



Process and Tool, Chicken and Egg: Finding the Right Tools for Your Organization

By Roy Atkinson
Senior Writer/Analyst, HDI

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Executive Summary

Every organization faces challenges when it comes to replacing the tools used to accomplish its work. Should the organization adjust to doing things according to the way the tool is designed, or should the tool be customized to fit the way the organization works? We all know that customization is expensive; when it comes to large software purchases, the costs can be significant, and they often expand beyond product costs to include professional services, consulting, and training.

To complicate matters, we also have to choose between on-premises and hosted/SaaS delivery, pick a licensing model, decide whether it matters to us how closely aligned with ITIL or another framework we need the tool to be, and then consider a large number of other variables.

In the midst of all these decisions, we often fail to consider a few very basic steps:

- Getting the right people involved
- Asking the right questions before you start
- Defining your processes before searching for tools
- Finding hidden expenses
- Deciding whether or not to customize
- Measuring success

More than ever, it's imperative that we understand and serve the goals of our organizations (i.e., the businesses for which we provide services). The days when IT was essentially a black box, and could purchase new tools at will, are gone.

Although it outlines some good practices, this paper is not intended to be a complete guide to planning your purchase and picking a winner in your search, or as a guide to organizational maturity. There are other publications that have good advice.¹ This paper focuses on the early steps in the process, including the value of defining the problem to be solved, current processes, and desired outcomes, and on being able to measure the outcomes of your initiatives.

Getting the Right People Involved

Purchasing a new tool or technology is a business decision with technical aspects, rather than a technical decision with business aspects. Management support is required for any initiative's success, and this is particularly true when functional lines are being crossed. You should give careful consideration to getting the right management sponsor for your anticipated project. In order to obtain support and sponsorship, your initiative must be framed in the language of the business. Business leaders will want to know the value that any change will provide, especially when it will require a substantial investment of money, resources, and time.

¹ *Best Practice Methodology for Selecting Support Center Tools, Technologies, and Software*, an HDI Focus Series publication, may prove particularly valuable. It is listed in the "Additional HDI Resources" at the end of this white paper. *Note: Most of the activities described in this paper should precede the steps outlined in the Focus publication, but are closely aligned with those described in that work, especially regarding the development of requirements for a new tool.*

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Almost any technology initiative will involve not only the support center, but likely system administrators, network administrators and often database administrators. You will need information and support from your financial and purchasing departments. If it is practicable, you should seriously consider involving people from the customer community as well. Pilot projects, user interface decisions, and the like should involve the people they affect. In addition, other business units may find uses for the new tool that you wouldn't think of, and those units might be able to share some of the cost.

Carefully consider the team you will be putting together if and when your project goes forward, and make sure that the management sponsor has responsibilities over all of the groups involved, or at least has the approval and support of someone who does.

Project (or initiative) success requires a sponsor who is:

- Directly tied to the success of the project
- Appropriately engaged in and aware of the project
- Actively engaged in eliminating barriers and resolving issues²

Whether your reconnaissance results in the purchase of new technology or not, you will likely be making changes. When looking for management sponsorship, be sure to consider the amount of change your initiative will require. As the saying goes, "Culture eats strategy for lunch." Entrenched behaviors can erect barriers to change at every level. You'll need someone to help overcome this resistance even if—perhaps *especially* if—you don't implement new technology but decide to improve existing processes and procedures instead.

Even though your exploration of new technology is just getting underway and you haven't decided whether or not to purchase a tool has not been made, getting sponsors on board is the first step to achieving a positive outcome.

Asking the Right Questions Before You Start

Michael Krigsman, a researcher and writer on the causes of IT failures, says that, "in almost all cases, IT failures arise from organizational issues rather than technical or software problems."³ He isn't talking about broken technology when he refers to IT failures; he's talking about failure to produce the desired results—and in some cases, failure to produce *any* results at all, other than expenses.

