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How to Successfully Transform the Organization during IP Network Transformation

IP transformation is a complex and challenging journey that impacts all the service provider's assets and activities. As in any major business undertaking, people are central to a successful outcome; therefore, close attention to human resources requirements is key during IP Transformation. The organization must be able to successfully integrate and transfer staff into the new environment and provide the means for the successful creation and implementation of methodologies for building teams to support each step in the business process. This paper provides an overview of guidelines for addressing the organizational change that must accompany transformation to an IP-based network and business.

Table of Contents

Introduction

For service providers transforming their infrastructure in order to offer new converged services, technology upgrades are not enough – attention to human resources is also critical to the success of the program. The organization must be able to successfully re-skill their staff to be able to support the new business and technology environment that will be created with the transformation project. In the event of outsourcing or acquisitions, the organization must strive for smooth transfer and integration of staff into the new company or environment. Other critical success factors include implementing methodologies for building teams to support each step in the business process, such as skills and profile mapping, inventory and gap analysis, and the delineation of growth capabilities.

The Drivers to Transformation

Not since the advent of the Internet has the telecom industry faced such massive change as today. Competition for customer mind- and wallet-share is at an all-time high. Competitive threats are no longer limited to predictable network-based operators, but include virtual operators and application providers without network assets. High-value services are increasingly sourced from third-party vendors, threatening to leave network operators out of the revenue and value-creation mix.

The bottom line is this: The traditional role of the network operator as connectivity provider is no longer viable. To survive in this hyper-competitive environment, operators must reinvent themselves as value-added service providers. Therefore, service sophistication and speed of innovation become the foundation for a sustainable business model. Moving to an all-IP infrastructure is key to agile and cost-effective service creation, deployment, and operations. The change in underlying technology and operations must be supported by a parallel transformation in the organization, which identifies and develops the right skills and processes to drive the business forward.

IP Transformation Targets

The full scope of transformation of the organization mandates an organization assessment and organization development.

Organization assessment is derived from:
• An assessment of organization readiness
• Definition of the transformation drivers
• Definition of the organization's vision of the future

Organization development is derived from:
• Organization design
• Competency development
• Career development
• Knowledge transfer
• Organization culture
• Change management

This white paper focuses on the organization development, and more specifically, competency development, knowledge transfer, and management of change.

Transforming People's Skills

Transforming people's skills should be organized to yield a predictable outcome. In a full business transformation project, service providers cannot wait for business process and underlying technologies to be in place before embarking on the human resources phase of the transformation. People must be supported, throughout the journey.

Specific Activities for Transformation

A best-in-class evolution of human resources capabilities, skills and competences requires the following activities:
- Defining the job and job competency catalogue
- Establishing a resource management process
- Building new practices and improve existing ones
- Detecting and re-using tacit knowledge
- Management of change for large groups of employees
- Development of courseware and training the organisation

DEFINITION OF THE JOB AND JOB COMPETENCIES CATALOGUE

A detailed system of classification is fundamental to any inventory management program. But unlike physical inventory items, such as part numbers or products, employee competencies and skills don't have convenient item numbers for identification.

Problem – Lack of definition leads to an unmanageable array of skills to track. When creating the basic classifications for building a skills inventory, the problem often is a lack of standardized definitions for skills. What one manager refers to as a "programmer" may be similar, but not quite the same, as another manager's definition of "systems engineer." The result – an inability to distinguish between apples and oranges, leading to an inaccurate or unreliable inventory measure.

Solution – A predefined classification system provides the basis for effective skills inventory management. An objective system relies on an established list of predefined skills and an agreed-upon set of criteria to measure them. Managers must be able to select a group of employees to participate in a skills inventory initiative and quickly decide which skills are critical to the group's success. And they must be able to do so without having to endure the time-consuming process of defining each skill.

A focused list of critical skills is often the best foundation for what will later grow into a wider skills inventory management capability. As a foundation for establishing a skills program, many companies begin by agreeing on key business objectives and identifying the skills that most closely impact those goals. An objective skills classification system frees decision-makers to focus on critical skills and business objectives, and helps to clearly establish the parameters for a successful initiative.

