Practical Application of Skills Learned: A Basic Navigation Course for New Users of SAP

Context

The Honeywell Corporation is a Fortune 100 multinational company (#94 in 2021) with revenues of over $35 billion USD in 2022 ("Honeywell," 2023, May 31). Having offices on all six inhabited continents, it employs about 97,000 workers worldwide and functions in about two dozen different languages. Honeywell does business in a number of areas, including security, disaster prevention, healthcare, aerospace, energy, logistics, and utilities. It both manufactures products for wholesale and retail sale and sells other companies' products as a kind of middleman to its numerous customers. Honeywell's US headquarters are in Charlotte, NC.

Functioning both as a manufacturer and seller of tangible products in the business areas mentioned above means that Honeywell's processes for managing demand planning, supply planning, and production are critical to the overall health of the organization, both financially and from a public relations standpoint. In the US and Mexico, Honeywell has used a tool called Rapid Response, put out by the Canadian software firm Kinaxis, to manage demand and supply planning.

Honeywell made the decision a few years ago to introduce SAP into operations in other business areas such as sales, procurement, logistics, and warehouse/inventory management. SAP is an enterprise resource planning (ERP) software, meant to maintain immediate, seamless data exchange and flow between multiple pillars of a business, eliminating the need to deploy separate software solutions for those departments.

In March 2022, I was brought on to Honeywell's SAP implementation project as an instructional designer for the first two of four phases of SAP rollout. The first phase comprises introduction of SAP into demand planning, supply planning, production, sales, and procurement, interfacing with Kinaxis, and is scheduled to go live no later than June 30, 2023. The second phase will comprise logistics operations, including shipping, warehousing, inventory, and transportation, and will commence some time in Q3 2023. As an experienced SAP instructional designer since 2005, I was recruited (thank you, LinkedIn!) as an independent contractor to provide instructional design and development services as part of a small training team. Still operating under COVID restrictions in certain locations, Honeywell has abandoned the need for consultants to travel to their locations to develop training. As a result, my interactions with Honeywell personnel are all virtual and remote.

Competencies Brought to the Assignment

I chose to create training for Honeywell people that Honeywell felt it would need moving forward with the SAP adoption. The challenges brought to developing end-user training for Honeywell include:

- Existing training material that is full of useful content but does not display a unified look and feel, having been created at different times by different content experts with varying communication skills

- Existing training material developed for a passive, hands-off lecture/demo in an in-person classroom setting, not the best for computer learning and not as effective for remote learning
- Materials posted to Honeywell's intranet was all well and good as a refresher for those who attended in-person training, but for new hires could be confusing to just read and attempt to self-teach
- Focus on business content in the training, not so much on gaining proficiency with SAP to leverage that business content

I interviewed the training team at Honeywell and reviewed existing materials, and learned that no basic SAP navigation training existed. Apparently, new SAP users just figured it out on their own or received informal deskside coaching from an expert user in their department.

Some competencies from the IBSTPI list which I am applying to this performance problem include:

2.2 **Validate performance gaps through multiple analysis techniques.** The Harless model I learned in IDE 712 serves we well here.Honeywell does indeed have a problem, and yes, it's a performance problem. If employees can't use SAP efficiently, they are not able to do their jobs properly, and products may be built wrong, which can cause harm to end consumers; inventory may be valuated incorrectly, which affects the company's bottom line; and employee efficiency suffers because tasks take too long. When all employees are able to complete their assigned business tasks in the assigned system without error (no accuracy goal is established, but 99%–100% would be a possible goal), then the problem is solved. Because many employees are coming from parts of the business, such as the warehouse, who haven't seen SAP yet, the performance problem is that most of these employees do not have the knowledge and skills to use SAP to perform their jobs. These employees will need SAP training, and a basic navigation course is the best way to get started with that.

2.5 **Describe required content/prerequisites for performance and identify instructional content required to close KSA gap**. From prior work with the Honeywell employees transitioning to SAP, I knew their baseline computer skills, abilities with the existing tool (Rapid Response), and depending on their location, time and space available to learn (learning environment). I am using these considerations as the point of departure for the capstone project I am developing for IDE 737. The employees who use Rapid Response and are just adding SAP to their skill set are not computer novices, but the next wave of employees getting SAP are a mix of novices and experienced users, especially in the warehouse. In addition, many are native speakers of other languages, so the terminology I use must be simple enough to be easily understood by reasonably intelligent adults and also easily translated into their target languages.