At this stage, the most important question to ask and answer is, "What problem are we trying to solve?" The answer shouldn't be, "Our tool is old." That may be true, but it doesn't necessarily indicate a problem. ("We have money in the budget this year" is probably not a sufficient reason either.) If the answer is, "Our tool doesn't do what we need it to do," then you need to lay out the unmet needs carefully and completely so that you don't make a mistake when you buy new technology—if, in fact, you need new technology.

If I had eight hours to chop down a tree, I'd spend six hours sharpening my ax.

Abraham Lincoln

How can we identify the potential causes of failure and do our best to eliminate them? We need to ask the right questions and deal with the real answers. In other words, we need to understand where we are now

² Roger Kastner, "Why Projects Succeed: Executive Sponsorship," *Slalom Consulting* (blog), February 15, 2011, blog.slalom.com/2011/02/15/why-projects-succeed-%E2%80%93-executive-sponsorship.

³ Michael Krigsman, "Evolution and Opportunity: Going Beyond IT Failure," *Beyond IT Failure* (blog), *ZDNet*, December 11, 2012, www.zdnet.com/evolution-and-opportunity-going-beyond-it-failure-7000008637.

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(processes, procedures, and pain points), where we want to be (future processes, procedures, and results), and how we can get there (solutions and change management).

Being technologists at heart, we tend to see technology as a solution—perhaps even *the* solution—without determining exactly what the problem is. How do we install the server? How do we get this product to talk to our identity and access management system? How can we push the client software to the desktop? Those are important questions, and you need to plan for these activities, but there are more-pressing issues that we tend not to see. Only when you’ve answered some basic questions—and any others that are specific to your organization—should you actively engage in the purchasing process.⁴

Even if we’re given a mandate to find a new tool and get it up and running by a certain date, we need to go through the right steps to arrive at the desired result. The basic questions we need to consider are:

- What problem(s) are we trying to solve?
- How are we doing things now?
- Where are the bottlenecks and pain points?
- How can we eliminate them?
- Will new technology help?
- How will we measure success?

Our goals can only be reached through a vehicle of a plan, in which we must fervently believe, and upon which we must vigorously act. There is no other route to success.

Pablo Picasso

Don’t forget to determine exactly what “we” means. Avoid silos and be as inclusive as possible.

There are many reasons why you might choose to replace an existing tool. Budget availability, resource availability, changes in other parts of the organization, laying the foundation for future initiatives, and so on. All of those should figure into your analysis and preparation for new tools and technologies.

Defining Your Processes Before Searching for Tools

Process: *A structured set of activities designed to accomplish a specific objective.⁵ A series of actions or steps taken to achieve an end.⁶*

Business process: *A collection of related, structured activities or tasks that produce a specific service or product.⁷*

One extremely effective exercise to complete *before* you start building requirement sets and writing your request for proposal (RFP), is building process maps of your current state.⁸ You shouldn’t assume that you understand the processes and procedures, or how they work—or don’t work—together, until you go through them step by step. Even if you’ve performed this exercise in the past, unless it’s the very recent past, you should go through it as a prelude to a major purchase and should consider doing periodic reviews to note

⁴ There may be aspects of your business vertical that are unique. For example, your organization may be required to comply with HIPAA, PCI-DSS, SOX, or other laws and regulations.

⁵ *ITIL Glossary and Abbreviations* (TSO, 2011).

⁶ “Process,” Dictionary.com.

⁷ “Business process,” *Wikipedia*.

⁸ See the “Additional HDI Resources” section for documents that can help you create your RFP.

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changes and save time on future initiatives. It may be a real eye-opener for your organization, and it should be done without blame or excuses. Inefficiencies, variances, and undocumented steps creep in over time. Just lay out all the steps as they are.⁹

In analyzing the activities that make up the process, get as granular as you can. If you're talking about creating a case for a customer, for example, the step isn't "Create ticket for customer." The steps may be more like:

- Receive call via IVR/ACD
- Enter customer info into case management system
- Listen to customer description of incident or request
- Search KB in customer's terms
 - ◆ If found:
 - » Provide customer with solution
 - » Document case in ticket with KB article number
 - » Once fix is verified with customer, mark resolved
 - ◆ If not found:
 - » Document case in ticket
 - » Search other knowledge for solution **OR** escalate to SME

A mechanic doesn't take a 3/16" wrench to the garage and then ask, "What can I fix?"

