Paying for Skills, Knowledge, and Competencies

**CEO Publication
G14-08 (642)**

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August 2014

To appear in L. Berger & D. Berger (Eds.), <u>The Handbook of Compensation</u>, 6th Edition

PAYING FOR SKILLS, KNOWLEDGE, AND COMPETENCIES

Implementation of skills, knowledge, and competency pay has become

commonplace, and usage has gradually increased in the last three decades. WorldatWork's

2012 Compensation Programs and Practices survey reported that 70% of private sector

firms (although fewer government or not-for-profit organizations) use skill acquisition as a

base pay increase criterion. However, usage of such pay systems is broad but not deep.

Surveys consistently show that a relatively high percentage of firms use some form of pay

for skills, knowledge, and competency, but typically with just a small percentage of the

workforce. Two decades ago, various authors predicted that this form of compensation

eventually would replace standard job-based pay systems. This clearly has not happened,

nor does it appear likely to happen in the foreseeable future.

This chapter argues that pay for skills, knowledge and competencies can take a

variety of forms, and that the most appropriate form for a given organization depends on

the business context that it must support. Overreliance on some forms and underuse of

others has led to the misapplication of the concept of pay for skills, knowledge, and

competencies. In particular, bonus-oriented systems are very underused as a way of

addressing the fluid business needs of contemporary organizations. A better

understanding of design options and their suitability to different conditions can lead to

greater use of these pay plans and greater effectiveness of the plans that are adopted.

DEFINITIONS

Pay for skills, knowledge, and competencies (referred to as SKC pay in this chapter)

is a compensation system that rewards employees for formal certification of the acquisition

and mastery of skills, knowledge, and/or competencies. *Skill* is observable expertise in performing tasks. *Knowledge* is acquired information that is used in performing tasks. *Competencies* are general skills or traits needed to perform tasks, often in multiple jobs or roles.

Oversimplifying somewhat, we can generalize about the emphasis of different versions of pay for SKC for different populations as follows. Systems that emphasize pay for skills tend to apply to non-exempt employee groups, such as factory workers and call center employees. Knowledge-based pay systems can apply to any type of employee. Competency pay plans tend to apply to exempt employee groups, such as professionals and managers. The use of different terms for different groups often leads to a lack of appreciation of the commonalities of these approaches. Reward professionals often fail to recognize that all of these systems share basic characteristics that make them different from traditional job-based pay.

Key characteristics of pay for SKC include the following.

1. Employees receive rewards only after demonstrating mastery of relevant skills, knowledge, or competencies. In traditional job-based pay systems, employees are paid for the job they hold, even if they cannot perform the job especially well.

2. There is a formal assessment of whether the employee has mastered the skills, knowledge, and competencies covered by the plan. This usually including a formal certification of some kind. In conventional job-based systems, there is no need for certification; merely holding the job results in the pay for that job. Pay typically changes as soon as the employee changes jobs.

3. Most SKC pay plans provide greater pay opportunities than under job-based pay

plans. The usual expectation is that not all employees will take advantage of the opportunities, but the opportunities are there for those who wish to pursue them.

FOUR TYPES OF PAY FOR SKILL, KNOWLEDGE, AND COMPETENCY

SKC pay system can reward up to three dimensions of skill, knowledge, and competency. These are depth, breadth, and self-management SKCs. Depth involves gaining greater expertise in existing SKCs. Examples of depth-oriented pay systems include the dual career ladder for technical personnel and the skilled trades system for blue-collar workers. Breadth involves increasing the range of the employee's SKCs. Classic skill-based pay systems in factories encouraged breadth, so that employees could competently perform all the tasks in a self-managed team. However, these systems also often had depth and self-management dimensions as well. Self-management SKCs involve those that are associated with higher levels in the organization, such as planning, training, budgeting, and so on. Organizations that reward such SKCs, such as in classic skill-based pay plans in factories, typically attempt to eliminate the cost of first-line supervision by providing teams of employees with the necessary SKCs to take over the management responsibilities.

Pay for SKCs can be delivered in three ways: it can be an alternative base pay (salary or wage) plan, it can be part of a merit pay system, or it can be delivered as a bonus that does not affect base pay. Most SKC pay systems in use today are base pay systems designed from the ground up with SKC principles in mind. Nearly all the research and the overwhelming majority of the writing that has been done on SKC pay systems have focused on such base pay systems. A second approach is to splice an SKC component into an existing merit pay system. In many merit pay systems, for example, performance

assessments that determine pay increases are based on a combination of goal attainment and competencies demonstrated. The third approach is to pay bonuses for mastering SKCs. Bonuses offer the most flexibility and the least risk to the organization, because the payments do not have the annuity feature of salary increases.

