Are you REALLY meeting your clients' reporting needs, at the same time keeping rising costs under control? That's one of our biggest challenges today.

Our company strongly believed we could meet the challenge of changing this trend. Over time, separate bases of enduser activity had evolved, and analysts duties consisted of varied responsibilities; only one of which was programming. The methods used to extract information from our mainframe systems were no longer the best solution to cost effective and reliable information reporting.

Opportunities existed to make the extraction of information more efficient. We need to ensure we took the fullest advantage of these, such as; ensuring code is written efficiently; combining a number of similar requests for information; completing cost benefit analysis before programming even begins.

Thus IRS was born. IRS, or Information Retrieval Services, is a service department which is accountable for:

* producing accurate information to the satisfaction of the sponsor
* being responsive to service expectations.
* developing/promoting effective and efficient programming techniques
* monitoring end user computing costs. Developing and using techniques to reduce the costs whenever possible.
* looking for ways to improve our programming, procedures, the output produced and the tools we use.

Those 4 focus points are a tall order to fill.

Initially, analysts consulted in detail with the user groups to help them understand the new process and become comfortable with requesting their information from a separate department. This was different than having an analyst right there and took some getting used to, for everyone!

Every program that was in existence had to be checked: was it efficiently coded, could it be merged with another program, should it be reprogrammed, did another program already produce the same information, if the job was duplicated, or was a critical job should it be programmed in a different language. All these questions had to be answered.

This mammoth exercise did help build a better understanding of how future databases need to be structured for efficient access utilizing enduser tools. It was also a big step in improving the cost management of our information gathering and storage.

Now that the initial stage is history, we are continually developing and testing approaches to best meet our clients needs. Some of the approaches we are currently employing include:

* Team structure

The Co-operators has offices across Canada, and utilizes a more than a dozen systems which each have their own idiosyncrasies and many details. To deal with these 2 situations, IRS has developed a team approach. We have 2 teams, each with a group of systems they are responsible for. Each team works at becoming extremely knowledgeable in their own systems. We also cross-train in each other's which provides a stronger knowledge and skill base. This helps when writing efficient programs, providing cost estimates, and consulting with clients.

Our team leader keeps the department running smoothly and deals with any major problems or concerns, is the contact with external clients and resources (such as SAS Institute), and generally is wherever help is needed. Each team has a senior analyst who delegates requests for their team. They are responsible for
ensuring requests are delegated evenly, providing information updates, and general training. This structure helps ensure a smooth transition of requests, thereby decreasing storage costs, and facilitates effective management of programs.

Some people may find it surprising that our team members are not centrally located - for that matter we aren't even in the same area of the country. We have a group in 3 major geographic areas in Canada. The benefits of this non-centralization include covering the majority of time zones for all our clients, and, putting us physically closer to clients on a geographic basis, which often assists in our understanding of the subtle differences of the business they are in.

In our previous divisional structure, analysts had numerous system related responsibilities; only one of which was programing. This sometimes resulted in not being able to do any one thing really well, but meant juggling many unrelated systems duties. With a dedicated team structure, we can eliminate many of these conflicts and concentrate on providing timely, accurate and useful reports by extracting information effectively and efficiently. We can focus on the details, and take the steps necessary to do our job successfully.

* Network of contacts
Each area within the company has a systems contact. Among other functions, these people are responsible for administering requests to IRS. Ideally this person has experience in both systems and the business side. They can assist the people who require information in submitting a request which will ensure they receive useful reports. They also provide assistance in determining other methods already available within their area to obtain the information required.

We have found it very effective to use this smaller network to facilitate initial proceedings on requests. For one thing, a sharing of knowledge continually takes place benefiting both client and IRS. We can stay better in tune with their needs and expectations, and clients acquire knowledge relating to information requirements and availability. When it will expedite the process, we deal directly with the person who will be utilizing the information requested.

* A standard request form
Clients utilize a standard request form developed on eMAIL * (an electronic mail system). The form prompts clients to consider their request carefully. We want them to consider the cost vs the benefit received, and to ensure all requirements and constraints are included from the start. It also provides some indication to the requester, of what is involved in creating the output requested, and reduces the number of communications necessary to produce the desired results. Telephone tag can have a very negative effect on getting output out on time.

Clients no longer require an extensive list of contacts. Utilizing the eMAIL * system assures the client that their request will be immediately assigned to an analyst familiar with the system(s) required, and who can complete is in the shortest amount of time.

