

The KISS Methodology for Evaluating Unified Communications and Collaboration and Impact on Business Enhancement

Unified Communications (UC) and Unified Communications and Collaboration (UCC) promise to transform both the user experience and the business value of the communications and collaboration process in organizations. However, UC/UCC has different impacts and values for different types of workers. While many workers have roles that require collaboration, many others do not. The purpose of this paper is to introduce the Knowledge/Information/Service Structure (KISS) of types of workers and companies. The KISS methodology is part of the overall process that PKE Consulting LLC has developed to assist organizations in optimizing their UC and advanced collaboration investments. While not a complete process in of itself, KISS is a critical step in identifying types of workers and the differences in potential Interaction Use Cases (IUC) that can be applied to each one.

The Three Types of Workers: Knowledge, Information, and Service

The KISS process starts with the assumption that there are three types of workers: knowledge, information, and service. The reason for identifying these three types is that the roles require different communications and collaboration services for successful value creation. Figure 1 shows the three types of workers, along with a definition for each and some examples.

	Knowledge Workers	Information (Task) Workers	Service Workers
Definition	<ul style="list-style-type: none"> Interaction and information Unstructured Process Undefined Outcomes Personal Workflow 	<ul style="list-style-type: none"> Structured Process with Information controlling flow Defined Outcomes No Personal Workflow 	<ul style="list-style-type: none"> Structured Process Do not use information to structure their job Information is only gathered
Examples	<ul style="list-style-type: none"> Engineers Executives Salespeople Managers 	<ul style="list-style-type: none"> Contact Center Agents Bank Tellers Nurses Policeman 	<ul style="list-style-type: none"> Hotel Maid UPS Driver Refuse Engineer Taxi Driver

Figure 1 Types of Workers

Service Workers

Service Workers do not use information in the structure or process management of their job. A Service Worker has a task to do that may involve some level of data interface, but the process is defined independent of the data. So a UPS driver who uses a bar code reader to scan his or her packages is a service worker. Similarly, a room maid in a hotel who uses the phone to call into an IVR to indicate the room is ready for occupancy is a Service Worker doing a not structured data entry.

Generally, Service Workers do not deal with the data directly through an application, but rather through capture or display devices. The process flow that the Service Worker uses is not based on accessing or interacting with data to achieve the outcome.



The KISS Methodology
for Evaluating Unified Communications
and Collaboration and Impact on
Business Enhancement

www.pkeconsulting.com
925-264-9420

Information (Task) Workers

The information Worker uses information in the structure or “flow” of their job. The Information Worker is generally following a defined business process with a defined set of outcomes. Often the Information Workers are using applications that is defining the process flow and managing both the information and the time of each task step, including interaction with customers and other workers. A bank Teller or a Contact Center Agent are prime examples of Information Workers. Another Information Worker example is a repairman who accesses an application and is told where to go next based on some data input. Generally, Information Workers do not decide their own next steps or manage their own calendars, but rather this is dictated by the business process.

Knowledge Workers

Knowledge Workers operate more as independent entities, managing their own time and work flows and processes. The Knowledge Worker combines information and interaction to a collaborative activity with other people. While the Knowledge Worker may work alone, they generally interact with others in the course of either a task-based or sales-based collaboration. Some examples of Knowledge Workers are executives, doctors, managers, and a large variety of specialists in their field, from accounting to development. The Knowledge Worker is characterized by managing both their own time and having a personal workflow management such as Outlook to manage calendars and information flow.

Relative Size of the Workforce by Worker Type

Figure 2 shows estimates of the relative size of each type of worker for both the US and world markets.

These estimates are based on available market data. With this data, it is possible to project worker types by ranges. As can be seen, the US population of Knowledge and Information Workers is higher percentage ranges than the rest of the world, and there are proportionately

Workforce Percentages

	Knowledge Workers	Information (Task) Workers	Service Workers
US	15-25%	35-45%	25-45%
World	10-15%	25-40%	55-70%

Basis/Sources: Number of PCs – Gartner – 800M of 1.6B total – 50% Knowledge Workers
World Workforce Size – World Bank “Labor Force”
US “Know/Info” Worker % - Wolff/Growth of US Information Workers – 65%

Figure 2 Worker Type Percentages

fewer Service Workers in the US. This is an important point, by only considering the impactor functions of UC and other advanced functions to the Knowledge Worker community, a company may be missing most of the opportunity.

Identifying Worker Types

Sometimes identifying worker types is easy. In a bank, the tellers are obviously Information Workers and are easy to identify. However, often it is challenging to identify the types and can be very difficult as workers do not want to be labeled, especially not as “lower” types of workers. Figure 3 shows a set of questions that are helpful in

identifying a worker type, between Knowledge and Information. The concept is based on the popular Jeff Foxworthy line, “You might be a redneck if...” In this case, if you answer yes to the questions, they help define your type. For example, Information Workers typically do not manage their own calendar. Their work path and activities are managed by a business application or process; therefore not using a personal calendar to manage your daily activities is a good indicator that the worker is an



- Do you have an assigned PC that is for your exclusive use?
- Do you take your PC with you outside the office?
- Do you manage your own time commitments?
- Do you routinely use a calendar program to manage your daily activities?
- Do you use email to set up meetings and events with other employees?
- Do you use your own smart phone or tablet in your work day (at or away from the office)?
- Do you attend meetings that are intended to make decisions?
- Do your interactions with other employees often require you to convince someone to follow your ideas?



