Please read each article and answer the following questions in Chinese.

A. Under the direction of Arian Ward, the leader of Hughes's knowledge management project, Hughes has adapted an approach that minimizes costs and overhead often created by formalized programs. According to Ward, "We're trying to avoid top management support. As a matter of fact, I've asked them not to give it." He believes that employees will be far more likely to embrace new knowledge management practices if they are presented as something voluntary. "The whole idea is to get people involved in this because they care about it and they are interested in it—not because management tells them to do it. People are not completely resistant to change. What they are resistant to is being changed."[12]

With this in mind, Ward has begun to create "lessons learned" databases that are available to Hughes's various business units through groupware technology. He calls it a "knowledge highway." The goal is sharing new processes and practices throughout the organization so that each group can customize corporate knowledge to fit its particular needs. With an accent on information technology, he is creating "a common environment" in which knowledge can be easily transferred and new practices adopted freely.

In practice, the new environment has enabled Hughes engineers engaged in the fabrication of communications satellites to exchange insights about technology and process with other technicians, thereby cutting development time. Such exchanges are recorded and made available to help others involved in similar projects. By leveraging knowledge in this way, the manufacturing process can be perpetually enhanced to maintain a competitive edge. Ward says that Hughes must create the capabilities that enable employees to "rapidly and continuously learn."

The impetus for introducing knowledge management to Hughes was principally twofold. According to Ward, "the markets for government and commercial satellites were rapidly changing, prices were dropping faster than ever before, and we had to find a good way to get and use market intelligence." In addition, the company had been "downsizing and restructuring, and we're moving away from a federation of programs to an integrated satellite factory. We needed better use of knowledge so we could stop repeating mistakes and stop reinventing."[13]

The Hughes example demonstrates that knowledge management practices can be successful when initiated from the bottom up. Ward's approach to introducing and implementing knowledge management initiatives has important implications for the ways managers should pursue their own knowledge management initiatives. Clearly, he was not working from existing approaches and frameworks for initiating and implementing new programs at Hughes.

1. What paradigm was Ward working within when he developed his approach to knowledge management? (15%)
2. Over time, when should managers use the bottom-up or top-down practice, and what is the best way to introduce the new knowledge management practice? (15%)
3. Do you believe his is the best way given the many options available? Why? (20%)

試題

考生注意: 1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分，並限以藍黑色筆作答。
3. 試題隨卷繳回。(餘請詳閱試場規則)

B、 Large companies are at a distinct disadvantage when it comes to innovation for several reasons: (1) if they are successful, they often suffer from inertia, the fear of doing something different that might jeopardize their success; (2) they often become insular, that is, they resist change and mistrust anyone outside the organization; and (3) they rely on incremental innovations and shun anything that changes their product platform. Procter & Gamble (P&G) fits this profile perfectly. P&G had not launched a new brand since 1983, going 15 years without a new product. When P&G finally did introduce a new brand, the fat substitute Olestra, it was a disappointing failure. In the late 1990s, however, P&G finally broke through its dormant period, introducing six new products at one time. One, the Swiffer mop, was enormously successful, but the cost of the market launch of six brands simultaneously put P&G in a financially precarious position, and it once again backed off from developing new products.

With more at stake on each new product, P&G finally realized that it could no longer isolate itself from the outside world and hope to be innovative enough to compete. P&G holds about 27,000 patents, but it uses less than 10 percent of them in its current product portfolio. Although it is common for information technology and biotech firms to license their technologies and reap multiple streams of revenues from them, it has not been as common in less-high-tech fields such as consumer products and services. The world views P&G as a consumer products company, but it sees itself as a technology company. Its signature product, Tide, is not simply a laundry detergent; it is a highly technical product with a lot of science behind it. That science is proprietary and can be licensed to other companies to stimulate the development of new products.

In 1996, P&G formed a licensing group with the intent of sharing its intellectual property with other companies. Jeff Weedman was put in charge of this effort. He knew that for the licensing initiative to succeed, P&G had to be willing to license its best intellectual property, not just the pieces for which they no longer had any use. He also knew that he had to create an incentive system that would encourage his team to work with companies on the outside. After all, why would a scientist work long and hard on a new technology only to see it licensed to another company. Unfortunately, P&G was not receptive to Weedman's ideas in the beginning. Not only did it keep the group from tapping into the patent portfolio of valuable P&G intellectual property, any license revenue the group managed to generate did not go back to the group that invented it, but went to the company's general fund. It seemed as though Weedman's concept would never fly. Finally, in 1998, Weedman found a champion in the CEO, Durk Jager, who believed that it was time for P&G to accelerate its rate of innovation. They decided to make any patent that had been in the portfolio for at least 5 years or used in a product for 3 years available for licensing. For example, P&G's food and beverage division had developed a formula that helped the body to absorb supplementary calcium. P&G used this technology in one product—Sunny Delight. With Weedman's encouragement, the division began licensing the technology to other beverage companies, including Tropicana. The rationale for this decision was that if you do not license a beneficial technology to your competitor, that competitor will find a way to design around your patent and compete directly. If you license it to the competitor, you are ahead of the game because the competitor is paying you for the use of the patent rights. To date, P&G has completed a few dozen deals, and the number is growing. In June 2001, P&G announced a licensing agreement with Newell Rubbermaid's Goody division to produce a line of hair accessories. In another partnership with Changing Paradigms, a private-label manufacturer, it is expanding its baby-care Dreft brand detergent with stain remover.

Sometimes the real value of a project goes well beyond the financial rewards. If P&G brings in $1 billion a year in additional revenues from licensing (only IBM has managed to achieve that figure), that amount will represent only about 2 percent of P&G's total revenues. More important than the new revenue is the change in culture at the industry giant and the recognition that it must share its technology if it is to continue to grow. The company's new goal is to have half of all of its innovations come from outside the company through licenses and partnerships. ■

1. Please compare the two strategies that P&G adopted when it came to innovation. What advantages and disadvantages does each strategy have? (25%)
2. What does this article inspire you? Please write your ideas down one by one, as many as you can. (25%)