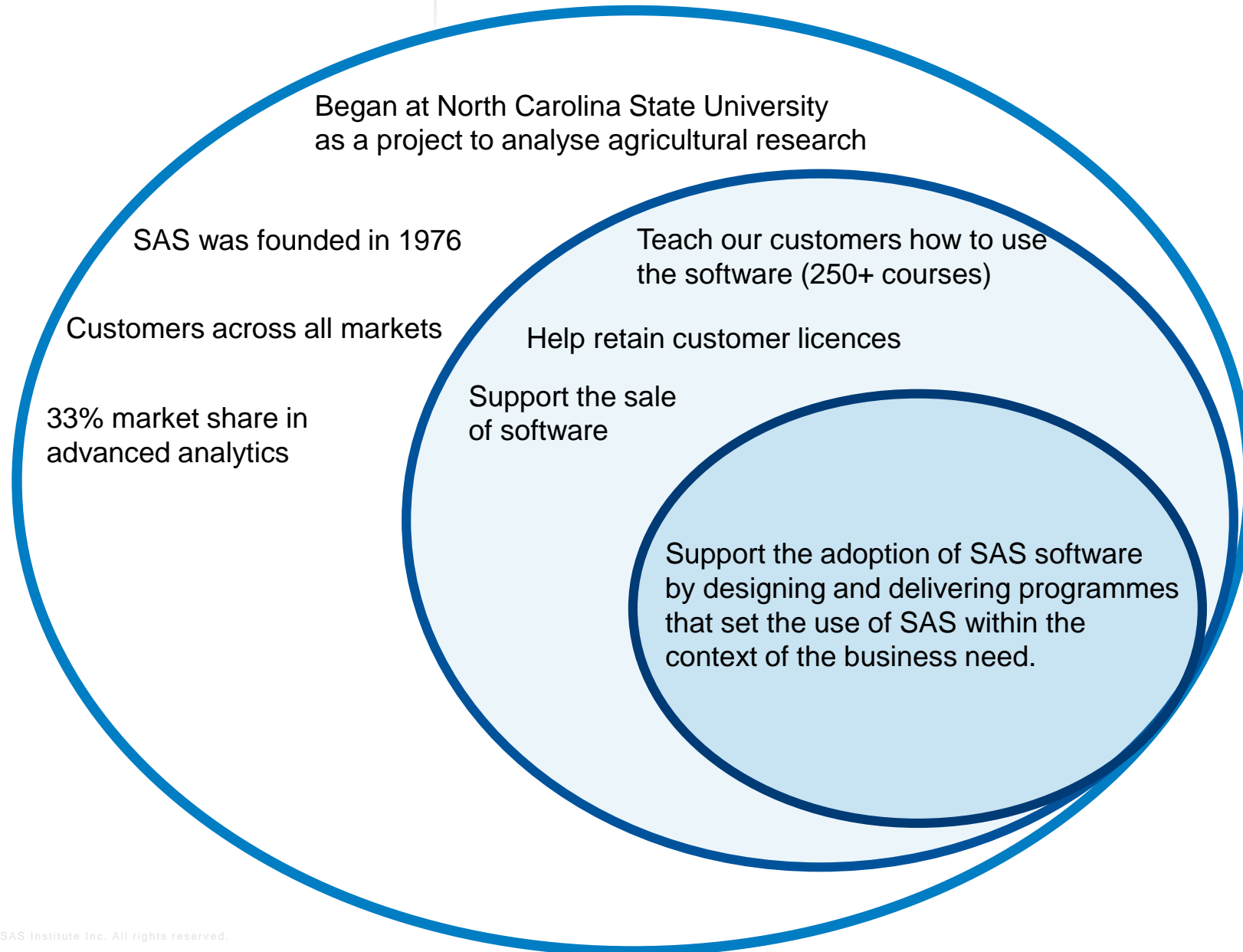


# MEETING THE NEEDS OF OUR ANALYTICS CUSTOMERS

CAROLINE TEW SAS ADOPTION SERVICES PRACTICE MANAGER



# WHO ARE SAS ...AND WHO ARE SAS EDUCATION



# ANALYTICAL SKILLS FRAMEWORK

## CASE STUDY

Business

Inefficient  
processes

Increasing  
demand from  
