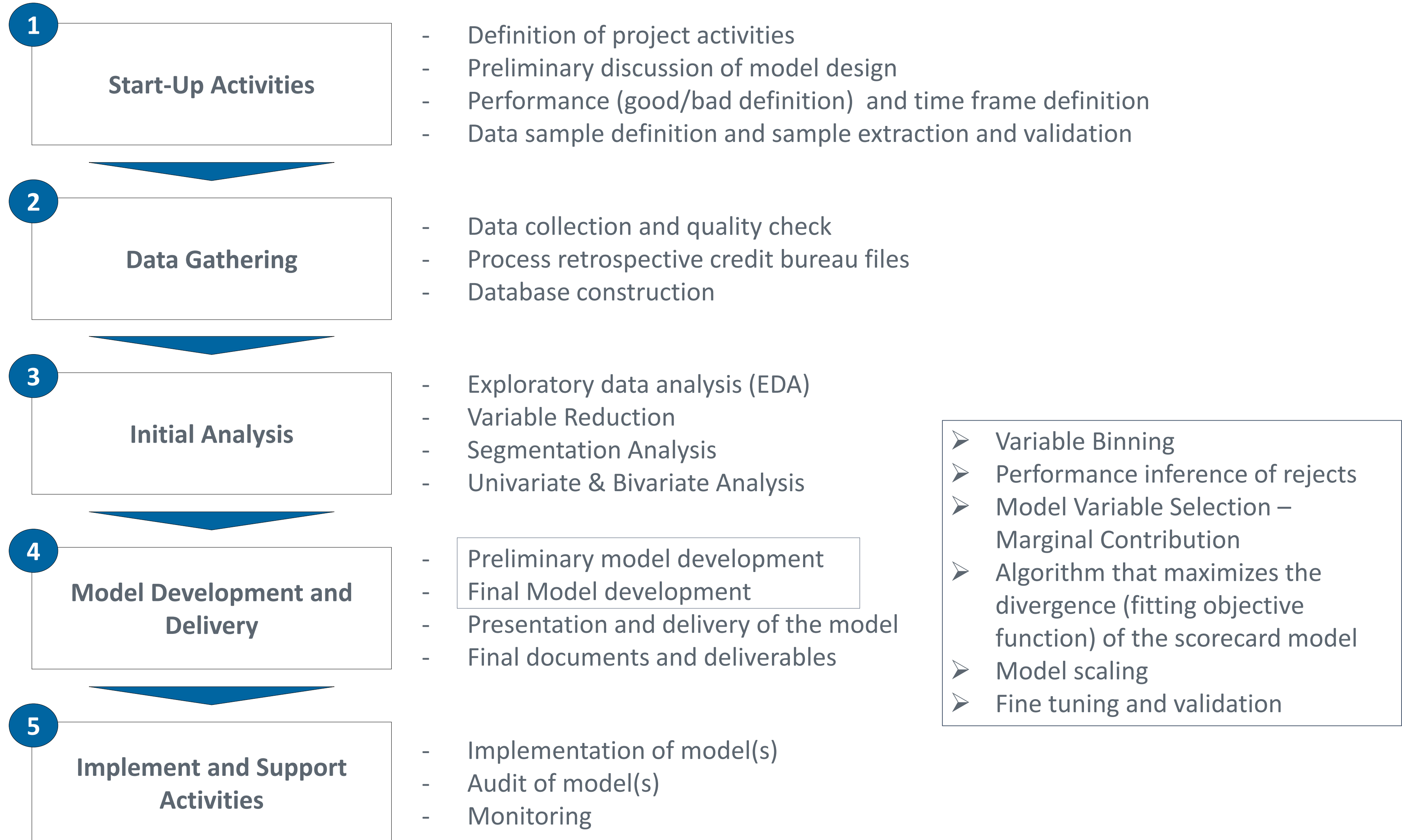
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Scorecard development process

General activities during the scorecard development



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Credit decision strategy optimization process

Additional activities after the scorecard development process

Once the model is developed, we perform additional analysis to determine how to best utilize the custom score in our client's existing credit decision strategy and provide recommendations & business requirements

