

Competency-Based Socio-Economic Development

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Society for the Advancement of Socio-Economics
Annual Conference, July 8-11, 2004
Washington, DC

ABSTRACT

For the past three decades, the concept of competency-based management has received ever-increasing attention in the business management literature. This attention assumes crucial proportions as the industrial base of many countries is supplanted by the “knowledge economy” or “Post-Industrial Society.”

As the knowledge economy grows, intellectual capital becomes the key differentiating factor for organizations. To assure success, organizations must find ways of identifying, quantifying, measuring, assessing, and enhancing their intellectual capital assets. One way of accomplishing this oftentimes difficult task is through competency-based management.

This paper describes the concept of competencies as defined by leading scholars, presents examples of competency-based management as practiced in important organizations, and shows the benefits of competency management. The paper presents an example of a construct that was developed to address competency-based development of individual employees, work groups, and organizations. Building on this micro-level approach, the paper illustrates how the model can be tailored to meet socio-economic development needs through the intermediate level (urban planning and renewal), to the macro level (nation building).

INTRODUCTION

Mid-way into the twentieth century, the American economy (and other modern societies) began to shift from an industrial base to a knowledge base. That meant, somewhat simplistically, that the majority of work shifted from fabrication, assembly, and other physical-labor-intensive “manufacturing” tasks to labor of a more knowledge-intensive nature. As the nature of the work changed, so also did the nature of the workers.

With the decline of the industrial base of the American economy, attention of scholars shifted to the new worker in what is variously called the “Information Age,” the “Knowledge Economy,” and the “Post-Industrial Society.” Drucker (1968), Bell (1972), and Mankin (1978), for example, described a new generation of “knowledge workers.” Others (Deming, 1982; Senge, 1990; Bennet and Bennet, 2004; Tapscott and Ticoll, 2003) described how the characteristics of these new workers demand new patterns of organizational structures and transactions, new ways of designing and managing work systems, and new paradigms of leadership and management. Etzioni (1968) saw the emerging preeminence of knowledge as a force that would reshape societies as a whole. Toffler (1970, 1980, 1990), Naisbitt (1982, 1996), and others (Naisbitt and Aburdene, 1990) introduced this phenomenon to the popular press.

Other scholars, meanwhile, were turning their attention toward the concept of knowledge itself. Polanyi (1958) and others wrote of philosophies of knowledge. Deming (1982, 1993) argued for the need of “profound knowledge” of work processes, while Senge (1990) developed the concept of the “learning organization,” where profound knowledge was to be systematically and continuously enhanced and expanded with resultant continuous improvement of organizational performance outcomes.

Toward the end of the 1990s, “Knowledge Management” had become a discipline in its own right, with numerous scholars (Koulopoulos, 1997; Koulopoulos, Spinello, and Toms, 1997; Davenport and Prusak, 1998; Liebowitz and Beckman, 1998; and Frappaolo, 2002) contributing. The general body of knowledge expanded: Fisher and Fisher (1998) studied the role of knowledge management in the performance of work teams. Stewart (1997, 2001) and Chatzkel (2002) addressed “intellectual capital” as a new source of wealth and competitive advantage. Fitz-Enz (2000) focused on knowledge management in terms of “human capital” and the return on investment in human capital. Most recently, Liebowitz (2004) predicted a coming crisis in human capital.

As knowledge management developed and grew, a sub-discipline – competency management – emerged. By and large, the subject was limited to the use of competencies in organizational management, and specifically to the management of organizational human capital. Lucia and Lepsinger (1999) demonstrated the use of competency modeling; Shandler (2000) addressed the nexus between competencies and Senge's “learning organization;” and Zwell (2000) called for the creation of a “culture of competence.” Dubois and Rothwell (2004) and Schoonover (2002a, 2002b, 2002c, 2002d, 2003a) offer holistic approaches to competency-based management of human capital.

Quinn (1996) and Parry (1997) focus on the use of competencies to develop leaders and managers. The American Productivity & Quality Center (1999, 2000), Schoonover (2003b), and Zwell (1998a, 1998b, 1998d) address the use of competencies in identifying, hiring, and developing top-level executives. Zwell (1998c, 2002) and Schoonover (2003a) address competency-based performance improvement, and Dubois (1996) specifically addresses the role of executives in using competencies to improve their organizations' performance.

While the aforementioned would seem to demand an expansion of the use of competency management from the business arena to society in general, the literature shows very little effort in that regard. Porter's seminal work on competitive strategy (1980, 1990) hardly touches the subject in addressing competition among business entities and nations. The same can be said of Summers *et al.* (1999) in the area of urban change. Only Eade (1997) can be said to devote significant attention to the use of competencies to address socio-economic issues.

This paper represents a beginning of an effort to address the need for increased attention to the use of competencies in addressing socio-economic issues. To that end, the paper will briefly discuss individual and organizational competencies and capabilities; competency and proficiency modeling, with a view to improvement of performance or addressing of socio-economic issues; competency management; benefits from competency management; and competency centers. A construct for competency-based learning and performance improvement, developed by the Internal Revenue Service Office of Research, will be described. Finally, the concept embodied by the IRS Competency-Based Learning Plan will be expanded to illustrate the use of competencies in Urban Planning and Urban Renewal, and in Nation Building.

INTRODUCTION TO COMPETENCY MANAGEMENT

It can be convincingly argued that Competency Management should be *the* central focus of every business system, yet it is conspicuously absent in many organizations. Superior organizational performance is unlikely, absent a competent, coordinated, and motivated workforce; and Competency Management can be an effective methodology for developing such a workforce.

Competency Management provides significant benefits to organizations, work groups, teams, managers, and individuals alike: For the organization, work group, team, or manager, key competencies and skills are identified, assessed, and improved by centralized Competency Centers. Competency Management guides the realization of the business vision and strategy by validating the feasibility of achieving the strategy, developing necessary competencies, and ensuring delivery of comprehensive capacities through an enterprise-wide sourcing strategy. Competency Management also can significantly improve productivity and quality through better matching and allocation of the workforce to the work. In addition, Competency Management complements and enhances disciplines such as Strategic Sourcing, Intellectual Capital Management, Knowledge Management, Project Management, Financial Management, and Performance Management.

Individual employees also benefit because this discipline promotes fairer compensation, better work assignments, and career actualization. Further, Competency Management enables smart development of the workforce through training, mentoring, and work assignments, resulting in improved career management, employee motivation, and commitment. Finally, this discipline provides communities, tools, and methods that support the performance and development of the entire workforce.

Business Context and Challenges

Most organizations manage the allocation and assignment of employees to workload credibly at the local team, work group, and branch levels. Examining this core competency of strategic sourcing at higher organizational levels, however, indicates that performance quickly degrades, resulting in inefficiencies that can easily trigger losses of 20-30% in attainable performance at the enterprise level.

The typical causes of this poor workload allocation include obsolete bureaucratic governance and organizational structures, dysfunctional leadership culture, as well as ineffective performance management and compensation practices. First, most branch, division, and department managers correctly believe that they effectively control workers under their authority because they pay, hire, manage, and appraise them. Managers rarely receive adequate benefits and reciprocity from loaning out their workers to other divisions. Consequently, employees are often secreted away and saved for unseen emergency circumstances. Thus, at each organizational level up the chain of command, further needless inefficiencies are introduced in organizational performance, capacity, and rigidity.