the business

Non-standard  
processes

No time for  
innovation

Analysts

Limited career  
path

Lack of structured  
technical training  
and skills  
development

Lack of role  
focus

# SAS ACADEMY STRUCTURE

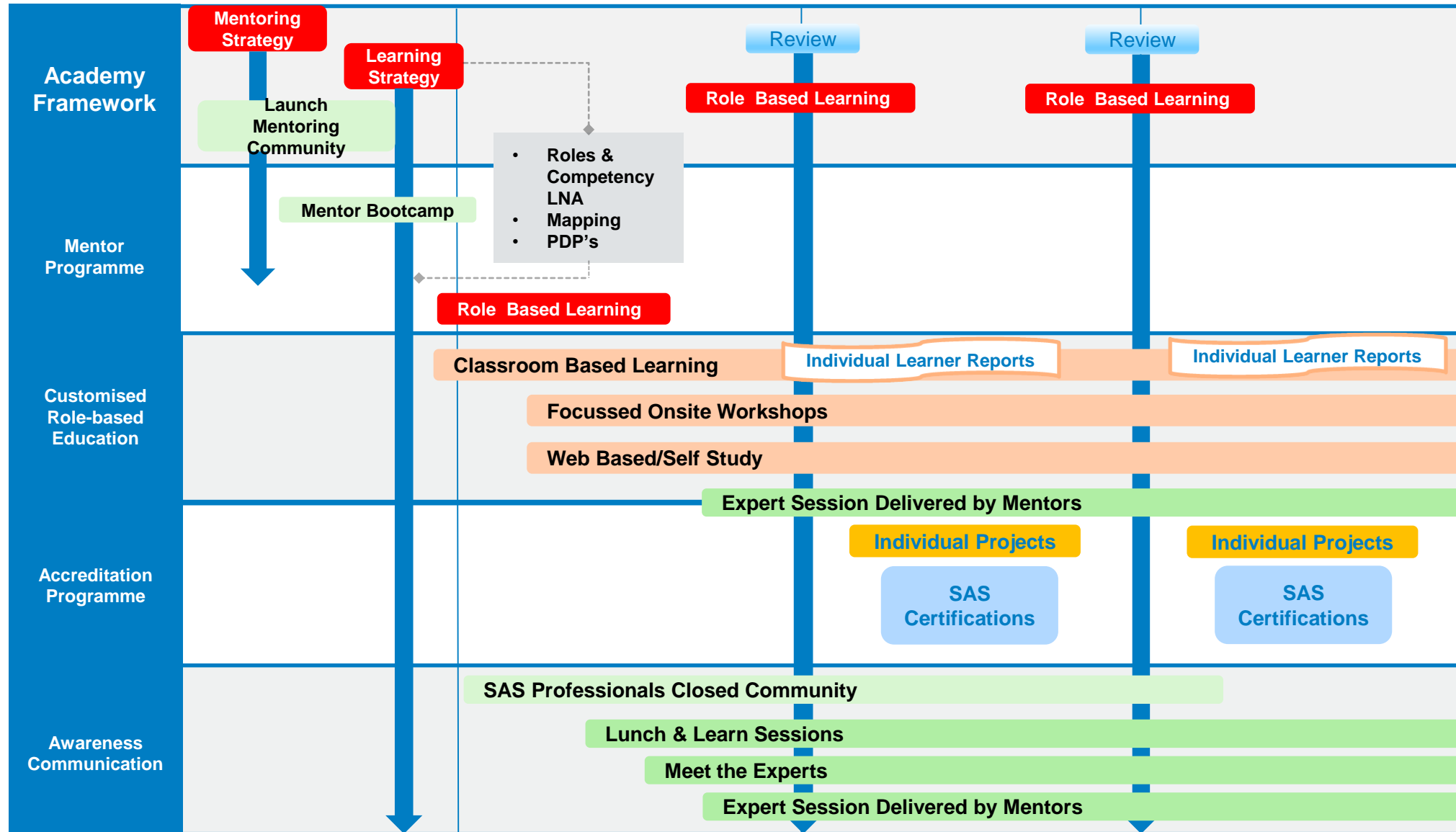
Delivery of Role Based Education Programme

