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Multiplying the Power of Experts: A Systemic Approach

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A photograph of a white lighthouse with a glowing lantern room, situated on a cliffside. The lighthouse is the focal point on the right side of the image. The background shows a hazy, blue sky and a wooden fence in the foreground, suggesting a coastal or highland setting.

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The Rise of Specialized Knowledge Work

Two distinct historic trends have merged over the past few decades, posing an increasing challenge to leaders everywhere.

In 1776, Adam Smith described the first of these two trends when he enthused over productivity gains derived from “division of labor”: allocating different steps in a manufacturing process to different people, and letting each person specialize in his or her own piece of the sequence.

Centuries later Peter Drucker observed the other trend and described it as the emergence of the “knowledge worker,” the employee *not* allocated a prescribed task in a manual process, but rather one who works primarily with information, developing or using knowledge in the workplace. According to Drucker, deciding “what *is* the task” is the knowledge worker’s most important decision. Smith’s division of labor offered no such hurdles.

But now there is a surprising confluence of *specialization* and *knowledge work*. That confluence has produced an ever-increasing number and variety of *specialized knowledge workers*. Here, for the sake of simplicity, we’ll call those people “experts.”

In retrospect, we now know that the rise of specialized knowledge work had to happen, and it had to happen at an ever-increasing rate. Since the Reformation, increasingly liberalized markets have encouraged technological development – from movable type to Ziploc® bags – to help serve those markets. And technological development has fueled larger and more vibrant markets. This recursive cycle has had two effects on specialization. First, it has demanded increasing numbers of scientific and technological specialties of knowledge work. For example, who would have thought that “genetic engineering” or “holograph storage design” was more than science fiction a few years ago? Second, prosperity affords us the *luxury* of certain specialists, from academics who study dead languages to feng shui consultants.

To the unprepared executive, the increasing need for specialized knowledge workers is a burden and a danger. Many experts are expensive, hard to find, and hard to retain.

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To the unprepared executive, the increasing need for experts is a burden and a danger.

They often live in their own little specialty worlds, and it can be tough to understand what they are saying and whether to take it seriously. And ordinary, day-to-day management of experts is a challenge: how do you ensure that employees stay and perform at the top of their game when you don't even understand the game?

Leaders who can quickly marshal new, needed expertise, and wisely apply existing expertise, are simply more effective and more agile than their adversaries.

However, executives who crack the code at managing experts have this prize waiting for them: *potent strategic leverage*. Leaders who can quickly marshal new, needed expertise, and who can wisely apply existing expertise across their organizations, are simply more effective and more agile than their adversaries.

Your organization needs to deal with China? Maybe you had better get good -fast- at managing a cadre of Chinese language and culture specialists. Your pharmaceutical company wants to create advanced drug delivery systems? Maybe you had better get good -fast- at managing a node of nanoengineers.

Three Problems of Managing Experts

How do you reasonably hire, evaluate and promote experts outside your field?

To manage experts well, the executive must tackle three basic problems. The first problem is one of *human resource management*. How do you hire experts who are out of your field? How do you reasonably evaluate and promote them? How do you grow their skills and target the right kinds of qualifications and certifications? What kind of career ladder do you build for them? (And if you don't build them a career ladder, how do you keep the good ones, assuming you know who they are?) And so on.

How do you inject new ideas and methods from outside the organization into the practices of your in-house experts?

Another problem is one of *organizational knowledge management*, which is different from managing individual expertise. Organizational knowledge management can be a tough nut to crack. Specifically, how do you ensure that lessons learned by one specialist are codified and transmitted across the organization? How do you inject new external ideas and methods into the practices of your in-house experts, so their expertise does not become stale and ingrown? And how do you ensure consistency of practice across the organization, so that experts' processes and practices are visible and open to improvement?

The final problem for the manager is *quality assurance*. How do you know your experts are using good practices - let

How do you know your experts are using good practices – let alone “best practices?” And what about conformance to organizational guidelines?

❶ Is there a critical mass of a given expertise (or the intention to build one) within the organization?

❷ Is the area of expertise dynamic and complex?

❸ Is the expertise important to the mission of the organization?

❹ Does the expert need to work closely, over time with people not of their expertise to produce an output?

Only senior leaders can solve the problem; the solution is *systemic*, requiring changes in both policy and thinking.

alone “best practices”? And what about conformance to organizational guidelines? Would you know if the systems architect working for you is using your organization’s architecture standards?

Conditions Demanding Expertise Management

Of course, these problems do not arise every time you manage someone more expert than yourself in a specific area. They arise when these four conditions exist.