Score Cutoffs

- 1) Understanding how our client is currently using the generic score and what they are trying to achieve with the custom scorecard
- 2) Setting the preliminary credit tiers of the custom score based on risk levels
- 3) Working with our client to set the final cutoffs for the custom score

FICO SCORE CUTOFFS

FICO	ALL AUTO		Auto Decision
	Total	Bad Rate	
A+	20%	0.8%	Approve
A	15%	2.3%	
B	10%	3.7%	
C	10%	5.4%	Review
D	10%	7.7%	Decline
E	10%	9.6%	
F	20%	13.4%	
No Score	5%	9.1%	Review

CUSTOM SCORE CUTOFFS

Custom Score	ALL AUTO		Auto Decision
	Total	Bad Rate	
A+	25%	0.5%	Approve
A	15%	1.1%	
B	10%	2.0%	
C	10%	3.3%	
D	10%	5.4%	Review
E	15%	9.4%	Decline
F	15%	22.1%	

➔ Same risk levels between FICO and Custom Score but more applications being automated

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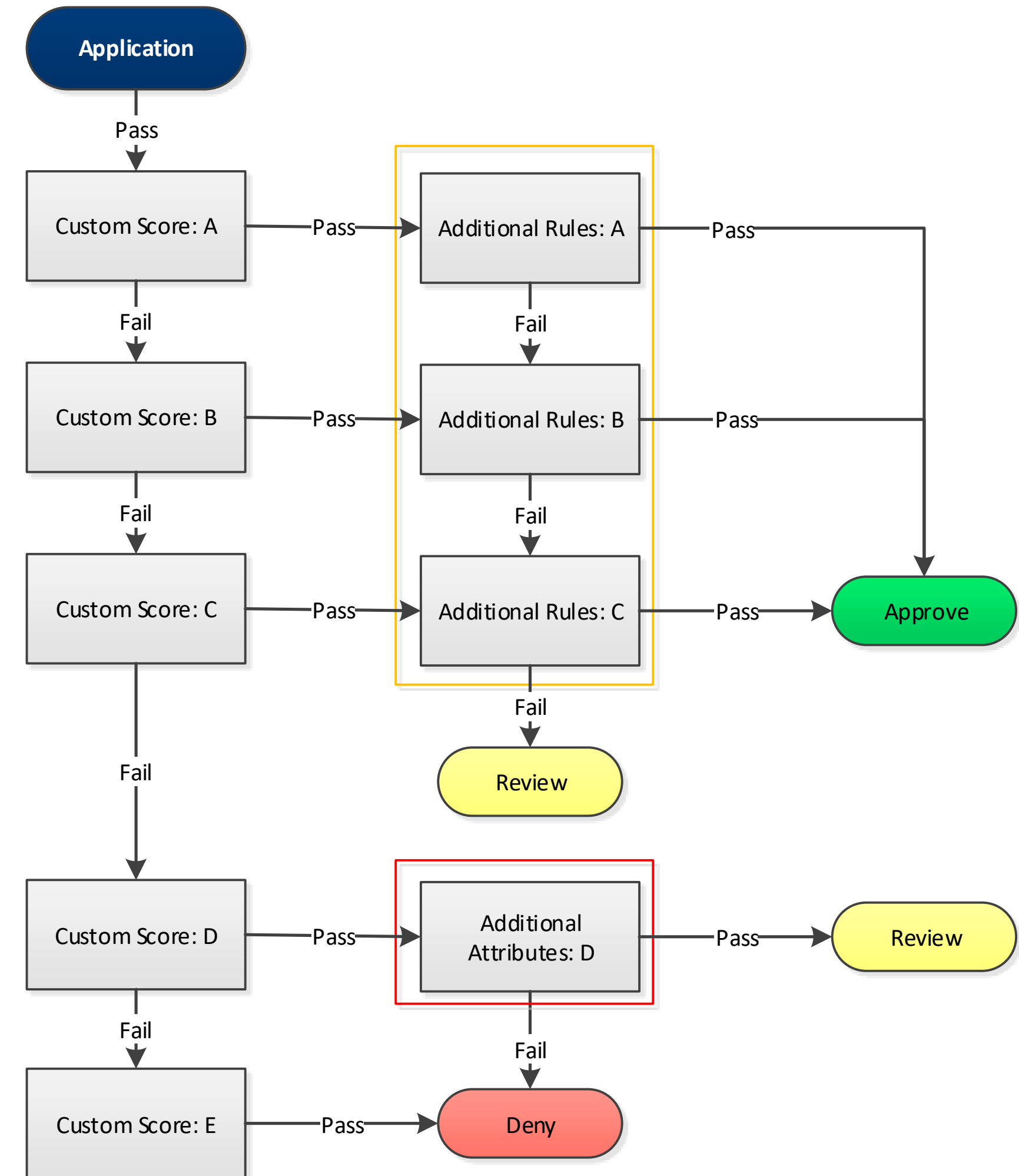
Credit decision strategy optimization process