Flexible Framework

Customer Delivery and Mentoring

Talent Identification & Retention

Scalable, Portable & Repeatable

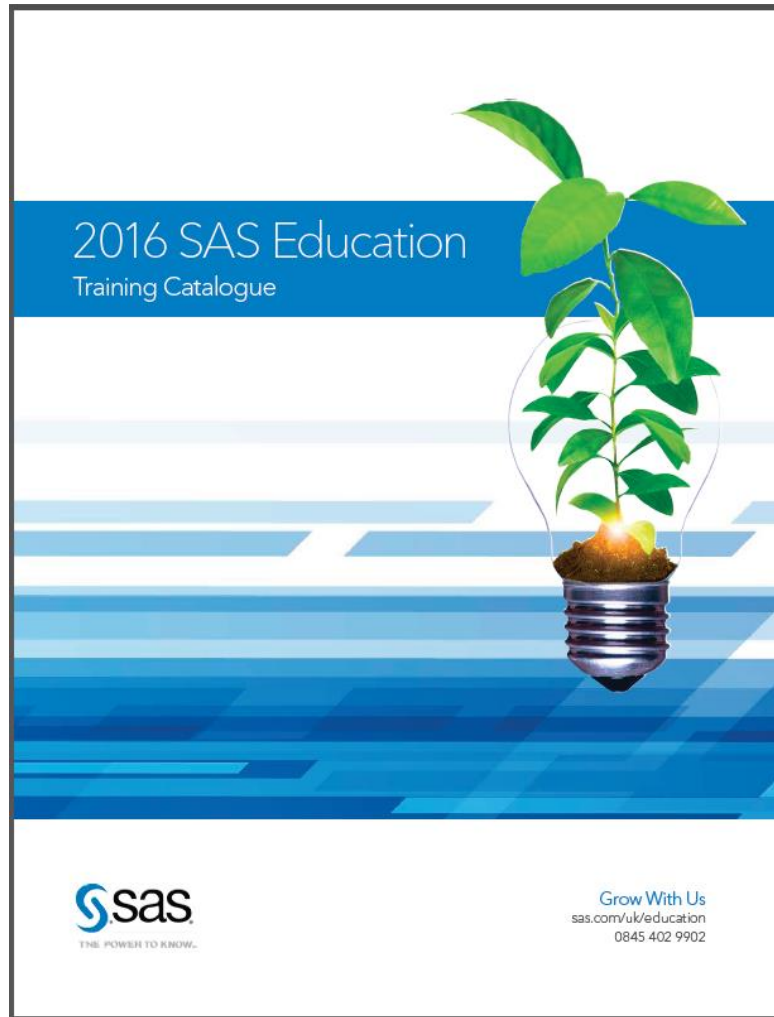


## WHY THE BENEFITS

- Creation of ‘Specialists’
- Adoption of new tools
- Process improvement, standardisation and transparency
- Improved quality of deliverables
- Standardisation of code
- Projects are easier to understand – faster, more efficient, consistent
- Enhanced control and auditability
- Greater analyst retention
- Time savings in performing analytics
- Modernisation

# WHY WAS THIS PROJECT DIFFERENT

## IT DIDN'T START OUT THAT WAY



- Adoption Services – provide offerings not in the catalogue
- We had small to medium sized projects
  - Learning Needs Assessments
  - Tool migration support
  - Workshops
  - Developing on-line learning
  - Supporting change management



# WHY WAS THIS PROJECT DIFFERENT

## INITIAL CONTACT WAS TRADITIONAL

- List of courses

Level	Title	Subject	Details	Duration/time period
Foundation	Data Systems and Structure	Introduction to the various data sources and systems: HSBC - SAS Server & DWH first direct - SAS Server, DWH, Infobank (to be demised) M&S Money - Minerva HFC - Partnership Cards	Workshop based training	Month 1
Foundation	SAS Foundation I	Guided learning	Partner with a Senior Analyst who introduces the trainee to: SAS Software and GUI Walks through set up and a standard basic syllabus Walks through connection to data systems Sets trainee off on self directed learning	Weeks 1 - 2
Foundation	SAS Foundation II	Self directed learning	Trainee uses basic guide and exercises to get started on SAS	Month 1
Foundation	SAS Foundation III	Workshop	Having completed the Guided and Self direct learning, the trainee attends a workshop on SAS Basics. This includes: Revision of Foundation I & II Standard syllabus of programming topics	Month 2
Foundation	SAS Coaching	Coaching from an experienced SAS programmer (designate SAS Coaches - trained/certified externally on SAS, and internally on Coaching Skills)	An experienced SAS programmer is available to: Discuss solutions Review code	Month 2 - 4
Foundation	Analytics Foundation		Classroom based training course	
Deployment Foundation	SMg3 Foundation I	Guided learning	Partner with a Senior Analyst who introduces the trainee to: SMg3 Software and GUI Walks through set up and standard basic syllabus Walks through connection to data systems Sets trainee off on self directed learning	Weeks 1 - 2
Deployment Foundation	SMg3 Foundation II	Self directed learning	Trainee uses basic guide and exercises to get started on SMg3	Month 1
Deployment Foundation	SMg3 Foundation III	Workshop	Having completed the Guided and Self direct learning, the trainee attends a workshop on SMg3 Basics. This includes: Revision of Foundation I & II Standard syllabus of programming topics	Month 2
Growth stage	Introduction to Teradata		Classroom based training course	
Growth stage	Introduction to SQL		Classroom based training course	
Growth stage	Introduction to Macros		Classroom based training course	

- Why are you coming to us now?
  - Staff retention and attraction
  - Wish to improve deliverables to the business
  - Wish to increase engagement
  - On-boarding process too long
  - ...

