Paper 066-2013

You're Invited!

Learn How SAS Uses SAS® Software to Invite You to SAS® Global Forum

Lori Jordan and Shawn Skillman, SAS Institute Inc., Cary, NC

ABSTRACT

Discover how you are chosen to receive an invitation to SAS® Global Forum. This paper explores the use of SAS® software, including SAS® Marketing Automation, SAS® Enterprise Guide, SAS® Enterprise BI (Business Intelligence) and SAS® DataFlux® Data Management in the selection process. See how SAS Marketing uses strategic segmentation practices and advanced analytics to target e-mail communications and improve list performance for SAS Global Forum.

INTRODUCTION

Each year, thousands of people attend SAS Global Forum. Even more receive e-mail invitations to the conference. It is obvious that SAS Global Forum attendees should be invited. Finding others in a database of millions is a more complex opportunity to address. This paper explains how SAS uses SAS software to identify and target the customers who are most likely to attend SAS Global Forum.

For SAS Global Forum campaigns, the process is a cycle that begins and ends with a series of marketing analytic reports created via tools in SAS Enterprise BI and The DataFlux Management Platform (DMP). In between, SAS Marketing Automation is used to design, create, and select a list from a data mart containing over three million contacts.

After e-mail invitations to SAS Global Forum are sent, response data is gathered and the team reviews a list performance analysis. This analysis is used to refine list criteria and content for the next set of e-mail messages. Finally, after SAS Global Forum, final attendee data is tracked and a series of reports are created for overall campaign analysis. This analysis identifies successes of the campaign and areas where the campaign can improve. These reports are in the Marketing Analytics Portal (MAP), created with the SAS Enterprise BI solution. These same reports are used in planning for the next year's campaign, thus beginning the cycle all over again.

At SAS, the internal marketing process uses SAS solutions in addition to standard SAS products in a campaign lifecycle consisting of:

- Requirements Definition
 - The Data Mart
 - List Criteria For SAS Global Forum
- Campaign Design and Creation
 - The Mini Mart
- Campaign Execution
- List Performance Analysis
- Marketing Analytics Portal
 - Data Integration
 - Data Standardization
 - Overall Marketing Campaign Analytics

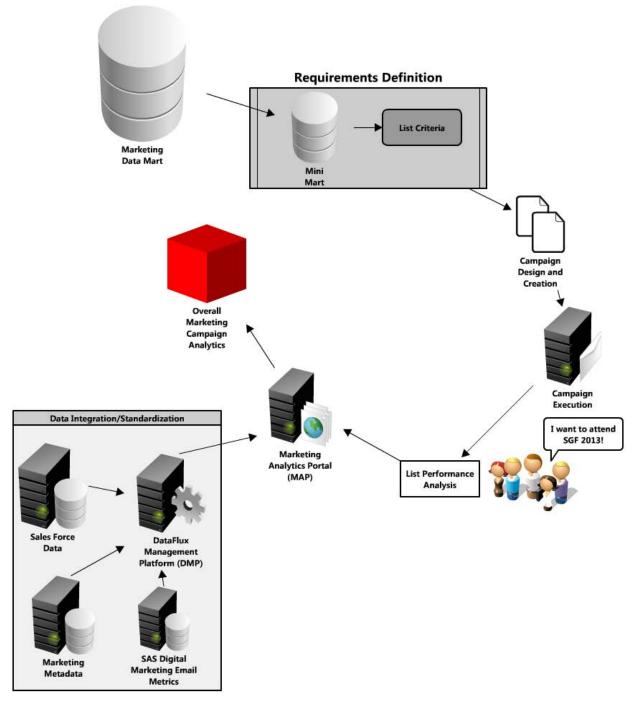


Figure 1. SAS Marketing Campaign Process for SAS Global Forum

REQUIREMENTS DEFINITION

The Data Mart

The Marketing Data Mart is a portfolio of data that tracks and integrates customer and prospect activity across multiple systems at SAS. It is updated nightly, and gives marketing analysts a concise and complete view of customer and prospect behavior. The mart data contains approximately 100 elements from four key data sources:

- SAS sales database
 - o leads
 - o pipeline
 - o invoices
- SAS marketing database
 - online and offline interactions
 - o web profile data
- SAS customer database
 - Education/Training
 - Purchasing
 - Installation
 - Tech Support
 - User Groups
 - Publications
- Purchased data

This data is then used in scoring models to ensure that the most suitable contacts are being selected out of the data mart and placed into the most relevant marketing campaigns.

List Criteria for SAS Global Forum

There is a general set of criteria used for SAS Global Forum. These criteria include:

- SAS Global Forum Executive Board members
- SAS User Group Steering Committee and board members
- Conference chairs
- Attendees from the past three years of SAS Global Forum conferences
- Attendees from the past three years of regional user group conferences (MWSUG, NESUG, SCSUG, SESUG, and WUSS)
- Attendees from the past three years of PHARMASUG
- Attendees from the past three years of local and special interest user group conferences
- Contacts who have expressed an interest via SAS Profile in one of the following: SAS Global Forum, MWSUG, NESUG, PHARMASUG, SCSUG, SESUG, or WUSS
- Attendees from the past three years of SAS Customer Connection conferences
- Attendees from the past three years of the Analytics Conference series
- Attendees from the past three years of SAS Talks
- Students from the past 1-2 years of SAS Education classes
- Contacts who have purchased a SAS publication in the past 1-2 years
- Contacts who subscribe to one of the following: SAS Technical Report, SAS Training Report, Certification Newsletter. or STAT OR Newsletter
- Contacts who serve as one of the following: SAS Representative, SAS Training Consultant, or SAS Warehouse Administrator at their site.
- Contacts otherwise identified as being SAS software users through calls to Technical Support.
- Contacts identified by SAS Customer Experience Analytics as having searched select <u>support.sas.com</u> web
 pages for a number of user group related activities

CAMPAIGN DESIGN AND CREATION

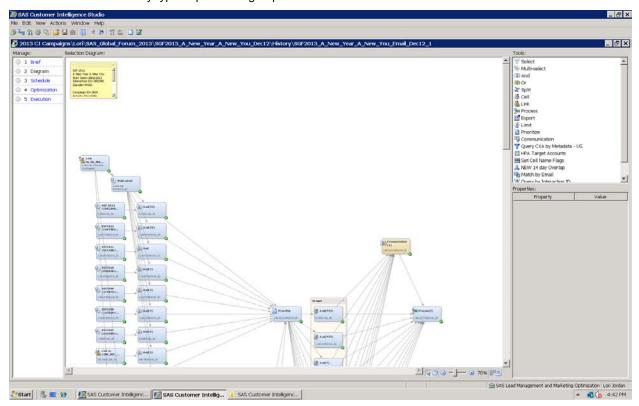
Once the general and more customized criteria have been established, SAS Marketing Automation is used to create the SAS Global Forum campaign by pulling contacts from the data mart meeting the specified criteria described above. Select nodes from the Tools window are pulled into the Selection Diagram and defined to either include, or in some cases exclude, data from the data mart. The inclusion of data meeting the criteria provides a starting population of contacts who might be included on a SAS Global Forum list. At the same time, Select nodes that exclude certain contacts, such as those who have opted out of e-mails, is useful in initial cleaning of the list.

Some Select nodes allow for the selection of multiple criteria elements in one node, for example, contacts who are selected because they registered for a past live event. For SAS Global Forum lists, which often start with a larger population, limiting the selection helps narrow the population to those more likely to respond to e-mail messages.