Additional activities after the scorecard development process

Once the model is developed, we perform additional analysis to determine how to best utilize the custom score in our client's existing credit decision strategy and provide recommendations & business requirements

Process Optimization

- 1) Understanding our client's credit decision strategy and the rules that overlay the generic score
- 2) Decluttering the existing rules through analytics and streamlining the credit evaluation process
- 3) Working with our client to ensure the proposed changes stay within the management guidelines



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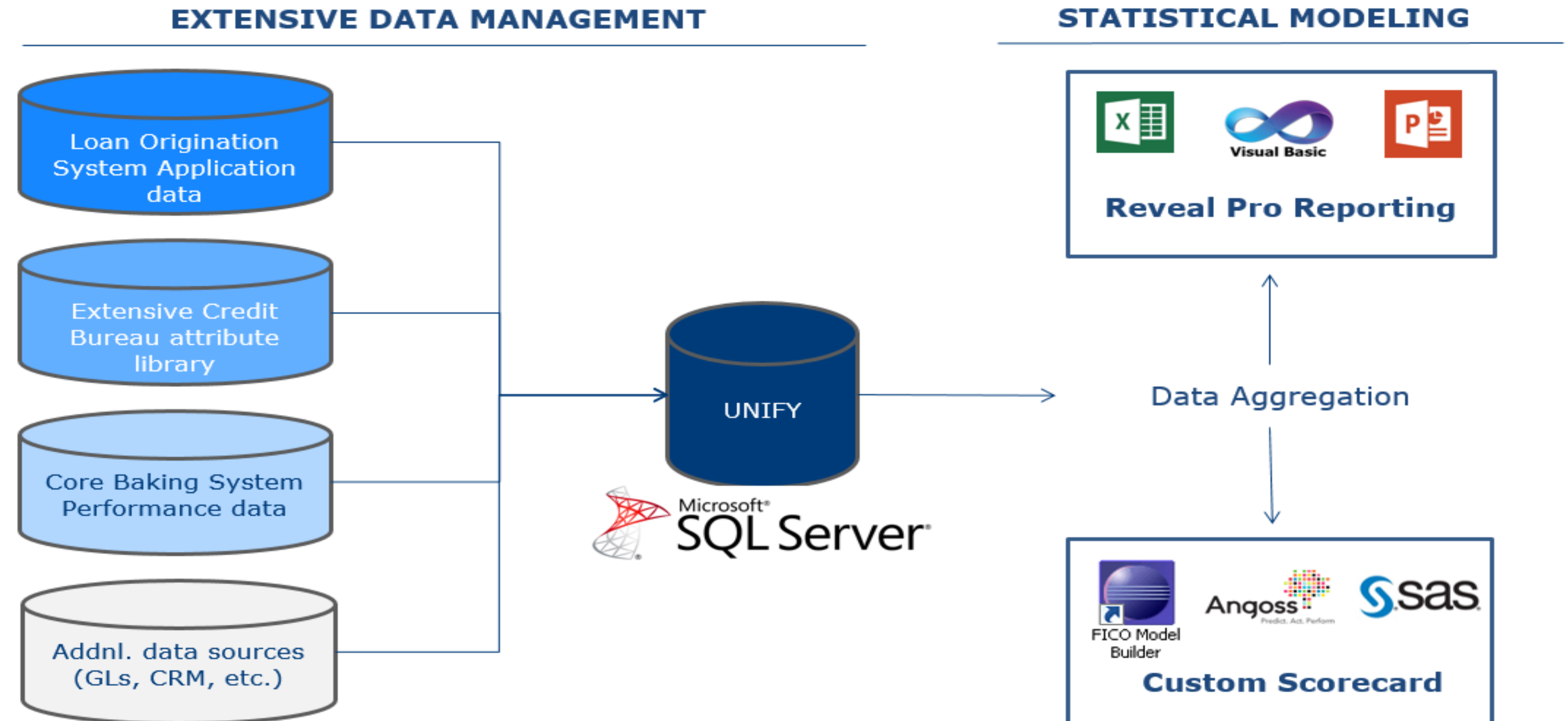
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Data used to build a custom scorecard