* Development of standards and procedures for IRS
IRS has developed a number of standards and procedures to help our programmers. For instance, skeleton members contain standard variable names and code which has proven to be the most efficient method of extracting certain information, and more. This helps reduce typing errors in repetitious code, provides excellent examples of nifty SAS * gems like INTCK and INTX functions, macro examples--putting the run date in a title automatically. We use specific program naming conventions to ease
identification of programs. We attempt to consistently document all programs to enable any programmer to easily identify how the program works, what it does, and who it is for. This also assists in identifying areas of programs which can be improved using new techniques that become available.

Using specific standards and procedures has:
- made it easier to locate and work on programs that someone else previously worked on,
- improved our ability to manage daily requests
- increased our consistency making it easier to work as a team
- caused fewer reruns from small coding errors
- lowered costs due to more efficient code
- and has been directly related to happier clients because they got the results they wanted

* Active consulting

Completing a request is no longer a matter of just writing a program. It involves selecting the appropriate set of tools to meet each individual request. There are always a number of possible approaches. The easiest approach is not always the best.

When necessary, we assist clients in determining the best method to obtain the information required. This may be a production report already in existence, the development of a new program in another language, or other possible sources. We strive to ensure our clients receive the information they need to make their daily business decisions. This also includes careful cost vs benefit analysis, before programming even begins.

Another side to this is putting clients in contact with each other when contact could benefit the parties—when projects overlap, or similar information is requested.

We also try to ensure our clients are aware of all options available, suggesting they take advantage of discounts available on weekend cpu time versus weekday. A printed report is also no longer the only option available to a client. Often clients require raw data they can manipulate themselves. We regularly produce files for downloading to a personal computer. Many clients have found this extremely beneficial. The options available seem endless, and they can often result in a considerable saving the client was unaware of before.

As part of consulting, we don't always wait for a client to come to us. Periodically we contact all owners of programs we submit regularly to see if they could be run less often, changed in any way or canceled completely. It's amazing how many people receive reports which they really don't want or aren't satisfied with anymore. This is an important part of ensuring information is useful to the client.

We also review all jobs we run regularly to make sure they are coded as efficiently as possible. Clients are very pleased when the cost of a report actually decreases!

* Listening

This is an often forgotten, but extremely important factor in the success of any type of service department—regardless of the type of service you provide. You must know your client and be able to provide the service they want. Our success is based on not only how cost effectively we can provide information but on the timeliness and usefulness of that information to the client.

To ensure we are meeting that need we take feedback from our clients very seriously. By incorporating their ideas and finding ways to meet their needs, we ensure their satisfaction, and ours.

* Utilities/Tools

We have sought out any available utilities (eg. utilities to sort large databases quickly and therefore less expensively) or programs
which allow us to do our job more effectively. We work closely with our information center to build our available resources.

We also create our own tools. Some of these have included a personal computer database to track the types of programs created, the cost and the clients involved; and a user guide which includes a catalog providing examples of reports and options available, and the associated costs.

* Training

We are responsible for ensuring we have the most up to date information and courses which will assist us in doing our job. This is not only in regard to SAS software itself, but in consulting, personal computers and JCL* --anything which will help us get better at what we do. Previously, when analysts had a variety of focuses, this was difficult to achieve.

* SAS system for personal computers and testfiles

Recently, we have begun utilizing the SAS system for personal computers and testfiles residing on the personal computer to develop and test most of our programs. We believe this will result in a marked decrease in our online costs. We have already seen less time spent waiting for test jobs to run in batch, and downtime experienced at the host level. It also saves many reruns due to small hard to spot errors. It encourages both inexperienced and experienced programmers to experiment more readily as the cost involved becomes negligible.

These are some of the ways we meet the continuing challenge of providing the best information available to our clients so they can confidently make the decisions facing them daily. They are all imperative in the outcome of the more than 200 requests the 8 IRS analysts complete each month. In 1990 IRS completed over 2000 requests for new programs or changes to existing programs. Although our volume of work stayed relatively unchanged from the past year, our associated expenditures decreased substantially—over 50%. This is quite a difference from the not so distant past.

Areas we are continuing to work to improve include estimating job costs, less noticeable transition of new staff, and providing more detailed cost information to our clients.

In the 4 years IRS has been providing ad hoc reporting services, clients have shown a high level of satisfaction with both the services and information they have received from us. The feedback we receive is important to the continual growth and development of the department so that we can meet the changing needs in an ever changing environment.

Trademark Citations

* SAS is a registered trademark of the SAS Institute Inc., Cary, NC, USA.

* JCL (Job Control Language) is a product of International Business Machines Corporation.

* eMAIL is a trademark of Computer Associates International Inc.

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