Other nodes in the Marketing Automation Tools window, known as Link nodes, allow for linking to groups of Select nodes in other marketing campaigns. The other marketing campaign might be a generic campaign designed as a

collection of pre-defined Select nodes. The Mini Mart, which is described below, is an example of such a generic campaign. These Link nodes are useful in SAS Global Forum as well as other user group lists where it is desirable to include attendees from past user group events. Select nodes that pull attendees from several specific events, such as all of the local user group meetings from one year, can be created in one campaign, grouped together, and then linked to from the new campaign.

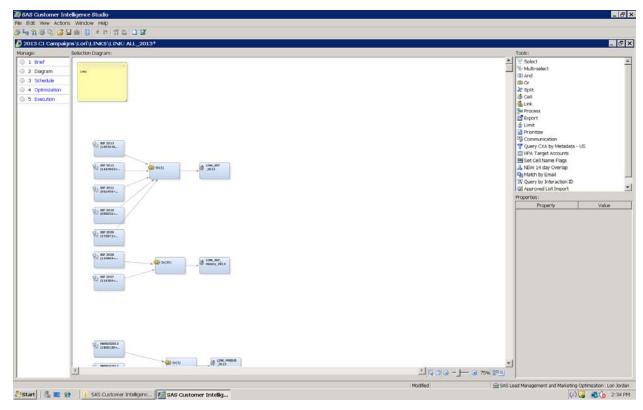
Once the Select, Multi-Select and Link nodes have been used to pull data into the campaign, other nodes such as "And/Or" nodes can be used for conditional execution. Also, Prioritize nodes can be included in the campaigns to prioritize some data over others. For example, past SAS Global Forum attendees are given priority over contacts who have not attended any type of past user group event or other live conference.



Display 1. Example of a SAS Global Forum Campaign

The Mini Mart

Because the general list criteria is extensive for SAS Global Forum, a subset of the data mart, internally known as the "Mini Mart," has been created using Marketing Automation. The Mini Mart is basically a collection of Link nodes that combine sets of list criteria, such as all of the local user groups in a given year. The Mini Mart simplifies the list creation process for SAS Global Forum because it pulls from the data mart only the criteria that are relevant to SAS Global Forum. New event data can be added and combined with past event data each year. The Mini Mart allows for the more efficient creation of campaigns because it is not necessary to "re-create the wheel" for each new campaign. It allows for criteria to be reused on a yearly basis and simplifies the segmentation process. During this step of the process, each contact is flagged when the contact's activities or preferences meet the above list criteria. By reviewing the types and number of criteria met, the information is used to rapidly identify the best performing segments of data for SAS Global Forum.



Display 2. Example of the Campaign That Creates the MiniMart

CAMPAIGN EXECUTION

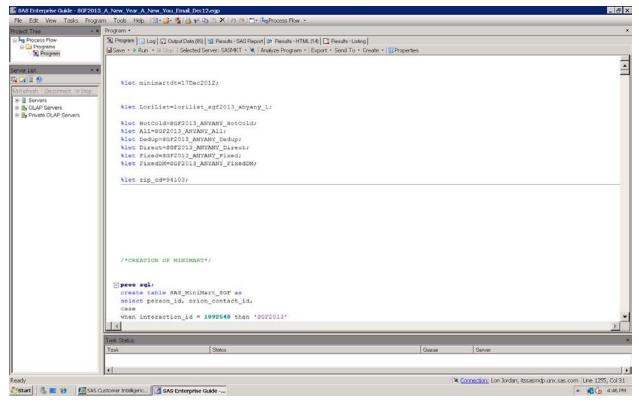
Once the campaign design and creation has been finalized, it is then executed and the output is generated. Additional data to aid in scoring and segmentation is then appended to the campaign-generated output. Some of the additional data that is appended to user group campaigns include:

- criteria elements (as described in the list criteria section above) which the contact meets
- counts of groupings of the criteria elements
- proximity to the event based on the contact's ZIP code
- indicators as to how recently the contact has been involved in other SAS events
- various flags for excluding certain contacts from the list

This application can be accomplished via code in a Process node in Marketing Automation or a job run in SAS Enterprise Guide or Base SAS®. The list is also cleaned to remove any contacts who should not receive the e-mail.

