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High Energy SAS® – Managing the SAS® Community in a Large Corporation

Mark Jordan, Capital One Services, Inc., Glen Allen, VA
Jim Alessio, Capital One Services, Inc., Glen Allen, VA

ABSTRACT

It is a challenge to oversee the installation, maintenance, training, and user support of any large software package in a rapidly growing organization. This paper will share the opportunities, bumps, and triumphs of administering SAS in a corporation that has seen its SAS user community grow from 50 to more than 800 in just three years.

INTRODUCTION

CapitalOne's SAS users come from diverse backgrounds and perform a broad spectrum of tasks, while operating SAS on multiple platforms including mainframes, UNIX, NT servers, and PC desktop installations. Once concentrated mainly in Virginia, our users are now geographically located from California to South Africa. They use a wide variety of SAS tools, including SAS/IntrNet®, SAS/AF®, Enterprise Miner™, and Enterprise Guide® where once Base SAS and SAS/STAT® were the modules of choice. This paper will address many aspects of our program including:

- user training
- technical support (help desk)
- developing and promoting an in-house SUG
- maintaining a sense of community in a geographically diverse work force
- managing inter-departmental and SAS vendor relationships

-- and how it is done with a team of six associates!

BACKGROUND

CAPITAL ONE – THE COMPANY

CapitalOne spun-off from Signet Bank as an independent company in 1995 with more than five million credit card customers – a top ten card issuer. It has grown rapidly in the past seven years with a global customer base of 40.1 million today. The number of associates has grown from less than 100 in 1995 to over 20,000 today. *CapitalOne* has also expanded from a single location in Richmond, Virginia, to locations throughout the United States as well as in other countries. The company now operates in over 25 sites in the Richmond area, northern Virginia, Dallas, Seattle, Tampa, Boise, Boston, Canada, the United Kingdom, France, and South Africa. *CapitalOne* has also moved into financial services other than credit cards, including auto financing, installment loans, and special loans for elective medical procedures, to name a few.

Capital One "is an information business, much more than a banking business"

Nigel Morris
CapitalOne President and Chief Operating Officer

Scientific testing on a massive scale is the core of *CapitalOne's* proprietary Information Based Strategy (IBS). Over 40,000 tests were conducted last year of products, prices, features, packages, marketing channels, credit policies, account management, customer services, collections and retention.

SAS AT CAPITAL ONE

Prior to 1998, only a handful of associates used SAS on PC's and on the mainframe, primarily a group of statisticians within the Marketing and Analysis division. SAS became the core model building software by 1998 and *CapitalOne* was ready to make a long-term commitment to the use of SAS. A separate group was formed to manage SAS for a user base of 25 to 30. The function of this group was to serve as SAS Institute contact and to maintain the software on each platform. Most help for SAS users was provided by end-user 'experts'.

Growth of SAS Users at Capital One
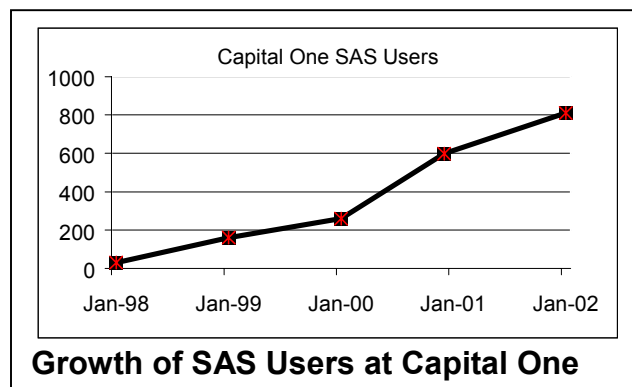
By 2000, the number of users had grown to 260 with most accessing SAS on their PC and 15 other platforms (mainframe, UNIX, and NT). The SAS group was expanded into the Enterprise *SAS Solutions* (*ESS*) team. The team's focus shifted from maintaining external relationships and the software to a much broader support of our SAS users. The emphasis was on building a community as the number of SAS users grew to over 800, spread throughout the United States and the world.

While growth in the SAS community was phenomenal, there were challenges because we lacked a strong IT champion for SAS and for the *ESS* team which sprang from the Marketing and Analysis SAS users community instead of information systems.

THE SAS COMMUNITY AT CAPITAL ONE
The rapid growth of *CapitalOne* and the spread of IBS into every area of the company – marketing, customer service, operations, risk – soon propelled SAS use beyond the domain of the statisticians. SAS quickly became a major tool for Data Analysts, MIS Analysts, Business Analysts, Operations Analysts, Financial Analysts in every division of the company – IT, Risk, Collections, Account Setup,

Location	Users
Richmond, VA	81%
Northern VA	8%
Dallas, TX	3%
Nottingham, UK	3%
Tampa, FL	3%
Boise, ID	2%
All Other Locations	1%

Distribution of SAS Users

and Card Operations. Besides individual use, teams of SAS programmers were formed to support non-technical users.   The Information Technology groups began using SAS IT Service Vision® (ITSV) software for capacity monitoring and planning on a large scale. It was clear that to properly service and support this diverse set of users a community focus was needed. Thus began a new direction for the *ESS*.