## WHAT WE DID NEXT | WHAT DID THEY REALLY WANT?

- We took an approach to identify what they really wanted and needed
- How we could support them
- Removed any pre-conceptions about what we could build and deliver
- Collaboration



# FRAMEWORK WE UNDERTOOK TO ...

- Create a three year programme
- Provide individual learning pathways
- Document and measure skills and competencies
- Link skills and competencies to PDP's and progression
- Address retention and attraction
- Facilitate cross team and department collaboration and movement
- Include non-SAS requirements
- Enable and satisfy KPI's of each team departments
- Ensure professional qualifications – SAS accreditations
- Identify talent via internal projects
- Provide access to industry experts and leading practice
- Deliver a return on investment

# CHANGES IN APPROACH

## 1. MULTI DISCIPLINED TEAM

- SAS Education
- SAS Presales
- SAS Sales
- SAS Business Value

## CHANGES IN APPROACH

### 2. CHANGE THE WAY DELIVERED AND SUPPORTED

- Flipped classroom
- Bootcamp
- Coaching and Mentoring
- Enabled self sufficiency

## CHANGES IN APPROACH

### 3. DEMONSTRATED A RETURN ON INVESTMENT

- Assessed and documented the business value
- Understood the requirements of the individuals
- Understood the requirements of the business
- Understood the SAS tools they had
- Understood what they want to achieve with their SAS tools

# CHANGES IN OUR APPROACH

## FOCUS

- Competency
- Flexibility
- Business needs
- Removing silos of working
- Building collaboration
- Standardising business processes
- Automating processes
- Learning and development
- Creating a scalable solution
- Accreditation
- Building repeatability
- Removing single points of failure
- Increase utilisation and knowledge of the SAS tool set
- Innovation
- Succession planning
- Capacity planning
- Attracting and retaining staff
- More effective on-boarding
- Structured career progression
- Making it work

## CHANGES IN OUR APPROACH

### 4. BUILT AND TRAINED A TEAM OF MENTORS TO ...

- Develop customised materials that support the delivery of internal workshops and mentoring activities
- Responsible for sharing knowledge, skills and information within the context of business processes and best practice
- Set up credible testing mechanisms that will indicate student learning progression and competence
- Design and deliver communication events and activities
- Support the on-going delivery of the framework

