What is the Right Organization Design

By

N. Anand
Imperial College, London

And

Richard L. Daft
Vanderbilt University

Introduction

A startup company in Florida, called World Response Group (WRG), developed an unusual woven mat for the horticulture industry that was made from all-natural fibers. Horticulture growers in the U.S. produce hundreds of millions of potted plants each year. The product, called SmartGrow, dramatically reduced weed growth in potted plants and simultaneously provided important nutrients—all with no chemicals. SmartGrow materials and manufacturing expertise were available in China and India. As the company grew, the managers and board members talked frequently about organization structure. Two schools of thought emerged. One group wanted to import raw materials into the U.S. for manufacturing by WRG and thereby have direct control over manufacturing, marketing, and sales. These functions would be departments within WRG. The second group wanted to import already manufactured and packaged products from overseas, outsource marketing to an agency, and hire a horticulture distribution company to handle sales. The second group pushed the concept that no one within the company would ever touch the product. Nor would there be functional departments for manufacturing, marketing, and sales.

That discussion of structure within WRG would not have occurred 30 years ago when Robert Duncan published his seminal article, "What is the Right Organization Structure?" in *Organization Dynamics* in 1979. At that time, organizations were thought to be self-contained, and structure defined the reporting relationships among internal functional departments. Duncan's article provided important insights about the conditions under which different internal arrangements would achieve a company's mission. His insights are still referenced in management textbooks today.

The purpose of this article is to present key developments in organization structure and design that have occurred since Duncan's article and describe when each can be used for greatest effect. We will briefly review the important structural designs from 30 years ago and then describe key developments since that time. The concepts are organized into three eras, which reflect substantive changes in management thinking from vertical organization to horizontal organizing to open boundaries via outsourcing and partnering.

Era 1: Self-Contained Organization Designs

The first era of organizational design probably took hold in the mid-1800s and was dominant until the late 1970s. In Era 1, the ideal organization was self-contained in terms of having clear boundaries between it and suppliers, customers or competitors. Inputs arrived at the organization's gate, and after a transformation process, left as a completed product or service. Almost everything that was required during the transformation process was supplied internally. Design philosophies from this era emphasize the need to adapt to different environmental and internal contingencies and the ability to control the

different parts of the organization though reporting relationship in a vertical chain of command.

The structure of self-contained organizations can be thought of as: (1) the grouping of people into functions or departments; (2) the reporting relationships among people and departments; and (3) the systems to ensure coordination and integration of activities both horizontally and vertically.

The first three structures—functional, functional with horizontal overlays (matrix), and divisional—are traditional approaches that rely largely on the vertical hierarchy and chain of command to define departmental groupings and reporting relationships.

Functional. In a functional structure, activities are grouped together by common function from the bottom to the top of the organization (Figure 1a). Each functional activity—accounting, engineering, human resources, manufacturing,—is grouped into a specific department. Most small companies use this structure as do many large government organizations and divisions of large companies.

Functional with Horizontal Matrix Overlays. Few organizations can be successful today with a pure functional structure because the resulting functional silos inhibit the amount of coordination needed in a changing competitive environment. Organizations break down silos by using a variety of horizontal linkage mechanisms to improve communication among departments. These coordination relationships are often drawn on organization charts as dotted lines (Figure 1b). Many organizations use full-time product managers, project managers, or brand managers, to coordinate the work of several departments. The brand manager for Planters Peanuts, for example, coordinates the sales, advertising, and distribution for that product. General Motors has brand managers who are responsible for marketing and sales strategies for each of GM's new models.

Organizations that need even stronger horizontal coordination may evolve to a matrix structure, which is illustrated in Figure 1c. The matrix combines a vertical structure with an equally strong horizontal overlay. While the vertical structure provides traditional control within functional departments, the horizontal overlay provides coordination across departments to achieve profit goals. This structure has lines of formal authority along two dimensions, such as functional and product or product and region. Some employees report to two bosses simultaneously. For example, after a regional marketing promotion went $10 million over budget, Nike managers engineered a matrix structure that assigned dual responsibility by product and region to manage the introduction of new products each year. Headquarters establishes which product to push. Then product managers determine how to do it, but regional managers have authority to modify plans for their regions. Nike's matrix provides a counterbalance between product manager and regional manager ambitions.

