

Retain and Grow the Talent in Statistical Programming

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ABSTRACT:

Keeping programmers engaged and motivated, while maintaining a work-life balance, is the key to organizational success. This requires coordinated efforts from managers and programmers to identify individual career goals and link those goals to an employee development plan so that an achievable path for career growth can be laid out. Managers regularly meet with the employees to assess their engagement and help them set realistic career expectations in an effort to provide the right developmental/growth opportunities on an ongoing basis. These conversations provide a deeper understanding of the programmer's interests, abilities, and aspirations to the managers and help them pursue different career paths including technical, managerial, or both. This helps retention and career development. Here we present different scenarios focusing on the varied interests, abilities, and aspirations of the programmers and how the managers help the programmers to achieve their goals while keeping organizational success in mind.

INTRODUCTION:

Retaining, and developing talent is crucial for achieving organizational success. Organizations typically have established systems and guidelines in place to support talent acquisition and promote career advancement. However, it is important to note that different organizations and individuals have varying definitions of career success. Generally, success in one's career has been measured by climbing the corporate ladder through promotions, accompanied by salary increases and incentives. Organizations typically evaluate an individual's work experiences and accomplishments to determine who is worthy of advancement.

In recent years, however, the definition of career success has shifted to encompass a more holistic view. Success in one's career is now seen as a feeling of personal fulfillment, achievement, and satisfaction that an individual may experience through their employment or career path. These are subjective ideas of success that are subject to change depending on an individual's circumstances. Additionally, it is important to note that individuals adapt to changing demands in their careers and personal lives to achieve a balance between work and life.

While the perspectives of career success may differ between organizations and individuals, they are interconnected, constantly evolving, and have a significant impact on one another. Professional relationships and knowledge sharing among coworkers also play a crucial role in both organizational and individual success. Networking with others for mutual benefit has been shown to assist individuals in achieving success in areas such as job searching and acquiring, gaining access to resources and information, as well as receiving guidance, sponsorship, and professional support. The work an individual does as part of their job also serves as a platform for developing professional relationships.

Considering an individual's strengths, their definition of success, the organization's goals, and the social network value of the individual, managers play a critical role as mentors in leading the success of both the individual and the organization (Fig. 1). Managers have a vital function in understanding the programmer's strengths, areas for development, the definition of career success, and providing available career development opportunities.

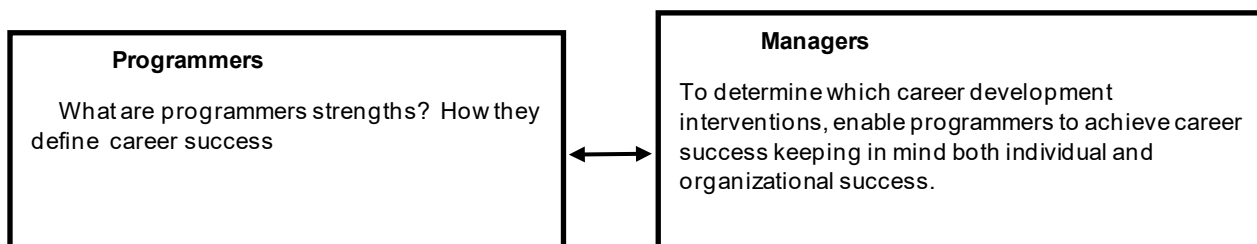


Fig. 1: Communication between programmers and their managers is the key to understanding programmers' strengths and career goals and providing the right career interventions leading to both individual and organizational success.