ESTABLISHING A RESOURCE MANAGEMENT PROCESS

The resource management process describes the flow of resource management from beginning to end. The correct design of the sub-processes and the related tools result in a predictable process execution.

The resource management process described below supports the change process in an organization.

Problem – When change is the continuous process common to project driven organizations, or the lengthy and large-scale process often found in a transformation programs, the process becomes very complex. Information is delivered by many people, the amount of information to be handled is huge, and many functions have to be executed. As a result, the process cannot be executed effectively or efficiently.

Solution – Supporting tools are required to realize an effective and efficient process execution. These change processes can be executed manually without dedicated tools, only when they are significantly less dynamic process and limited in scale.
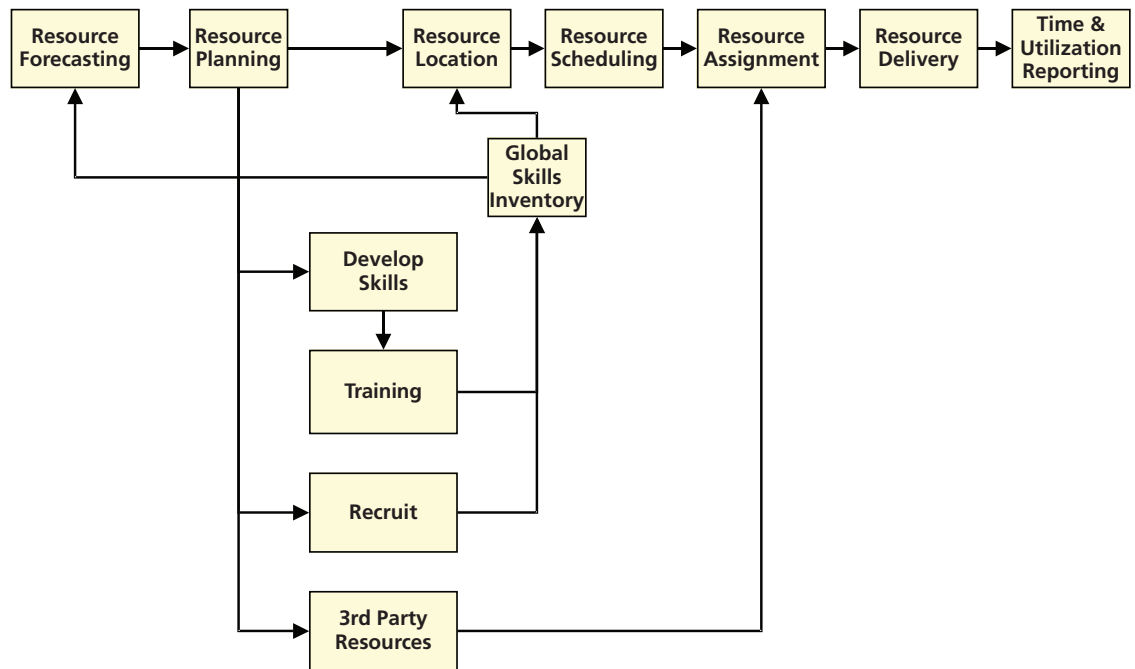

Figure 1: Resource management process

The overall resource management process describes the flow of resource management from beginning to end. The prime objective of the process is to improve predictability.

The forecast and global planning processes provides organizations with the ability to look ahead and predict future job profile needs, easing the development and location phases. The forecasting process considers data from multiple inputs in order to predict upcoming resource needs. The global planning of resources is based on a regional forecasts of resource needs.

The skills management process handles the skill inventory and skill development. Skill programs are constantly in development to support the changing needs of the business. Completing a skills program provides validation that each employee currently has the skills required to perform a particular job function. The skills assessment and associated development plan are personal development tools that are used in this process.

As employee skills evolve, it is important that resource managers have a complete inventory of all skill sets at their disposal, including product, professional, and external certifications. A periodic skill inventory refresh ensures the data is accurate.