Divisional. The divisional structure occurs when departments are grouped together based on organizational outputs, as illustrated in Figure 1d. The divisional structure is sometimes called a product structure or profit centers. Most large companies have

separate divisions that use different technologies or serve different customers. People within each division have more product focus, accountability and flexibility than would be the case if they were part of a huge functional structure. For example, Microsoft has product divisions for Windows, server software, mobile software, office software, videogames, business software, and MSN Internet service. Each unit acts like a stand-alone company, doing its own product development, marketing, and finance.

Era 2: Horizontal Organization Design with Team- and Process-based Emphasis

The second era of organizational design started in the 1980s. As the world grew increasingly complex, organizations of Era 2 experienced the limits of traditional designs. Coordination between departmental silos within the organization became more difficult and vertical authority-based reporting systems often were not effective in creating value for customers. Design philosophies of this era emphasize the need to reshape the internal boundaries of the organization in order to improve coordination and communication.

The horizontal organization follows from Era 2 design philosophies emphasizing the reengineering along workflow processes that link organizational capabilities to customers and suppliers. While traditional self-contained organizations of Era 1 embodied the need for hierarchical control and separate functional specializations, the horizontal organization advocated the dispensing of internal boundaries that are often an impediment to effective business performance. If the traditional structure can be likened to a pyramid, the metaphor that best applies to the horizontal organization is a pizza – flat but each is packed with all the necessary ingredients.

Examples

New product development is one context to which the horizontal organization design is most appropriate. Take the example of Ford's Escape gas-electric Hybrid Sport Utility Vehicle (SUV), which was conceived in response to consumer demand and competition from rivals such as Toyota and Nissan. Ford adopted the horizontal organization design, which involved the creation of a cross-functional team to handle the entire workflow for developing and launching a new automobile model. The team included highly accomplished individuals from research and product engineering – two groups that are traditionally in separate silos in Ford. There were two team leaders, one with experience in product development and another with expertise in launching vehicles in the market on time. In the development phase the team invested a considerable amount of time learning about customer requirements firsthand by talking to potential owners instead of relying on market research reports. The research scientists and engineers shared a common office space, discussed emerging issues over group lunches and improved product design through hallway chats. The team was sheltered from the rest of the organization and provided with resources rapidly as and when required. For example, when discussions

with the Japanese battery supplier were stalling because of language difficulty, the Ford corporate office dispatched an engineer fluent in Japanese to help the team out. Once the prototype vehicle was developed, the team shifted into launch mode in order to get it ready for production. The team started working more intensively with outside suppliers that provided critical parts for the new vehicle and were always around to solve manufacturing problems. The Escape Hybrid SUV was launched on time and is regarded by industry experts as a successful product for Ford.

Other firms that have used the horizontal organization for new product development include Xerox, Lexmark Printers, and Eastman Kodak. Another domain in which this design works effectively is in back-office work of financial services firms that involve handoffs to multiple departments. Barclays Bank in the UK uses the horizontal design for its mortgage services, incorporating legal and relocation services in addition to traditional tasks such as loan sanctioning and credit assessment.

The design features of the horizontal organization are summarized in Table 1.

Table 1. Design features of the hollow organization.

Features	**Horizontal Organization**
What is it?	Breaking down internal boundaries and vertical silos to make subunits work together *horizontally*
Design Principles	(1) Organize around complete workflow processes rather than tasks; (2) Flatten hierarchy and use teams to manage everything; (4) Appoint process team leaders to manage internal team processes; (4) Let supplier and customer contact drive performance; (5) Provide required expertise from outside the team as required
Advantages	(1) Rapid communication and reduction in cycle time of work done; (2) Individuals working together on teams develop broader perspective, more flexible and empowered roles; (3) Rapid organizational learning is facilitated; (4) Customer responsiveness
Disadvantages	(1) Separation of business activities into processes and non-process functions may be problematic; (2) Cinderella problem: non-process bits of the organization could feel neglected; (3) Teamwork could get in the way of functional specialization; (4) Traditional departments may instigate turf battles
When to use	When the organization can create better value by improving internal coordination internally to enable greater flexibility and tailored responses to fit customer needs.

