From Writing Documents to Meeting User Information Needs

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As professional Technical Communicators, we constantly struggle with the question "Is what we produce being used and is it making a difference?" Too often, we base our measures of success on our own views of what makes a good document, Help system, or other information product.

Through broader and more detailed analysis, and by measuring success based on how our information products affect others, we can increase the effectiveness of our information products and increase our value to our users and companies.

INTRODUCTION

As the manager of the Systems Information Design Team at Southwest Airlines (a team of ten Technical Writers and one Web Designer), I received a request from a Customer (a manager in another department at Southwest) to update the online Help for an internally-developed software application. I assigned a writer.

The writer studied the application and its specifications to determine how they had changed since the last update of the Help about two years ago. She updated a copy of our source files and had both the technical and business subject matter experts confirm the accuracy of the information. She applied our style guide to be sure she had followed all our standards for text conventions, word usage, layout, and so forth. Both I and one of the other writers edited the work to be sure nothing had been overlooked.

The writer meticulously followed our standards for converting our source files to compiled HTML Help, and she delivered the Help file to the Customer on time and slightly under budget, based on our original estimate.

What was the result?

We had no idea if we had met our Customer's needs, and it was possible we had wasted our time and failed to make a positive difference for the Customer's department and for our Company as a whole.

Where did we go wrong?

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The truth is, that's not what really happened, but it's a pretty good summary of what I did, and guided other people to do, for many years. It's what I thought I was supposed to do … give the Customers what they wanted (asked for) the best way I knew how. But I always knew there was something missing.

I heard the cliches like "nobody reads the manual" and "nobody uses the Help," and deep down, I knew there was some truth in them; I knew that using the information products we created was often a *last resort* for most people. I wanted the information products I created, and helped others create, to be more than well-written, accurate, and well-designed. I wanted them to make a difference!

But how could we ensure they did?

The answer is based on a few simple truths:

Success is the result of achieving a measurable goal—before we begin, we must have a goal in mind, and we must have a way to measure if we've achieved that goal.

Deliverables aren't goals—the mere existence of something … a document, a software application, a piece of hardware … is not a goal. Goals are based on people being able to do something more efficiently or being able to do something new. They are a measure of the improvement of people's lives or of a company's bottom line. Usually, it takes a series of tasks and deliverables to reach a goal, but the goal must be the underlying reason for all the work.

Information products support people, not software/hardware—if our goal is to accurately describe a software (or hardware) product, we are not likely to achieve a meaningful result. If, however, our goal is to support the people who use or maintain the software (or hardware) product, and to support their workflow or business process, we are almost certain to achieve a meaningful result.

Information can't make a difference unless it gets into a person's head—any plan for success must include a plan to deliver the information, not just a document or file. Of course, this requires you to know very well the people you are supporting.

The rest of this paper describes the efforts of two writers who worked on a "Help update" project; it reflects their ideas, their efforts, and the cooperation and collaboration of many others. For each phase of their process, we describe the concept being applied (why they were doing what they did) and a summary of how the concept was applied for the specific project.

This paper is based on a project in progress and a process we hope to adapt and improve for other future projects. The fact that we are an internal group creating user information products for other internal groups allows us to do things that might not be possible when creating user information for a retail product, but I am convinced the same concepts can, and should, be applied. (b.h.)

BACKGROUND

The following case history is based on an engagement between our Southwest Airlines Systems Information Design Team and one of our Customers. In our environment, a Customer is a representative of one of the various other business areas within the airline.

This engagement began with a request from the Manager of Cargo Customer Service for us to update the online Help for his **C**argo **A**ccounting **T**racking **T**racing **S**ystem (CATTS). The online Help had not been updated for several years, and CATTS had changed significantly during that time.

CATTS' primary functions are:

- Support decisions for what flight(s) a shipment should travel on
- Aid in tracking/tracing of shipments
- Report Customer shipping patterns and trends
- Ensure compliance with the latest Transportation Security Administration (TSA) security mandates
- Provide auditing and accounting support

PARTNERING WITH THE CUSTOMER

Customer requests often come in the form of a specific solution to a problem, such as "Update the online Help." It is often (usually) easiest to simply respond to the Customer's request by creating the requested solution. This, unfortunately, results in an *order giver/order taker* relationship.

The positive effect of an information product is enhanced by a partnership based on the Customer's knowledge of business needs and working environment and on the Technical Communicator's expertise in developing information products to address specific needs and goals.