# CREATING THE ACADEMY

## ROLES AND COMPETENCY HEATMAP

	KEY ACE Level - A = Aware C = Capable E = Expert	Person 2 (Portfolio)		Person 3 (Portfolio)			Person 4 (Portfolio)			Person 5 (Modelling)			Person 6 (AIM)			Person 7 (Financial Modelling)			Person 8 (AIM)			Person 9 (Financial Modelling)		
		Score	Gap	ACE Level	Score	Gap	ACE Level	Score	Gap	ACE Level	Score	Gap	ACE Level	Score	Gap	ACE Level	Score	Gap	ACE Level	Score	Gap	ACE Level	Score	Gap
<b>Enterprise Guide</b>	Create and export or publish reports	2	6	A	2	6	A	2	6	X	0	8	A	2	6	C+	6	2	A	2	6	A	2	6
<b>Enterprise Guide</b>	Use tasks to transpose, stack, rank, and create a random samples of data	2	6	A	2	6	C	5	3	A+	3	5	A	2	6	C	5	3	A	2	6	A	2	6
<b>Enterprise Guide</b>	Use SAS functions in Query Builder	2	6	A	2	6	A	2	6	C	5	3	A	2	6	C+	6	2	A	2	6	C	5	3
<b>Enterprise Guide</b>	Use conditional logic in the Query Builder to create new columns	2	6	A	2	6	C	5	3	C	5	3	A	2	6	C	5	3	A	2	6	C	5	3
<b>Enterprise Guide</b>	Customise task output by modifying the code that is generated	2	6	A	2	6	C	5	3	C+	6	2	A	2	6	C+	6	2	A	2	6	C	5	3
<b>Stored Processes</b>	Understand SAS Stored Process concepts and uses	0	2	A	2	0	X	0	2	A	2	0	X	0	2	A	2	0	A	2	0	X	0	2
<b>Stored Processes</b>	Create Stored Processes in SAS Enterprise Guide	0	2	A	2	0	X	0	2	A	2	0	X	0	2	A	2	0	X	0	2	X	0	2
<b>Stored Processes</b>	Understand stored process parameters	0	2	A	2	0	X	0	2	A	2	0	X	0	2	A	2	0	X	0	2	X	0	2
<b>Stored Processes</b>	Create Stored Processes in SAS management Console	0	2	A	2	0	X	0	2	A	2	0	X	0	2	A	2	0	X	0	2	X	0	2
<b>Enterprise Guide Modelling</b>	Using the Rapid Predictive Modeling Task	0	5	A	2	3	X	0	5	X	0	5	A	2	3	X	0	5	X	0	5	X	0	5
<b>Enterprise Guide Modelling</b>	Using the Model Scoring Task	0	5	A	2	3	X	0	5	X	0	5	A	2	3	X	0	5	X	0	5	X	0	5
<b>Data Integration</b>	Register source data and target tables	0	2	A	2	0	A	2	0	X	0	2	E	8	-6	X	0	2	C	5	-3	X	0	2
<b>Data Integration</b>	Create DI Studio jobs and explore the functionality of the Job Editor	0	2	A	2	0	A	2	0	X	0	2	E	8	-6	X	0	2	C	5	-3	X	0	2
<b>Data Integration</b>	Work with DI Studio transformations	0	2	A	2	0	A	2	0	X	0	2	E	8	-6	X	0	2	C	5	-3	X	0	2
<b>Data Integration</b>	Enhance table relationships using integrity constraints, key, and indexes	0	2	A	2	0	A	2	0	X	0	2	E	8	-6	X	0	2	C	5	-3	X	0	2
<b>Data Integration</b>	Work with slowly changing dimensions	0	2	A	2	0	A	2	0	X	0	2	E	8	-6	X	0	2	X	0	2	X	0	2
<b>Data Integration</b>	Create custom transformation with the Transformation Generation Wizard	0	2	A	2	0	A	2	0	X	0	2	A	2	0	X	0	2	X	0	2	X	0	2
<b>Data Integration</b>	Document and deploy jobs	0	2	A	2	0	A	2	0	X	0	2	E	8	-6	X	0	2	C	5	-3	X	0	2
<b>Data Integration</b>	Administer DI Studio	0	2	A	2	0	A	2	0	X	0	2	-C	4	-2	X	0	2	C	5	-3	X	0	2
<b>Model Manager</b>	Manage SAS Model Manager Data Sources	0	2	A	2	0	A	2	0	X	0	2	-C	4	-2	X	0	2	C	5	-3	X	0	2
<b>Model Manager</b>	Create a SAS Model Management Project Tree	0	2	A	2	0	A	2	0	X	0	2	-C	4	-2	X	0	2	C	5	-3	X	0	2
<b>Model Manager</b>	Import Models into SAS Model Manager	0	2	A	2	0	A	2	0	X	0	2	-C	4	-2	X	0	2	C	5	-3	X	0	2
<b>Model Manager</b>	Compare and Assessing Models Using Model Comparison Reports	0	2	A	2	0	A	2	0	X	0	2	X	0	2	X	0	2	A	2	0	X	0	2
<b>Model Manager</b>	Score SAS Model Manager Models	0	2	A	2	0	A	2	0	X	0	2	-C	4	-2	X	0	2	A	2	0	X	0	2
<b>Model Manager</b>	Create Model Manager Production Reports	0	2	A	2	0	A	2	0	X	0	2	X	0	2	X	0	2	A	2	0	X	0	2
<b>Model Manager</b>	Create SAS Model Manager Advanced Reports	0	2	A	2	0	A	2	0	X	0	2	X	0	2	X	0	2	A	2	0	X	0	2
<b>Model Manager</b>	Create Customized Version Life Cycles	0	2	A	2	0	A	2	0	X	0	2	X	0	2	X	0	2	A	2	0	X	0	2
<b>Model Manager</b>	Use the SAS Model Manager Query Utility	0	2	A	2	0	A	2	0	X	0	2	X	0	2	X	0	2	C	5	-3	X	0	2
<b>SAS Add-In to MS-Office</b>	Use the SAS Add-In to MS-Office	0	5	A	2	3	A	2	3	X	0	5	A	2	3	A	2	3	A	2	3	E	8	-3
<b>SAS Add-In to MS-Office</b>	Access various types of data from Microsoft Office Applications	0	5	A	2	3	A	2	3	X	0	5	A	2	3	A	2	3	A	2	3	E	8	-3
<b>SAS Add-In to MS-Office</b>	Interact with multidimensional data within Microsoft Office Applications	0	5	A	2	3	A	2	3	X	0	5	A	2	3	A	2	3	A	2	3	E	8	-3
<b>SAS Add-In to MS-Office</b>	Run SAS Analyses within Microsoft Office Applications	0	5	A	2	3	A	2	3	X	0	5	A	2	3	A	2	3	A	2	3	E	8	-3