Data framework

The Achieve team utilizes a module based and flexible framework which allows for a complete reporting package and the necessary datasets for model development



Data Framework

- ❖ Application data
- ❖ Complete set of credit bureau attributes
- ❖ Core banking system history
- ❖ Additional data sources

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Data used to build a custom scorecard

Data framework

The Achieve team works to extract the historical application and loan information from the loan origination system

Applications

- Amount requested, amount approved
- Branch, channel, dealer, state
- Product Type, etc.

Employment and Address Histories

- Current and previous custom addresses
- Current and previous employers and length of employment

Applicant Finances

- Applicant income, monthly expenses, current debts
- Number of dependents
- Marital status

Credit Score

- Credit Bureau used
- Score type
- Score value

Collateral

- Collateral value
- Collateral age

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Data used to build a custom scorecard

Data framework

The historical credit reports are extracted from the loan origination system and used to aggregate new credit attributes. The Achieve team works with our clients to get the necessary historical data from the core banking system.

Credit Bureau data

- Using MeridianLink software solution to create an extensive library of normalized credit bureau attributes from the raw credit report files

Core Banking System data

- Core Banking data requirements are provided and the client extracts the data

Additional data sources

- Alternative data sources
- Member / Customer data

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Benefits of building a custom scorecard

Better risk assessment

A custom scorecard gives a strong rank order of risk that can allow for deeper market penetration or lowering risk in alignment with the desired risk tolerance

Custom Risk Class	Decision	Cumulative Population	Approval Rate	Potential Gain in business	Lost Business	Bad Rate in the class	Cumulative Bad Rate
A	Auto Approve	9.9%	83.0%	25.2%	1.7%	0.0%	0.0%
B		20.2%	75.5%		2.5%	0.1%	0.1%
C		30.1%	65.8%		3.4%	0.1%	0.1%
D		40.1%	63.1%		3.7%	0.4%	0.2%
E		50.0%	55.0%		4.5%	0.6%	0.3%
F		60.1%	56.2%		4.4%	0.7%	0.3%
G		69.9%	49.0%		5.0%	1.4%	0.5%
H	Review	79.9%	36.5%	6.4%	2.9%	0.8%	
I		89.9%	31.8%	6.8%	4.6%	1.2%	
J	Auto-Decline	100.0%	29.0%	2.9%	12.7%	2.4%	

Additional Details

- A. This personal loan example shows this institution can get up to 69.9% in auto-approval and 10.1% in auto-decline for a total 80% of auto decisioning
- B. The Institution will increase the business of 25.2% due to a better selection of the population
- C. The scorecard is capable of allocating the majority of default on the auto-decline class
- D. The risk associated with the auto-approval portion of the portfolio is only 0.5% and the risk appetite can go up

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Business case

Overview of the project and its results

CLIENT

Large Credit Union located in the Southwest

CHALLENGE

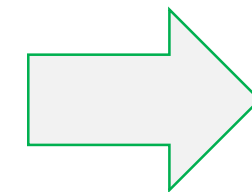
The Credit Union looked to significantly increase automated decisioning through custom scorecards and strategy enhancements but lacked the in-depth analytic expertise, experience, and resources

SOLUTION

The Credit Union partnered with the **Achieve** team to replace their generic score strategy with custom scorecards and to redesign their decisioning structure

RESULTS

The **Achieve** team developed a solution for the Credit Union's Auto Portfolio - Direct & Indirect Lending with the following benefits:



Increase automated decisioning from 11% to 66%

Project a slightly lower level of bad rate (60+ days past due)