ESS Team Logo

ESS SUPPORT OF THE USER COMMUNITY
ESS took a holistic approach to supporting the SAS user community, identifying major areas of need, and devising strategies to deal with those needs. This paper focuses on two major areas:

- Maintaining the benefits of community in a disaggregate organization
- Maintaining vendor relationships

USER COMMUNITY MANAGEMENT
It was important to develop a sense of community in order to maximize our SAS resources. This required defining the benefits of sharing such things as best practices, lessons learned, and cross-business collaboration. *ESS* was able to build on *CapitalOne's* unique culture to create

an environment that met users' goals and enhanced their skill sets and work styles.

Training
The *ESS* team coordinates all SAS training within *CapitalOne*. At first, the *ESS* team assumed responsibility for all components of training support – course syllabi, student registrations, classroom logistics, instructor assignments, material preparation, and so on. Initial training classes were primarily "off the shelf" programs from SAS institute. By conducting user surveys, mining records of "help desk" user questions, and anticipating the company's future needs, *ESS* has tailored a much more broad-based and highly effective training program.

There are now several channels for training support:

- Stand-alone instructor-based courses
  - Standard SAS Institute instructor-based courses offered on-site and off-site through the Enterprise Public Training Offer (EPTO)
  - On-site contractor instructor-based courses, developed in collaboration with *ESS* and specifically tailored to *CapitalOne's* needs
  - *CapitalOne* developed courses taught by *ESS* staff or other *CapitalOne* associates
- *CapitalOne* developed modules that are integrated into non-SAS training courses and programs and taught by *ESS* staff or other *CapitalOne* associates.
- Intranet-based instruction via SAS OnlineTutor® training software – 'at your desk'
- Centrally located self-paced classes. This innovative approach provides SAS class manuals, sample data, a quiet classroom with a computer, and an *ESS* staff member to answer questions. This makes possible cost-effective training where each student learns at his own pace.
- 'Brown Bag' lunches – a monthly one-hour series where short topics or insights are presented by *ESS* team members or other SAS users. These are held in Richmond and 'broadcast' to remote *CapitalOne* sites via Microsoft® NetMeeting®.

While *ESS* retained overall responsibility for the SAS training program, including selecting courses and monitoring the quality of classes, a *CapitalOne* training group now administers all formal courses and handles the day-to-day logistics. This permits tracking of participation by course and by individual for development and certification recording.

Consulting
The *ESS* team provides consulting services for projects throughout the company, including programming support for small one-time projects and development support for long-term, more permanent projects. The *ESS* team does not program or maintain ongoing reporting and operational activities and prefers a collaborative approach to all programming efforts - providing training for the ultimate owner during the development phase. *ESS* 'jump starts' projects then passes the standard programming and maintenance functions on to the project owners.

The team acts as a liaison between a *CapitalOne* group, SAS Institute, and other SAS contractors. **ESS** staff is also a resource in identifying SAS-based solutions to problems and provides internal consulting services in the early phases of project definition to assess the feasibility and effectiveness of using SAS.

Technical Support
In the early days, **ESS** made a great push to gain recognition in the SAS community. An outreach effort was launched in 2000 in an attempt to ensure that every SAS user had a personal dialog with an **ESS** team member to make our users aware of our services. A multi-channel approach using the Intranet, phone calls, email, snail-mail and meetings raised user awareness from under 40% to about 98% during the subsequent year. **ESS** distributed

SAS Help Magnet

business card size magnets listing the team members' names, telephone numbers and areas of expertise to all SAS users. Satisfaction among SAS users soared.

The success of the outreach effort soon brought troubles of its own. **ESS** programmers suffered constant interruptions for user questions while trying to program for their assigned projects. Users had a favorite team member and were frequently hesitant to speak to another member when their primary contact was unavailable, thus delaying response. Team morale and user satisfaction suffered as the team's scope expanded without adding more personnel.

ESS took a technological approach to solving these problems - we are, after all, geeks at heart. The team began using Microsoft NetMeeting, allowing us to view and type code on a remote user's PC desktop. At the end of the session, the user has his solution "in place" with no need for follow up email. This cut the average help call from 30 to 10 minutes - a tremendous boost in productivity without significant expenditure. Next, **ESS** promoted the 'help desk' concept. A special "SAS Help" email address and phone number were established, with all team members granted access. The team split responsibility for monitoring SAS Help into shifts and committed to making the initial response to inquiries within one-hour (during normal working hours). We then launched another publicity campaign to educate the users on the new system. This dramatically improved response time for the users and decreased interruptions for the **ESS** team members, once again boosting productivity at very little cost. User satisfaction returned to its normally high levels, and team morale has significantly improved. An unexpected benefit of sharing an Outlook identity is the SAS Help calendar. The team uses this to schedule out-of-office time for training, vacations, etc., and for noting the dates and times of special events that affect the SAS community, such as SUGI and OneSUG days.

Strength in Community
An active and robust user community is essential to get the most value from any software product. Identifying the SAS user community is at the core of the **ESS** team mission. Besides promoting user participation in training, the **ESS** team has developed several avenues to bring SAS users together to share experiences and best practices.

