

Mahesh Kuruba

Role Competency Matrix

A Step-By-Step Guide to an Objective
Competency Management System

 Springer

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Mahesh Kuruba
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To

my parents

*Honnurappa Kuruba and
Nagarathnamma Kuruba*

my wife

Jyotsna Kuruba

my daughter

Aarushi Kuruba

Foreword



People cost is the major cost component for an Information Technology (IT) organization, constituting as much as 50% of its revenues. While employees are regarded as valued assets, their competency management has challenged IT companies for decades. IT businesses are under a constant pressure to respond quickly to the constantly changing technology trends, often feeling compelled to hire trained workforce at a higher cost. The cyclic behavior of employees joining and separating from an organization has become a phenomenon in IT industry. The result is that many organizations experience double-digit attrition, and the

people working in them may not necessarily be optimally leveraged for the roles in which they operate, thereby impacting product quality and productivity.

IT companies need a framework with which to manage their workforce competencies holistically and effectively, leveraging their workforce capabilities by considering employee capabilities and aspirations, and business needs. Any workforce competency management system demands an objective and transparent approach for management and employees alike, as well as being aligned to business goals.

The Role Competency Matrix (RCM), which is presented in this book, is a framework that helps in objective assessment of competency. RCM provides the metrics to quantify competency index and competency gap at both employee and organizational level. The RCM framework enables organizations to develop an objective data-driven competency measurement system and help them to

proactively address competency gaps. RCM guides management in making business decisions at strategic, tactical and operational level based on the workforce competency. At the employees' level, it helps them in competency development and career progression. At management and decision-making levels, the framework will be helpful in people management strategies and succession planning.

I am sure that the book will benefit heads of business units who value their workforce and want to have the “*right people in right roles*”. The author deserves to be congratulated for proposing such a framework. I am sure this book will be found to be of great value in IT industry.

May 2019

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Preface

People are central to, and at the front of, the IT business. IT organizations have a well-earned reputation for innovative and transformative practices in the marketplace. But the nature of their work also places a huge demand on the capabilities of their workforce. Businesses need to sense the shifts in business scenario and technology trends, and quickly respond to their markets' demand for better products and services. Companies that do not realize this are doomed to oblivion. Although technology is the driving force of the changes in the industry, it is the ability of its workforce to adapt and respond to the changes that will decide whether a business will grow or fade into nothingness. Most competency management practices, even the ones that are claimed to be 'state-of-art' are largely qualitative in approach. They have a significant subjective component and are poorly aligned to business strategy. The result is that, often, doubts persist about a competency management system's objectivity and fairness, as well as its ability to deliver on its intent and purpose. With an increasing demand for IT professionals with the right skills, and the high cost of making a wrong staffing decision, it is vital for organizations to identify people who are optimally suited for their roles.

Therefore, there is a need for a competency management system (CMS) that is transparent to all stakeholders, objective and scalable across the organization, and uses measurable indicators for evaluating competency. Such a system has a better chance of being effective and accepted in the organization.

This book is about the Role Competency Matrix (RCM), a framework for effective workforce competency management. RCM enables a company's workforce to be responsive and agile so that the competencies are always current and aligned to the business goals of the company. The RCM framework minimizes subjectivity and provides a measurement-based approach that will help people managers in IT organizations to objectively assess employee competency, identify and measure the competency gaps that must be bridged through competency

development for achieving organizational goals. In addition, RCM also aids employees in choosing appropriate career paths based on their competencies and organizational role requirements. Importantly, the framework also assists business leaders in succession planning.

A Note for the Reader

This book presents the Role Competency Matrix, a framework for managing workforce competency in the IT industry. The framework is a valuable guide for organizations in developing their workforce competencies—and using them—in a systematic manner to enhance organizational performance, as well as realize employee potential and aspirations.

Having worked in several countries, the author found that workforce management practices vary from country to country. These practices are influenced by the local culture and have a significant effect on the quality of software. In countries like Japan, a person remains with one organization till he or she retires from service. On the other hand, in the developed countries of the Western hemisphere, it is normal for people to be laid off at short notice (or fired), or change jobs frequently. However, it was also seen that frequent changes to team composition result in erosion of knowledge and know-how, which impacts software quality.

It also came as a surprise to the author to find that despite high employee costs, which can be as much as 50% in many IT organizations, workforce quality remains suboptimal. This affects organizations in multiple ways, such as low productivity and poor operating efficiencies both of which adversely impact an organization's competitive position. Moreover, such companies are also poorly prepared to adapt to the rapid changes in technology and the marketplace. Unwillingness to recognize the seriousness of these challenges can have a severely detrimental effect on the company.