The reduction in overall organizational performance from poor workload allocation is likely equaled by the failure to provide adequate individual career development and performance opportunities. Not only do these failures further reduce long-term enterprise performance, but also these missed opportunities can sour the employee-employer relationship and inhibit trust, loyalty, commitment, and engagement.

Most organizations inadvertently promote internal competition among individuals for management and leadership positions at the expense of cooperation and collaboration. Managing a large staff and budget are key sources of power and advancement in most large organizations. This competitive culture extends outward from the managers to the organizations they represent. Personal agendas and dysfunctional management cultures tend to rule out more effective governance options. In this culture, managers hoard staff and tend to reward those employees who are loyal and who share their values and beliefs, rather than the true high performers and innovative thinkers.

Leaders and managers traditionally have been advanced and otherwise rewarded for being loyal and for complying with the superior's plans, and for avoiding mistakes that cause embarrassment for superiors. The goals that lead to success individually are usually not congruent with the enterprise goals, because there are high risks and few rewards for advancing these global objectives. There often are no rewards for improving performance and developing innovations for competitive advantage. Failures that result from risk-taking are usually severely punished, and thus most managers who are not on the preordained career fast-track tend to reduce risk by not changing or challenging the status quo, and by following their superior's lead.

When compensation, rewards, recognition, and opportunities are not distributed according to merit, contribution, and accomplishment, then workforce motivation and commitment will fall. Employees will stop going the extra mile, volunteering solutions, and offering innovative ideas when there is no benefit to doing so. When talented employees are not treated well, they will seek opportunities in other divisions within the firm, in other firms, or compete directly against their present employer. In all cases, organizations that do not practice Competency Management will lose in a major way.

Precursors of Competency Management

Within the past 15 years, several related disciplines – Performance Management, Intellectual Capital Management, Knowledge Management, and Competency Modeling – have provided some guidance regarding how to manage and develop competencies. These disciplines have, however, largely failed to achieve their promise because they did not focus on connecting the workforce to the work, resources, and competencies necessary for success.

The best of these, Competency Modeling, provides an incomplete solution, covering the organization, classification, and development of key skill sets within the workforce. Competency Modeling, as described and practiced in the literature, focuses on the behaviors necessary for success in given competencies, rather than adopting a multi-dimensional approach.

Intellectual Capital Management hints at the value of different intangible resource classes and competencies, but provides little advice on implementation or strategic sourcing. Most Intellectual Capital models focus on measuring three categories of intangibles: customer, organizational, and human capital. Competency Management creates value from conceptual Intellectual Capital models and metrics by detailing needed competencies and capabilities, and welding the organizational and human capital components together in support of organizational goals and performance.

In this view, Knowledge Management plays a supporting role by formalizing workforce experience, expertise, and knowledge into Knowledge Repositories and also capturing the results from team, project, and community problem-solving. Performance Management deals with workforce performance and assessment, but pays little attention to classifying workers into meaningful categories so that the organization can more effectively bundle, develop, and manage capabilities.

An intelligent organization would effectively apply human resources in terms of staff, partner, and community to better accomplish organizational, partner, community, and personal goals. In this vein, it is necessary to know the assembled talents, capabilities, and interests of the workforce and other members in order to better utilize them. Also, it would be advantageous to catalog the knowledge and experience of these groups, tell how to reach them, and indicate their availability to contribute. Finally, improving the work environment and obtaining the trust, commitment, motivation, and engagement of employees through improved development, increased opportunities, and fairer rewards would be a necessary enabler of human and organizational performance excellence.

Within this same context, innovative IT also plays a key role in enabling the success of Competency Management through the development of new technology capabilities and through a leveling effect regarding information access. The following is a sampling of software applications that would help make enterprise-wide Competency Management a reality: Enterprise Locator Systems, Automated Job Application Systems, Automated Help Desks, Workload Optimization Expert Systems, Advisory Expert Systems, Knowledge Discovery through Data and Text Mining, and Learning Management Systems.

COMPETENCY DEFINITIONS

The definition of competency has evolved over the past 30 years, and today is close to an operational, implementable description that includes both properties and classification. Following are descriptors proposed by leading scholars:

- *Competency* – A human characteristic that underlies successful performance (McClelland, 1973).
- Characteristics that are causally related to effective or superior performance in a job (Klemp, 1980).
- An area of knowledge or skill that is critical for producing key outputs (McLagan, 1989).
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- Characteristics include five types: motives, traits, self-concept, knowledge, and skill (Spencer and Spencer, 1993).
- Competencies add value and help predict success (Flannery, Hofrichter, and Platten, 1996).
- Competencies can be classified as organizational, job- or role-related, and personal (Byham and Moyer, 1998).
- Tools used by workers in a variety of ways to complete units of work, or job tasks (Dubois and Rothwell, 2000).
- Technical competencies are specific to certain roles, and non-technical competencies are more generic in nature (Rothwell, Hohne, and King, 2000).
- Competencies consist of several dimensions: behaviors, motivations, and knowledge (Dubois and Rothwell, 2004).

BENEFITS OF COMPETENCY MANAGEMENT

Competency Management, it has been argued, is the key to sustainable competitive advantage. Competency Management enables one to identify, assess, select, develop, organize, manage, and improve key capabilities that achieve superior results by: improving performance; improving workforce utilization, development, and motivation; achieving the business vision and strategy; and building sustainable competitive advantage. This approach recognizes that the knowledge, expertise, experience, motivation, and commitment of the workforce, and much less the business process itself, are critical to organizational success. Understanding the knowledge, expertise, competencies, and career aspirations of the entire workforce is a crucial foundation to organizational improvement. Better allocation and utilization of the workforce and knowledge resources can rapidly improve productivity and performance by 10-20% by improved matching of work and workforce, and by more focused workforce development. Competency Management can improve conception and realization of the business vision and strategy by providing a crucial link that leads to improved alignment of staffing resources to the mission, vision, strategy, and goals of the organization. Properly implemented, Competency Management leads to improved workforce development, performance, opportunities, motivation, and commitment. Finally, this discipline further supports organizational performance through bundling of resources into capabilities that provide key business value.

One of the principal benefits of Competency Management lies in its ability to integrate a number of complementary disciplines. At the strategic level, Competency Management enables the unification of business strategy development and realization (enabling enhanced focus on awareness of current competency realities and limitations and future directions, and a greatly enhanced focus on and improvement of strategic planning); customer relationship management (enabling enhanced emphasis on customer-focused and results-based competencies, and improved customer service, satisfaction, and loyalty); and supplier/partner relationship management (enabling enhanced focus on relationship-building and -maintaining competencies for interfacing personnel, and improvement of supplier/partner relationship processes).

At the operational level, Competency Management enables unification of resource management (identification and development of competencies to improve the management of finances, equipment, human capital, and facilities); performance management (focus on appraisal,

recognition, reward, and motivation of employees, and on metrics for doing so, for the purpose of recognizing and rewarding true expertise and performance and making the connection between workforce competencies, workforce performance, and achievement of organizational goals, objectives, mission, and vision); business process management (providing a competent workforce that can effectively perform the work irrespective of changes to the organizational or external environment and irrespective of changes to business processes); and organizational learning (focus on competencies [e.g., research, analysis, and problem-solving competencies] to facilitate continuous cycles of assessment of organizational performance; translation of assessment findings into prioritized, actionable opportunities for improvement; and implementation and monitoring of actions to improve performance).