Combining the different dimensions that SKC can reward and the different delivery methods of SKC rewards suggests four different types of SKC pay systems. Type 1 - Career Depth dates to antiquity as a career path for employees to learn specialized skills. The apprenticeship approach for learning skilled trades is an archetypal example of this approach. The goals of this approach are to deepen employee expertise over a long period of time, and to outline training and certification requirements clearly for the employee.

Type 2 - Classic Skill-Based Pay typically emphasizes breadth of skill, blended with some level of self-management skill and skill depth as well. These systems are very complex but often can be very effective in increasing organizational performance by leaner staffing and reduced managerial layers. The primary goals of these plans are to increase employee flexibility and to provide employees with a broad perspective on the production or service delivery process so that they can help manage it.

Type 3 - Merit Pay often uses competencies that are defined for the entire organization, although in some cases these can be customized for particular categories of employees or even individuals. The purpose is to reinforce competencies that management believes are especially relevant to organizational performance. However, the competencies most often used (e.g., "teamwork" or "analytical thinking") can seem vague and may be difficult to assess.

Finally, Type 4 - Bonus plans permit the organization to make frequent changes

based on immediate talent availability and needs, and to attract and retain specialists who might otherwise consider the company's base pay system inadequate. The primary users of this approach today are the U.S. armed forces, where skill bonuses are used extensively for the attraction and retention of specialized talent (such as doctors, pilots, and Special Forces). Descriptions of the plan are limited to obscure federal publications.

An HR group at the Pentagon monitors the degree to which the armed forces have been able to fill each of hundreds of occupational specialties. If they have difficulty attracting and retaining personnel, a temporary enlistment and/or reenlistment bonus is offered. This may be modest – most are less than $10,000 – but it is possible to offer up to $40,000 for enlistment bonuses and $150,000 for reenlistment bonuses. (Reenlistment bonuses are higher because SKCs can be more readily assessed for existing troops.) Bonuses may be used for both officers (such as pilots and medical personnel) and enlisted personnel (such as Special Forces). The author's nephew, a Marine helicopter mechanic, was offered a $70,000 bonus to reenlist for two years at the height of the war in Iraq, which would have in effect doubled his cash compensation. Such bonuses are used sparingly and are offered only as needed; they disappear when staffing needs for a specialty are met. The specialties for which bonuses are paid and the amounts offered change so frequently that the military does not announce them.

Some teacher SKC pay systems also use bonuses rather than base pay increases for mastery of specific competency blocks (such as use of technology) or for certification by the National Board for Professional Teaching Standards. Use of bonuses rather than base pay increases is determined by state and local school board policy.

Figure 1 summarizes the discussion of the SKC dimensions required and form of

payment for each type. It also lists examples of each type.

	SKC Dimensions Rewarded	Form of Payment	Examples
Type 1: Career Depth	Depth	Base pay	Dual career ladder, skilled trades system
Type 2: Classic Skill-Based	Multidimensional	Base pay	Skill-based pay in factories
Type 3: Merit Pay	Multidimensional	Merit Pay Component	Competency pay, e.g. some teacher SKC pay
Type 4: Bonus Plans	Mostly depth so far	Bonus	Military critical skills bonuses, some teacher competency pay

FIGURE 1
TYPES OF PAY FOR SKCs

WHERE DOES EACH TYPE OF SKC PAY FIT?

Each type of pay plan fits some organizational conditions better than others. Type 1
- Career Depth systems work best when there is a long-term competitive demand for
specialized expertise and long training cycles are required to build key skills.   These
conditions make the retention of specialists highly desirable, because replacing the
specialists is expensive. This provides a return on the significant investment required for a
well-designed pay system, training programs, and certification testing. The system also
provides incentives for employees to deepen technical skills as a way to increase salary and
experience career progression, rather than seeing progression through a management
hierarchy as the only path for career progression. Type 1 plans are less successful if the
SKCs represented by the plan are rapidly changing. This is sometimes an issue in dual

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career ladders for scientists and engineers as well as in plans for information technology professionals. The problem is that employees may be well paid for SKCs that have become obsolete. Moreover, changing these plans may be difficult because they build entrenched interests in maintaining the plan, whether or not it meets current conditions. Skilled trades apprenticeship systems faced this problem during the past 15 years as companies have introduced multi-crafting (which emphasizes skill breadth) to increase the flexibility of maintenance workers and other tradesmen, and to reduce unnecessary staffing. Many employees who spent years on a depth-oriented system often found this change hard to accept and actively resisted it.