PROGRAMMERS:

Statistical programming is a technical role, and its key competency is the use of statistical analysis programming techniques to produce data and analysis output that adheres to CDISC and industry requirements. The proper application of statistical analysis techniques and data standards will lead to high-quality deliverables. In addition, the programmers are expected to learn new technological applications, and advanced programming skill sets, follow standardized business processes, and undergo ongoing training. In statistical programming, we encounter individuals with varied levels of competencies in terms of different skills including technical skills, soft skills, identifying and working on the areas of development, interest in new opportunities, and interest to lead organizational goals (Fig. 2). The programmers also need to identify the areas that need improvement and setting achievable goals in consultation with the manager and work toward achieving those goals. This can be further achieved through seeking feedback from colleagues and mentors and attending training and development programs. By doing so, programmers can enhance their skills, improve job performance, and increase their chances for advancement.

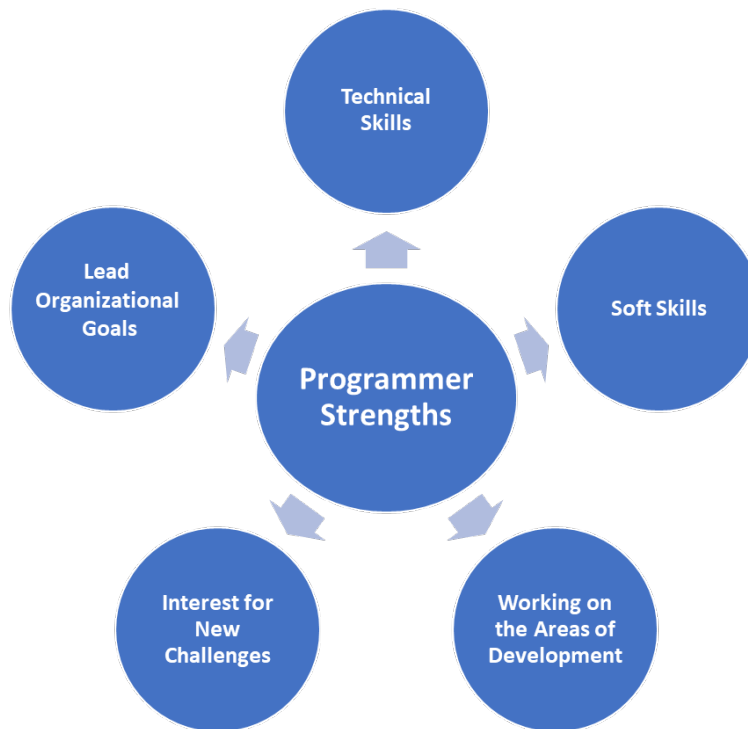


Fig.2: Programmer strengths are a combination of technical skills, soft skills, working on the areas of development, interest in new opportunities, and thriving to lead organizational goals

Programmers, working in their current job, need to evaluate their competencies and see if they have strengths as well as interests in pursuing careers in the context of organizational opportunities. Particularly evaluating their strengths and channeling the strengths for their growth in the organization. For example, if a programmer has superior programming skills and wants to spend more time programming, may need to look for opportunities where their technical skills are well utilized such as leading projects at an expanded level or leading new technological innovations/standardizations for the organization with a team of colleagues.

On the other hand, if the programmer has competencies and interests in leading a team, then taking up the managerial role responsible for the team's work and being accountable for the project completion, may be a career choice. In addition, the team seeks managers' guidance and mentorship for the projects and their individual growth. The organizational structure of your company and the opportunities available determine the hierarchical growth in various career paths for individual contributors or managerial positions.

The organizations evaluate the programmers' talents, and the programmers are considered for the open positions. It requires a coordinated effort in displaying your strengths in the areas of technical and soft skills as well as showing enthusiasm for new opportunities. This necessitates choosing a position for the future and developing a plan to get there. The organizational view for the future job and your intention for career flexibility, skill development, and change management are all critical

considerations at the same time. While you assess your strengths and career opportunities, you must perform well in the current job and improve your soft skills and professional network. The right professional path for programmers is not predetermined. Each of us must select what works best for us and devise a plan to achieve where we want to go.