Design Principles

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There are five principles governing the design of a horizontal organization. Organize around complete workflow processes rather than tasks. The key is to move away from a traditional department-centered mindset of breaking things down by functions and to think about how different pieces of work are holistically accomplished in the organization. Diminish hierarchical differences and use teams to carry out the work. The use of team structure empowers employees, decentralizes decision-making, and allows for greater learning across the organization. Appoint team leaders to manage the internal process in addition to coordinating the work. It is important to realize that monitoring the team's processes are as important as taking care of expected outputs. In the Escape Hybrid team, one individual took the lead role during development and adopted a relaxed and exploratory mindset while another individual took on a more task-oriented and deadline-driven role during the launch phase. Allow team members to interact with customers and suppliers directly so as to adapt and respond quickly if required. Direct contact allows members to keep abreast of changes in the environment more quickly. Provide required expertise from the outside as and when requested by the team. A good team realizes that it does not have all the answers and therefore it not shy about asking for help when needed.

Advantages

There is rapid communication among team members with different functional backgrounds, resulting in reduction in the time for getting workflows completed.

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Members of a team develop a broader perspective and become adept at solving problems that have the potential to hinder the effectiveness of the entire organization. Employees become more flexible in terms of skill and competence by being aware of the roles of others, and thus feel more empowered to make decisions. Being part of the team also guarantees some recognition and social support. Overall, the level of learning within the horizontal organization increases tremendously compared to the traditional pyramid structure because of close contact with both customers and suppliers at either end of the workflow. This factor, in turn, improves the long-run adaptability of the firm.

Disadvantages

As with any design option, the horizontal organization has its fair share of drawbacks that make it less than universally applicable. First, the identification of complete and self-contained work processes within an organization can be problematic. It may be difficult to separate workflows from departmental tasks in a straightforward manner. Strong departments within a firm might fight hard because they might perceive a loss of 'turf'. Even where the identification is done well and in a politically astute manner, there can be a short-run increase in costs while the transitional arrangements are perfected and as employees adjust to the lack of traditional forms of authority and direction. Second, there is the Cinderella problem: employees belonging to parts of the organization that have not

been earmarked as horizontal might feel relatively neglected. Finally, the emphasis on cross-disciplinary teamwork and immediate customer gratification could stand in the way of deeper technical specialization that can result in innovative products that focus on a future generation of customers.

When to use

The horizontal design is best used when the organization can create better customer value by improving internal coordination sufficient to be flexible and responsive to customers' needs. By creating key workflow processes and defining the support tasks, there is a better line of sight to customers. This design should be used when the organization is able to move to the mindset of a team-based structure without great difficulty.

Era 3: Organizational Boundaries Open Up

The third era of organizational design came into its own in the mid-1990s with rapid improvements in communication technology in the form of the internet and mobile phones. Era 3 also coincides with the rise of emerging economies such as China and India where there is a great pooled of skilled expertise in performing very specific tasks such as low-cost manufacturing and developing software. The external and internal boundaries of the organization opened up as never before. Managers became increasing comfortable with the idea that their organization could not efficiently perform all of the tasks required to make a product or service. In the early years of the era, large and bloated organizations shed a lot of internal tasks that were completed internally, and this led to a difficult period of adjustment. Later on, organizations were designed to be more lightweight by having a number of tasks were performed externally.

Hollow Organization

The biggest trend in the design of organizations in Era 3 has been, without doubt, the outsourcing of various pieces of work done internally to outside partners. The phenomenon became most noticeable in the shifting of the manufacturing function from the U.S. to cheaper areas of production in Asia. In 1986 a *Business Week* article noted that a number of industries including auto, steel, machine tools, consumer electronics, and semiconductor chips were shift their production base elsewhere, and hence could be characterized, in contrast to traditional manufacturers, as "hollow corporations." More than 20 years on business commentators recognize that adopting the hollow organization design form has lead to more value creation because U.S. firms now focus on honing their profit-making functions such as design and marketing.