In this very basic process slice, you can see at least one opportunity for automation: Entering the customer information into the case management tool can be automatic if the IVR/ACD and the tool ("screen pop") are integrated. There may be other opportunities, but for now you can note "screen pop" as an improvement that technology can make. Entering customer information is tedious, time consuming, prone to human error, and likely to cause customer annoyance as the analyst asks, "Could you spell that again for me, please?"

Problem: *Capturing customer information is time consuming and prone to error.*

Solution: *Update "screen pop" technology.*

Perhaps you'll consider tools with integrated knowledge management, so that as the analyst begins typing the customer's issue into the tool, knowledge articles are presented, cutting down on the number of steps the analyst must take.

The last step noted is "Escalate to SME" (subject matter expert). Since many SMEs don't work directly in support, they may not pay much attention to the tickets they're assigned—even if there is an existing operational level agreement (OLA) between the support center and the group or unit to which the SME belongs. How will SMEs be notified about escalated cases? Who else will be notified? What happens if they are unresponsive and the support center is facing a breach of its service level agreement (SLA) by failing to respond within X hours? Perhaps you can specify "notification to assignee and manager for escalations" as a requirement for your new tool.

⁹ There are many tools to assist in process mapping, and some are free. A quick Internet search will get you started. Just remember to make sure that all of the people involved at this stage have access to whatever tools you use.

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As another example, let's say that your organization mandates that support analysts and desktop support technicians must obtain explicit permission from a customer/end user before connecting remotely to their computer. The problem is, you have no way to verify that the technician obtained permission, other than a statement in the ticket that the permission was given. Some remote connection tools offer a feature that requires the customer to accept the connection before the technician can see the desktop. That acceptance can document the adherence to the permission requirement—another case of technology enabling processes and procedures.

Problem: *Can't document end-user permission for remote connection.*

Solution: *Tool requiring end-user acceptance of connection (logged).*

As you consider each step, ask yourself, "Why do we do it this way? Is there an easier way to accomplish this? Can it be automated?"

There are deeper insights to be gained from a view into how various processes and functions are connected. Let's suppose, for example, that your business decides it can save money by installing a password reset tool.¹⁰ You base your selection on ease of use, good reviews, and cost considerations, only to discover six months later that your password reset call volume has gone *up*. What you may have missed during your exploration is that new applications were being developed and introduced to your organization that have different password requirements, or simply won't work with the tool you've just bought. End users don't remember (and shouldn't have to) which passwords the tool can reset, and therefore bypass the tool completely by calling the service desk.¹¹ The application developers were unaware of the capabilities of the reset tool, and your exploration team was unaware of the forthcoming applications.

The places where processes cross lines (i.e., where business units or functions not directly related to the support center are involved) can present both problems and opportunities for process improvements, as shown in the password example. Knowing exactly where and how these cross-functional processes intersect can be of great benefit when considering the need for new technology. Make sure that the most senior management sponsor of your new technology has the ability to manage or influence all of the units involved.

When you carefully map out the processes and procedures you currently have ("as-is"), you should also be thinking about the end result of your changes ("to-be").

- What is the ideal result of your process improvement?
- Where are the gaps between where you are now and where you need to be to fulfill the needs of your business?

This gap analysis can point out where you can best leverage technology, and where you can make changes to current processes and procedures to achieve your goals.

Technology can help you save time, effort, and money, as well as improve service. It's in these instances that there is value in buying a new solution, adding features, or upgrading to the latest version. In any case, it's the *process* that needs improvement; the technology is only an enabler. The work laid out in this section is fundamental to helping you decide whether to adjust your processes or customize your tools. Your organization may have extremely efficient ways of accomplishing its work, and realigning to the dictates of a particular tool might make you less efficient. But how will you know unless you analyze?

¹⁰ For another look at this particular option, see the "Measuring Success" section on p. 9.