Type 2 - Classic Skill-Based Pay is an excellent fit with high involvement and lean organization designs that require employee versatility and/or a high degree of self-management. Procter & Gamble pioneered these plans in "greenfield" high involvement plants starting in the 1960s. Research suggests that Type 2 plans tend to work best in manufacturing settings, perhaps because it is easiest there to specify the skills required. These plans emphasize technical skill development, and are tightly woven with training programs, job rotation plans, and formal certifications. They require a significant investment of design and development time. These plans are less successful if business needs, technology, and organization designs are rapidly changing. A study of eight long term skill-based pay plans in high involvement manufacturing plants (Ledford, 2008) found that plans that survived were redesigned periodically to keep up with new skill requirements. It may not be worthwhile to invest a year or more in redesign work if the rate of change is so high that redesign cannot keep up with business needs.

The most prominent failures of classic skill-based pay plans have been in the high

technology field (Motorola and Intel, for example). This is probably because of the very

rapid changes in technology and work processes in that industry. Rapid change in

technology, products, and production techniques mean that the organization is constantly

reinventing itself on the fly. It is difficult for Type 2 plans to keep up with this rate of

change.   In one case of failure in high tech, the plan was obsolete before it was even

implemented and was abandoned.

Type 2 plans also fail if the organization does not use job rotation and recertification

policies that ensure that it is receiving value for the pay. If employees learn the skill once

and do not rotate back to positions where they can use the skills, they tend to lose the skills

over time, and cannot perform the tasks for which they are paid if called upon.

Type 3 - Merit Pay plans require the existence of a merit pay plan to which the

competency system can be added. Merit pay plans tend to be used primarily with

professional and managerial employees, partly because many non-exempt wage plans do

not receive merit pay. The competencies emphasized in these plans tend to apply to a wide

range of positions and job families, and usually attempt to encourage development of

competencies that reinforce strategic corporate directions, competencies that internal

research has shown to contribute to organizational performance, and/or competencies that

embody desired attributes of the organizational culture.

Merit plans demand a great deal of focus to be successful. For example, one

successful plan by a food processing company based managers' salary increases on two

traditional managerial competencies (leading for results and leveraging technical and

business systems) and two competencies that reinforced major corporate initiatives

(building workforce effectiveness and meeting customer needs). The company carefully

defined and communicated each competency. The plan worked because it brought great focus to a limited number of SKCs that were the basis for the plan.

All too often, however, competency systems lack focus. Competencies may be one component of several in a performance appraisal. It is all too common to see appraisals that are based on the achievement of multiple goals, behavioral criteria, and several competencies chosen from a menu. In the era of 3% salary increases, the weight of each competency in assessing performance in such a system is so small as to be almost irrelevant. Also, companies tend to take the easy way out in choosing competencies to reinforce, by allowing very diverse and numerous choices by those on the pay system, not providing well designed behavioral anchors for competencies, and using generic competencies that are not relevant to their particular organization. As a result, the entire exercise can appear "fluffy" and lacking in value.

Type 4 - Bonus Plans are very versatile. Because the pay delivered by these plans does not have the annuity characteristics of salary increases, the organization pays one time only for an SKC increase. If the SCKs that the organization needs change from one year to the next, that is not a problem; the list can change easily and quickly to meet changing needs. Also, because there is no annuity feature to bonuses, the cost of design errors is much smaller in bonus systems than in base pay systems. In addition, bonuses are very easy to add on top of any base pay system; they do not require the overhaul of the salary system as is required in the other types (especially Type 1 and Type 2).

The primary problem with bonus plans is that they can become too sloppy because they appear to be so forgiving. Management does not escape the need to think through the types of SKCs that it wishes to reinforce through the plan and how employees will be able

to gain the skills. A certain level of rigor is required if the plan is to be credible and if

employees are to understand why they need to acquire certain SKCs and what they must do

to obtain those SKCs. A plan that seems arbitrary or capricious will not be motivating.