Thus, as IT companies grow and expand globally, there is a need for a framework which supports a holistic quantitative-based approach to managing workforce competencies by aligning them to business objectives. Such a framework should help managements in making workforce-related decisions on performance-critical matters. An optimally managed workforce benefits both employees and the organization which will result in improved performance at individual as well as company level. Companies have the responsibility to promote a work environment in which employees are respected, encouraged to improve existing capabilities and develop new ones.

The competency management framework presented in this book will be useful for IT organizations in managing their workforce competencies effectively, which can also help in reducing attrition. Organizations that outsource a significant part of their work can employ the framework to assess the competencies of the vendor's workforce.

The competency management framework presented in this book should help business unit heads, HR and people managers to make the best use of their personnel by putting the “*right persons in the right roles*” and nurturing them. The author invites readers and users of Role Competency Matrix framework to share their experiences and views. These will be of immense value in improving the framework for making better people decisions. Feedback and comments will be welcomed wholeheartedly. The author will regard them as valuable lessons for incorporation in a future edition of this book.

Pune, India
June 2019

Mahesh Kuruba

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A special mention must be made of my editor, Venkatanarayanan Ganapathi, who helped transform a doctoral thesis into a book which, I hope, will be of value to a large audience of practitioners. I would also like to thank all the participants who were part of the study and helped with their inputs and data for the role competency matrix.

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About the Author



Dr. Mahesh Kuruba is an Information Technology (IT) professional with wide experience in research, consulting, as well as product and application development. He is currently working as a product manager at Digitate, Tata Consultancy Services (TCS). Till recently he was Process Consulting Head for Japan and ASEAN countries. There, Mahesh managed transformation programs, achieving substantial quantitative benefits for various organizations. He also has wide experience in software development and management in both conventional and agile methodologies. Mahesh's doctoral research at the Indian Institute of Technology, Bombay, was on "Productivity loss reduction-based framework for software process improvement." He was also a visiting scientist at the National Institute of Information and Communications Technology (NICT), Japan, where he pursued research on network security.

Chapter 1

Introduction



In April 1993, IBM hired Louis V. Gerstner, Jr. as its new CEO. Between 1990 and 1992, IBM had made a loss of nearly \$16 billion. It had missed several technology shifts and customers, who previously swore by brand IBM, began to move towards more responsive and nimble competitors. Industry watchers had begun to write off “Big Blue” (as IBM is also known as). Gerstner brought with him a strong, customer-focused approach, which meant committing IBM to deliver integrated services and solutions rather than just hardware and programs.

Gerstner diversified into information technology services, working on behalf of customers in architecting and designing systems, managing applications and running them for the customer. In 1992, IBM’s services earned \$7.4 billion; by 2001, they became a \$30 billion business. The shift in business focus wasn’t easy because IBM was predominantly a product company. The business models for products and services business are very different; and so are the skills and capabilities required to manage them. Services are a human-intensive business and heavily dependent on workforce knowledge and capabilities. IBM’s employees, who were till then working on just products, had to work with various products, including that of their competitors, to develop solutions for their customers. These required significant changes in IBM’s people policies and processes, including recruitment, compensation and incentive structures, and employee training. The focus was on developing the “Competencies of the people”, and aligning them to “Organizational culture and needs”, which has resulted in where we see IBM Global Services today [1].

Information Technology (IT) has been the dominant driver of global economic growth since the late twentieth century. There is no doubt that it will continue to be so in the foreseeable future. Today, virtually every aspect of our lives is impacted by IT. The transformational ability of Information Technology is astounding. With cloud computing and mobile solutions, businesses can access and deploy resources, as well as carry out their operations, quickly and efficiently. Thanks to IT, the way business is conducted today is unrecognizably different from what it was even a decade earlier.

“...and it is really that there is so much to leverage in science and technology. I think most people don’t really realize that. There is so much that can be done with these new technologies...” Larry Page in ‘The Google Story’ [2].

IT is integral to businesses’ efforts at increased productivity, improved efficiency and outstanding service quality. Besides, IT has opened new business and market

opportunities with innovative models that were even unthinkable a few years ago. Today, we have IT companies like Uber and Ola, who provide on-demand mobility services without the need to own a car; short-duration rental accommodation services like Airbnb without the need to check into a hotel-owned property; and retailers like Flipkart who provide the technology platform that helps sellers reach their buyers with minimum logistical challenges. IT-enabled data analytics has enabled customer segmentation to “*segmentation of one*” that businesses are now confident of refining their approaches and make products and service offerings to deliver differentiated services and value at low cost to each customer.