# ANALYTICAL SKILLS FRAMEWORK

## STRUCTURED CAREER PROGRESSION

### PROMOTION

### PROMOTION

### PROMOTION

### PROMOTION

### NEW RECRUIT

#### *Level 1*

Technical skills

#### *Level 2*

Technical skills

Problem solving

Business project-based assessment

#### *Level 3*

Technical skills

Supervisory role

Human relations skills

Problem solving

#### *Level 4*

Technical skills

Supervisory role

Human relations skills

Solution provider

Accountability

SAS Certification

#### *Level 5*

Technical skills

Managerial role

Human relations skills

Solution provider

Freedom to act

# CHANGES IN OUR APPROACH

## NEW OFFERINGS

**MENTORS SOCIAL NETWORKING GROUP**

Chris Dillon Sign Out Search SAS Professionals

SAS professionals Home My Account Members Forum Groups SAS Pro TV Photos

All Groups My Groups Options Invite

**HSBC SAS Academy**  
Created by SAS Professionals Administrator Send Message View Groups

Information

 This is a group exclusively for HSBC Academy Mentors in the UK

Members (20)

News

Hi everyone, my plan is to update this section with current news and updates.

Update for w/c 30th September. Only a week to go until the boot camp! How exciting! So for the final week we need you to develop a 5-15 minute training session on a topic of your choice. Please make it something related to SAS or RRA. Any questions please dont hesitate to ask!

Hi folks, update 16/9/2013. Week 6's work is the Enterprise Miner e-learning. Rather than create another page, please add any comments to the E-Miner Day.

Next Week's work will be the Model Manager two day session with Zoran.

This is the link to the word document that I mentioned in my response to Amy's questions about an alternative to DDE on the Week 5 page.

Sending data to a specific Excel column

Has anyone had a chance to try this?

Pages (10)

Week 1 Getting Started  
Week 2 E-Miner Day  
Week 3 Books & Links  
Week 4 Process Review  
Model Manager  
Useful Top Tips  
Week 5 e-Learning  
Enterprise Guide  
Week 6 Stats e-learning  
Week 7 Program analyzer

+ Add a Page View All

**MENTORS BOOT CAMP**

Team Building

Softskills

Teaching Coaching Mentoring

Planning



### ACADEMY LAUNCH MENTOR PRE-LAUNCH ACTIVITIES

#### Academy Competency Assessments

- Create Competency Map
- Create Role Based Development Plans
- Create Role Based Learning Strategy Report

#### Create Training

- Specify Training Courses for SAS to develop
- Create On-boarding Training materials
- videos, documentation training course, e-learning etc.

#### Produce Launch materials (Academy)

- The role of the Mentor
- The Academy Framework and Development Routes
- Training available now
- What's Next
- What do we need from you?

#### Produce Launch Materials (Technical)

- Overview of Tool Set
- Demonstrations

### ACADEMY LAUNCH LAUNCH DAY



Retail Risk Analytics

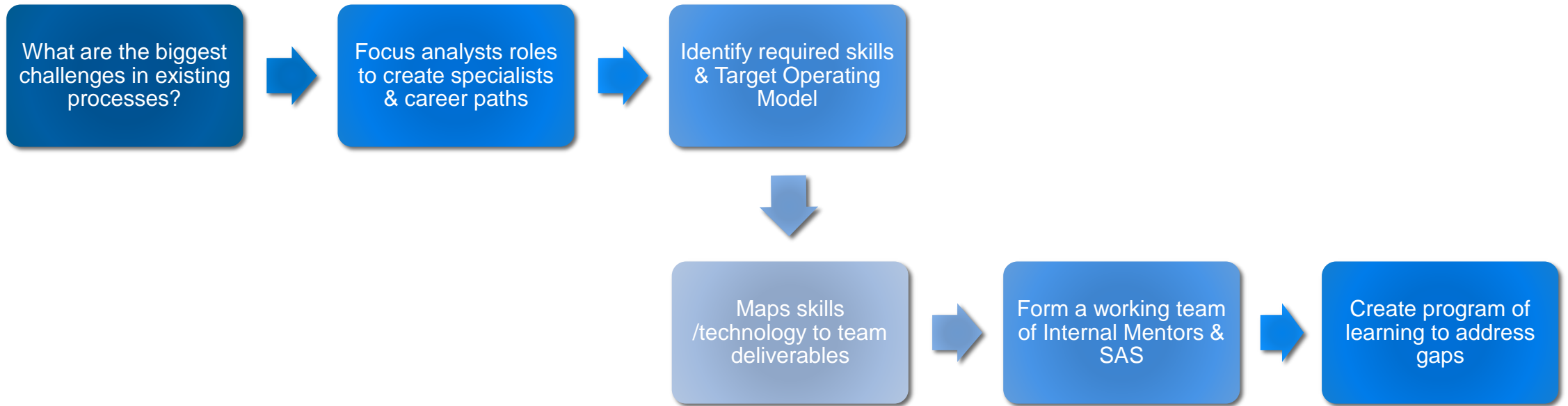
HSBC M&SMONEY

direct

as THE POWER TO KNOW.