On another level, Competency Management provides linkages among strategic sourcing (focus on determining competencies and skill sets needed by present and future workforce, partners, and communities, and on ensuring the workforce, partners and communities have the capability and capacity to perform successfully); talent management (focus on identifying, recruiting, hiring, and retaining employees – and identifying and forming coalitions with partners, suppliers, and communities – who possess or can develop the competencies that will enable the organization to perform successfully); and career planning/succession planning (focus on training, education, development, and opportunities for all employees, partners, suppliers, customers and other stakeholders, and communities to learn, grow, and achieve).

Finally, Competency Management can unite and synergize intellectual asset management (focus primarily on identifying, locating, and assessing – rather than creating, improving, and applying – intellectual capital); expertise management (focus on identifying and exploiting knowledge of existing experts and practitioners both within the enterprise and within the wider “extended enterprise” or “business network”); knowledge management (focus on supporting the workforce and management by, *inter alia*, building knowledge repositories and expertise locator systems to capture and share explicit and social knowledge); and expert systems management (focus on capturing and representing tacit knowledge of domain experts in the form of advisory systems).

SYMPTOMS AND CONDITIONS FOR USE

It would be a mistake to view Competency Management as a panacea – a “silver bullet” that can solve every problem, resolve every issue, and lead to some organizational Utopia. That said, there are a number of circumstances where Competency Management should be considered. Strategic planning is probably the most likely candidate for competency-based approaches: Identification of current and future competency needs is an integral part of SWOT (strengths, weaknesses, opportunities, and threats) analysis, which is a major element of nearly all modern strategic planning models. Succession planning and talent management are also particularly amenable to successful achievement through Competency Management. When performance (either individual or organizational) is substandard or below the expectations of customers or stakeholders, Competency Management – e.g., identification of required competencies and measurement of the level of competencies in the workforce – may provide the key to improved performance. Workforce issues such as low workforce morale and motivation, high attrition

rates, and inability to identify and recruit talent may often be traced to poor competency management.

Competency Management may also be the “approach of choice” in other situations such as where new programs or projects are being launched; where the internal or external environment is hostile or extremely dynamic; where urgent, critical situations or problems demand immediate resolution; where projects are behind schedule and/or over budget; and where governance interventions have not been successful in solving legal or ethical problems.

COMPETENCY MODELING AND WORKFORCE DEVELOPMENT

Competency Modeling, as described in the mainstream literature (Byham and Moyer, 1998; Dubois, 1996; Dubois and Rothwell, 2004; Lucia and Lepsinger, 1999; Rothwell, Hohne, and King, 2000; Spencer and Spencer, 1993; and Ulrich and Smallwood, 2004), focuses on behaviors necessary for success in given competencies. As described here, this modeling adopts a multi-dimensional approach in which behavior is but a single criterion. Additional elements include: accomplishments and contributions; experience, expertise, and knowledge; performance measured through 360-degree appraisals; roles, responsibilities, and competencies; education, training, self-study, and other forms of development; learning and improving; teaching, coaching, guiding, and mentoring; publishing and delivering presentations; cognition (objective – principles, knowledge, methods, learning, and adaptation; and affective – emotional intelligence, biases, values, and beliefs); and, finally, behavior, especially communication, social and political adeptness, and technical skills.

Competency Modeling and Workforce Development Processes

While a number of effective and useful competency modeling approaches exist, the nine-step process in Table 1 has gained prominence. This process focuses on aligning the organization’s competency management technique to its strategic direction. Using the Competency Modeling Process as a foundation, Beckman (2004) advocates a five-step Workforce Development Process (Table 2) to further integrate competency management activities and to align employee development processes with the organization’s mission, vision, strategies, objectives, and plans.

Step 1	Determine core competencies, domains, & disciplines needed to improve performance & implement strategy.
Step 2	Define taxonomies for: competency families/model/framework; business functions and Competency Centers; job families, work roles, and job descriptions.
Step 3	Build a proficiency model for each competency.
Step 4	Determine disciplines, traits, and proficiency levels needed to staff openings for jobs, projects, and details.
Step 5	Customize competency and proficiency models to enable organizational strategies, business functions, and work roles.
Step 6	Determine enterprise-wide capacity needs by core competencies and proficiency levels.
Step 7	Capture workforce self-assessments classified by organizational competencies, proficiency levels, and employee career goals, aspirations, and interests.
Step 8	Identify capability and capacity shortfalls, and map development paths along career ladders.
Step 9	Guide staffing, hiring, appraising, promotion, development, and training actions based on present and future needs, opportunities, and shortfalls.

Table 1. Nine-step Competency Modeling Process

Step 1	Capture and assess competency and proficiency data on all employees, partners, contractors, and suppliers (e.g., Position Descriptions, job roles, and responsibilities; proficiency levels in all key competencies and disciplines; process, project, task
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	force, and research experience; accomplishments and resumes; appraisals, recognition, and rewards; training, education, mentoring, temporary details, other development activities; presentations: conferences, seminars, and teaching; publications: proposals, tutorials, papers, and books)
Step 2	Capture employee career goals, aspirations, and interests.
Step 3	To meet both organizational and employee needs and goals, prepare Individual Development Plans to progress to next career level.
Step 4	Provide needed developmental activities: training, seminars, workshops, conferences, communities, research, details, apprenticeship, and mentoring (e.g., accomplishing business strategies and plans; building competencies and disciplines; improving resources, process/practice, and results)
Step 5	Assign and track employee and organizational progress toward career and organizational goals.

Table 2. Five-step Workforce Development Process
THE COMPETENCY CENTER: A COMPREHENSIVE BUSINESS SOLUTION

Competency Management is seen as the future of management because it enables organizations to succeed in a variety of environments and contexts. It is seen as *the* most critical business systems component over which the organization has control. The care and feeding of the workforce must be paid attention to, or else firms risk losing their key performers and expertise to their competitors. Enabling components and disciplines include stakeholder analysis, requirements development, strategic sourcing, novel organizational forms, innovative IT, and improved compensation schemes.

To fully realize the potential of this concept, a novel organizational form, the Competency Center, is proposed. A number of Competency Centers will need to be formed to manage the critical occupations, core subjects and disciplines, and skill sets necessary for success. The Centers are responsible for sourcing and developing all staff enterprise-wide for a given competency. Competency Centers also supply experienced practitioners to staff enterprise operations, development, maintenance, projects, and details for necessary core functions such as marketing, R&D, production, service, distribution, finance, HR, and IT. Further, domain experts elicit, capture, edit, and organize knowledge regarding the selected competency, and develop and maintain a Knowledge Repository that supports all practitioners. In addition, Competency Centers organize and support active communities to further support practitioners in problem solving and formalize the capture and sharing of best practices and lessons learned.