What Happened on the Cargo Project

The first thing we wanted to do was identify and understand the business goals/needs that prompted the Customer's request for updated online Help. We believed this would help us make better decisions while updating the online Help and that it might also reveal other ways we could help the Customer. However, we knew this was not what the Customer expected, so we proceeded with caution.

Before the first meeting with the Customer, we reviewed the existing online Help and the Customer's written request for service, which contained background information about the Cargo Department. From this, we prepared a short list of key questions that would help us learn about the Cargo Department and show the Customer we were interested in his part of the airline's business.

In that first meeting, we made it clear that the Customer was in control. We told him that the approach we wanted to take might be very different than he was used to and that it might take a great deal of his time.

We also explained our reasons for taking this approach … more value and a greater return on investment for his department … but we assured him that we would suspend our detailed goals/needs analysis at any point he felt we were not wisely using his time and budget dollars. We repeated this disclaimer at the beginning of each of these early meetings with the Customer.

UNDERSTANDING BUSINESS GOALS

Business goals usually relate to a company's bottom line but are often stated in the terms of better customer service, improved operational efficiency, more consistent processes and procedures, compliance with government regulations, and so forth.

When a goal is clearly defined, it is easier to design solutions that support the goal and to measure success in reaching the goal. For example, business goals are most effective when they are:

- Specific (get new clients)
- Measurable (get three new clients)

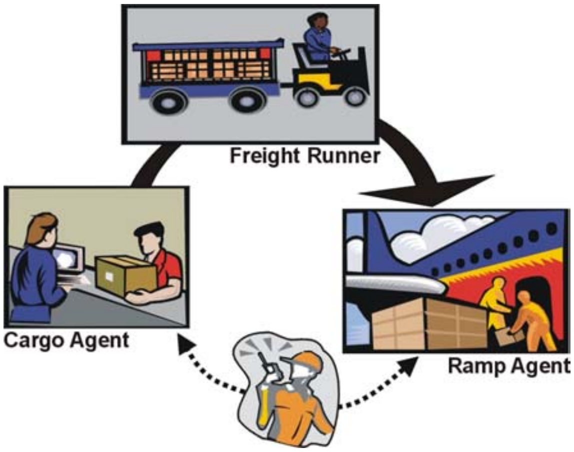
Although it is important to do your best to identify business goals that meet these criteria, it is sometimes necessary to make compromises such as depending on somewhat subjective measurements of performance improvement.

What Happened on the Cargo Project

When we first asked the Customer to help us understand his business goals, he listed goals related to how the online Help might be used, such as providing on-the-job assistance for CATTS users. But we continued to ask questions to *drill down* to more specific goals based on "how the company/department would be better off … how we would make/save money or reduce risk." Once he understood what we were asking, the Customer identified 10 business goals; but for the purpose of this case history, we are focusing on the primary goal … **moving a higher percentage of shipments as planned**.

Here's what that means ...

When a shipper brings a shipment to our Cargo Office, the **Cargo Agent** uses CATTS to plan what flight(s) it will travel on to reach its destination. Then, the **Freight Runner** takes the shipment to the ramp (the area where baggage and freight are loaded into the plane). If the plane is already full, or the flight is cancelled or delayed, the **Ramp Agent** must ensure the shipment gets on another flight that will get the shipment to its destination. This is a good thing!



However, if the **Ramp Agent** puts the shipment on a different flight, and doesn't communicate this change back to the **Cargo Agent**, CATTS no longer *knows* how the shipment is moving. This means we cannot accurately track/trace the shipment, and therefore, we cannot provide accurate information to our valued shippers. This is a bad thing!

We want to keep our shippers happy to ensure repeat business and new business through referrals.

***Note**: We previously said that goals should be specific, and measurable. We felt the primary goal of "moving a higher percentage of shipments as planned" was specific, and we learned that the Customer tracks this information, which would allow us to measure improvement.*

IDENTIFYING BEHAVIOR CHANGES TO ACHIEVE BUSINESS GOALS

The next step in identifying an appropriate information product to support the business goal is to identify **who** has to do **what** differently to achieve the goal.