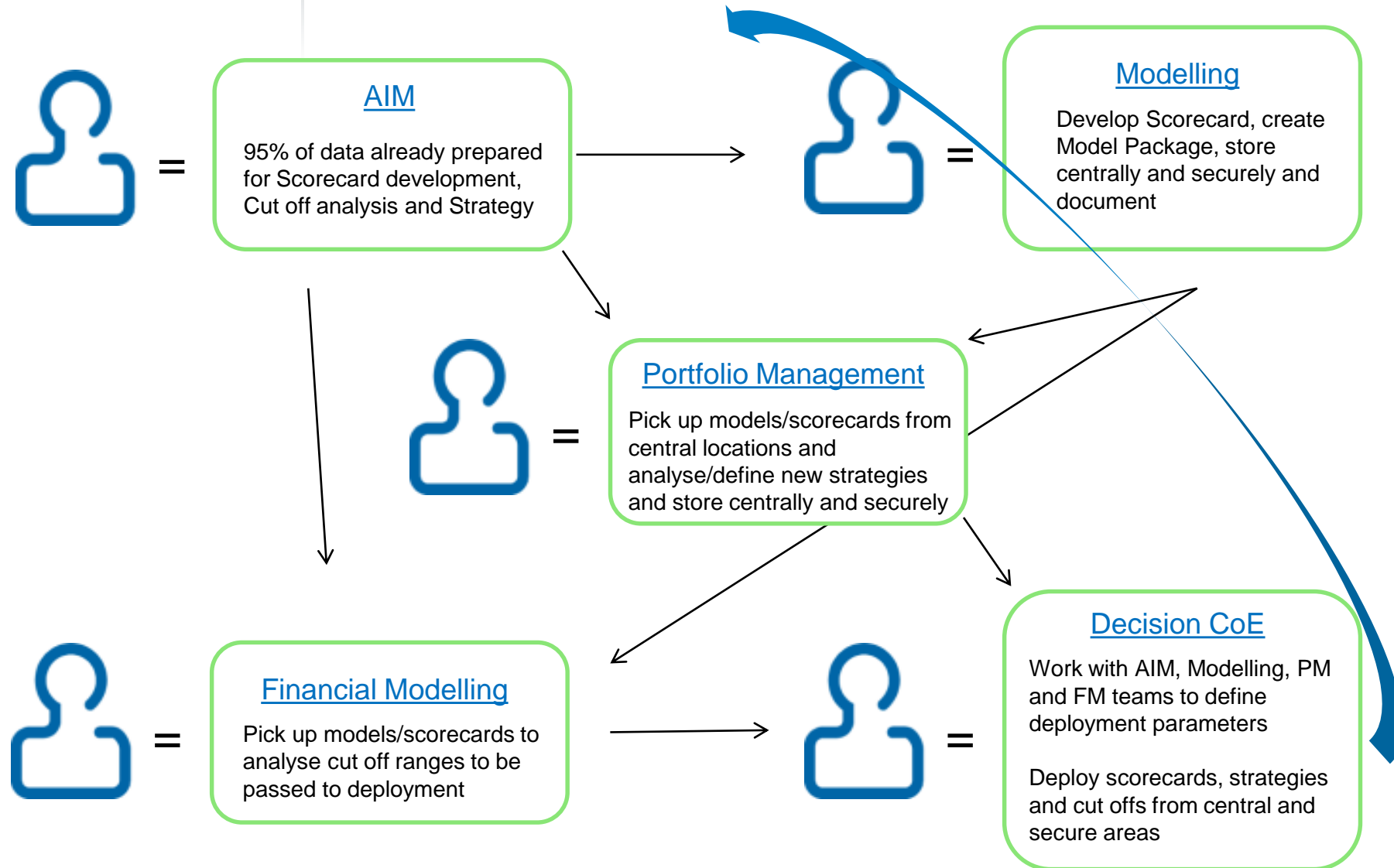
# ANALYTICAL SKILLS FRAMEWORK

## PROCESS FOLLOWED



# CHANGES IN OUR APPROACH

## TARGET OPERATING MODEL



Role	Modelling	Decision Centre of Expertise	AIM (previously BI team)	Portfolio Management	Financial Modelling	SME
<b>Analyst</b>	<ul style="list-style-type: none"> <li>➤ Small Analytics projects</li> <li>➤ Monitoring models</li> <li>➤ Scorecard build</li> <li>➤ Document</li> </ul>	<ul style="list-style-type: none"> <li>➤ Deploy models &amp; strategies developed by modelling, PM and FM teams</li> </ul>	<ul style="list-style-type: none"> <li>➤ Develop data transformation s based on analyst requirement</li> <li>➤ Run defect reports based on CRA request</li> </ul>	<ul style="list-style-type: none"> <li>➤ Monitor existing rules</li> <li>➤ Define new strategies and customer segments</li> <li>➤ Document</li> <li>➤ Adhoc questions</li> </ul>	<ul style="list-style-type: none"> <li>➤ Run existing models through different scenarios</li> <li>➤ Access scorecard output and run cut off analysis</li> <li>➤ Document</li> </ul>	Cover PM, FM and Modelling for SME
<b>Senior Analyst</b>	<ul style="list-style-type: none"> <li>➤ Define data requirements for models</li> <li>➤ Review projects</li> <li>➤ Scorecard build</li> <li>➤ Work with DCoE to deploy models</li> </ul>	<ul style="list-style-type: none"> <li>➤ Develop new decision systems</li> <li>➤ Manage deployment requirements</li> </ul>	<ul style="list-style-type: none"> <li>➤ Design and optimise data structures</li> <li>➤ Manage job scheduling</li> <li>➤ Centrally manage access to data and SAS objects</li> </ul>	<ul style="list-style-type: none"> <li>➤ Define data requirements for strategies</li> <li>➤ Review strategies</li> <li>➤ Work with DCoE to deploy strategies</li> </ul>	<ul style="list-style-type: none"> <li>➤ Define models to be run by analysts</li> <li>➤ Define data requirements for models</li> <li>➤ Work with DCoE to deploy cut offs</li> </ul>	Cover PM, FM and Modelling for SME