Most importantly, IT is driving innovation. There is demand for IT-enabled change and improvements from everywhere. In the ever-changing market dynamics, customers are demanding faster delivery of services and better value for their money. They want better products and services at a lower cost of ownership. The challenge here is to use technology in multiple and creative ways to make business processes more efficient, provide differentiated and on-demand services to customers, or to develop new applications that generate the potential for establishing new businesses.

The Amazon Dash Button is a case in point. It is the company’s latest step towards becoming a truly on-demand goods service, allowing customers to reorder household essentials with the press of a button. The Dash Button is part of the Internet of Things (IoT) and connects the user to his (or her) Amazon account via WiFi. Each Dash Button is linked to a specific product—press the button, and it will automatically place an order for that product with Amazon, with guaranteed next-day delivery [3].

Tata Consultancy Services (TCS), one of India’s biggest and most respected IT companies, made a modest beginning in Mumbai about 50 years ago. Today, it is its current worth is \$100 billion. TCS’s customer-centric approach, using innovative technology-driven solutions and service delivery models, has enabled their customers to maintain market leadership in their respective businesses. Today, TCS routinely bags multibillion-dollar deals, a rarity in the Indian IT industry.

TCS reached its preeminent position by focusing on innovation labs and products to develop high-quality software for their customers. The first innovation center, Tata Research Development and Design Centre (TRDDC), was established in 1981., TRDDC has developed several software products for TCS. According to its website, TRDDC is “...*one of India’s premier research and development centres...[whose] goal is creation of tools and processes that simplify the development, maintenance and management of large IT and engineering systems.*” Some of the research work from TCS’s Innovation labs has come out from product incubation to products, such as ignio, which have helped TCS achieve a unique position in the market with its AI-based automation [4].

The IT industry is in a state of constant churn. New technologies and applications are being developed—and existing ones rendered irrelevant or obsolete—at a bewildering pace. Innovation is no longer a fancy add-on to a company’s capabilities; it is a business imperative. Organizations that cannot sense the shifts in a business scenario, and quickly respond to their markets’ demand for better products and services, are doomed to oblivion. You either thrive to survive or wither and die. There is very little space for an in-between state of existence in the IT industry.

Advances in Information Technology resulted in steep decline in communication costs which in turn spurred the rise and spectacular growth of e-commerce. E-commerce has revolutionized the way business is conducted, facilitating transactions between businesses (B2B) and businesses and their customers (B2C).

The transformational—and constantly transforming—nature of IT business places a huge demand on the capabilities of its workforce. Technology may be the driving force of the changes in the industry, but it is the ability of its workforce to adapt—and respond—to the changes that decide whether a business will grow or fade into nothingness.

Till not so long ago, people were hired for a certain set of competencies that were expected to serve a company's needs for many years. Given today's business scenario and the disruptive effective of technological changes, this no longer holds true. Existing competencies quickly become irrelevant or obsolete. Therefore, it is imperative that managements view competency development as a strategic imperative that will drive its business goals.

Today, business changes are seen less as a “big shift”, or episodic, that takes place occasionally and then forgotten; rather, change is a continuous and never-ending process. Changes are taking place around us even without our being aware of them. Companies need—or are compelled—to constantly review their objectives and offerings rationally and honestly, and figure out what is it that they can do today, and what their customers are likely to expect tomorrow.

In certain sections of the IT community, there is a growing concern over the relevance of present skills and the need for a large-scale reskilling of the workforce. Capgemini's CEO, Srinivas Kandula, commented that 60–65% of the senior/mid-level *cannot* be trained. According to an estimate by NASSCOM, an Indian IT industry body, 1.5 million IT staff needs to be retrained, a clear indication that IT companies are not focusing enough on competency management [5].

Where is the Problem?

In today's competitive business environment, all organizations are constantly trying to attract and retain talent; but there are not many who are investing in building competencies with a long-term vision. This is due to lack of a strategic direction because of which the workforce is not adequately aligned to the vision.

To be successful, organizations must identify and leverage the strengths of their employees. A defining characteristic of high-performance teams is the strength of their people and the manner in which these strengths are leveraged to achieve optimum contribution to business goals. Identifying competencies and strengths works well for small teams. However, as team size increases the competency management practices which served them well, start to fall apart.