You might be a
Knowledge Worker



- Do you use computing devices that are shared with other users?
- Are your computing devices special for your job?
- Are the computing devices you use located in specific work areas?
- When you use computing, are you using programs that have specific business names (not email or calendars)?
- Is your work scheduling dictated by the programs you use?
- Do you have assigned hours of works that are coordinated by others?
- When you work with another employee, are you focused to completing a defined task?



You might be an
Information Worker

Figure 3 You Might be _____ Worker if.....

Information Worker. Similarly, an employee with an assigned PC for his or her exclusive use is a good Knowledge Worker indicator, while a shared PC is a good Information Worker indicator. As a company analyzes their population, using a tool like this or even a survey can help in classifying the users and evaluating the impact of different UC solutions.

Different Types of Companies

Generally, companies can be viewed by their worker population and divided into three types: companies that have a large service and information worker population and therefore are more oriented towards Traditional Telephony solutions for basic telephony, those that are virtually all Knowledge Workers and become Knowledge companies, and those that are a mix or a “Hybrid.” Figure 4 shows these three types of companies along with their mix of worker types as the tapers in the background. Knowledge Worker companies tend to have very high percentages of Knowledge Workers. Consulting and high tech development are examples of companies where virtually all of the workers are Knowledge Workers. For Knowledge companies, extending the UC or UCC solution to all of the employees makes sense. In a discussion with the CIO of a major consulting company, I asked what percentage of their workers were Knowledge Workers. At first he did not even understand the question. After a bit more discussion he said, “almost everybody.” With the exception of a few receptionists at major locations and some janitorial staff, all of the workers were Knowledge Workers, either consultants or supporting them. For a Knowledge company, deploying a UC/UCC solution like Lync may be more appropriate. Even though a small number of users may not need the capabilities, the dominance of the Knowledge Worker group makes this choice easy versus having two separate systems.

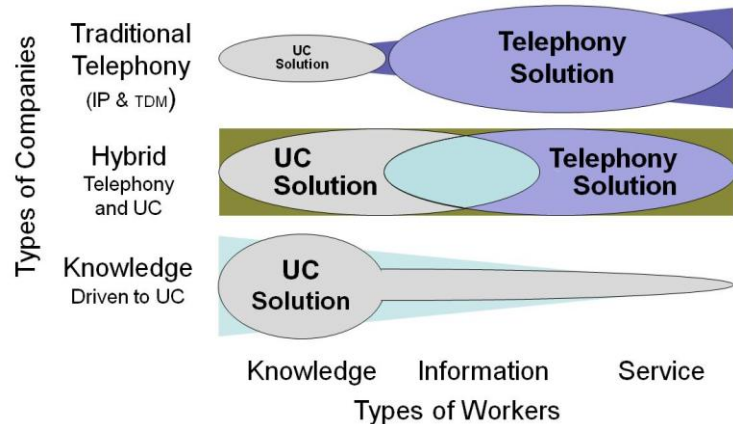


Figure 4 Types of Companies

the employees makes sense. In a discussion with the CIO of a major consulting company, I asked what percentage of their workers were Knowledge Workers. At first he did not even understand the question. After a bit more discussion he said, “almost everybody.” With the exception of a few receptionists at major locations and some janitorial staff, all of the workers were Knowledge Workers, either consultants or supporting them. For a Knowledge company, deploying a UC/UCC solution like Lync may be more appropriate. Even though a small number of users may not need the capabilities, the dominance of the Knowledge Worker group makes this choice easy versus having two separate systems.

In the traditional telephony company, a large part of the population is made up of Service and Information Workers and traditional telephony is required for that population. In these companies, such as manufacturing and transportation, the communications between the Knowledge Worker group and the other groups is very limited, so the solutions can almost operate independently except for telephony. Finally, in the middle are companies that have a more even mix of workers and where there are needs for the Information Workers to collaborate with the Knowledge Workers in certain situations (more on this in the next section). Examples of the Hybrid Company are health care, banking, insurance, and other industries where the Information or Service workers have complex tasks that require Knowledge Worker assistance. By clearly understanding your company type, it becomes much easier to evaluate your technology alternatives and the complexity of your implementation.

If you are a traditional telephony company, using a traditional IP PBX for the majority of your population may be the most efficient alternative, while deploying an advanced UC and Collaboration solution like Lync or Cisco Jabber or Avaya Aura only for the Knowledge Workers may make sense. The integration between these is often minimal. If you are a Hybrid company, you have the most challenging decision as

you need to weigh the cost and complexity of the UC/UCC side with the telephony side and how the two work together.