Examples

There are now few industries that remain untouched by the hollow organization design option. Take the case of the U.S. military. Faced with contradictory demands – for greater troop deployment to fight terrorism around the world and pressure to cap the number of active personnel and reservists that are called up – the military has turned towards ever increasing use of private military company (PMC) contractors to provide all services except the core one of fighting battles and securing defensive positions. For instance, PMC Kellog Brown & Root, a subsidiary of the Haliburton Corporation, builds and maintains military bases that have been deployed in Iraq and also provides for all catering and cleaning requirements and its employees (comprising engineers, architects, logistics experts, cooks, and cleaners) live and work alongside servicemen and women in many active theatres around the world. Much of the sophisticated weaponry used by the military such as the F-117 fighters, the Patriot missile, and the Global Hawk drone is maintained on site by PMCs. A study of the use of PMCs by the military in Bosnia showed that outsourcing had reduced troop numbers by 24% and cut operational costs by 27%. As this illustration shows, the hollow design form allows for more flexibility, better use of specialist external technology, and greater efficiency.

More conventional examples of the hollow design abound. Sneaker companies Nike and Reebok pioneered the outsourcing of the manufacturing to South East Asian contractors more than 20 years ago and showed how profitability could be improved by adopting by hollow design. More recently, much of the mundane work of the financial services industry such as processing insurance claims, approving mortgage loans, and analyzing financial statements of companies has been accomplished by outsourcing partners located more than halfway across the globe. Another area is customer service work, from simple tasks such as confirming bank or credit card balances to sophisticated ones such as providing technical support for computer users. Rapid developments in communication technologies have allowed work that would have previously been kept in-house to migrate abroad and it is trend that has affected large and small companies alike. Fluor, a medium-sized California-based architectural services company outsourced much of the work of generating blueprints and specifications for a multi-billion dollar Saudi Arabian petrochemical complex to a team of 200 Filipino architects employed by partner firm in Manila. Likewise, solo architects working in the US can make use of freelance architectural contractors based in Budapest, Hungary to render plans into three-dimensional specifications.

The design features of the horizontal organization are summarized in Table 2.

Table 2. Design features of the hollow organization.

Features	**Hollow Organization**
What is it?	Outsourcing internal organization *processes* that support an organization's mission
Design Principles	1) Determine non-core processes – those that are *not* (a) critical to business performance, (b) creating current or potential business advantage, (c) likely to drive growth or rejuvenation; (2) Harness market forces to get non-core processes done efficiently; (3) Create an effective and flexible interface through a contract that aligns incentives
Advantages	(1) Cost savings due to less capital expenditure and overhead; (2) Tapping into best sources of specialization and technology; (3) Market discipline that leads to supplier competition and innovation; (4) Flexibility in using lower cost and higher quality inputs
Disadvantages	(1) Loss of in-house skills; (2) Loss of innovation capacity; (3) Costs of transitioning to hollow state; (4) Higher monitoring to align incentives; (5) Reduced control over supply; (6) Competitive threat of being supplanted by suppliers
When to use	When there is heavy price competition and there is enough of a market outside the organization to perform required processes.

Comment [ogsm3]: I wonder if we should make a bigger deal in the text about the distinction between process and module. I liked the distinction between process and function in your previous paper, but we don't have function here. I guess process now includes, HR and IT as well as warehouse and logistics process, or innovation process.

Design Principles

There are three principles governing the design of the hollow organization. (1) Determine core and non-core business processes in the organization. Typically, core processes share these characteristics: they are critical to business performance, they create current or potential business advantage; and they are likely to drive future growth and rejuvenation. All other processes can be deemed non-core and are likely candidates for being outsourced. For example, in building the Cayenne SUV Porche retained critical processes such as engine production, transmission manufacturing and final assembly contributing to just about 10% of the finished automobile as core and outsourced everything else. (2) Harness market forces to outsource non-core processes. With increasing globalization and installation of high-touch IT systems it is possible to offshore work to places that are not only cheaper, but also of higher quality. Big tax and audit firms, for example, routine outsource the filling and filing of individual and corporate tax returns to India-based

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firms such as MphasiS where highly qualified local accountants complete the task at a fraction of the price than an equivalent employee would cost in the U.S. (3) Write an effective and flexible contract to align incentives between the firm and the outsourcing provider. One sensitivity issue in using PMCs in war zones is that such firms are ultimately accountable to shareholders rather than the U.S. military as such, and therefore incentives have to be put in place to ensure continued cooperation.