- First, there is a critical mass of a given expertise (or the intention to build one) within the organization. If you only have one chemical engineer in your organization, you will probably have to just manage as best you can. If you have many chemical engineers, you face the problem of whether and how to manage that body of expertise.
- Second, the area of expertise is a complex, dynamic field. So, for example, managing expertise in “nanoengineering” represents a greater challenge than managing expertise among, say, “buzz saw operators.”
- Third, the expertise is important to the organization’s mission. For instance, you may have a team of janitors that keep your space clean and in good repair. This is important work, but it is not usually central to enterprise strategic success. However, the expertise of mechanical engineering residing within a defense contracting firm may well fit this criterion.
- Finally, the experts need to work closely over time with other people, not of the same expertise, to produce outputs. Software development, product design, proposal development, cost estimating, and many, many other activities can require this level of interdependency.

A Systemic Solution

If all four conditions exist for a given area of expertise, the challenge of managing experts is significant and warrants senior leaders’ attention. Indeed, only senior leaders can solve the problem because, as our research and experience have shown, the solution is organizational, involving other

key players as well as the experts. More to the point, the solution is *systemic*, requiring changes in both policy and thinking.

Most attempts to solve this problem focus on collecting the experts into a group, where the expertise can be treated as an asset to be protected, nurtured, and grown. This general approach has taken on various monikers, including “Competency-Based Management,” “Resource Pool Management,” “Centers of Excellence,” “Career Centers,” and “Centers of Expertise.” Here, we will use the latter term, *Center of Expertise* (CoE), which strikes us as reasonably descriptive.

When implemented correctly, the CoE is an organizational entity that leverages and improves pockets of expertise within corporate networks. CoEs aim to ensure the best possible performance from their experts, and do so consistently and predictably.¹

As with many organizational approaches, there are effective, ineffective, and downright awful ways to do a CoE. Some cornerstones of CoE success are common sense and well-known. They include, for example, the need for investment of time and money from the parent organization, clear purpose that aligns with that organization’s strategic direction, and strong, current links to internal and external sources of competence.^{2 3} These factors lay the foundation for an effective CoE; to harness the full benefit of the approach, further actions are required.

Based on broad industry and governmental experience, and primary and secondary research, the authors of this paper offer additional requisites for CoE success. We spell out the roles inherent to this model, accountabilities of each role, and the issues that must be resolved for CoEs to run smoothly. The reader may observe that the CoE approach we describe touches much of the organization beyond the “center of expertise.” For many readers, the prescription may require a shift in thinking about how a manager “owns” resources and what comprises the most effective human resource policies and strategies.

Three Relevant Roles

At the most fundamental level, there are three roles inherent to our CoE approach. Although they might easily go by a

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variety of names, here we will call them (1) the “Expertise Manager,” (2) the “Work Manager,” and (3) the “Expert.”

Understanding effective expertise management means understanding these three roles, and their relationship to each other. Specifically, it means answering the question, “*Who is accountable to whom, and for what?*”

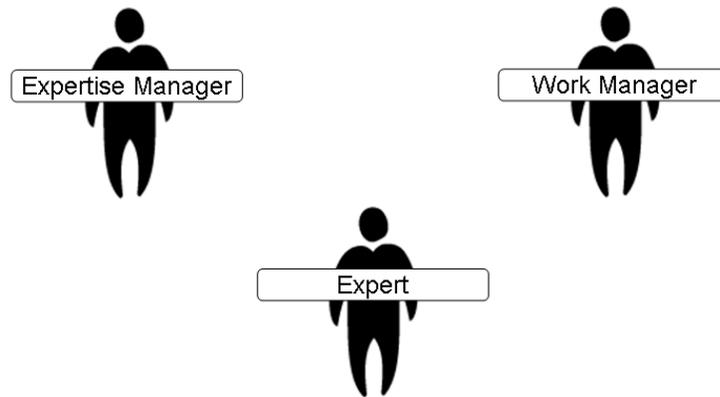


Figure 1: These three roles are the key players in the CoE approach.

Understanding effective expertise management means understanding, for these three roles, “Who is accountable to whom, and for what?”

The CoE is led by the Expertise Manager, who manages the CoE to benefit the broader organization.

The Expertise Manager performs human resource management, knowledge management, and quality assurance functions.