Examples of how this thought process can impact organization have come up many times as I discuss deploying advanced technologies. For example, I was talking to the CIO of National Police organization in Europe. The organization was 30,000 employees. He was being pushed by a major vendor to deploy a UCC solution universally for all of his employees and felt uncomfortable with the decision. After talking through the KISS model, he realized that 27,000 of his employees were Information and Service Workers and would have no benefit from the solution he was being pushed to buy. His decision was to deploy an advanced UCC solution, but only for the 3,000 workers who could truly benefit from the investment. In fact, the business analysis that was having trouble justifying the UCC decision at 30,000 employees showed a great payback when limited to the 3,000 employees that could truly benefit in their roles through the advanced capabilities of UCC. Similarly, a major US bank realized that the thought process of evaluating UC and Collaboration, based on the needs of the Knowledge Workers doing the evaluation, applied to less than 15% of their population. The average employee in their bank was a part-time teller who did not even have a calendar.

How Different Worker Types Interact

Often, when discussing UC and Collaboration products, vendors present to the IT and Telecom staff. The capabilities and features presented are often very much improving the working environment for Knowledge Workers, and appeals to that group. However, while the IT and Telecom decision staff are almost all Knowledge Workers and have great need for the collaboration tools that the solutions provide, they are often not representative of the larger employee population.. When we look more closely, it becomes clear that those tools maybe of limited use to Information or Service Workers. For example, a great Collaboration tool like WebEx or Go to Meeting would not be used between two Contact Center agents. In fact, when

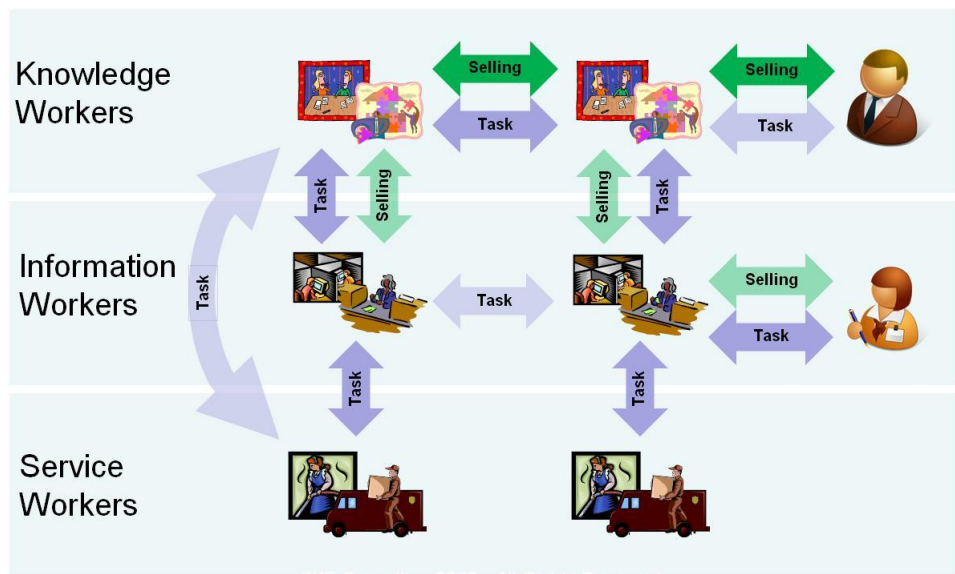


Figure 5 Worker Type Interactions



we consider their work day and business processes, we find that Information and Knowledge Workers generally do not collaborate with each other. They tend to collaborate with experts or their managers, who are generally Knowledge Workers, when an exception or issue emerges. Figure 5 shows the modalities of collaboration between the three types of workers and customers. The interactions are shown as Selling- and Task-based collaboration (for more information on collaboration mechanisms and a comparison of task and selling based collaboration, please read the Video Value Series #1 white paper on this web site). The dark arrows show primary communications, while the lighter versions show the secondary ones. For example, an Information Worker will have primarily task-based collaboration with a Knowledge Worker or a Service Worker. This may be about how to do a task or complete an action. Infrequently does the Knowledge and Information workers collaborate in a Selling collaboration where there is a need to come to consensus or agreement and the visual clues of Selling based collaboration are required. Similarly, Information Workers may occasionally collaborate on a task, but it is task based and generally driven by the business process, not a personal work flow. By clearly understanding the worker types and their relative communications and collaboration requirements, the decisions about what and how to deploy UC and Collaboration become much clearer.

Conclusions

The KISS methodology is a powerful way to evaluate and understand the communications and collaboration needs of the workers in any organization. By clearly understanding roles and how those roles relate to each other and the customers, decisions about what technologies to deploy and how to deploy them across the organization become easier to do. As companies evaluate their vendor choices, having a clear understanding of the workers mix and requirements may avoid expensive purchases and even evaluations to continue use of solutions that are well suited to the workers they support.

Finally, combining KISS with other analysis mechanisms of the UCC needs and integrations of an organization is a clear path to deciding between the plethora of UC and UCC options available today. Combining these tools enables organizations to make the right decisions, resulting in lower implementation costs and increased