Advantages

The main advantage of the hollow organization is in the cost savings that comes from utilizing a lesser amount of capital expenditure and in carrying a lesser administrative overhead. This design also provides greater organizational flexibility by allow the use of higher quality inputs at lesser cost. Firms can focus on what they do best while tap into the best sources of specialization and technology that outsourcers can bring with them. The market for outsourcing, in turn, makes provides more competitive and innovative thereby adding more to the bottom line of the hollow organization.

Disadvantages

There are several downsides to using the hollow design option. There is a loss of in-house skills, and with that possibly the reduced capacity to innovate. The costs of transitioning to a hollow state are high and include intangibles such as reduced employee morale. Also, if the supplier is distant both geographically and culturally, then there may be additional costs in terms of increased monitoring or switching to another supplier. Hollow organizations have reduced control over the supply of their products because of dependence on outsourcing provides, and there is even a threat of being supplanted by suppliers. To illustrate, Motorola hired BenQ, a Taiwanese manufacturer to design and develop handsets for its American markets; BenQ then used the expertise gained to create a market for itself in mainland China.

When to use

The hollow design is usually considered when an organization faces heavy price competition. This prompts managers to see what processes can be done cheaper outside the organization. In order to avoid being held hostage to a single supplier, there has to be enough of a market to stimulate efficiency in the performance of outsourced processes.

Modular Organization

The modular organization was another design that was popularized in the early 1990s. The image that is presents of the organization is one of a collection of Lego bricks that can snap together or be hived off as necessary. The design is similar to the hollow organization in its use of outsourcing. Crucially, however, what is different and distinctive about this form is that outsourcing conforms to pieces of the product rather

than outsourcing organizational *processes* (HR, warehousing and logistics) in the hollow form. The assembly of decomposable product chunks provided by internal and external subcontractors is the defining feature of modular organization design.

Examples

The making of Bombardier's Continental business jet shows how flexible modular organizations can be. The jet can fly eight passengers comfortably from coast-to-coast in the U.S. without stopping to refuel. Bombardier has broken up the design of the aircraft into 12 large chunks provided by internal divisions and external contractors. The cockpit, center and forward fuselage are produced in-house but other major parts are supplied by manufacturers spread around the globe: tailcone (Hawker de Havilland, Australia), Stablizers and rear fuselage (Aerospace Industrial Development, Taiwan), engines (GE, USA), wing (Mitsubishi, Japan), fairings to improve aerodynamics (Fischer, Austria), landing gear (Messier-Dowty, Canada), and avionics (Rockwell Collins, USA). It takes just four days for employees in Bombardier's factory in Witichita, Kansas to snap the parts together. There were a number of upsides for Bombardier in using the modular design. The firm was able to share development costs with its partners, slash the cycle time required to launch a new product, and was able to enter the market at a price point that was about $3 million less than its nearest competitor.

Other industries in which modular organizations tend to be prevalent include automobile manufacture, bicycle production, consumer electronics, household appliances, power tools, computing products and software.

The design features of the horizontal organization are summarized in Table 3.

Table 3. Design features of the modular organization.

Features	**Modular Organization**
What is it?	Assembling decomposable *product chunks (modules)* provided by internal and external subcontractors
Design Principles	(1) Break products into manageable modules; (2) Design interfaces that allow different chunks to work together; (3) Outsourced product chunks are produced more efficiently by others; (4) Design the organization to focus on assembling and distributing chunks created in-house and outside.
Advantages	(1) Cost savings and speed of responsiveness (2) Take advantage of competence beyond one's boundary; (3) Scope to experiment with different suppliers that focus on improving their own bit; (4) Increased ability to innovate through recombination of modules different ways

Disadvantages	(1) Not all products may be amenable to chunking into modules; (2) Poorly specified interfaces that hinder modules from work can hamper assembly; (3) Laggards can hold up innovation that occurs concurrently across a chain of collaborators
When to use	When it is possible to specify the nature of product modules and to design interfaces that allow them to join up and function.