<b>Team Leader</b>	<ul style="list-style-type: none"> <li>➤ Manage, review and sign off models</li> <li>➤ Define processes across team</li> </ul>	<ul style="list-style-type: none"> <li>➤ Manage, review and sign off deployments</li> <li>➤ Define processes across team</li> </ul>	<ul style="list-style-type: none"> <li>➤ Manage, review and sign off jobs</li> <li>➤ Define processes across team</li> </ul>	<ul style="list-style-type: none"> <li>➤ Manage, review and sign off strategies</li> <li>➤ Define processes across team</li> </ul>	<ul style="list-style-type: none"> <li>➤ Manage, review and sign off models and cut off decisions</li> <li>➤ Define processes across team</li> </ul>	<ul style="list-style-type: none"> <li>➤ Manage, review and sign off</li> <li>➤ Define processes across team</li> </ul>

## HOW WE CHANGED OUR APPROACH

## THE RESULT

- By the end of 2014 all the team had received key training and development identified in their learning plans

- The framework delivered on all its promises
- We are entering our fourth year of engagement
- We have trained the third group of mentors

## WHAT IT DID FOR US?

## HELPED SAS EDUCATION RETAIN AND ATTRACT TALENT

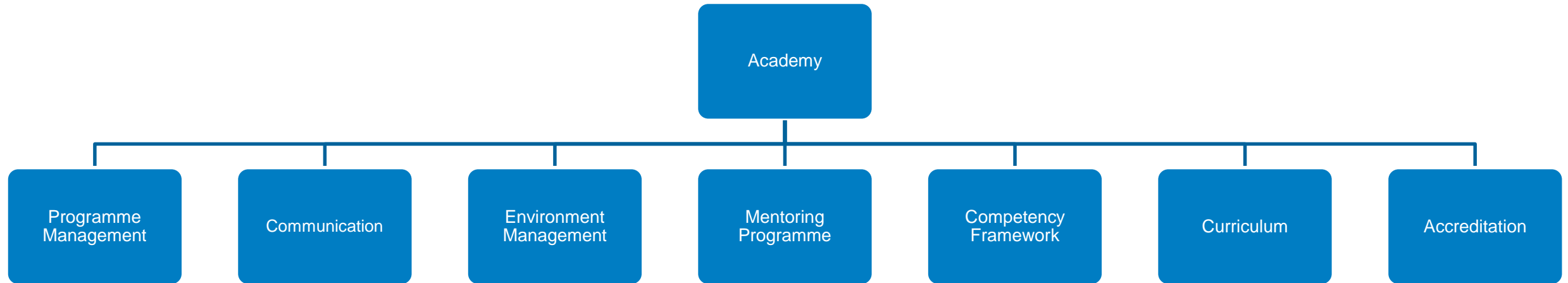
"Working on this project has required me to stretch many of my skills, in particular my creative skills beyond where, in the past, I would have thought they could be stretched.

It has given me experience in many areas that I would not have been exposed to in a normal training role, such as project management, advanced facilitation, team building and the soft skills associated with this. I have also learnt much about the banking industry and this has proved invaluable in giving me confidence in dealing with other customers."



# WHAT IT DID FOR US

## TEMPLATED SCALABLE REPEATABLE APPROACH





**THE  
POWER  
TO KNOW<sup>®</sup>**