Once all of the data has been evaluated, the list can be divided into specified segments to receive targeted messages in the planned e-mail communications. Examples of ways in which a list might be segmented with targeted content include:

- past attendees of the event
- job title
- company industry
- proximity to the event



Display 3. Example Code for Adding Additional Data to SAS Marketing Automation Output

Once the final list is approved, it is then sent to the SAS E-mail Marketing Office where the e-mail invitation is sent to you!

LIST PERFORMANCE ANALYSIS

Approximately two weeks after an e-mail is sent, data is gathered and analyzed to determine the performance of the e-mail blast. The two-week time period allows sufficient time for an analysis of a user's response to the e-mail (opening, clicking a link, registering or opting out of future e-mails) while at the same time allowing for marketing staff to make changes to the messaging of the next set of e-mail blasts based on the performance of this list.

For each marketing campaign, general analysis is performed on data elements such as:

- job title
- job function
- company industry
- company size
- data source
- US state (contact's address)

However, for SAS Global Forum, more telling analysis is done on the criteria elements and groups of elements. For example, a group of data considered to be a 'Conference' consists of users meeting one or more of the following:

- past attendance at a SAS Global Forum
- past attendance at a regional user group
- past attendance at an Analytics conference
- past attendance at a Customer Connections conference

Users' attendance at a local user group meeting or virtual special interest user's group meeting, but not a conference, is distinguished in a separate category known as 'Local Conference.' Additional categories distinguish users who have not attended a user group event or conference, but who meet one or more list criteria.

For each of these categories the number of contacts for this e-mail blast is determined:

- Registered for the event
- Clicked on one of the links in the e-mail
- Opened the e-mail
- Opted out of the e-mail

The SAS System	SAS Global Forum 2013 A New Year A New You Email								
	Number	Number	% Opt-out	Number	% Opened	Number of	% Click-thru	Number of	%
	Emailed	Opt-out	76 Opt-out	Opened	76 Openeu	Clicks	76 CHCK-HHU	Registrants	Registered
All	27392	66	0.24	4375	15.97	948	3.46	55	0.2
Group									
1: CONFERENCE(S)	8237	15	0.18	1455	17.66	356	4.32	34	0.41
2:LOGAL EVENT(S)	2510	6	0.24	365	14.54	115	4.58	3	0.12
3: ATTENDEE									
WEBINAR+EDUCATION+SUBSCRIBER	153	0	0	33	21.57	11	7.19	0	0
4: ATTENDEE EDUCATION+SUBSCRIBER	334	0	0	72	21.56	8	2.4	1	0.3
4: ATTENDEE WEBINAR+EDUCATION	246	0	0	35	14.23	9	3.66	0	0
4: ATTENDEE WEBINAR+SUBSCRIBER	470	0	0	116	24.68	28	5.96	1	0.21
5: ATTENDEE EDUCATION	1335	4	0.3	164	12.28	41	3.07	1	0.07
5: ATTENDEE WEBINAR	1725	4	0.23	258	14.96	88	5.1	0	0
5: REPORT_SUBSCRIBER	7334	14	0.19	1261	17.19	150	2.05	8	0.11
6: GIDB_ONLY	616	3	0.49	71	11.53	9	1.46	2	0.32
6: INTEREST_ONLY	208	3	1.44	30	14.42	0	0	0	0
6: PUBS_ONLY	67	0	0	11	16.42	4	5.97	0	0
6: SAS_USER_ONLY	1716	6	0.35	203	11.83	43	2.51	2	0.12
7: CXA_ONLY	93	0	0	27	29.03	11	11.83	0	0
8: MISCELLANEOUS	2348	11	0.47	274	11.67	75	3.19	3	0.13
Recency									
0-30 DAYS	338	2	0.59	77	22.78	32	9.47	0	0
31-90 DAYS	2371	5	0.21	556	23.45	170	7.17	13	0.55
91-180 DAYS	1655	3	0.18	319	19.27	98	5.92	5	0.3
NONE	23028	56	0.24	3423	14.86	648	2.81	37	0.16
Radius *									
	1	1	100	1	100	1	100	1	100
1: WITHIN 25 MILES	2093	5	0.24	291	13.9	74	3.54	4	0
2: 26 - 50 MILES	1474	4	0.27	204	13.84	43	2.92	1	0
3: 51 - 75 MILES	472	1	n 21	62	13 14	20	4 74	n	n