Design Principles

Four principles govern the design of modular organization. (1) Break products up into separable modules that can be made on a stand-alone basis. (2) Design interfaces that allow different modules to work with each other. If this aspect is poorly done, then it can cause tremendous headaches down the line. Bombardier learned this principle from tough experience while outsourcing modules for aircrafts that it developed before the Continental jet. (3) Outsource product chunks that can be made more efficiently by external contractors. PalmOne Inc., the manufacturer of personal digital assistants, uses modularity in the product to focus on developing the software while outsourcing various hardware modules to subcontractors such as HTC of Taiwan. (4) Enable the organization to focus on assembling the different chunks of the product created in-house and outside.

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Advantages

The prime advantage of the modular structure is its efficiency and speed of response. Nissan operates the most efficient automobile plants in the U.S. thanks to its modular organizational design. Parts such as the frame, dashboard and seats are built by contractors and shipped right to the assembly line. Modular design also allows firms to take advantage of competence beyond their own boundaries. By partnering with HTC, PalmOne was able to reduce defects by 50%. Firms can experiment with the use of different suppliers that focus on being the best in their class. Another advantage for modular firms is the increased ability to innovate through the recombination of modules in different ways. Nissan, for example, can use its assembly line to build many more different models of autos than rivals thanks to its greater modularity.

Disadvantages

One key issue that limits the applicability of the modular organization design is the fact that not all products or production processes are amenable to chunking into modules. Second, poorly designed interfaces can hinder modules from working with each other and lead to costly rework. DaimlerChrysler adopted a highly modular design for its two-seater Smart Car but the launch was beset with a number of problems because the various

parts of the car would not snap into place as planned and required extensive debugging. Finally, firms have to manage partner firms as if they were part of one large coalition – and this where the modular design differs significantly from hollow. Innovation has to occur concurrently across a chain of partner firms in order to create a new generation of products and laggards can hold up the entire development cycle.

When to use

The modular design is used when it is possible to break up the organization's product or task into self-contained modules, and where interfaces can specified such that the modules work when they are joined up together.

Virtual Organization

Few of today's companies can go it alone under a constant onslaught of international competitors, changing technology, and new regulations. Organizations around the world are embedded in complex networks of relationships: competing fiercely in some markets while collaborating in others. Collaboration or joint ventures with competitors usually takes the form of a virtual organization - a company outside a company created specifically to respond to an exceptional market opportunity that is often temporary. The metaphor for this design comes from virtual memory in a computer, which makes it act if there were more storage capacity than actually present.

Examples

When Marks & Spencer (M&S), the venerable British retail chain, suffered the onslaught of dramatically declining sales in its core product range of women's clothing it turned to a one-time rival for help. George Davies is a serial entrepreneur who has previously set up and moved on from two companies that have competed successfully with M&S. M&S created a virtual organization with George Davies called Per Una with the objective of getting younger women interested in a range of fashionable but reasonably priced clothing. The arrangement was unusual for M&S, which is famously insular and likes to keep all its branding and merchandising in-house, but it proved to be a big hit and help revive its business fortunes. In launching Per Una, M&S provided only the retail shelf space and marketing support. Davies contributed everything else including the apparel and accessories, logistics, and sales training; he also kept the lion's share of the profits, while M&S benefited from increased traffic into its stores. M&S has recently brought the Per Una organization in-house by buying out Davies while retaining the separate identity of the brand. This example illustrates the key features of the virtual organization – willingness to collaborate with unlikely partners, capitalizing on market opportunity, and dissolving the virtual entity when it has served its purpose.

Virtual organization design is very prevalent in the high-technology industry where concurrent competition and cooperation is rife. For example, Symbian Ltd., a software developer for mobiles phones is a virtual organization set up by a consortium of competitors for handsets including Nokia, Sony Ericsson, Samsung, Panasonic, and Seimens. Large and mature companies also use virtual organization design to respond swiftly to a commercial opportunity. For example rivals P&G and Clorox have recently collaborated with each other to create a new generation of plastic wrap, Glad Press 'n Seal, to compete with market-leader Saran.

The design features of the horizontal organization are summarized in Table 4.

Table 4. Design features of the virtual organization.