The Expertise Manager

The Expertise Manager leads a group of Experts whose expertise is in the same professional field. The Expertise Manager and the Experts are collectively known as the *Center of Expertise*. The job of the Expertise Manager is to manage the CoE toward broader benefit of the entire organization in which the CoE resides. A CoE comprised of many Experts will usually require more than one Expertise Manager, plus support staff.

The head of the CoE typically reports to a corporate executive: someone high enough up to be both motivated and authorized to resolve conflicts between various “stovepipes.”

The Expertise Manager performs *human resource management, knowledge management, and quality assurance* functions. Human resource management includes hiring, firing, training, evaluating and promoting experts who are within the CoE’s field of expertise. Some of this – as we’ll explain – is done with the advice and consent of others. The salient point here is that it takes an expert in a specialty to recognize and cultivate others in that specialty.

Human resource management also includes allocation of resources. So, in many organizations, an important CoE function is to assign Experts to various work efforts (projects, programs, etc.), depending on the larger organization's priorities. There will be conflicting needs for scarce resources (i.e., the Experts); it is the CoE's job to resolve those conflicts, and support achievement of greater good for the larger organization.

The Expertise Manager also aims to maintain and improve organizational expertise, a *knowledge management function*. To accomplish this, the Expertise Manager role contains a number of accountabilities.

The Expertise Manager builds knowledge centers and "community of practice" mechanisms.

The Expertise Manager encourages innovation but prevents reinvention.

Expertise Managers develop "the way we do it around here."

- Expertise Managers build and maintain knowledge centers: libraries of materials and services for all its Experts to employ. Materials may include databases, and best practice templates and procedures. Services provided include internal consulting, quality reviews, and information delivery. Expertise Managers also encourage lateral networking among Experts by establishing "community of practice" mechanisms such as Web tools, in-house conferences, and in-house publications.
- Expertise Managers gather and disseminate lessons learned from inside and outside the organization: new ideas that work and old ideas that don't. In other words, the Expertise Manager encourages innovation but prevents reinvention.
- Expertise Managers develop "*the way we do it around here*": standards, practices, processes, and process linkages particular to the greater organization. "The way we do it around here" must allow for size and type of application; it may include broad principles, detailed procedures, or both, depending on the specialty and the organization's needs. It must also balance the need for corporate-wide standards with needs particular to a specific organization or work site. Done well, such standardization drives out unnecessary ambiguity and variability without introducing unnecessary bureaucracy. Organizations working to reduce quality variation via standardization can reduce re-work and review by

others, saving time and money. In addition, well-designed standardization leaves room for the Expert to exercise professional judgment and creativity when and where they add the most value.

Expertise Managers continually improve “the way we do it around here,” often by injecting improvements from the field at large. They do this by using outside experts,⁴ memberships in professional organizations and standards bodies, and participation in research.

Effective knowledge management requires a degree of *quality assurance*. Expertise Managers must overcome the problem of getting Experts to contribute to and actually use the CoE’s body of knowledge. This is an opportunity that some Experts will embrace and others will not.

In effect, the Expertise Manager is accountable to ensure quality of the “How” dimension of the Expert’s performance. The “What” dimension – the actual work assigned - is *not* the Expertise Manager’s accountability, as will soon be described when we discuss the Work Manager. Expertise Managers can execute on their accountability, for example, by affecting the “how” portion of the Expert’s performance appraisal.

Expertise Managers must overcome the challenge of getting the Experts to contribute to and actually use the CoE’s body of knowledge.

The Expertise Manager is accountable for the “HOW” dimension of the Expert’s performance. The “WHAT” dimension is not their accountability.



Figure 2: Expertise Managers lead the CoE and perform these three functions

Work Managers are accountable for achieving successful team outputs, and their teams may include one or more types of Experts.

The Work Manager

Work Managers often take the form of program managers, project managers, product design team leaders, and so on.

The Work Manager's job is easier when he can focus on this critical role and not on whether each Expert on the team knows their field or performs well in it.

They are accountable for achieving successful team outputs, and their teams may include one or more types of Experts. Work Managers face the challenge of coordinating and integrating the work of a diverse team of contributors.

Across private and public sectors, diverse teams produce a huge array of outputs (e.g., software applications, proposals, cost estimates, product designs); therefore it is impossible to generalize about where Work Managers reside organizationally. Suffice it to say here that the Work Manager's job is easier when he can focus on this critical integrative role and not on whether each Expert on the team knows their field or performs well in it.

In the CoE model the Work Manager's job doesn't change much. The exception is that Experts on his team are more likely to be highly qualified, up-to-date, follow good practices, and learn from other Experts around the organization.