Display 4. Example of a List Performance Analysis

Based on these results, the next e-mail message is more customized for a set of contacts meeting a particular profile.

MARKETING ANALYTICS PORTAL (MAP)

Marketers then make decisions on how to alter the campaign to be more efficient, effective, and drive more of the intended results (for example, responses, leads, sales opportunities). Data provided as information maps via SAS Enterprise BI (that is, OLAP, standard reports, and Dashboards) enables a self-service environment for the marketing team to interact with and ask questions of the data. This allows them to review the effectiveness of their respective events with metrics that correspond to the event's goal (for example, Registrations, Attendance, Sales Opportunity Creation, and so on).

Following the completion of SAS Global Forum, post-conference analysis is conducted and successes and opportunities for improvement are identified through objective measures (for example, #Email Sent, #Responders, Response Rate (%), and so on). This review and analysis is integral for the planning phase for the next event. These analytical questions provide insight into the quality of the event for its intended purpose:

- Was the SAS Global Forum successful?
 - Year-over-Year attendance trends.
 - Did it meet the needs of the new/existing customers?
- Did marketing technologies identify and invite contacts with the correct background?
- Did e-mail deliverables create responders with the desired skill set or qualifications?
- Were e-mails timely in driving consistent registrations leading up to the event date?
- Was the venue adequate for the number of attendees?
 - o Does a new location need to be secured for the next event?

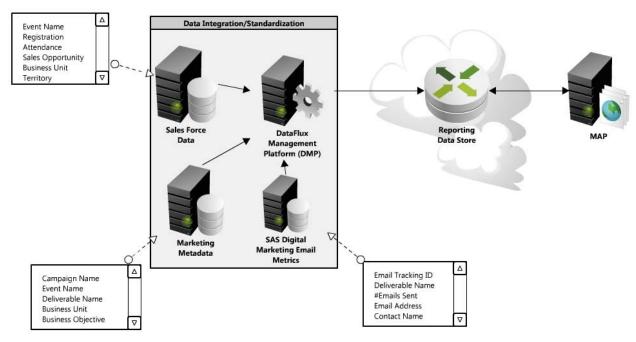


Figure 2. Overall Process of Data Integration to Data Analysis in Marketing Analytics Portal (MAP)

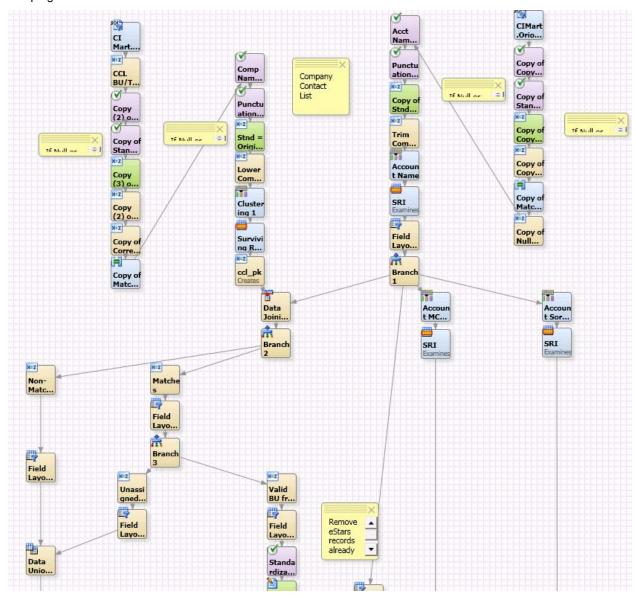
Data Integration

The DataFlux Management Platform (DMP) integrates the following marketing list performance data in MAP:

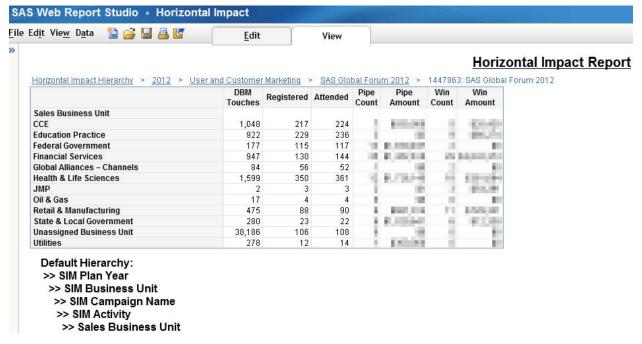
- SAS Digital Marketing
 - o # E-mails Sent
 - E-mail Addresses
 - o E-mail Sent Date
- Responders
 - Registrants
 - Attendees
 - o Contact Details
 - Account Name
 - Standardized Job Title
 - Industry
 - E-mail Address
 - All events to which the contact has responded in the past
- Sales Force Performance Data
 - o Leads, if the event's focus is to generate leads
 - o Sales Opportunities
 - Account/Contact Details
 - Standardized Company Name
 - Sales Business Unit
 - Sales Territory
 - Industry
 - Company Size
- Marketing Metadata
 - o Campaign Name
 - Event Name
 - o E-mailed Deliverables associated to the Event
 - Targeted Industry
 - Collateral associated to the Event
 - Booth Needs
 - Copywriting
 - Web Assets

- Search Engine Details
- Logos
- Business Objective

Combining transactional data (for example, E-mails sent, Responses to E-mails sent) with operational data (for example, Sales Data, Marketing Campaign Metadata) provides an overall view of the marketing data for end-user reporting. DataFlux Management Platform uses matching technology to identify existing contacts within the SAS customer base as well as new contacts. Existing contacts might respond to an event through newer channels (for example, Twitter, Facebook, and LinkedIn) or traditional channels (for example, respond to targeted e-mail or phone campaigns). Matching these responses to the existing contacts is important to gain a full view of the interactivity a contact might have with SAS. DataFlux Management Platform integrates all data based on both match code processing as well as primary keys. Each source system has ties back to the sales data via a persistent key. An event ID provides the link between all data sources and allows for easy traversing of metrics to quickly display campaign execution results.



Display 5. Integrating Sales Data from Marketing Data Mart



Display 6. SAS Global Forum Reporting in MAP

Data Standardization

DataFlux Management Platform Schemes provide a standardized view of the data to ensure accuracy when analyzing results. A Scheme uses matching technology to determine organizations, as an example, which should be considered the same. (See Display 7.) Common noise words such as Corp, Co, Inc, and LLC are removed to determine the root Organization word and to help identify these potential matches. This provides a consolidated and more accurate view of the performance of an individual organization rather than have performance metrics tied to each and every permutation of an organization. Account behavior can be efficiently analyzed showing top responding organizations for SAS Global Forum or top revenue-generating organizations for revenue-generating marketing events.

Scheme	Entries: 9				
Data	Standard				
SAS	SAS Institute Inc.				
SAS Inc.	SAS Institute Inc.				
SAS Incorporated	SAS Institute Inc.				
SAS Institute	SAS Institute Inc.				
SAS SOFTWARE	SAS Institute Inc.				
sas	SAS Institute Inc.				
sas Software	SAS Institute Inc.				
sas inc	SAS Institute Inc.				
sas software	SAS Institute Inc.				