One type of problem is frequently seen in all types of SKC pay, but especially Types

1-3. That is poor infrastructure for supporting the plan. Infrastructure includes good

communication about the plan, training opportunities that permit employees to acquire

SKCs that the plan rewards, renewal systems to keep the plan current, and good

implementation practices. Research suggests that infrastructure is more important than

the actual design in determining success. (See Ledford and Heneman, 2012 for a detailed

	Conditions for Best Fit	**Common Problems**
Type 1: Career Depth	Need for expertise; Multi-year training cycles for key skills; Expensive to replace talent	Obsolescence; High rate of change in expertise required; Poor infrastructure
Type 2: Classic Skill-Based	High involvement and lean work systems; Well-defined competency system	High rate of change in organizational conditions; Obsolescence; Poor infrastructure
Type 3: Merit Pay	Prior use of merit pay; Succinct list of desired competencies	Appraisal too complex; Competencies too numerous or vague; Poor infrastructure
Type 4: Bonus Plans	Rapidly changing demand for SKCs	Overly sloppy implementation; Poor infrastructure

FIGURE 2
TYPES OF PAY FOR SKCs: BEST FITS AND COMMON PROBLEMS

Discussion of this topic.) However, bonus plans are somewhat more forgiving because the organization wipes the slate every year and to some degree can start over – as long as management has credibility with the workforce.

THE CASE FOR GREATER USE OF TYPE 4 – SKC BONUSES

SKC pay in general is underused as a way to increase the development of employee capabilities in an era in which continual learning and development are needed. Even if pay for SKC never fulfills the hopes many had for it to replace job based pay systems, its use is likely to continue expansion in the future. Clearly, there are many areas of the economy in which there are serious skill gaps, despite high unemployment in the economy as a whole. Pay for skills can help address such gaps, and can help prevent gaps in the first place by incenting employees to build skills in emerging areas of need.

However, the analysis above suggests that the most common designs for SKC pay are part of the problem in increasing its usage. Types 1 and 2 are base pay forms of SKC pay that are increasingly difficult to develop and administer well. The conditions under which they experience difficulties are increasingly prevalent in today's economy. The rate of change in technology, work systems, organization designs, and business models is accelerating, and base pay SKC systems are difficult to design and maintain in such an environment. Indeed, SKC pay systems are more difficult to maintain than traditional pay systems in such conditions. SKC pay rewards skill redundancy, and everyone who is eligible to earn pay for a given skill, knowledge, or competency is affected every time that a relevant skill, knowledge, or competency changes. Thus, the ramifications of organizational changes are greater in SKC pay systems.

In addition, SKC obsolescence is an increasing threat to SKC pay systems. These

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systems assume some level of stability in the learning content of the work. Without at least

a reasonable level of stability, it is difficult to design a system for career advancement that

involves career advancement over many years. Yet increasingly this requirement for

stability cannot be met. Consider the new SKCs in IT and software engineering that did not

exist only a few years ago – social media, mobile hardware, smart phones that are more

powerful computers than the mainframes of 30 years ago, new programming languages,

and so on. Any SKC pay system designed for IT as recently as seven years ago would be

obsolete today.

Furthermore, SKC pay system success depends on good infrastructure – training,

communication, renewal system, implementation, and so on. Unfortunately, infrastructure

is a management weakness in far too many companies. Even if the original designers of the

pay plan are dedicated to maintaining the infrastructure, conditions change. Manager

advancement and turnover eventually leads to new players and new priorities, and

maintaining the system of the prior leadership may not receive high priority. Ultimately,

telling managers that they must maintain the infrastructure of the plan seems only a little

more realistic than the demand that managers do performance appraisals well.

Bonus-based systems look increasingly attractive in a chaotic environment, and they

deserve far greater use than they have received to date. Bonus systems never face the

problem of obsolescence. The plan can be changed every year or discontinued at any time

without doing violence to the base pay system. Changing organizational conditions become

a reason to use this form of pay, not a hindrance. Indeed, a bonus system can be used to

reinforce SKC relevant to management's new goals and initiatives each year. The quality of

the infrastructure can be good in some years and poor in others as managers change, and

as long as it is not so bad as to lose the good will of the workforce, the damage will not be lasting. Managers wise enough to make good use of infrastructure will be more successful, but those who are not so wise will not necessarily make the system ineffective.

CONCLUSION

This chapter has outlined four different approaches to paying for skills, knowledge, and competencies. It has indicated that each type fits a different set of conditions, and each tends to experience a different type of problem. The chapter concludes by arguing that there should be a far higher use of the least common form of SKC pay, that is SKC bonuses. This type of plan is less susceptible to the problems that affect other forms of SKC pay, and indeed it is most suited to the rapidly changing world of contemporary organizations.

REFERENCES

Gerald E. Ledford Jr. and Herbert G. Heneman III. (2011). *Skill Based Pay.* SIOP Science Series. Alexandria, VA: Society for Human Resource Management (SHRM).

Ledford, G. (2008). "Factors Affecting the Long-term Success of Skill-based Pay." *WorldatWork Journal*, vol. 17, no. 1, pp. 6-17.