Increase control over the decisioning process for future enhancements

Large potential for portfolio growth within the existing risk appetite

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Business case – AS-IS

How we helped our partner to develop a custom scorecard and to optimize automated decisioning

Institution's Challenge

The Credit Union wanted to reduce loan approval processing time and to better select through-the-door (TTD) population using custom scorecards

Level of auto-decisioning

AS-IS System Decision	% of TTD	Final Decision	% of Final Decision in AS-IS System Decision	Projected Bad rate	Bad rate of funded loans	Projected bad rate of declined loans	Total Auto Decisioning
Approve	2%	Approved	100%	0.70%	1.86%	8.58%	11%
Review	89%	Approved	43%	1.91%			
		Declined	57%	7.53%			
Decline	9%	Declined	100%	14.31%			

KEY FACTS: In the current (AS-IS) decisioning structure

- Separate credit risk assessment strategies for Direct and Indirect Auto applications
- Limited Auto-Decline criteria: only applied to non-member with very low FICO Score for Indirect Auto
- Overly strict Auto-Approval rules including FICO Score and 19 additional criteria

- **Very low automated decisioning**
- **High volume of applications to be manually reviewed**
- **2 separate set of rules to maintain in the system**

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Business case – TO-BE

How we helped our partner to develop a custom scorecard and to optimize automated decisioning

Achieve's Solution

- a) **Origination Custom Scorecard** to replace the generic score
- b) Designed the strategy to best leverage custom scores in the Credit Union's current decisioning structure

Level of auto-decisioning

TO-BE System Decision	% of TTD	Previous Final Decision	% of Previous Decision in TO-BE System Decision	Projected Bad rate	Projected bad rate of TO-BE funded loans	Projected bad rate of TO-BE declined loans	Total Auto Decisioning
Approve	40%	Approved	65%	0.96%	1.74%	10.69%	66%
		Declined	35%				
Review	34%	Approved	41%	4.48%			
		Declined	59%				
Decline	26%	Approved	1%	15.25%			
		Declined	99%				

KEY FACTS: In the future (TO-BE) decisioning structure

- Auto-Approval increases from 2% to **40%**: while keeping same risk appetite
- Auto-Decline increases from 9% to **26%**: now the institution declines truly risky applicants and avoid losing good borrowers
- **14%** gain in new business: Applications that were previously declined but would be auto-approved in the new system with low projected bad rate

- **Less Risk**
- **More Automation**
- **More Business**

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Business case – TO-BE

How we helped our partner to develop a custom scorecard and to optimize automated decisioning

Maximum Potential Benefits

If the Credit Union uses solely the Custom Scorecard as their automated decisioning strategy, the result could be over 80% of applications being auto-approved or auto-declined with the appropriate risk levels

Level of auto-decisioning

TO-BE System Decision	% of TTD	Previous Final Decision	% of Previous Decision in TO-BE System Decision	Projected Bad rate	Projected bad rate of TO-BE funded loans	Projected bad rate of TO-BE declined loans	Total Auto Decisioning
Approve	52%	Approved	62%	0.97%	1.26%	11.95%	81%
		Declined	38%				
Review	19%	Approved	26%	4.62%			
		Declined	74%				
Decline	29%	Approved	11%	15.35%			
		Declined	89%				

KEY FACTS: In the future (TO-BE) decisioning structure

- 12% more Auto-Approval and 3% more Auto-Decline
→ A total of **15%** more automation
- Net gain in new business of **17%**:
 - 20% gain in low risk applications that were previously declined
 - 3% loss in high risk applications that were previously approved
- One set of rules for both Direct and Indirect Auto loans

Maximum benefit of automating with the custom scorecard but the strategy needs to be aligned with management policy!