Since the Work Manager is accountable for his team's outputs, he must hold authorities requisite to any manager who is accountable for subordinate outputs.

Since the Work Manager is accountable for team outputs, he must hold authorities requisite⁵ to any manager who is accountable for subordinate outputs. Those authorities are:

1. To select team members (from a pool of qualified candidates provided by the Expertise Manager).
2. To assign tasks and timeframes related to team outputs.
3. To remove unsatisfactory performers from the team (in coordination with the Expertise Manager, so that the non-performing Expert is then moved on – or out – at the determination of the Expertise Manager).
4. To provide meaningful input with performance consequences for the Expert's appraisal in the “what” - not “how” - portion of the job.*

The length of an Expert's assignment to a Work Manager's team will vary by task and organization. Professional service firms often follow the CoE model: Experts within them may work on a project for a few days, a few weeks, or for the project's duration.

* A variant on the split appraisal approach is to treat the CoE as a contracting agency that sends out individual contractors to the Work Manager. The rules of engagement between the Work Manager and the CoE are spelled out in a customer-supplier agreement. As with real contractors, customer satisfaction must be established as a priority of personal consequence to the Expert.

The Expert

In a CoE structure, the Expert has dual accountability. What makes this work is that he is accountable to the Work Manager for “what” work gets done and to the Expertise Manager for “how” work gets done.

Like any other team member, the Expert is accountable to the Work Manager for completing tasks within timeframes assigned (the “what”), and to operate as an effective team member on the Work Manager’s team.

The Expert is accountable to the Expertise Manager for conforming to established guidelines, processes and best practices; for maintaining necessary qualifications and certifications; and for contributing to and utilizing knowledge resources (the “how”).

The Expert is accountable to the Work Manager for “what” work gets done (meeting commitments to outputs, timeframes, and resource utilization). The Expert is accountable to the Expertise Manager for “how” work gets done (conforming to established guidelines, processes and best practices).

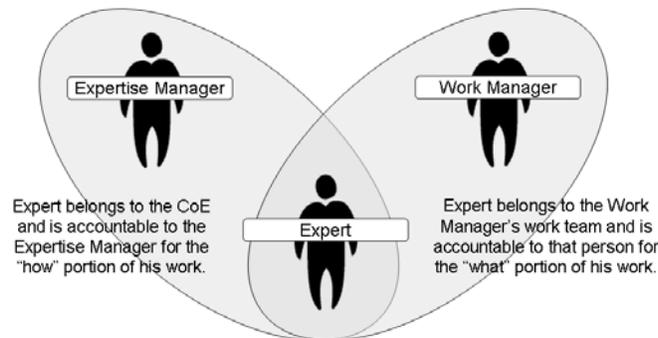


Figure 3: Each Expert is accountable to two different managers for two different aspects of performance: “what” and “how”

The Expert must never be left to wonder, “Who’s my boss?” He or she is genuinely accountable to each of the two managers and has no flimsy “dotted line” relationships in which one boss is “real” and the other is not. The key is that the Expert is accountable to each boss for *different* things. In principle, this is no different from the student who is accountable to more than one teacher at a time.

Experts may or may not be geographically dispersed. They may be assigned to perform duties onsite with their respective Work Managers, or they may work in “virtual” arrangements by long distance. Depending on workload, Experts may work for more than one Work Manager at a time. In addition to the already great need for communication between Expertise Managers and Work

The Expert is genuinely accountable to each of the two managers – the key being that the Expert is accountable to each boss for *different* things.

Managers, the latter arrangement introduces the need for considerable *proactive* communication and coordination among the various Work Managers involved.

Four Issues That Must Be Resolved Up Front

Every organizational design carries with it the proverbial devil in the details. The CoE is no exception.

Every organizational design carries with it the proverbial devil in the details. The CoE is no exception. Here are some examples of such issues, each of which must be worked out in advance by organizations adopting the CoE approach. Unfortunately, in no case is there a single right answer or solution to the problem at hand.

Absolutely and inevitably, there will be occasional conflict between the two managers. The Work Manager wants to do the right thing and the Expertise Manager wants to do things right.

Issue #No. 1: Absolutely and inevitably, there will be occasional conflict between the two managers: it is almost a law of nature. These two managers each want something different, and that difference sometimes leads to disagreement.

In broad terms, the Work Manager wants to do the right thing, and the Expertise Manager wants to do things right. The question to answer here is: “How do you decide when to cleave to the rigor of standards and when to bow to the demands of expedience?” Sometimes the two managers encounter situations in which they cannot answer this question for themselves. Therefore, *in advance of any such conflicts*, you will need to establish some kind of conflict resolution mechanism.