Display 7. DataFlux Management Platform Organization Scheme

Overall Marketing Campaign Analytics

Using SAS EBI, known internally as the Marketing Analytics Portal (MAP), the marketing teams are empowered to monitor the results of SAS Global Forum using this integrated and enriched data. MAP reporting delivers tactical insights into the results of SAS Global Forum, as well as any other marketing campaigns, while also addressing effective campaign strategy providing the business with a tool to make better, informed decisions.

Here are some examples of these decisions:

- 1. What Customer Segments performed well?
- 2. What is the profile of a successful contact?
 - a. To maintain a diverse audience, are all ranges of Job Titles/Descriptions invited to and respond to the invitation by attending SAS Global Forum?
- 3. What deliverables performed best?
 - a. What SAS Global Forum white papers, e-mail, direct mail, and so on, was best at driving responders to SAS Global Forum?

Audiences for the SAS Global Forum data include these groups:

- Marketing Team
 - Are we targeting the correct segment of our customers to drive registrations/attendance to our events?
 - Are we seeing response rates increase with more targeted e-mail?
- Marketing Managers
 - Resource Allocation

For other Campaign related events (that is, not SAS Global Forum), analysis might include a more diverse audience:

- Sales Executives
 - o Is marketing delivering good quality leads to assist in our revenue goals?
 - Are the leads converting to sales opportunities?
 - Is marketing effectively removing the tire kickers and putting them into nurturing campaigns to bring them to Sales at the appropriate time?
- Marketing Executives
 - Spend analysis
 - o Return on Investment (ROI)
 - Is marketing efficiently investing to drive revenue?
- Marketing Managers
 - o Are Campaigns generating leads to give to sales representatives?

MAP facilitates discussions with Marketing and other internal organizations. At the highest levels, dashboard technology delivers quick insights, and lower level granular data is available through OLAP (Online Analytical Processing) and standard Web Report Studio reports. OLAP reporting provides a vehicle for the marketers to interact with the data and create custom views answering their most pertinent questions. Data is stored in the reporting data store, which is essentially a specific subset of the metadata (SIM), sales force data (Orion), and e-mail marketing data providing a centralized repository for all marketing-related metrics.

CONCLUSION

Marketing is an important function in the many facets of the business lifecycle. From identifying new opportunities for growth, through prospecting, to targeting the existing customer base with relevant messages and recruitment offers, Marketing is responsible for identifying, nurturing, and providing sales leads to the sales department. For SAS Global Forum, SAS uses many of its own products: SAS Marketing Automation, SAS Enterprise Guide, SAS Customer Intelligence, SAS Enterprise BI, and SAS DataFlux Data Management and solutions to deliver an optimized, targeted list of potential responders and attendees to e-mailed invitations. Tweaking marketing messages based on responses keeps marketing more relevant longer into the buy-cycle. Technologists are becoming important partners with the traditional marketers, bringing an analytical mindset and the software know-how to handle the ever growing amount

of data as well as identifying new insights from this data. SAS products and solutions lead the way for internal marketing efforts. This partnership between left-brain and right-brain marketing professionals creates efficiencies within marketing, making the team more relevant and effective at its marketing strategy and communicating the value of an organization, product, or service. This year, the SAS Global Forum marketers used more analysis and marketing analytics via SAS products and solutions to become more efficient and more effective at targeting and delivering e-mail invitations. By using our own products and solutions internally, SAS has developed a scalable marketing solution that incorporates many different data points allowing uncomplicated modification of campaigns and enabling additional metrics to be added easily and efficiently to deliver a competitive advantage.

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CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Lori Jordan SAS Institute Inc. SAS Campus Drive Cary, NC 27513 919-531-7046 Lori.Jordan@sas.com:

Shawn Skillman SAS Institute Inc. SAS Campus Drive Cary, NC 27513 919-531-2793 Shawn.Skillman@sas.com:

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