When people need to be hired, the job definitions and competence requirements are immediately available for the recruitment process.

The 3rd party resource process streamlines efforts to outsource projects when the organization's own resources are not available, or when the project requires a specific skill set that has not been developed internally.

LOCATION, SCHEDULING AND ASSIGNMENT PROCESSES

Resource location is the process of finding qualified people to fill open positions globally – the larger the pool of people in the system, the more effective and efficient the search. Resource scheduling gives resource managers the ability to reserve resources for particular projects and resource assignment allows managers to assign employees to projects.

SERVICE DELIVERY AND TIME REPORTING PROCESSES

Once assigned, the service delivery process ensures that the service is delivered to the customer per contract requirements. Prompt and accurate time reporting provides useful information to management.

Building New Practices

Problem – It is imperative that an organization continuously improves. Best practices need to be detected, documented and spread on an ongoing basis. The detection and the re-use of best-in-class explicit knowledge has to be organized to be effective , which means that people need to be placed in an environment that allows them to easily interact and respond to an existing problem. A subject matter expert is most efficient when responding to a specific question It would be inefficient when an expert is writing down his or her knowledge in an attempt to answer hypothetical questions that may never be asked.

Solution – Building best practices and managing explicit knowledge can be very effective if the organization creates a collaborative environment and stimulates a collaborative attitude. Resources that support a collaborative environment include:
- Collaborative web environments such as Quickplace, Sharepoint, and project portals with templates, and information sharing sessions such as informal webinars and webcasts
- Communities of practice[1]
- An informative environment including department portals built on the principle that a maximum of three clicks is needed to find all information
- Rewarding people for knowledge sharing.

Leveraging Tacit Knowledge

Tacit knowledge is defined as the knowledge that people carry in their minds. (Knowledge that is easy to communicate is called explicit knowledge.)

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1 According to John Seely Brown, director of the Xerox Palo Alto Research Center ("PARC"), people involved in communities of practice "…are peers in the execution of 'real work'. What holds them together is a common sense of purpose and a real need to know what each other knows. There are many communities of practice within a single company, and most people belong to more than one of them." http://www.fastcompany.com/online/01/people.html

Tacit knowledge is difficult to access – often people are not aware of the knowledge they possess or how it can be valuable to others. Tacit knowledge is considered extremely valuable because it provides context for people, places, ideas, and experiences. Effective transfer of tacit knowledge generally requires extensive personal contact and trust.

Problem – Tacit knowledge is not easily shared. In the field of knowledge management the concept of tacit knowledge refers to a knowledge which is only known by an individual and that is difficult to communicate to the rest of an organization.

Solution – Effective transfer of tacit knowledge generally requires extensive personal contact. Therefore, the one looking for answers should have the means to find and be in close contact with the person or persons who might have the background and experience required to provide the answers.

Methods to enable the transfer of tacit knowledge include:
• Maintaining a detailed curriculum vitae of employees that includes a description of past experience and is collected into a searchable database
• Building a network of people with same interest and same skill – communities of interest and communities of practices
• Providing immersion training in which the person to be trained is "immersed" in the expert team for a couple of weeks.
• Encouraging on-the-job training by colleagues
• Supporting key expert programs (see below)

Management of Change for Large Groups of Employees

Problem – When the need exists to acquire or improve operational know-how for a large group of employees, standardized catalogue training courses do not guarantee that personnel will be fully operational in a real life situation.

Solution – A job orientated teaching process, known as a key expert program, is a more effective method. This approach allows personnel to:
• Quickly and efficiently gain the operational know-how needed for a job
• Capitalize on existing in-house knowledge

This training approach is appropriate if a significant number of people are involved. During the process, a key expert – someone with confirmed technical expertise in a specific domain – transfers knowledge and know-how of operational processes and procedures to other members of the team. The expert may even have helped develop and refine the particular processes and procedures.