Competency Centers are also responsible for providing the workforce with meaningful work, opportunities for accomplishment and development, and career advancement and self-actualization. Creating independent Competency Centers can improve performance by altering the organizational, authority, and sourcing relationships between the workforce and management, thereby breaking the hold of dysfunctional bureaucracies. Funding for the Center (staff, equipment, facilities) could be provided by the clients being served through a charge-back mechanism.

Competency Center Roles and Responsibilities

The primary role of the Competency Center is Centralized Competency Management. This includes, as a minimum, the systematic managing of individual and organizational experience, knowledge, and expertise enterprise-wide for a selected key subject area, domain, or discipline by process, function, or industry. Another principal Competency Center role is Competency Modeling – determining needed competencies from strategy, customers, and operations;

assessing workforce capabilities and capacities, gaps, and overages; and developing action plans to mitigate gaps and develop adequate resources. This leads logically to sourcing and workforce management (including management of enterprise-wide sourcing for current and future staffing needs, supplying competent staff to meet all enterprise needs, and assisting in assigning staff to projects, organizations, processes, and details) and performance management (establishing annual commitments by work role and competencies, and developing metrics by which to assess progress in meeting commitments; assessing contributions by individual employees, teams, and work groups to organizational performance and growth; and managing the measurement, appraisal, recognition, reward, and compensation processes).

Sourcing and workforce management, combined with performance management, drives another important role of the Competency Center, *viz.*, workforce development. This would include, among other activities, capturing employee career needs and goals, and aligning those with organization goals; managing and implementing training, education, and other individual development and learning; and creating growth opportunities through temporary details, mentoring, and apprenticing.

Another function of the Competency Center is the enabling of collaboration, improvement, and research. Examples of tasks associated with this role include managing and supporting Communities of Practice, and supporting research and analysis by developing and sharing white papers, research reports, tutorials; and eliciting tacit knowledge from domain experts, for the purpose of identifying and sharing best practices and lessons learned.

Finally, Competency Centers could support the implementation and maintenance of knowledge management initiatives and IT Applications: The Competency Center could, for example, create and maintain web sites and services to support communities and E-Learning and to enhance the efficiency and effectiveness of business (both value creating and support) processes; develop and maintain Expertise Locator Systems, Knowledge Repositories, and Performance Support Systems; create and maintain Data Warehouses with Data Mining capabilities, and develop other types of Expert Systems.

TRANSFORMING THEORY INTO PRACTICE: A COMPETENCY-BASED LEARNING PLAN

Following a major reorganization and dispersal of human resources, the Research community of the Internal Revenue Service was faced with the challenge of how best to use scarce training and travel dollars to optimize the capability of researchers to achieve their strategic goal to “make a difference in tax administration.” To that end, in 2001 the IRS Office of Research employed A.D. Little, Inc., to assist in devising a methodology for enhancing Research competencies. The IRS and A.D. Little together developed what was to become the Competency-Based Learning Plan (CBLP).

Purposes

As stated, the primary objective for developing the CBLP was to facilitate the Research community's contribution to achieving organizational goals. This came to be defined as (1) a competent, high-performing workforce; (2) improved service to customers; (3) improved curriculum and training choices; and (4) better allocation of training dollars.

A secondary – enabling – objective was to improve the employee development process, to ensure accomplishment of training to fill competency gaps and to institutionalize a model for employee self-development.

A final objective of the CBLP was to facilitate recruiting, hiring, and promotion decisions. In short, the CBLP would enable IRS Research managers and Executives to identify, recruit, and hire the right individuals for the right jobs, and to use competency models to develop employees to their maximum potential.

Scope

As originally envisioned, the CBLP was to be implemented only within the IRS Research community. The Research Community comprises roughly 1,000 employees, divided among the four IRS Business Operating Divisions (Large and Mid-Sized Business, Small Business/Self-Employed, Wage and Investment, and Tax Exempt/Government Entities) and National Headquarters (Headquarters Office of Research and Criminal Investigation Division Research). For the purposes of the CBLP, employees were segmented into six job categories – Computer Research Analyst, Economist, Operations Research Analyst, Program Analyst, Statistician, and Team Leader – all but the last of which are formal Federal Job Series Designations. Executives, Managers, and Clerical employees were not included in the CBLP. Each job category has defined competencies – both general and technical – and these differ according to Business Operating Division (BOD).

Background

Variations in educational background, work experience, and organizational knowledge oftentimes lead to an employee pool with great differences among individuals. This situation was found to be true within the IRS Research community, and was exacerbated by the Servicewide reorganization of 2000, which in a number of cases created new organizations with new missions and goals, and which sometimes resulted in organizational units in which employees were geographically separated from one another and from their managers.

A competency-based learning approach helps to address these issues. At the same time, competency-based learning helps organizations identify, recruit, and hire individuals who possess the competencies needed to perform their jobs effectively. Competency-based learning is a robust approach to employee development, is widely used in private industry, and is gaining momentum within the Government.

Benefits of a Competency-Based Learning Plan

A competency-based approach to employee learning can benefit employees, managers, and the organization as a whole. Employees get the right training, at the right time; are able to focus on the skills, knowledge, and characteristics that have the greatest effect on their performance; and can develop individually at an appropriate pace.

Managers, meanwhile, are better able to address the competencies employees need to perform effectively; can hire and develop employees based on consistent standards; and can develop viable succession plans based on projected needs.

The organization can more efficiently allocate limited training dollars; can develop a meaningful, effective curriculum to address valid employee development needs; and can measure effects in terms of improved business results, customer satisfaction, and employee satisfaction.

While not specifically addressed in the business case for the CBLP, the customers and stakeholders of the IRS Research community benefit as well. Researchers who have received competency-enhancing training are better able to conduct high-quality tax administration research, and are thus able to provide continuously improving, high-quality services to their clients. Those services, subsequently, result in more effective identification of tax administration issues and more effective allocation of human, financial, and other resources to address those issues. Competency-based employee development approaches also can have the added effect of appearing more fair and equitable, thereby enhancing employee satisfaction and improving labor-management relations.

The Competency-Based Learning Plan

The CBLP is an employee-specific training and development plan, constructed by comparing the employee's current competencies to the competencies needed to fulfill job responsibilities. It complements and augments Individual Development Plans (IDPs), which are formulated annually to plan employee training for the forthcoming year. Managers are expected to guide employees through the CBLP process

The Competency-Based Learning Approach: Three Levels

The IRS Research CBLP was developed with a view to action on three organizational levels. At the first level – organizational – the organization establishes and defines a set of performance-based competencies for each position. At the second – managerial – level, managers work closely with individual employees, as well as across the organization, to efficiently address cross-cutting training needs. Finally, at the third – employee – level, individual employees identify which competencies they need to perform their jobs, assess the levels at which they possess those competencies, and then develop a Competency-Based Learning Plan to close any competency gaps identified during the process.

Developing the Competency-Based Learning Plan

At the employee level, the CBLP is developed for each individual employee using a four-phase process as illustrated in Figure 1. Following the organizational- and managerial-level identification of competencies needed by a particular employee, the manager explains the CBLP process to the employee. The employee performs a self-assessment of the level to which he/she possesses the identified competencies, compared with the level needed (Figure 2). The self-assessment is validated together with the employee's supervisor, and a long-range employee development map (Figure 3) is agreed upon. Education, training, and other developmental activities are then scheduled to implement the employee development map. The individual CBLP process is repeated annually, or when competency needs change.

