The Optimal Allocation of Human Resources

by Philémon Paquette, Ph.D. 1

One of the questions which occurred to me over my more than thirty years as an economist, entrepreneur, manager, executive, and consultant to managers and executives in addressing organizational issues was:

Is there an approach to the allocation of human resources, which when applied by a practicing manager, will yield optimal results each time; where optimality is defined as producing the greatest output with the given resources while minimizing the impact of existing constraints on production?

By 1996 I was able to explicitly state the nature of a model that had served me well for several years, in working with a number of organizations, and that was:

Any organization is driven by the interplay of five elements: Strategy, Products, Systems, People, and Organization. When these five elements are in balance, the organization will be both highly effective and efficient.

In early 1997 I decided to articulate the structure of this model so that it might be used by others. At the same time, I decided to achieve two objectives at once and made this research and the articulation of this model, the basis of my doctoral dissertation for Barrington University. 2

After two years of intensive research and culling of notes from more than a dozen case studies, I arrived at what I now call A Balance Model of Organizational Management.

THE MODEL

The Balance Model of Organizational Management is the point of synergy in bringing the five elements of strategy, products, systems, people, and organization together in such a way as to produce the highest productivity possible while minimizing any existing constraints.

For the purposes of this model, the elements are defined as follows:

1. **Strategy**: Strategy includes the various tools to define where an organization

---

1 To contact Dr. Paquette, or for more information go to www.paquetteconsulting.com

wants to go, including mission statements, strategy statements, strategic thrusts, strategic objectives, or strategic plans.

2. **Products:** are those goods and/or services produced by the organization to serve its clients in achieving its strategic objectives.

3. **Systems:** Are those tools used to assist the people of an organization to produce the products and services necessary to achieve the strategic objectives of an organization, or to implement the strategy of an organization? This will include the information technology, policies, program structure, leadership or management approach, classification system, pay plan and incentives, and any other systems put in place to assist the organization to be more effective. Given the people employed by an organization there is an optimal set of systems necessary to support the optimal allocation and performance of those individuals.

4. **People:** Are the individuals employed by an organization (or active in an organization in the case of a volunteer organization), as well as their knowledge, skill-sets or competencies, attitudes, and aptitudes. In any organization there is an optimal configuration of the number, knowledge, skills, attitudes, and aptitudes of the individual employed by the organization to produce the products or services necessary to achieve its strategic objectives.

5. **Organization:** By organization here is meant the structure of the organization. Is it hierarchical, flat, flexible, or rigid? And what is the optimal organization structure to achieve the optimal allocation of human resources?

As might be seen in looking at these five elements, they cannot be independent of each other, but are to a great extent interdependent.

**THE BASIS OF THE MODEL**

The model is built on an examination of both economic and management theory, and equally importantly, it is based on examples, drawn from a number of case studies drawn from the author’s thirty-plus years of experience. Case studies include a number drawn from the Canadian Federal Government including from the Department of Energy Mines and Resources, the Canadian International Development Agency, and the Canadian Section of the International Joint Commission. They include also a number of Canadian industry associations, a US manufacturer, a US private training company, and a Canadian federally funded independent agency.

**LESSONS:**

There are three broad lessons which can be drawn from this study.
In the case of economic theory it can be concluded that while the optimal allocation of human resources is no different from the optimal allocation of any other economic factor, economic theory as a guide to the manager provides more of a framework within which to work; often too broad of a framework to address the problems that arise in smaller organizations. In the case of the smaller organization, economic theory can still be a guide, but the importance of the individual personalities can offset any broad guidance that economic theory might suggest as the best answer. Another issue is that in spite of the validity of the theoretical considerations, in much of economic theory, homogeneity of labour is assumed, or only very specific differences are allowed, whereas in the typical organization, labour is not homogeneous, and the differences can be greater than any model might be able to predict or manage. In short, if the manager is responsible for a relatively small organization, say less than a thousand, economic theory provides only limited guidance for the allocation of human resources.

In the case of management theory and organization theory, the conclusion of two other authors\(^3\) best summed up the situation for me when they wrote:

> There is no such thing as the theory of organizations. Rather, there are many theories that attempt to explain and predict how organizations and the people in them will behave in varying organizational structures, cultures, and circumstances. ... Anyone who studies this subject is free to join the school of organization theory of his or her choice, and is free to accept the philosophic boundaries of one group of serious thinkers over another. ... You may find that no single perspective deserves your loyalty, that each contains important information and insights that are useful to differing circumstances.\(^4\)

In the case of the Balance Model, given the interdependence of the five elements, it is by a manager looking at all of these elements, and assessing whether each independently makes sense, and then whether each is in support of the others. If the manager does this, then there is a far greater chance that the manager will choose an allocation of human resources that really does get the most out of the potential production and synergy of the individuals employed by the organization, and minimize constraints on that production.


\(^4\)Ibid. pp 5-6