Features	**Virtual Organization**
What is it?	Creating a *company-outside-a-company* to respond to an exceptional opportunity, often temporary
Design Principles	(1) Create boundaries around a temporary organization with external partners; (2) Use technology to link people, assets, and ideas (3) Each partner brings its domain of excellence; (4) Disband or absorb once the opportunity evaporates
Advantages	(1) Ability to move nimbly to respond to market opportunity; (2) Allows a firm to provide product extension or one-stop-shop service; (3) Leverage of organizational assets distributed across partners forming the virtual firm; (4) No commitment to keeping the organization going after initial opportunity vanishes
Disadvantages	(1) Increase in the load of communication to ensure that there is no duplication or redundancy; (2) Lack of trust could break down communication and coordination; (3) Employees in the virtual entity may have partisan or weak organizational identification
When to use	When it is possible to order explore a fleeting market opportunity by partnering with other organizations

Design Principles

There are four principles governing the design of the virtual organization. (1) Create boundaries around a temporary organization with external partners. The organization may look like a joint venture or a separate entity or a conglomerate division. (2) Use technology to link people, assets, and ideas. Often the virtual organization is not tangible in terms of separate offices, facilities, and other types of infrastructure. What makes it

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coherent is a sense of purpose and resources are dedicated to achieving goals. (3) Each partner brings its domain of excellence to bear. (4) Disband or absorb once the opportunity evaporates. For example, at the height of the dot-com boom P&G used technology partners to create a virtual organization called Reflect.com with the aim of selling cosmetics online. After the boom faded away, P&G disbanded the organization and absorbed the learning from the experience into a more traditional cosmetics division.

Advantages

The virtual organization provides firms with the ability to move nimbly to exploit a favourable market opportunity. Virtual design also allows a firm to provide a product extension that would have been possible otherwise and also to jointly leverage organizational assets are distributed across partnering firms. In the Glad joint venture for example, the wrap was invented in P&G labs but marketed under Clorox's well-established Glad brand name because P&G does not have a plastic wrap category. Since then, the two companies have continued the collaboration with the introduction of Glad Force Flex trash bags, which makes use of a stretchable plastic also invented in P & G labs. Finally, another advantage of the virtual form is that it can be easily disbanded or absorbed once the opportunity for collaboration goes away, or it can be made into a stand-alone entity if the opportunity becomes larger.

Disadvantages

The major downside of virtual organization design is that it requires a tremendous amount of communication and understanding to keep it going. Partners need to talk to each other to avoid duplication and redundancy. One recurring problem with the Per Una organization was that some of its apparel was strikingly similar what M&S had designed as well. Another problem is that lack of trust or misalignment of incentives could break down communication and coordination. In the Per Una case this problem manifested itself in terms of M&S's has an indefinite return policy – customer can brings in goods that they are dissatisfied with any time; George Davies, on the other hand, wanted a time limit on when customers could come back in to claim a refund or exchange so as to protect the profitability of the operation and also its reputation for fair commercial exchange. A final drawback is that employees in the virtual entity may have partisan or weak organizational identification, and this in turn, may reduce their commitment to it.

When to use

The virtual design is used when it is possible to explore a fleeting market opportunity by partnering with complementary organizations. In such situations, typically one organization does not have the necessary capability to respond, and it is necessary to look around to see what other organizations (including competitors) can offer. The design works best when there is clear understanding among partnering organizations as to what their rights and obligations are.

New Demands on Managers and Organizations

The shifting emphasis from vertical designs to horizontal designs to partnership designs has reshaped the roles of managers. The biggest change has been from having direct control over resources required for performance toward dependence on others over whom there is no direct control. Even with more dependence and less control under newer structural designs, managers are still responsible for performance outcomes. For a manager who is used to a traditional top down approach, it is hard to let go of control. As Peter Drucker said about large company managers, "They're used to giving orders, not to working with a partner, and they are totally different . . ."

A study of the fit between executive style and executive roles by the Hay Group distinguished between *operations roles* and *collaborative roles*. Operations roles have traditional line authority and are accountable for business results typically through direct control over people and resources. Successful operations managers set goals, establish analyses, take risks, and are intensely focused on results. Collaborative roles, however, lack direct authority over horizontal colleagues or partners, and are nonetheless accountable for key business results. Successful managers in collaborative roles are extremely flexible and proactive, achieve outcomes through personal communication and influence tailored to people and situations, and assertively seek out needed information.