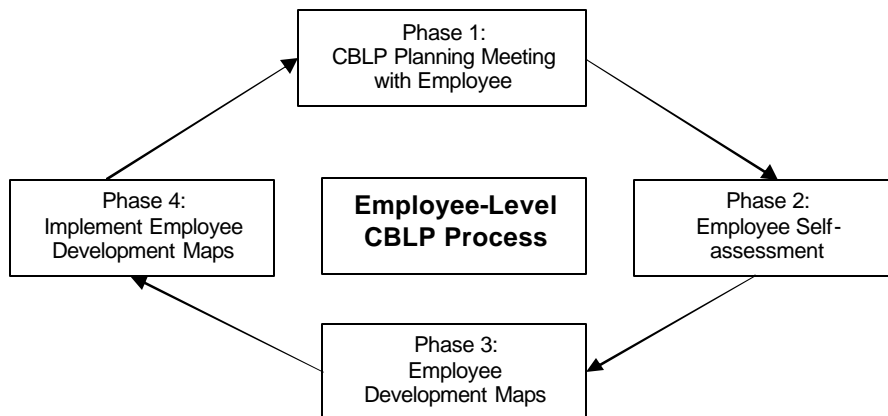


Figure 1. Employee-Level CBLP Process.

An Example: Competency-Based Development for a Research Economist

As an example of how the CBLP would work, consider the generic list of competencies compiled by the organization for a Research Economist (Table 3).

Competency Area 1: Analytical Thinking/Problem Solving. Draw on own knowledge or expertise, and call on other resources as necessary, building a logical, realistic approach to address problems or opportunities, or manage the situation at hand.
• Identify inconsistencies and discrepancies in information/data that are not obvious.
• Discover relationships among various pieces of information.
• Identify the information needed to solve a problem effectively.
• Know the limits of own expertise and when to obtain assistance from other resources.
• Identify key issues within complex situations.
• Anticipate the consequences of potential actions/solutions.
• Analyze situations logically to identify causes and draw solid conclusions.
• Determine the feasibility of various recommendations.
• Translate vague project ideas into specific, scientific, and research-applicable questions.
Competency Area 2: Technology Orientation. Determine the ability and willingness to learn and use technology on the job (e.g., new software applications).
• Manipulate and transfer data from various sources to fit into the research plan and activities.

<ul style="list-style-type: none"> • Apply technological solutions that make work more efficient and effective. • Stay current with the latest software packages available in the marketplace that apply to economic work.
Competency Area 3: Technical. Utilize specialized expertise to accomplish daily activities and project objectives.
<ul style="list-style-type: none"> • Apply appropriate macro- and micro-economic theories to research projects. • Identify socio-economic and demographic factors and trends that affect and may explain taxpayer compliance levels. • Identify data within and outside the Service and government that can be applied to research projects. • Identify which sources of information measure the "health" of the various market segments (e.g., national economy, local economies, businesses, individuals). • Determine the best methods and sources for gathering socio-economic data. • Analyze and interpret standard business financial ratios/balance sheets to determine the "current state" of the population under consideration. • Stay up to date on the latest findings, trends, and methodologies in the economic industry. • Design econometric models to predict future scenarios. • Diagnose the strengths and weaknesses of various econometric models. • Interpret the findings of analyses in light of the method used. • Apply forecasting theories and techniques to project work. • Conduct time-series analysis as appropriate. • Perform cost-benefit analyses of proposed treatment measures.
Competency Area 4: Oral Communication/Listening Skills. Demonstrate the ability to effectively transfer thoughts and express ideas, using speech in individual or group situations.
<ul style="list-style-type: none"> • Use effective questioning techniques to determine issues. • Present self clearly and articulately when speaking with an individual or before a group. • Adapt speech, presentation, or conversation to the understanding of the audience to facilitate clear communication. • Use examples, analogies, and paraphrasing in speech, as necessary, to clarify ideas and concepts. • Utilize active listening techniques (e.g., paraphrasing, open-ended questions, summarizing) to check the understanding and clarity of communication among parties.
Competency Area 5: Attention to Detail. Act to minimize errors and attain complete accuracy by taking an organized approach to work assignments, and by developing systems for structuring work and information.
<ul style="list-style-type: none"> • Express concern that things be done right, thoroughly, or precisely. • Provide information in a usable form and on a timely basis to others who need to act on it. • Complete all reports and documents according to procedures and standards. • Write down important details in messages or communications so they are not lost or forgotten.
Competency Area 6: Initiative. Evaluate, select, and act on various methods and strategies for solving problems and meeting objectives before being asked or required to do so; self-starting rather than passively complying with instructions or work orders.
<ul style="list-style-type: none"> • Do things before being asked or forced by events. • Do more than is minimally required in the assignment, task, or job description. • Dig beneath the obvious to get at the facts, even when not asked to do so. • Willing and eager to seek out increased responsibilities.
Competency Area 7: Persistence. Keep working to meet or exceed stated goals, or until the goal is no longer reasonably attainable.
<ul style="list-style-type: none"> • Do not quit after meeting rejection, or when faced with obstacles. • Try different approaches, as necessary, to accomplish a goal. • Stick with a difficult task over a long period of time to complete it, or until it becomes obvious that the task is not reasonably attainable.

Table 3. Competencies for an Internal Revenue Service Research Economist.

The Economist in this instance would identify the competencies on the list (and any additional ones not listed) that he/she needed to effectively perform assigned economic research tasks, and record those competencies in the leftmost column of the Competency Assessment Matrix (Figure 2). For each competency listed in the Matrix, the Economist estimates the level (on a scale of 1-10) of the competency he/she currently possesses, and the level of the competency needed to be effective. (In both cases, the lower the number, the lower the competency level possessed or needed.) The number corresponding to "Current Level of Performance" is then subtracted from the number corresponding to "Level of Performance Needed" and the result is entered in the "Score" column of the Matrix. In this model, the higher the Score, the greater will be the need for competency enhancement. A positive Score indicates a need for enhancement; a negative Score indicates a higher level of competency than is needed; a Score of "zero" indicates a perfect match.

Competency & Learning Area	Low Level										High Level										Difference between Current and Needed Levels	Score
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10		
Design econometric models				x															x		+4	
Gather socio-economic data		x																	x		+5	
...																						
Apply forecasting theories									x							x					-4	

Figure 2. Competency Assessment Matrix (Abbreviated), Research Economist.

After scoring all applicable competencies and learning areas the Economist, in concert with his/her Manager, would prioritize his/her competencies by Score. (Highest positive Scores indicate the largest gap between current performance level and needed performance level, and would therefore be assigned highest priority.) The prioritized competencies would then be listed in the form of a Competency Development Map (Figure 3).

Competency	Score	Priority
Gather socio-economic data	+5	1
Design econometric models	+4	2
...		3
		4
		5
		6
		7
		8

Figure 3. Competency Development Map (Abbreviated), Research Economist

The Competency Development Map can be used by the Economist and the Manager in decision making around acquisition and enhancement of competencies. If, for example, the Economist already possesses the competency, but not to the required degree, a decision might be made to enhance current competencies. The Economist and the Manager would identify opportunities to close the competency gap by formal training (classroom, computer-based), quasi-formal training (conferences, expositions), on-the-job instruction (mentoring, coaching), or self-study (journals, books).