This training approach implies that a training platform and effective training policies are in place. It significantly reduces the time required for employees to improve efficiency and extend their skills. It also results in savings on training and increases the availability of personnel to perform their job. This method is easily applicable over the long-term and increases efficiency and quality of service. An incentive plan for these operational key experts helps to motivate them in performing this new responsibility.

Developing Courseware and Training the Organization

The training involved in a large scale transformation project will have to cover a wide range of technical, market, personal, business, and management curricula. The training possibilities available on the market are virtually limitless. Various methods and formats of training can be provided, such as classroom training, virtual classes, computer-based training, webcasts, and recorded webinars.

Problem – Defining the curricula and selecting the proper trainings and training methods is vital, but highly complex. An organization can easily spend a fortune and waste valuable employee time by making the wrong choices.

Solution – Specialized learning consultants should be involved to create the proper skill program and select and define the underlying training programs and methods. Courses can be classified into vertical and horizontal training. For example, vertical training covers individual products like basic operator and advanced troubleshooting courses. Horizontal training is end-to-end, covering a technology or an entire network, situating the different products within that network, and also explaining the services and applications making use of that network or technology. Prerequisite courses provide basic knowledge and insight to enable people to participate in the horizontal or vertical courses.
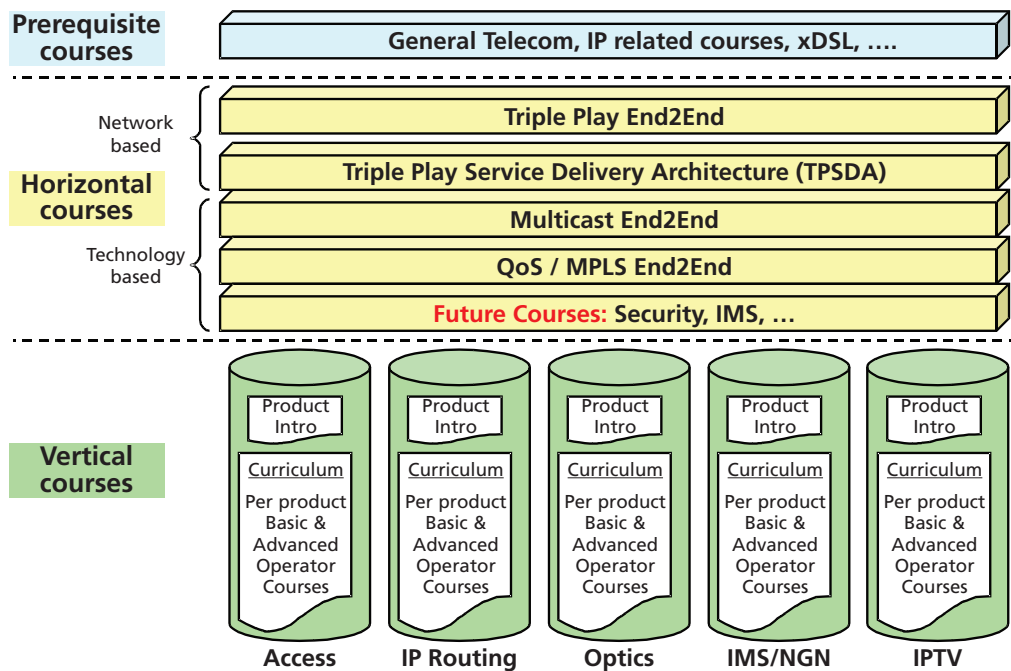

Figure 2: Example of a typical training offering

Summary

Business transformation can only be successful when the people driving the processes are motivated and fit the job. If a partner is working with the organization making the transformation, the partner should not only be highly experienced but also able to provide extensive business practices bundled into logical packages. These packages include professional services to be performed as well as deliverables and results targeted. This approach is essential in handling the critical human resources aspects of a transformation.

The transformation of people, a major program in itself, is an integral part of the Alcatel-Lucent IP Transformation solution and a primary asset in the successful implementation of our clients' programs. For more information on Alcatel-Lucent's IP Transformation solution go to: www.alcatel-lucent.com/iptransformation

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