¹¹ Jenny Rains, "Password Reset Practices," HDI Research Corner (May 2011), www.ThinkHDI.com/~Media/HDICorp/Files/Research-Corner/RC_PWResets_May2011.pdf.

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Finding Hidden Expenses

Too many times, organizations invest in tools and technologies without having fully explored the peripheral costs that may be incurred. In some cases, particular expertise may be required in order to integrate a new tool with your existing infrastructure, or you may make an assumption during the purchase process that comes back to haunt you during implementation. For this reason alone, it's a good idea to perform a gap analysis looking at the skills your organization currently has versus those required to successfully implement a new technology. The questions to ask at this stage include:

- Where are the skills gaps?
- Will we need outside expertise?
- Do we need to train our staff?

The second and third questions are really about how long the gaps will persist. If implementation requires a special skill set for installation and launch, but not for operation and maintenance, short-term outside expertise may be the right answer. If the need is long-term, training is probably required. And if you require specialized expertise, you can expect it to be expensive to either hire or acquire.¹²

There's another area of hidden cost as well: *the future*, which can be a very unpredictable place. What happens to your upgrade path if the vendor is acquired? What is the vendor's road map for future technology? If your organization invests in a tool now and a whole new version is introduced in eight months, will you receive an upgrade for free? At a discount? Will it require changes to the very processes you've mapped and explored? If you decide to customize the tool, will your customizations work in the new version, or will they have to be done all over again?

There is more to the future than that, however. The world of IT and technical support is changing rapidly, moving toward a more multichannel, social model. Will your new tool handle the change, or will your future business initiatives drive you "back to the drawing board" for yet another tool, or leave you trying to shoehorn information from new channels into the existing tool using copy/paste? It's a good idea to ask senior management if they're considering any major shifts in the way business—at the very least *your* business—is done.

We love our vendors, but they have an unfortunate tendency to underestimate the complexity of integrating different pieces of technology.

Chris Farver and Robert S. Last

On the other hand, we can be distracted by a large feature set. A tool may have plenty of features and capabilities, but are they ones your organization can and will use? There's a difference between features and benefits.

Features are all the capabilities (especially ones that differentiate the tool from competitive offerings) of a particular product or service. *Benefits* are the value your organization derives from using the product or service. A pickup truck may be able to tow 15,000 pounds, but since I don't pull a trailer, that feature isn't a benefit for me—it has no value. A remote control tool may be able to connect to Unix computers as well as those running Windows, but if you don't have any Unix boxes in your organization, there's no benefit to you. If you develop a good working relationship with a vendor, they will be able to walk you through the benefits, not just the features.

¹² Refer to the "New Product Support Evaluation" worksheet included in the "Additional HDI Resources" section at the end of this white paper.

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Deciding Whether or Not to Customize

Many organizations have moved away from customization to using tools “out of the box.” In general, the latter is less expensive, but there may be hidden costs (as explored in the previous section).

Customization can be very expensive, but large organizational changes are themselves not *in*expensive. During the exploration of your processes, you should begin to see whether there are large inefficiencies in the way your organization does things, or whether you have managed well and are getting the right things done quickly and efficiently.

Customizations often enable the collection of specific data, so that reports can be run the way we want. During your exploration, find out who values (i.e., uses) these reports, and whether that data needs to be collected at all. It’s very common to find out that few care about some of the items in the reports, and that they wish for other insights. Note these insights and add them to your RFP—even if they’re just “nice-to-have” (as opposed to “must-have”) items.¹³

The lifespan of a particular software product is usually three to five years. At the end of that time, you must decide whether or not to carry data over from the previous product or version. In many cases, exporting and importing the data is so cumbersome and expensive that organizations decide to simply start over. The more customized your product is, the more difficult it will be to extract data in such a way that it can be imported into a new product or tool. If you keep in mind that you very well may be abandoning collected data in five years, you may be able to expand your search and not worry so much about compatibility.

Measuring Success

The ability to record, measure, and report is central to the value of any tool. These reporting capabilities should be broad enough to accommodate the needs of different levels of management, and flexible enough to make it easy to obtain information when you need it and as you need it. Your primary goal should be using the data and information you gather from your suite of tools to produce meaningful metrics. The metrics you track tell the story of your success (or lack thereof).