If, however, the needed competencies are not present at any level, the Competency Assessment Matrix and Competency Development Map would lead to the identification of opportunities to obtain competencies. These opportunities might include developing the needed competencies in current employees (formal training, quasi-formal training, on-the-job instruction, self-study); “borrowing” employees who have the needed competencies from other IRS organizations and government agencies; recruiting and hiring new employees who have the needed competencies; contracting with private sector organizations to provide the needed competencies; or partnering with not-for-profit sector organizations (research institutes, universities) to supply the needed competencies.

EXPANDING THE CONCEPT: COMPETENCY-BASED URBAN PLANNING AND RENEWAL

One of the advantages of the Internal Revenue Service competency-based learning model is that its simplicity and elegance enable it to be transportable to a vast array of other, diverse uses. In applying the IRS model to urban planning and renewal, one would expect to see a list of competencies that dealt with education, housing, transportation (roads, rail lines, airports), utilities, sanitation, law enforcement, health care, emergency response (fire, ambulance), and social services.

The Economist's Role in Competency-Based Urban Planning/Renewal

One could also expect that there would be roles for an Economist in urban planning and renewal. For example, in the broad category of Public Finance, one might expect to see such competencies as tax policy (e.g., knowledge of how investment, consumption, and output are affected by taxation policies; applies microeconomic principles to determine effective taxation policies in order to promote and sustain real economic growth; uses econometric models to predict future growth patterns and tax revenues) and tax administration (e.g., assists taxpayers in meeting their obligations set forth by policy; examines the accuracy, timeliness, and completeness of tax returns and deters noncompliance through legal sanctions). Also in the category of Public Finance, one might find competencies related to bond issuance and other non-tax revenue generation (e.g., ability to design investment vehicles and offer them to citizens to fund municipal needs; ability to market and sell a bond at a competitive price and yield to adequately fund needs; ability to design and implement fee-for-service programs; ability to obtain funds/loans/grants from state and/or federal government agencies).

In another broad category, Government Spending, one could expect to see competencies related to budgeting (e.g., ability to create models/plans for short term and long term fiscal operations; ability to adapt to changing economic conditions as well as to changing levels of demand for resources); resource allocation (e.g., ability to assign scarce resources to fund needed projects or programs, ability to monitor effectiveness of fund usage and identify over- or under-funded programs, ability to determine effectiveness of additional funding or the lost benefits of terminated programs); and fiscal policy (e.g., ability to determine effects on business and industry due to taxing or subsidies; ability to identify main recipients of subsidies by examining elasticity of labor, supply, and demand; skill in monitoring budget execution to react to changing circumstances; ability to decide relative effectiveness of differing courses of action – for example: increasing taxes *versus* reducing government spending; knowledge of how domestic spending affects prices, inflation, interest rates, and industrial output).

A third broad category of Economist competencies is Economic Governance. Here one might expect to see competencies related to Corporate/Business Regulation (e.g., ability to determine what policies are best suited to promote growth, competition, and equality/fairness under the law; skill in examining how regulations can affect business and industry behaviors in general; knowledge of how specific industries or businesses may be affected by regulations; knowledge of how governments can effectively use regulation to better the aggregate well-being); and

Banking Regulation (e.g., knowledge of the various ways a commercial banking network can enhance or deteriorate the area's economy; skill in identifying successful crediting that allows citizens and/or businesses to purchase needed items; skill in examining an entity's ability to repay loans in a timely manner; and knowledge of how relationships between a central bank and a network of commercial banks can affect monetary conditions).

Competencies for an Urban Planning/Renewal Economist

The Competencies for an Internal Revenue Service Research Economist (Table 3) can be easily tailored to develop a similar list of Competencies for an Urban Planning/Renewal Economist (Table 4). Because of the generic nature and portability of the competencies in Competency Areas 1 (Analytical Thinking/Problem Solving), 2 (Technology Orientation), 4 (Oral Communication/Listening Skills), 5 (Attention to Detail), 6 (Initiative) and 7 (Persistence) these competencies could be expected to be transferred virtually unchanged from Table 3 to Table 4. The competencies of Competency Area 3 (Technical) found in Table 2 would also be expected to remain virtually unchanged in Table 4. But it would be expected that additional competencies would be included (as shown in bold type in Table 4).

Competency Area 1: Analytical Thinking/Problem Solving. Draw on own knowledge or expertise, and call on other resources as necessary, building a logical, realistic approach to address problems or opportunities, or manage the situation at hand.
• Identify inconsistencies and discrepancies in information/data that are not obvious.
• Discover relationships among various pieces of information.
• Identify the information needed to solve a problem effectively.
• Know the limits of own expertise and when to obtain assistance from other resources.
• Identify key issues within complex situations.
• Anticipate the consequences of potential actions/solutions.
• Analyze situations logically to identify causes and draw solid conclusions.
• Determine the feasibility of various recommendations.
• Translate vague project ideas into specific, scientific, and research-applicable questions.
Competency Area 2: Technology Orientation. Determine the ability and willingness to learn and use technology on the job (e.g., new software applications).
• Manipulate and transfer data from various sources to fit into the research plan and activities.
• Apply technological solutions that make work more efficient and effective.
• Stay current with the latest software packages available in the marketplace that apply to economic work.
Competency Area 3: Technical. Utilize specialized expertise to accomplish daily activities and project objectives.
• Apply appropriate macro- and micro-economic theories to research projects.
• Identify socio-economic and demographic factors and trends that affect and may explain taxpayer compliance levels.
• Identify data within and outside the Service and government that can be applied to research projects.
• Identify which sources of information measure the "health" of the various market segments (e.g., national economy, local economies, businesses, individuals).
• Determine the best methods and sources for gathering socio-economic data.
• Analyze and interpret standard business financial ratios/balance sheets to determine the "current state" of the population under consideration.
• Stay up to date on the latest findings, trends, and methodologies in the economic industry.
• Design econometric models to predict future scenarios.
• Diagnose the strengths and weaknesses of various econometric models.
• Interpret the findings of analyses in light of the method used.
• Apply forecasting theories and techniques to project work.
• Conduct time-series analysis as appropriate.
• Perform cost-benefit analyses of proposed treatment measures.
• Design and develop investment vehicles to fund municipal needs.
• Market and sell bonds at a competitive price and yield to adequately fund needs.
• Apply knowledge of investment, consumption, and output, to develop taxation policies.
• Apply microeconomic principles to determine effective taxation policies in order to promote and sustain real economic growth.
• Use econometric models to predict future growth patterns and tax revenues.
• Assist taxpayers to meet their obligations set forth by policy.