Collaborative roles are more common in new organizational structures. The old way of managing was to defend the unit's boundaries and oversee performance. The key manager demands for succeeding with newer structural designs are as follows:

Get the right partner on the bus. In a hollow or modular design this means spending time to get to know a potential partner's strengths, weaknesses, and goals. For routine, commodity-type sourcing, due diligence is less important. But for a significant partnership, trust in the partner is essential. Check for gaps in skills and competency to assess whether the partner can deliver what your business needs. It is good to investigate prospective partners by talking to other companies they've partnered with and to develop a sense of how well suited their culture and priorities are to your own. For hollow and modular designs it is good to understand the process being outsourced and what to expect from the partner. When the partner takes it over, your control will be gone. The partner will get most of the benefit from improvements, innovation, and efficiencies.

Select people with lateral skills. People who are part of a horizontal team or who work with outside partners must have excellent coordination, personal influence, and negotiation skills. Soft skills dominate hard skills in the newer organization designs. A process owner or a partner cannot simply order a change. It's about influence, influence, and influence to adjust the relationship to serve new demands. Horizontal managers may

also act as evangelists, convincing people to give up their own needs for the greater good of collaboration for customer satisfaction.

Seek clarity, not control. As relationships move from vertical to horizontal and from work that can be observed to work performed elsewhere, much time has to be devoted to the front end of the relationship--setting expectations and creating structure. Every conceivable issue must be discussed and probably written down in contracts with outside partners. Memos of understanding are effective for process teams. The respective goals, incentives, and desired outcomes should be defined in advance. During the relationship problems surely will arise and changes will be made, but clarity in the beginning is essential. Steedman Bass, CEO of Strida, said that careful negotiation beforehand is essential. "Good contracts are important. They may be time-consuming, but taking the time to write and negotiate good contracts that work for both parties is essential. You're placing a lot of reliance on people, and it has to work. We did our homework up front, thinking of how we wanted the relationships to work, and that has probably eliminated 98% of the potential misunderstandings on either our part or theirs." Bass also emphasized, "I had never used contracts to sue or punish partners; I used them to mutually establish the playing field and rules of the game."

Design coordination mechanisms. Some amount of mutual control with partners can be asserted through explicit collaboration mechanisms. For an outside partner, example mechanisms might include a Leadership Governance Board of senior executives that meets quarterly, or monthly meetings of team leaders, or periodic visits to each other sites to see the work, build relationships, and discuss results. Scheduled periodic discussions of metrics, performance results, and written reports should also be part of the coordination process with internal or external partners.

Conclusion

After much debate, the managers at WRG, the startup horticulture supply company referred to at the beginning of this article, decided to adopt a hollow rather than a functional design. It was a learning process for managers and board members because the team's experience was in traditional structures. One manager and board member made to trips to India and China to meet and build personal relationships with suppliers. The product had to be supplied in bulk for horticulture nurseries and in appealing individual packages for retail sales. The time and travel overseas was only a fraction of the cost of buying machines and building a small manufacturing plant. Building strong relationships with sales distributors and a marketing agency was more challenging. These businesses were focused on their own needs more than on a partnership. Moreover, the board member who worked with distributors had something of an autocratic temperament which made it hard to connect with the prospective partners. The CEO discovered a knack for building horizontal relationships with growers and university researchers for testing the product's efficacy. The science supporting the superior efficiency of SmartGrow was thereby accomplished at minimal cost. After some trial and error, the hollow organization form proved a boon to WRG.

The movement from Era 1 to Era 3 has vastly expanded the array of organization design choices available to managers. The new designs—particularly variations of the horizontal and hollow forms--that have evolved in the past three decades offer a number of advantages, but as we have noted, each has particular challenges as well. And the implementation of a new design has its own challenges. Realigning a large company along horizontal processes can require a wrenching change in people and culture. Adopting a hollow form may require less change in culture, but a new management approach will be needed, with special focus on finding suitable external partners and building relationships that serve both partners. Maintaining external collaboration often seems to present more challenges than maintaining internal collaboration. With increasing global competition, managers have to be astute and realistic about the organization design that provides them with competitive advantage and their customers with greatest value.

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