More often than not, the most convincing business cases are made in terms of money. Telling a business leader that 30 percent of your 3,000 calls per month calls are for password resets may not be convincing. Telling that same leader that password resets are costing over \$200,000 per year will likely attract immediate interest.¹⁴ If you can put these two elements (reporting and business value) together, you’ll be on your way to measuring success.

Traditionally, support centers tend to measure activities: how many calls answered and how fast, tickets opened and resolved, and so on. Those metrics are valuable to support center managers. They help determine staffing levels and may reflect on individual performance as well as that of the support organization. But these metrics—and many others—measure activities. What support centers need (and what many in the field are searching for) are metrics that show how value is being delivered.

¹³ Items can be ranked or weighted on the “Product Comparison” form that can be found in the “Additional HDI Resources” section at the end of this white paper.

¹⁴ If your cost per call is \$20 and 30 percent of your 3,000 calls per month are for password resets, those resets cost \$216,000 per year.

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In the case of a new software initiative, value can be shown in several ways, including the staple return on investment (ROI), which is intended to show how the project is paying off over time.¹⁵ But there may be other measurements that can show the value of new tools. Drawing on the examples used previously in this paper:

- Higher first contact resolution may result from better, faster access to knowledge
- A reduction in support volume may result from fewer password reset calls to the service desk
- Higher customer satisfaction (CSAT) may result from improved ease of use
- Shorter call durations may result from the integration of the “screen pop”

Make sure you have a good set of metrics now. You’ll need to compare the *before* and *after* measurements to show that your plan has worked and that you’re delivering the value you promised. But be aware that, even if your project is successful, not all metrics will automatically improve.

Let’s take the fictional example of the password reset tool mentioned earlier. Let’s say the tool went live on the last weekend in August, and you want to look back from the following January to see whether or not you’ve achieved the desired results. You want to look at the cost of password resets, the effect on contact volume, and the effect on first contact resolution, as well as the percentage of contacts that are for password reset.

		Contact Volume	Password Resets	Password Reset % of Contacts	Password Reset Cost (\$20/contact)	CSAT	First Contact Resolution (%)
Pre-project	June	3,755	1,126.5	30%	\$22,530.00	0.89	66.5%
	July	3,820	1,146.0	30%	\$22,920.00	0.91	67.0%
	August	3,694	1,108.2	30%	\$22,164.00	0.87	65.0%
	AVERAGE	3,756	1,126.9	30%	\$22,538.00	0.89	66.2%
Post-go-live	September	4,215	1,475.25	35%	\$29,505.00	0.86	67.0%
	October	3,975	1,073.25	27%	\$21,465.00	0.89	66.4%
	November	3,420	820.8	24%	\$16,416.00	0.93	65.0%
	December	3,156	725.88	23%	\$14,517.60	0.94	64.0%
	January	2,984	626.64	21%	\$12,532.80	0.95	63.0%
	AVERAGE	3,550	944.36	26%	\$18,887.28	0.91	65.1%

Average savings per month = \$3,650.72

Note the downward trend in contact volume and in the number of password resets, and the spike after the new tool was implemented. The numbers show that the percentage of contacts related to password resets is trending lower. Happily, they also show a reduction in the monthly cost of password resets, and an increase in customer satisfaction (CSAT). (You can’t attribute this directly to the new tool unless customers indicate that in their feedback, but you can add a question to your CSAT survey about the tool’s contribution to overall satisfaction.)

¹⁵ For a detailed look at how to calculate ROI for a project, see Chris Schweighart, “Calculating ROI to Realize Project Value,” *iSixSigma* (blog), March 27, 2010, www.isixsigma.com/operations/finance/calculating-roi-realize-project-value.

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The anomaly here appears to be the first contact resolution rate, which is trending *lower*. Upon reflection, however, it's apparent that most password resets were resolved on the first contact, and, therefore, the remaining cases are more complex and less likely to get immediate resolution. You have successfully eliminated some of the no-value, repetitive calls or contacts your service desk receives.