• Examine accuracy, timeliness, and completeness of tax returns and deters noncompliance through legal sanctions.
• Identify socio-economic and demographic factors and trends that affect and may explain taxpayer compliance levels.
• Identify opportunities for non-tax revenue generation (e.g., fee-for-service).
• Obtain loans/grants from higher-level (e.g., national) government entities.
• Create models/plans for short term and long term fiscal operations.
• Adapt fiscal models/plans to changing economic conditions as well as to changing levels of demand for resources.
• Allocate scarce resources to fund needed projects or programs.
• Monitor effectiveness of fund usage and identify over-/under-funded programs.
• Determine effectiveness of additional funding or the lost benefits of terminated programs.
• Determine effects on business and industry of taxation or subsidies.
• Identify main recipients of subsidies by examining elasticity of labor, supply, and demand.
• Monitor fiscal policy budget to react to changing circumstances.
• Apply economic theories to decide among courses of action (e.g., tax cuts vs. increased spending; tax increases vs. less government spending.
Competency Area 4: Oral Communication/Listening Skills. Demonstrate the ability to effectively transfer thoughts and express ideas, using speech in individual or group situations.
• Use effective questioning techniques to determine issues.
• Present self clearly and articulately when speaking with an individual or before a group.
• Adapt speech, presentation, or conversation to the understanding of the audience to facilitate clear communication.
• Use examples, analogies, and paraphrasing in speech, as necessary, to clarify ideas and concepts.
• Utilize active listening techniques (e.g., paraphrasing, open-ended questions, summarizing) to check the understanding and clarity of communication among parties.
Competency Area 5: Attention to Detail. Act to minimize errors and attain complete accuracy by taking an organized approach to work assignments, and by developing systems for structuring work and information.
• Express concern that things be done right, thoroughly, or precisely.
• Provide information in a usable form and on a timely basis to others who need to act on it.
• Complete all reports and documents according to procedures and standards.
• Write down important details in messages or communications so they are not lost or forgotten.
Competency Area 6: Initiative. Evaluate, select, and act on various methods and strategies for solving problems and meeting objectives before being asked or required to do so; self-starting rather than passively complying with instructions or work orders.
• Do things before being asked or forced by events.
• Do more than is minimally required in the assignment, task, or job description.
• Dig beneath the obvious to get at the facts, even when not asked to do so.
• Willing and eager to seek out increased responsibilities.
Competency Area 7: Persistence. Keep working to meet or exceed stated goals, or until the goal is no longer reasonably attainable.
• Do not quit after meeting rejection, or when faced with obstacles.
• Try different approaches, as necessary, to accomplish a goal.
• Stick with a difficult task over a long period of time to complete it, or until it becomes obvious that the task is not reasonably attainable.

Table 4. Competencies for an Urban Planning/Renewal Economist.

THE MACRO LEVEL: COMPETENCY-BASED NATION BUILDING

As with urban planning and renewal, the Internal Revenue Service competency-based learning model can be used to identify, assess, acquire, and develop competencies associated with nation building. In a nation building application, one would expect (as with the urban planning and renewal example) to see a list of competencies that dealt with education, housing, transportation (roads, rail lines, airports), utilities, sanitation, law enforcement, health care, emergency response (fire, ambulance), and social services. In addition, one would expect to see additional, higher order competencies dealing with national government (legislative, executive, and judicial functions); political processes (elections, party systems); finance (printing/minting and managing money, tax policy); posts and telecommunications; trade and commerce; diplomacy and international relations; business and industry; agriculture, forestry, fisheries, mining, and other extractive activities; and national defense and security.

The Economist’s Role in Competency-Based Nation Building

For an Economist engaged in the nation building task, one would expect multiple and diverse roles. For example, in the broad category of Central Banking and Treasury Functions, one might expect to see such competencies as monetary system management (e.g., knowledge of how to create and print a currency that is backed by the central govt. to ensure credibility and liquidity of the currency; skill in analyzing aggregate statistics and reports of the economic conditions facing the country to determine proper valuation system [e.g., float, fixed, pegged, monetary union] to ensure the stability of the currency in international money markets; ability to determine proper rate of money supply growth that is consistent with the growth of output as a tool to stabilize the currency’s valuation; and skill in determining the effectiveness and consequences of printing money to fund government projects and programs); banking (e.g., skill in collaborating and cooperating with world banking institutions and international trade organizations to establish and implement monetary plans and economic policies that affect the rest of the world’s trade markets; skill in establishing a commercial banking system that has a firm foundation and is able to withstand fluctuations in the domestic and international banking and finance environments; skill in monitoring and influencing domestic monetary conditions, inflation, unemployment, income/prices, and interest rates; skill in monitoring international trade flows and in taking appropriate action offset adverse situations; ability to devise long term strategies to deal with trade imbalances to ensure economic stability; and skill in examining relative price changes and their affects on the global and domestic economy.

Competencies for a Nation Building Economist

As with the competencies for an Urban Planning/Renewal Economist, the Competencies for an Internal Revenue Service Research Economist (Table 3) can be easily tailored to develop a similar list of Competencies for a Nation Building Economist (Table 5). Again, because of the generic nature and portability of the competencies in Competency Areas 1 (Analytical Thinking/Problem Solving), 2 (Technology Orientation), 4 (Oral Communication/Listening Skills), 5 (Attention to Detail), 6 (Initiative) and 7 (Persistence) these competencies could be expected to be transferred virtually unchanged from Table 3 to Table 5. The competencies of Competency Area 3 (Technical) found in Table 3 would also be expected to remain virtually unchanged in Table 5. But it would be expected that additional competencies would be included (as shown in bold type in Table 5).

Competency Area 1: Analytical Thinking/Problem Solving. Draw on own knowledge or expertise, and call on other resources as necessary, building a logical, realistic approach to address problems or opportunities, or manage the situation at hand.
• Identify inconsistencies and discrepancies in information/data that are not obvious.
• Discover relationships among various pieces of information.
• Identify the information needed to solve a problem effectively.
• Know the limits of own expertise and when to obtain assistance from other resources.
• Identify key issues within complex situations.
• Anticipate the consequences of potential actions/solutions.
• Analyze situations logically to identify causes and draw solid conclusions.
• Determine the feasibility of various recommendations.
• Translate vague project ideas into specific, scientific, and research-applicable questions.
Competency Area 2: Technology Orientation. Determine the ability and willingness to learn and use technology on the job (e.g., new software applications).

