

COMMUNICATION WITH HVE OFFICES POST COVID

What Will It Be Like When It Is Over?

Over the past several years the major engineering design companies have moved more and more of the detailed engineering to offices in foreign countries. This has come from necessity to maintain competitive costs for engineering. These offices are typically in Mexico, India, Philippines, China or other locations where design capabilities are available and pay scales are lower. These offices are now referred to as “high value engineering centers” (HVE).

Communication with HVE offices is inherently a problem. When you are working with a team half a world away, timing is an issue. Of course, email is always available but when you are separated by several time zones the turnaround for getting a response can be 18-24 hours. However, “round the clock” work can benefit progress when it is properly managed. Often it is necessary to discuss an issue in real time. Telephone or video conferencing is very helpful but teams have to come in early or stay late to have an overlap in office presence.

It is a tremendous advantage when working counterparts have a personal relationship with one another. This helps smooth out cultural differences and creates trust between individuals. So how do we enhance communication and establish these relationships?

A typical scenario for an EPC company doing a major project is as follows:

- During FEED the HVE team will assist on finalizing P&ID's and completing tasks such as line lists and instrument lists. During the final month of FEED the lead discipline engineers from the HVE office will come to the lead office to work directly with their counterparts to complete the package and participate in the 30% design review. This enables the lead discipline engineers to establish a close relationship with their counterpart and an understanding of mutual expectations. There will be a written execution plan for each discipline with a defined scope of work for each office.
- The HVE leads will return to their office with the package to orient their teams and start the design work. An engineering manager from the lead office will be resident in the HVE office to coordinate the work. With all work on design documents being done in the cloud each side will be able to monitor the work of their counterpart. Telephone, email, online messaging, or video conferences between leads are used to deal with any questions or issues.
- Leads may travel to the other office for design reviews or they may be done virtually.
- Presence of the HVE lead at the EPC office during the start of the project will enable a better understanding of the project's execution methodology and smooth coordination among all team members.
- Direct correspondence between EPC and HVE offices with the client will enhance execution of work. Moreover, presence of a client representative in both offices will help sort out many issues across the table.
- Regular meetings using video conferencing between EPC and HVE offices will create an environment whereby everybody stands on a common platform with the same level of information and reduce communication gaps between offices.

- Creation of standard assemblies for pumps, PSVs and other components on P&IDs by the EPC office at the start of the project will minimize errors and ensure consistency.

We hear a lot today of the “new normal” after this coronavirus episode runs its course – if and when it does. It is likely that international travel will be significantly reduced. Perhaps international companies will be like the proverbial reformed alcoholic-now that they know they can survive without so much travel they may prefer it. It certainly would reduce travel expenses. Travel frequency has gone from the pre-COVID levels to zero during the quarantine period. We have struggled with the inconvenience but for the most part we have survived. With our new familiarity with virtual technology it is likely to be a long time before we return to the earlier levels of international travel. It remains to be seen where the new normal for travel will be.

With the increased utilization of technology that has taken place during this period of quarantine there are many things that can be done with less travel. This tremendous boom in video conferencing has made us more comfortable with this format. We can even have virtual site visits using such things as helmet cameras or drones.

Currently design teams are holding virtual leads meetings with their HVE teams with both sides working from home. Feed-back seems to indicate that this is working well but how will it work in the long run? Will things be missed because of inefficient communication?

Virtual team building sessions can be held to serve both sites. Perhaps some of the professional team building facilitators can comment on this. Much of the personal interaction that adds value to the team building exercise may be lost but trained facilitators should be able to adapt to regain much of the interaction and value.

Also, with many people working from home, has productivity suffered? How do discipline teams function when everyone on the team is working from home? Certainly if more people worked from home on a routine basis expensive office space could be reduced. If people are to routinely work from home, what accommodations would the companies make to account for that? What about cyber security when working from home? How will people deal with the fact that home is no longer a haven away from the office stress? These are questions that companies are currently dealing with.

Of course, the efficacy of working from home will vary between individuals and perhaps between cultures. Some people will have well equipped and private home offices while others may have to work from the dining room table with little privacy. Some people will be content working from home or perhaps even prefer it but others, not so much. Current reports indicate that after two months of working from home many workers are becoming restless and dissatisfied. The approach appears to be novel only in the beginning.

Several proactive practices that have proved beneficial during this current period:

- Team members have a list of phone numbers for all team members so they can call one another whenever a question arises. An email can be overlooked in the multitude that is received but a call or text can address immediate needs.
- A short morning meeting and afternoon meeting to address project needs and review progress.

- For international teams two meetings a day is a problem. A single leads meeting with the HVE team held early morning for one team and late evening for the other.
- Regularly review team progress with the whole team via video conference.

What about the synergism we gain from working in close interaction between colleagues within disciplines as well as between disciplines? Much of this is lost even with frequent video conferencing. Perhaps, working part time from home and part time at the office is the answer. However this seems to be the worst of both worlds.

In summary, we have yet to see how we will work and communicate in the new normal. Whatever it is, we will be resilient and find the most efficient way to get the job done and we will be better for it.

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