Having a good set of metrics is important, and tracking them over time with a view to those that illustrate the success or failure of your initiative is imperative. But you will also want to carefully review the process maps you built early on. Have the bottlenecks and pain points been eliminated or reduced? Have the interests of all the stakeholders been served? If you've been careful, the answer to these questions is probably "Yes."

Conclusion

Before you buy a new technology or upgrade an existing one, decide what you really need to accomplish and what problem(s) you are trying to solve. Technology only enables efficiency, it doesn't create it. If your processes and procedures are inefficient now, it's the processes and the procedures you need to work on, with technology as your tool.

Get the appropriate senior management sponsorship, or your initiative or project may very well join the statistical pile of IT failures. Involve people from other groups and business units as much as is practicable. You will need to cut across silos and get around obstacles.

Get the right people "in the room" when you build your team. Make sure you have people at the table who understand your initiative's technology needs and business needs.

Use available tools and publications to lay the groundwork *when and if* your organization decides to pursue a new technology solution. Choose the tool carefully and make sure you're buying appropriately. Anticipate hidden costs, and avoid them as much as possible. Customize tools if you must, but be aware that you may incur ongoing expenses.

Don't forget that it's far less expensive to say "We don't need to buy this tool at this time" than it is to abandon a project, or, worse, run over time and over budget on an implementation that doesn't serve the needs of the business.

Measure before and after, and always show the business value of the expensive work you have done.

Begin with the end in mind.

Stephen R. Covey

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Additional Resources

Books, Worksheets, and Templates

Chris Farver and Robert S. Last, *Best Practice Methodology for Selecting Support Center Tools, Technologies, and Software* (HDI, 2009), www.ThinkHDI.com/~Media/HDICorp/Files/Books/Focus-Books/Q22009toolstechsoftware.pdf.

“Creating a Request for Proposal” (worksheet), www.ThinkHDI.com/~Media/HDICorp/Files/Library-Archive/Creating-RFP.pdf.

“New Product Support Evaluation” (worksheet), www.ThinkHDI.com/~Media/HDICorp/Files/Library-Archive/Product-Support-Eval.xls.

“Product Comparison” (worksheet), www.ThinkHDI.com/~Media/HDICorp/Files/Library-Archive/Product-Comparison.xls.

“RFP for IT Service Desk Software” (template), www.ThinkHDI.com/~Media/HDICorp/Files/Library-Archive/RFP-Template-Software.xlsx.

Web and Social

HDI Buyer’s Guide, www.HDIConnect.com/Buyers-Guide.

Hundreds of tools in more than thirty categories.

Ask Your Network, www.HDIConnect.com/Boards.aspx.

Ask your peers what they’re using.

HDI Professional Association for the Technical Service and Support Industry (LinkedIn), www.linkedin.com/groups?home=&gid=70779&trk=anet_ug_hm&goback=.gmp_70779.

HDI Local Chapters, www.ThinkHDI.com/Membership/Local-Chapters/Directory.aspx.

Many chapters have their own LinkedIn groups or Facebook pages, as well as face-to-face meetings where you can ask questions and seek advice.

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About the Author

Roy Atkinson is HDI's senior writer/analyst. He is the chief writer for white papers and *SupportWorld* articles, and a key in-house subject matter expert. Roy has an extensive background as a practitioner in IT support and customer service. He served as technical lead for an award-winning enterprise software implementation, and as project manager for many others. Roy is a former member of the Apple Consultants Network. He is a frequent speaker and writer on social support, customer service excellence, and mobile device support, and serves on the HDI International Certification Standards Committee.

About HDI

HDI is the professional association and certification body for the technical service and support industry. Facilitating collaboration and networking, HDI hosts acclaimed conferences and events, produces renowned publications and research, and certifies and trains thousands of professionals each year. HDI also connects solution providers with practitioners through industry partnerships and marketing services.



Guided by an international panel of industry experts and practitioners, HDI serves a community of more than 120,000 technical service and support professionals and is the premier resource for best practices and emerging trends.