<ul style="list-style-type: none"> • Manipulate and transfer data from various sources to fit into the research plan and activities. • Apply technological solutions that make work more efficient and effective. • Stay current with the latest software packages available in the marketplace that apply to economic work.
<p>Competency Area 3: Technical. Utilize specialized expertise to accomplish daily activities and project objectives.</p>
<ul style="list-style-type: none"> • Apply appropriate macro - and micro - economic theories to research projects. • Identify socio -economic and demographic factors and trends that affect and may explain taxpayer compliance levels. • Identify data within and outside the Service and government that can be applied to research projects. • Identify which sources of information measure the "health" of the various market segments (e.g., national economy, local economies, businesses, individuals). • Determine the best methods and sources for gathering socio -economic data. • Analyze and interpret standard business financial ratios/balance sheets to determine the "current state" of the population under consideration. • Stay up to date on the latest findings, trends, and methodologies in the economic industry. • Design econometric models to predict future scenarios. • Diagnose the strengths and weaknesses of various econometric models. • Interpret the findings of analyses in light of the method used. • Apply forecasting theories and techniques to project work. • Conduct time-series analysis as appropriate. • Perform cost -benefit analyses of proposed treatment measures.
<ul style="list-style-type: none"> • Direct treasury to create and print a currency that is backed by the central government to ensure credibility and liquidity of the currency. • Analyze aggregate statistics and reports of the economic conditions facing the country to determine proper valuation system (e.g., float, fixed, pegged, monetary union, etc) to ensure the stability of the currency in international money markets. • Determine proper rate of money supply growth consistent with the growth of output as a tool to stabilize the currency's valuation. • Determine the effectiveness and consequences of printing money to fund government projects and programs (seniorage). • Collaborate and cooperate with international banking institutions (e.g., World Bank) and international trade organizations (WTO, etc.) to establish and implement monetary plans and economic policies. • Establish a commercial banking system that has a firm foundation and is not vulnerable to minor/major fluctuations in the domestic and international lending markets. • Monitor international trade flows and attempt to offset negative conditions when possible. • Examine relative price changes and determine their affects on the global and domestic economy. • Examine possible alternatives to existing structure for improvement in the growth and stability of the economy. • Monitor capital inflows and place restrictions to prevent emerging market crises. • Determine policies best suited to promote growth, competition, and equality/fairness under the law. • Examine regulations to determine their effect on business and industry behaviors in general, and how specific industries or businesses may be affected differently/more negatively due to regulations and how governments can use this tool as a means to better the aggregate well-being. • Examine the various ways a commercial banking network can enhance or deteriorate the area's economy. • Identify successful crediting that allows citizens and/or businesses to purchase needed items. • Determine the effects of government subsidies/ taxes on specific industries. • Develop national information research centers to aid government and businesses in economic decision making (e.g., NBLIS, Census Bureau). • Establish a tax system that is favorable to investment and encourages production (e.g., loan interest deductions, equipment depreciation deductions). • Aiding in the establishment of efficient and stable communications, energy, and other public utilities markets through long term financing of the large initial capital demands of creating a national network and infrastructure. • Determine most competitive tax structure for foreign imported goods and exported goods to promote growth of domestic industries. • Create a national transportation infrastructure to expedite the transfer of goods and services. • Adopt policies that will strongly advance the state of technology used to increase productivity (e.g., grants to universities or institutions conducting technological research). • Create a business environment that rewards companies that operate efficiently and fairly in a free market economy. • Promote entrepreneurial ideas and actions to engage individuals in growing their own economy, and not biased to large corporations. • Develop communicative relationships with specialists in various businesses and industries to consult with on specific policies. • Establish commerce reporting agencies that express the aggregate opinions of business managers to continually enhance or facilitate the flow of trade. • Solve credibility issues of small businesses through inquisition and general reporting centers (e.g., Better Business Bureau) to promote trade at basic levels.
<p>Competency Area 4: Oral Communication/Listening Skills. Demonstrate the ability to effectively transfer thoughts and express ideas, using speech in individual or group situations.</p>
<ul style="list-style-type: none"> • Use effective questioning techniques to determine issues. • Present self clearly and articulately when speaking with an individual or before a group. • Adapt speech, presentation, or conversation to the understanding of the audience to facilitate clear communication.

• Use examples, analogies, and paraphrasing in speech, as necessary, to clarify ideas and concepts.
• Utilize active listening techniques (e.g., paraphrasing, open-ended questions, summarizing) to check the understanding and clarity of communication among parties.
Competency Area 5: Attention to Detail. Act to minimize errors and attain complete accuracy by taking an organized approach to work assignments, and by developing systems for structuring work and information.
• Express concern that things be done right, thoroughly, or precisely.
• Provide information in a usable form and on a timely basis to others who need to act on it.
• Complete all reports and documents according to procedures and standards.
• Write down important details in messages or communications so they are not lost or forgotten.
Competency Area 6: Initiative. Evaluate, select, and act on various methods and strategies for solving problems and meeting objectives before being asked or required to do so; self-starting rather than passively complying with instructions or work orders.
• Do things before being asked or forced by events.
• Do more than is minimally required in the assignment, task, or job description.
• Dig beneath the obvious to get at the facts, even when not asked to do so.
• Willing and eager to seek out increased responsibilities.
Competency Area 7: Persistence. Keep working to meet or exceed stated goals, or until the goal is no longer reasonably attainable.
• Do not quit after meeting rejection, or when faced with obstacles.
• Try different approaches, as necessary, to accomplish a goal.
• Stick with a difficult task over a long period of time to complete it, or until it becomes obvious that the task is not reasonably attainable.

Table 5. Competencies for a Nation Building Economist.

COMPETENCY DEVELOPMENT FOR URBAN DEVELOPMENT AND NATION BUILDING

Competency-based development for individuals engaged in urban planning and renewal or nation building would proceed in the same way as competency-based development of the IRS Research Economist.

Competency & Learning Area	Low Level										High Level										Difference between Current and Needed Levels	Score
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10		
Design econometric models				x															x		+4	
Gather socio-economic data		x																	x		+5	
...																						
Apply forecasting theories								x							x						-4	

Figure 4. Competency Assessment Matrix (Abbreviated), Urban Planning/Renewal or Nation Building Economist.

As with the IRS Research Economist, the Urban Planning/Renewal Economist or Nation Building Economist would identify the competencies on the appropriate list (Table 3 or Table 4, as appropriate) – and any additional ones not listed – that he/she needed to effectively perform assigned tasks, and record those competencies in the leftmost column of the Competency Assessment Matrix (Figure 4). Each competency listed in the Matrix is self-assessed and scored, prioritized, and listed in the form of a Competency Development Map (Figure 5).

Competency	Score	Priority
Gather socio-economic data	+5	1
Design econometric models	+4	2
...		3
		4

Figure 5. Competency Development Map (Abbreviated), Urban Planning/Renewal or Nation Building Economist.

Again, the Competency Development Map can be used by the Economist and his/her Manager to decide how to address competency gaps. If the Economist already possesses the competency, but not to the required degree, enhancement of current competencies might be the preferred option. The Economist and the Manager would identify opportunities to close the competency gap by formal training (classroom, computer-based), quasi-formal training (conferences, expositions), on-the-job instruction (mentoring, coaching), or self-study (journals, books).

If, however, the needed competencies are not present at any level, the Competency Assessment Matrix and Competency Development Map would lead to the identification of opportunities to obtain competencies. These opportunities might include developing the needed competencies in current officials (formal training, quasi-formal training, on-the-job instruction, self-study); “borrowing” officials who have the needed competencies from other government entities; recruiting and hiring new officials who have the needed competencies; contracting with private sector organizations to provide the needed competencies; partnering with not-for-profit sector organizations (research institutes, universities) to supply the needed competencies; revising tax or immigration policies to encourage inflow of needed competencies from other municipalities or countries; or obtaining aid from external sources in the form of competency building (e.g., Peace Corps, VISTA).

CONCLUSIONS

Competency Management is an exciting new discipline that can be successfully applied at multiple levels to solve business and government problems. Organizations can gain value even by implementing only portions of the overall approach. For example, strategic sourcing can be greatly improved by understanding enterprise needs and current workforce capabilities and capacities. In most firms, workload management can be significantly and quickly improved by matching workforce competencies to available work and other opportunities. Finally, organizations, work groups, teams, and individual workers can benefit from employing Competency Management.

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