The role of a programmer in professional development is critical to career growth. By taking charge of their learning and development, the programmer can shape their skills and knowledge to align with their career goals and evolving needs of the organization or industry. This can include seeking out training and professional development opportunities, setting individual career goals and regularly assessing the goals, and further enhancing their skills. It is also important for individuals to communicate their professional development needs and goals to managers and seek any resources or support from the organization.

How a programmer perceives success also plays a major role in how the strengths and opportunities nexus work out. In general, the programmers value the following things such as recognition from colleagues and managers, professional experience, contribution to drug approvals, work-life balance, financial security, and lateral opportunities (Fig. 3).



Fig.3: The programmer's perception of success can be a combination of factors including the recognition of colleagues and managers, professional experience, contribution to drug approvals, work-life balance, financial security, and hierarchical progression.

RECOGNITION BY COLLEAGUES AND MANAGERS: The positive feedback from colleagues and management encourages individuals and enforces personal feelings of achievement and success at work. Sometimes this can be done using a formal system of recognition using awards with points that have a monetary value. They can also be used as a motivator to increase productivity, and quality and also as a way to retain the best employees in the organization. Furthermore, it can be a way to showcase the company's values, culture, and beliefs and also to promote healthy competition among employees.

PROFESSIONAL EXPERIENCE: Enjoy being a programmer and engaged in work activities that facilitate the achievement of personal fulfillment and successful job performance. Engaging in various work activities that utilize individual talents, which further helps broaden professional expertise and lead to successful outcomes for the organization

CONTRIBUTION TO DRUG APPROVALS. The satisfaction that comes from being a part of a team that is responsible for bringing important and potentially life-saving treatments to society can be a major contributor to an individual's sense of professional accomplishment and career success. Additionally, the knowledge that one's work is making a tangible and meaningful impact on the lives of patients and society at large can be a powerful motivator for those working in the field of drug development and approval.

WORK-LIFE BALANCE: The experience of successfully balancing time spent at work, time spent with family, friends, and other obligations has become an important priority for many programmers. The programmers may not be interested to accept job opportunities that would compromise their work-life balance that demand greater workloads and obligations. In such cases,

organizations need to recognize the importance of work-life balance and make efforts to accommodate the needs of their employees in this regard. This can include offering flexible work arrangements, such as telecommuting or flexible hours, as well as providing resources and support to help employees manage the demands of their work. On the other hand, there will be times when a critical business need may require you to stretch your time commitments. In such cases prioritizing critical business needs and being flexible with other existing commitments, would be expected and recognized. The work-life balance needs to be managed by each individual and it could be individualized, and organizations need to work with the employees to adjust the work as needed.

FINANCIAL SECURITY: The wages that are associated with the job concerning the individual financial situation and financial future play a key role in the definition of success. Individuals may be more inclined to accept job opportunities and stay longer if they receive competitive wages and benefits. Furthermore, financial security also encompasses the stability and predictability of income, which can affect an individual's ability to plan for the future. The fair and competitive package motivates the employees to stay longer with the organizations and make productive contributions.

HIERARCHICAL PROGRESSION: Hierarchical Progression serves as an important component of career success for those who aspire to move up in their career paths either technical or managerial by expanding responsibilities over time. The ability to progress in one's career can provide a sense of achievement and fulfillment, as well as opportunities for personal and professional growth. For those who are striving to move up in their career, the ability to take on new challenges and expand their responsibilities over time can be a powerful motivator.

LATERAL CAREER OPPORTUNITIES: Taking on new roles and responsibilities within the organization that does not necessarily involve promotion but provides new challenges and opportunities that broaden programmer skills serves as a key component of success. These opportunities include different areas of statistical programming: the use of new technologies for reporting, taking on projects that require languages such as R, Python or more complex programming tasks, expanded project management roles, or people managing roles. By embracing lateral opportunities, individuals can expand their versatility and marketability, and position themselves for future advancements. These opportunities not only broaden employee skills but expose them to different stakeholders or cross-functional groups and build a diverse network within the organization. In an industry that is constantly evolving and growing, lateral opportunities can provide a path for continuous learning, growth, and career development and serve as another motivator to stay with the organization and grow with it.