What Happened on the Cargo Project

In the previous section, we identified the roles that directly affect "moving shipments as planned." So, we asked the Customer to explain whose behavior would have to change, and how it would have to change, to achieve the business goal. First, he explained that the process was successful most of the time, but that even small improvements could make a valuable difference in the bottom line. He then explained several possible performance improvements related to this business goal. For example:

- **Cargo Agents** can increase the chances that a shipment will travel on a particular flight by making the best possible routing decision. This involves knowing how to gather flight data from CATTS and other sources and knowing other key facts, such as the cargo capacity of each aircraft model.
- **Ramp Agent**s can improve the accuracy of CATTS information by communicating with the Cargo facility when part or all of a shipment cannot be loaded on the planned flight.
- **Freight Runners** can facilitate communication between Ramp Agents and Cargo Agents, because they are a part of the activities in the Cargo facility and out on the ramp.

UNDERSTANDING HOW PEOPLE LEARN AND WHAT MOTIVATES THEM

Before you can create a solution and a plan for changing people's behavior, you must understand how they learn to do their jobs and what might motivate them to change their behavior. Important factors include:

- **Formal and informal training**—how do they currently learn to do their jobs?
- **Formal and informal on-the-job support**—where do they get information if they have a question while performing a job task?
- **Formal and informal reward systems**—to what are they held accountable? What makes them feel good about their jobs? Who in that job role is respected and admired, and why?

It is also important to understand the underlying reasons they might not perform a task correctly.

- They don't know what they are supposed to do.
- They don't know how to do what they are supposed to.
- They feel the effort of doing what they are supposed to do is not worth the benefits of doing so.

What Happened on the Cargo Project

To gather information about how Cargo Agents, Ramp Agents, and Freight Runners learn how to do their jobs, and about what motivates them, we interviewed the Customer, interviewed and observed Employees in all three job roles, interviewed training providers, and reviewed existing training and job-support materials.

Here’s what we learned:

What All Three Job Roles Have in Common

- They are all part of the greater Ground Operations Department.

About Cargo Agents

- Learn mostly from other Cargo Agents.
- Do not use the CATTS Help—they don't want to try to look up something in the Help while the shipper is standing at the counter.
- Receive formal training for TSA regulations only.
- New Cargo Agents receive a printed version of the CATTS online Help.
- Cargo Agent procedures are not included in the manual that contains all other Ground Operations policies and procedures … the Ground Operations Manual. Cargo Agent policies and procedures are defined by memos, a training guide, and other communications. This information is not stored in a common repository and is becoming increasingly difficult to maintain.

About Ramp Agents

- Receive formal new hire and recurrent training.
- Do not use CATTS; therefore, would never see CATTS Help.

About Freight Runners

- Receive formal new-hire and recurrent training.
- Use CATTS for one simple task only; therefore, are unlikely to ever use CATTS Help.

***Note**: At this point, we knew we had been correct to understand the Customer's business goals instead of just respond to the request for updated online Help. The CATTS Help would have no effect on two of the job roles key to meeting the primary goal. Perhaps because our traditional role was that of Help developers, the Customer was not aware of the full range of possible solutions we could offer; and , as you'll see, there were lots of other things we could do to support the business goal.*

CREATING AN INFORMATION PLAN

Based on all the information you have gathered and all the analysis you have done, you should be ready to work in partnership with the Customer to create an *Information Plan*. This plan is a summary of all the research and analysis done so far and a list of proposed solutions. It should serve as both a guide and a contract for the rest of the work to be done.

- As a guide, it describes the work to be done.
- As a contract, it defines who will do what work, and it lists the commitments required from each participant to ensure optimum success.

What Happened on the Cargo Project

We met with the Customer and project manager to determine appropriate solutions. We started by asking these questions:

- Whose behavior do we need to change?
- Why aren’t they currently performing the job the way it needs to be done?
- What solution is likely to change the behavior and be worth the development cost?

Based on the answers from the questions above, we selected the following information solutions:

- **Develop a Cargo chapter for the Ground Operations Manual** that contains the policies and procedures for Cargo Agents. This manual is the guiding document for all other Ground Operations classifications, so adding a Cargo chapter to it gives the Customer a way to hold Cargo Agents accountable for upholding Cargo-related policies and procedures.
- **Develop up-to-date CATTS Help.** Even though Cargo Agents don't use online Help much now, we expect the linking of the online Help to the Ground Operations Manual to increase its use. Also, because Agents will be exposed to the Help (online and printed versions) during training, we think it is more likely that they'll use it when they're on the job.
- **Provide links from the Ground Operations Manual Cargo chapter to the CATTS Help**, and organize topics in both documents so that together they provide complete and coherent support for Cargo Agent job tasks.
- **Provide PDF files for the Ground Operations Manual Cargo chapter and CATTS Help** on the Cargo pages of the Intranet.
- **Develop a Cargo Agent Training Checklist** for on-the-job training that lists each job task and provides references to supporting topics in the Ground Operations Manual Cargo chapter and CATTS Help. Ensure that use of the Ground Operations Manual and CATTS Help are included in the checklist.
- **Train Station Trainers to use the Training Checklist** and the documents it references to train new Cargo Agents and retrain existing Cargo Agents (either by directly delivering the training or by training a Cargo Agent within the Cargo facility). Teach them to print fresh materials for each training session and discard the materials after the training session to ensure the materials always reflect the most current information. This approach is necessary because of the unpredictable timing of

changes in government regulations and company policies and procedures.

- **Review existing Ground Operations Manual topics and training materials** for Ramp employees (Ramp Agents and Freight Runners) to ensure the information clearly articulates cargo-related policies and procedures.
- **Transfer responsibility** for maintaining the Cargo chapter and Training Checklist to Ground Operations Training developers.

Several of these solutions required a commitment from Ground Operations Training leadership. The Customer received this commitment early in the project. Although Ground Operations Training felt in the past that they did not have the resources to do this work, they felt they could maintain the information once we created the foundation. In addition, Ground Operations Training committed to developing classroom training for new hires once the retraining effort was complete.

The Customer understands that information does not necessarily address the motivation aspect of job performance (people don't believe the effort is worth the benefit). Therefore, in addition to implementing the information products that we are developing for him, he has convinced Ground Operations leadership to add a cargo-related performance criterion to the Station Report Card. Station Managers will soon see a direct correlation between their performance appraisals and their employees' adherence to cargo policies and procedures. The assumption is that accountability for cargo-related performance will then begin to trickle down to all Ground Operations employees.

FOCUSING ON JOB TASKS AND REQUIRED KNOWLEDGE

The focus of a writer's research touches every aspect of the information solutions being developed, including the research routes taken (such as who is interviewed and what is asked), the delivery methods considered, and the organization of and language used in the information products. Therefore, it is important to remain focused on "supporting the business goals" (rather than "supporting the software)."

What Happened on the Cargo Project

Once we identified the solutions and got approval from the Customer, we began our detailed research. To help us maintain a performance-improvement perspective … to ensure we were supporting the business goal, not describing the software … we focused this research on business processes, job tasks within the processes, and knowledge required to perform each job task.

For example …

Business Process	Processing Outbound Shipments
Job Task (One of several job tasks within Processing Outbound Shipments)	Accepting a Shipment
Knowledge Required for *Accepting a Shipment* Job Task	• TSA requirement for identifying and reporting unauthorized explosives or incendiary (flammable) devices • Department of Transportation (DOT) regulations regarding hazardous materials • Contract of Carriage guidelines for accepting shipments • TSA requirements related to accepting shipments from authorized shippers • Steps for validating authorized shippers in CATTS

MEASURING SUCCESS BASED ON BUSINESS GOALS

Whenever possible, measure before and after states of performance criteria to determine whether the information solutions are achieving the business goals. Work with the Customer to identify measurable criteria for each of the business goals.

What Happened on the Cargo Project

As mentioned in the introduction, this is a project in progress. We worked with the Customer to identify success measures for each of the project goals, which goals would be measured by whom, and the frequency of the evaluations. We plan to help the Customer capture the measurements before implementation of the solutions, six months after implementation, and again at one year after implementation.

CONCLUSION

At the time this paper is being completed, the project is still in progress, so there really isn't a conclusion in that sense. However, we feel very strongly that we are on the right track.

We feel that our process's primary components …

- Partnering with the Customer
- Understanding Business Goals
- Identifying Behavior Changes to Achieve Business Goals
- Understanding How People Learn and What Motivates Them
- Creating an Information Plan
- Focusing on Job Tasks and Required Knowledge
- Measuring Success Based on Business Goals

… are each an important part of *making a difference*.

We have also learned that this process requires a great deal of cooperation with the Customer, and we are grateful for that cooperation.

Finally … we believe that even if we cannot implement all our process's components on every project, we are more likely to make a difference if we simply remain focused on business goals, in addition to applying our Team's internal standards.

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