Considerations:

- How close is the crossover manager? If the Work and Expertise Managers are direct reports to the same person, the conflict-resolution mechanism is close at hand. This is not always the case: in some organizations, the crossover manager is many layers up and unlikely to get involved in conflicts many layers down.
- Can parties agree to disagree? Sometimes the conflict is about getting the “right answer” on a design or analysis. In this case, it may be possible to submit multiple solutions to higher management, and they can decide which one to use.
- Is there a third party, a standing committee or possibly an *ad hoc* group that could make the call?

A tug-of-war can erupt between the Expertise Manager and the Work Manager when both are (or were) experts in the same field.

In any event, the conflict-resolution mechanism must be determined in advance. Many approaches will work, but here is the one that will not: *“We’ll work things out as we go along.”*

Issue #No.2: A tug-of-war can erupt between the Work Manager and the Expertise Manager when both are (or were) experts in the same field. This is a tug-of-war to be averted rather than fought.

The authors have never seen an instance in which the Expertise Manager should cede accountabilities and authorities to the Work Manager. However ever you decide to handle this situation, each manager’s role should be made exceedingly clear. That clarity must be made early in the game, and it may need to be re-established on occasion.

Considerations:

- Is the Expertise Manager’s expertise either outdated or out of touch with the organization’s growing body of knowledge? Can it be updated or refreshed?
- Can the Work Manager provide informal mentorship (vs. formal direction) to develop the Expert’s talents?
- How much actual oversight is the Expert receiving from the Expertise Manager? Is the Expertise Manager too overburdened with other things to continue to add value? (And that brings us to the fourth issue, which follows.)

Issue #No.3: Sometimes Expertise Managers are spread so thin that their contributions become necessarily reactive. They farm out talent, but they have no time to cultivate it.

Considerations:

- Will senior management invest sufficient money and mindshare in the CoE for it actually to work?
- What is your ratio of Experts to Expertise Managers? Does your budgeted ratio seem reasonable given the complications of the specialty and the work at hand?
- Can technology mitigate this problem? Sometimes video teleconferencing and other tools can help bridge the gap created by infrequent face-to-face meetings.

Sometimes Expertise Managers farm out talent, but they have no time to cultivate it.

- Talented managers know how to use their time. Are you able to induct Expertise Managers who can really manage – or are they merely well-dressed Experts? If so, can the required managerial skill set be taught

Executives are often drawn to the CoE approach because it can save money and increase responsiveness through the use of resource leveling. But how often should you move experts between different Work Managers?

Issue #No.4: How often should you move Experts around between different Work Managers?

Executives are often drawn to the CoE approach because it can save money and increase responsiveness through the use of “resource leveling”: the ability to deploy experts where and when they are needed. That ability promises to reduce delays and overtime hours and to concentrate talent where it is needed most. This use of the CoE can benefit both the organization and the Expert who wants to build skills and a strong resume.

The Expert who stays with a single Work Manager becomes expert at dealing with *that manager’s* subject matter.

But there is a contrary view. The Expert who stays with a single Work Manager becomes expert at dealing with *that manager’s* subject matter. For example, a Java programmer who remains dedicated to the claims department in an insurance company will come to understand the claims end of the business very well. That’s great for the claims department, but the programmer’s depth of understanding comes at a high cost to himself professionally and to other departments who could use a good Java programmer.

Which approach provides the greater benefit? Based on priorities, that is for management to decide. Some organizations employ both approaches successfully.

Considerations:

- Which approach aligns best with current Corporate Strategy? Does deep knowledge in a specific arena trump the value of diverse experience? The answer to this question will drive decision making, and looks something like this, “The business needs _____.” As needs change, so must your approach. Get to know your Organization’s Strategic Plan and the assumptions it is built on. Monitor changes *regularly* and adjust your approach as needed.
- Which approach satisfies the Expert’s drive to collect different experiences? With some Experts, and within some specialties, that drive is strong. Failing to

accommodate these people could cost you your most talented Experts.

Conclusion

The CoE approach has potential to pay huge dividends throughout an organization. Potential dividends cascade from senior leaders netting strategic wins, to middle managers charged with reliably producing complex, quality products, to individual experts assured of sound career management and skillful leadership. Clear definition of roles and accountability structures (who is accountable to whom for what), and careful planning to anticipate and address common pitfalls on the front end can help turn this potential into measurable gains for individuals, work groups, and the organization alike.

Endnotes

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