A record number of *CapitalOne* associates, 67, attended SUGI last year. **ESS** manages the SUGI experience for all of our associates, coordinating to obtain group rates and good lodging rates, and making plans to maximize the training and social value. Prior to SUGI, the **ESS** team brings attendees together several times to prepare for the convention. Participants share meeting schedules, and groups with similar interests make sure someone is covering important presentations. The **ESS** team created games to foster interactions among *CapitalOne* attendees and with other SUGI attendees, with prizes awarded on the afternoon of SUGI's last day. Shirts are distributed and the *CapitalOne* contingent wears them on one day of the conference. This adds to our sense of community and serves as a special means of publicizing *CapitalOne*.

SUGI 25 Shirt Logo

Returning from SUGI, the "away team" meets again to share their conference experiences. The *CapitalOne* contingent selects the SUGI presentation they felt was the

most applicable to *CapitalOne*, and a SUGI presenter is invited to *CapitalOne* SAS Days held in the fall. Individuals share their experiences with their business teams during subsequent team meetings.

Besides participating in SUGI and the Virginia SUG (VASUG), *CapitalOne* users have their own company SUG, *One*SUG, which has become the focal point for in-house activities. *One*SUG had a couple of false starts and has tried several different models. We have found that, without *ESS* acting as the "Executive Committee", *One*SUG activity dies off over time, as the volunteers' priorities naturally shift to more tangible business results. Yet, *One*SUG helps to establish the sense of community within the user base. Currently *One*SUG has evolved into a loose organization that primarily funnels speakers to the Brown Bag lunch series and acts as sponsor for SAS Days.

Our annual SAS Days convention began two years ago. The first SAS Day was a one-day event consisting of several concurrent tracks with presentations by SAS Institute staff. Our goal was to develop this into a mini-SUGI within *CapitalOne*. Last year's SAS Days brought

us closer to that goal. This two-day event consisted of papers presented by *CapitalOne* SAS users, presentations by SAS Institute, and the outside speaker selected by our SUGI 26 attendees. There were even several "coder's corner" sessions. SAS Days were publicized in a multi-channel blitz, including posters, snail-mail flyers, and email. Registration was handled via a SAS/IntrNet application on the *ESS* Intranet web site, serving not only as a great way of collecting registration data but also as a demonstration of a valuable and new (to us) SAS technology. Many of our SAS users attended, as well as several "walk-ins" who had never used SAS. SAS Days provided something for everyone, from high-level executive overviews to hard-core coding demonstrations. SAS Days provides a unique and valuable forum for users to share their proprietary work. The program will be expanded this year to include hands-on workshops.

VENDOR MANAGEMENT

CapitalOne negotiated a multi-year Enterprise SAS license for the first time in 1998, giving our users unprecedented access to a wide array of SAS products on

SAS Days 2001 – Day 1 Posters

multiple platforms. As the company ventured into new areas of the world, and our associates needed to have their favorite tools with them, it became obvious that an international agreement on the same scale was required. Negotiation of an international agreement was completed in December of 2001, giving our current and future foreign offices the same easy access to SAS that *ESS* provides in North America.

Just as the *ESS* team is a partner with our SAS users, we are also closely aligned with SAS. *ESS* is active in "SAS evangelism" collaborating closely with our SAS sales representative to identify and capitalize on ways of leveraging our SAS assets to their full potential. SAS provides us great technical expertise and resources to help kick start internal projects. Several of our users have met with SAS product developers and engaged in dialog aimed at improving the next generation of SAS. The *ESS* team frequently meets with SAS personnel to exchange ideas, discuss opportunities, and keep each other apprised of future developments. We have included SAS representatives in our SUGI fun events, Brown Bag lunches and other arenas.

CONCLUSION

The *ESS* has set the standard at *CapitalOne* for building strong relationships with its user community and providing world-class service. Early this year, an agreement was reached positioning *ESS* within IT. The team will be the model for support teams centered on other enterprise software packages in use at *CapitalOne*. This should also improve collaboration with the platform services group and give *ESS* the IT champion we need.

There are several new challenges facing *ESS* in the coming year, including devising an appropriate charge-back scheme to cover the costs of the SAS license and the team's overhead in these increasingly cost-conscious times.   Expansion into new international markets brings with it a need to consider multi-lingual support, and what do you do about those pesky time zones?

With a demonstrated history of rising to the challenge, we predict a bright future for our SAS community, and for all of *CapitalOne*!

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CONTACT INFORMATION

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

Mark Jordan
Capital One Services, Inc.
Attn: 12060-0411
11011 West Broad Street
Glen Allen, VA 23060
Phone: (804) 967-8493
Fax: (804) 934-5001
Email: mark.jordan@capitalone.com
Web: www.capitalone.com

Jim Alessio
Capital One Services, Inc.
Attn: 12060-0411
11011 West Broad Street
Glen Allen, VA 23060
Phone: (804) 934-5283
Fax: (804) 934-5001
Email: jim.alessio@capitalone.com
Web: www.capitalone.com