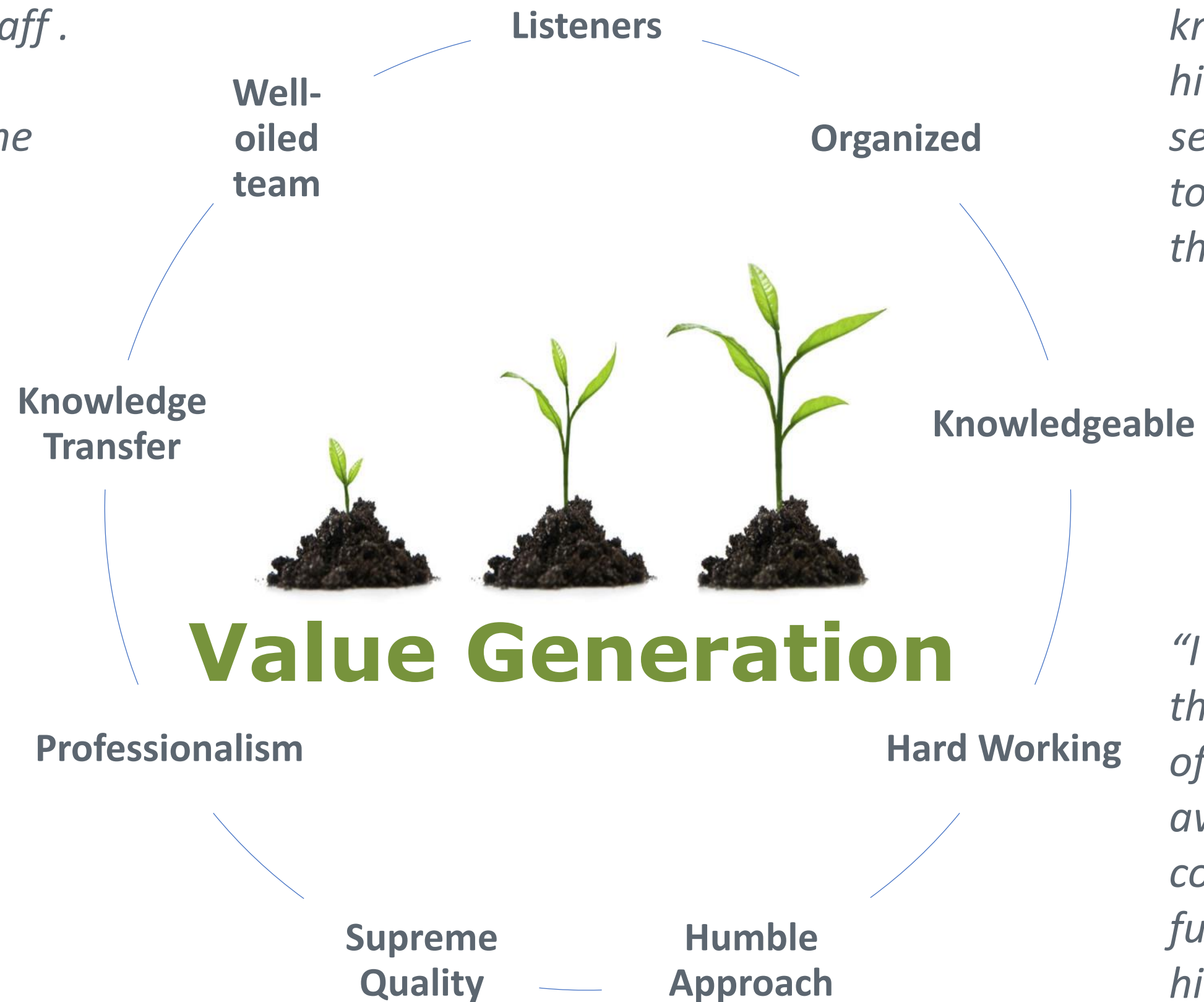
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QUESTIONS?

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The new Achieve Analytics & Business Consulting Team

“The consulting team was outstanding to work with. They were organized, prepared, spent many hours talking with the Bank’s staff. In summary, we were extremely pleased with the work of the Achieve Consulting Team”



“In a nutshell, impressive deliverable quality”

“The MeridianLink Achieve team is professional, dedicated to their projects and extremely knowledgeable. I would highly recommend their services and we look forward to additional endeavors with this team in the future”

“I would highly recommend that they continue on their path of helping others from a system awareness angle and from a consulting angle with other future/current clients. There is high value here.”

100% Satisfaction with all our Partners

“We feel like this was one of the best decisions we could have made!”

Thank you

FOR FURTHER INFORMATION, PLEASE CONTACT:

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