Career success from an individual perspective is a complex mix of the above components. The individuals may differ in how they value each of these components and define their success. The managers play a key role in understanding the unique definitions of individual success and aligning them with the organizational goals and available opportunities.

MANAGERS:

The managers have the vital role to understand individual definitions of success as well as organizations and providing career interventions to help the programmers to achieve their success in turn contributing to the organizational success. From an organizational perspective, success may be perceived as meeting or exceeding the job responsibilities outlined in the job description. Primarily the organizations link employee achievements with organizational strategies /success. In other words, success from an organizational perspective is making a significant contribution to the organization or exceeding organizational expectations in some way contributing to the overall achievement of organizational goals. In general, career interventions are adopted in line with organizational goals as well as individual strengths and interests. Therefore, managers are responsible for implementing performance management systems and providing opportunities for professional development, mentoring, and career advancement (Fig.4).



Fig.4: Managers are responsible for Performance Management, Professional Development, Mentoring, and providing career opportunities to enable the individual and the organizational success.

PERFORMANCE MANAGEMENT: While setting a performance management plan for individuals, the managers work with individuals to align their goals with organizational objectives. This requires managers to work closely with employees to understand their strengths, interests, and goals to incorporate them into the performance management plan. A key aspect of performance management is having regular meetings to discuss the progress toward goals and provide feedback. Providing continuous feedback and appraisals throughout the year, rather than just at the end of the year, allows for real-time adjustments and improvements to be made as needed to continue to make a progress.

PROFESSIONAL DEVELOPMENT: The manager provides guidance on learning opportunities such as training courses or pursuing advanced degrees. In addition, they provide advice on joining professional networks within or outside organizations that help individual professional development. However, it is important to note that while managers play an important role in providing guidance and opportunities for professional development, ultimately the responsibility for pursuing professional development falls on the individual employee. Employees must be proactive in seeking out opportunities for growth and advancement, and actively engage in their professional development

MENTORING: The manager serves as the primary point of contact for guidance, feedback, and support in conducting daily business. This entails helping a mentee develop the skills and networks necessary to be successful in their current roles, as well as to prepare for potential promotions. Mentoring works wonders if strong rapport and trust exist between mentor and mentee. This helps to have open and honest conversations and provide feedback to have successful outcomes.

CAREER OPPORTUNITIES: Managers play an important role in informing career progression opportunities that aligns with individuals' strengths, interests, and goals. In addition, providing clear pathways for achieving them. This includes setting specific and measurable goals, as well as providing training and development opportunities that align with the advancement opportunities. The manager should be transparent about the available opportunities and set the right expectations. By providing career opportunities that align with individual goals and organizational objectives, managers can ensure that employees are motivated, engaged, and productive in their roles, ultimately contributing to the overall success of the organization.

The interactions between a manager and an employee should be active, constructive, and on-going basis rather than having a passive approach and waiting for feedback from annual appraisals. Career success is a priority for both individuals and organizations. Though organizations and individuals have different definitions of career success, these definitions are interdependent and subject to change. Both parties should have the right feedback mechanisms and pay attention to each other to have effective career interventions to complement each other. Thus, enabling the growth of individuals and organizations.

CONCLUSION:

For an organization to succeed, talent must be retained and developed. Even though each individual may have their definition of success, it is important to have a clear understanding of the organizational objectives and align the individual objectives with the needs of the organization. Managers play a crucial role in helping individuals understand how their strengths and interests can be utilized to benefit the organization, and in providing opportunities for them to develop new skills and take on new roles that align with the organization's goals. This not only leads to individual success but also contributes to the overall success of the organization. On the other hand, bidirectional communication between individuals and the organization facilitated by the manager is crucial for this alignment and adapting the definitions of success by organizations and individuals in changing circumstances.

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