3.7 **Develop new instructional, evaluation, and implementation materials based on plan, using appropriate techniques and technology** and 3.9 **Pilot test, critique, and/or finalize learning instructional, assessment, evaluation, and implementation plans, activities & materials.** The unit I am developing for IDE 737 is based on Gagné's (1965) nine events of instruction and uses advance organizers such as getting learners to think about what they already know to form a framework for what they are about to learn. It will be a challenge to get all nine events into one unit, but into an entire course should be straightforward. I intend to share the

finished product of this course, the intro unit, and the follow-on units as a pilot with the second wave of Honeywell learners.

Knowledge Gains

Here are just a few additions to my professional knowledge base that I believe will serve me well in future instructional design assignments:

- The learning concepts and models presented in IDE 621, for example Gagné's nine events and the idea of advance organizers, are useful to me in developing instruction in the future, not only in a work context but also in personal contexts such as teaching people a hobby like soapmaking, or reading biblical Hebrew.
- The notion of alignment among all the products of instruction learned in IDE 631 will be invaluable as I self-evaluate my design and development products at Honeywell and elsewhere. Reflecting on my prior consulting work, I realized that I usually was able to align an instructional goal with objectives, activities, and assessments, but not always. Skilled performers who were my peer reviewers, providing what I now recognize to be a formative evaluation of my work, gave me guidance over the years in making sure everything hangs together as a cohesive unit and no concept or skill is left unattached, so to speak, to the other concepts and skills presented. I will be sure to look out for this type of overall alignment as I peer-review the work of others as well as my own work.
- The evaluation question-writing techniques and logic model development skills learned in IDE 641 will be useful when I develop summative evaluations for courses I develop, as well as those developed by others. I had some experience in developing evaluations prior to this one, but this course gave me a number of insights and tips on how to refine questions so that the data collected are easily analyzed and in the long run tell me the merit of the product I developed. Logic models will be useful when I determine
- I expect to use the task analysis models presented in IDE 712, especially the activity-based models such as Critical Incident Method and Task Knowledge Structures, in future computer training assignments. They do not have to be SAP, although they probably will be. (We SAP trainers/instructional designers tend to get pigeonholed once recruiters find out we know SAP.) My consulting assignments are virtually guaranteed to be workplace training settings, where the important outcome is good performance, not just knowledge. Therefore, techniques leveraging analysis of activities will likely be a common tool I will use.

Personal Reflection

I will start this section with a personal anecdote: A high school friend reached out to me this week suggesting I should go on *Jeopardy!* as a contestant. My mother, of blessed memory, used to say the same thing. The reason is that I know a little bit about a lot of different things. Instructional design was no different. I knew a little bit about a lot of facets of instructional design, but not the whole picture of any of the five steps of ADDIE. Pretty much everything I knew about ID coming into this degree program was absorbed over the past 18 years through job experience, often passed down to me by other designers who also learned instructional design by the seat of their pants. I considered it a large gap in my knowledge base, and I suspected that I could make myself an even better designer by learning and applying theory to practice.

Practical Application Beth Woodell
05/24/2023

Each of the courses I've completed in this program, as well as the two I'm completing in summer '23, have valuable skills, tools, and literature I can refer to and use in future assignments. Some tools will be useful sooner than others, as Honeywell owns me for the next year, at least, and will definitely leverage my skills for instructional design and development, and possibly evaluation. They may encounter a surprise when I offer them skill in digital media production and use of modern technologies in deliverables as well.

One area in which I hope to use my broad general knowledge of various topics is if I get a chance to perform a front-end analysis for a potential client. In the past, I've been able to jump into a training assignment and learn enough about the environment and the issues to be able to communicate with clients regarding their needs and desires for instructional events. It's a good skill for a consultant to have, and one we are called upon frequently to do as we get assignments in every career area possible—business, IT, fashion, pharma, universities, governments, manufacturing, Big Oil, transportation, media and telecom, and even beauty products. Being able to dig through the business-specific aspects of a client's enterprise to get at the underlying issues in gap analysis was an unspoken feature of the projects and assignments in IDE 712. The settings may have been different—a middle school, a bank, an aerospace company—but learning and instruction, and what needs to be done to close a performance gap at any of these organizations, are similar. In the IDE 712 group project, I was able to share my brief experience actually doing a front-end analysis for a client in 2015, an experience the other students picked up on and provided great insights on. I hope those experiences continue.

References

Gagné, R. M. (1965). The conditions of learning (1st ed.). New York: Holt, Rinehart & Winston.

Harless, J. (1973). An analysis of front-end analysis. Improving Human Performance: A Research Quarterly, 4, 229–244. In Chyung, S. Y. (2008). Foundations of instructional and performance analysis. HRD Press.