



North American Young Generation in Nuclear

What's Critical to Your Success?

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Executive Summary

One of the major challenges to the nuclear industry is retaining and developing their current workforce. Many focus groups have been formed to collect and review data within the nuclear industry from an organizational perspective, however, NA-YGN wanted to collect data directly from young professionals of the nuclear industry. North American Young Generation in Nuclear conducted a focus group at the 2006 NA-YGN Annual Workshop titled "What's Critical to Your Success?" to collect information in regards to understanding the young professional's work environment and their skills.

Nearly 60 participants provided their honest (and anonymous) feedback regarding their employment profile, job skills, job characteristics, actions they would recommend to their employers, reasons why they stay or would consider exiting their organization and the types of barriers they face in conducting their jobs.

The participants varied in their jobs whereby 61% were engineers, 13.5% held jobs in the support organizations (e.g. Training, Finance, Human Resources, Marketing), 13.5% held project management positions, 8% held jobs in Operations, 1% were students, and the remaining percentage did not provide a response. They also varied in the length of time they've been with the company from as little as three months to as much as sixteen years.

The focus group's responses provide insight or ideas as to what, when and how organizations can do to improve their current job satisfaction. However, note that 69.4% of the participants indicated that their current job satisfaction was "satisfactory" or "excellent." Only 29% indicated that their job satisfaction "could be better".

Although only 59 participants provided data for this focus group, the ideas presented may help organizations who are looking for ideas to help develop and retain their current workforce and/or may consider conducting a study of this type for the young professionals within their organization.

In general, participants are satisfied with their current employment, however, there is potential for them to consider other opportunities if they arose. The nuclear industry is currently on the upswing and filled with new opportunities regarding new plant builds, innovative designs and processes, and growth. Employers will need to balance these types of opportunities against the opportunities which are needed to ensure existing operations are sustained in a safe and reliable matter. A recommendation would be to continuously pulse the work force about their needs and adapt the strategy as appropriate.

Background

At the 2006 NA-YGN Annual Workshop, a focus group was held called, "What's Critical to Your Success?" The objectives of this focus group were to identify ideas and provide recommendations to young professionals and their respective organizations as it relates to their careers. 59 participants provided honest feedback and recommendations about their jobs by responding to a variety of questions about their profiles, their skills, and their perceptions of their jobs. Each participant was assigned a participant identification number, therefore were able to remain anonymous in their responses.

Methodology & Data Collection


For this analysis, there were “tools and rules” that helped collect the data. The questions were generated prior to the workshop. Half-slips of the background questions with pre-assigned participant identification numbers were distributed to all participants. In regards to the questions about their perceptions about their jobs and skills, post-it notes were used to capture their responses. Participants were instructed to write their participant identification number on the back of the post-it as a mechanism to trace their answer to their background information. Although this methodology allowed for interaction and brainstorming amongst the participants, it wasn't the best tool for tracing their answer to their background information because some participants did not write their number on every post-it note. For each question about their perceptions, a flip chart page was designated for each question. Participants were instructed to put their post-it on the designated page. The exercise allowed participants the opportunity to instantly see their similarities and/or differences for their responses and allowed group discussion on various responses. Upon collection of the data, the responses were entered into a spreadsheet to begin analysis on what was considered critical to this group's success. Minitab and MS Excel tables were used to create the charts seen in this report.

In regards to data analysis, the following methods were applied:

- Participants were permitted free-form responses; however, in order to show relevancy of data amongst the group, their responses were grouped into appropriate categories.
- Responses to the Questions 1 through 10 represent only 90% of the provided responses.
- Ratings were averaged when ratings were provided, therefore providing an average importance rating for an idea.

A sample of the background information half-slip is provided below.

#1



Background Questions for "What's Critical to your Success?"

How long have you been with your company?

What's your current role?

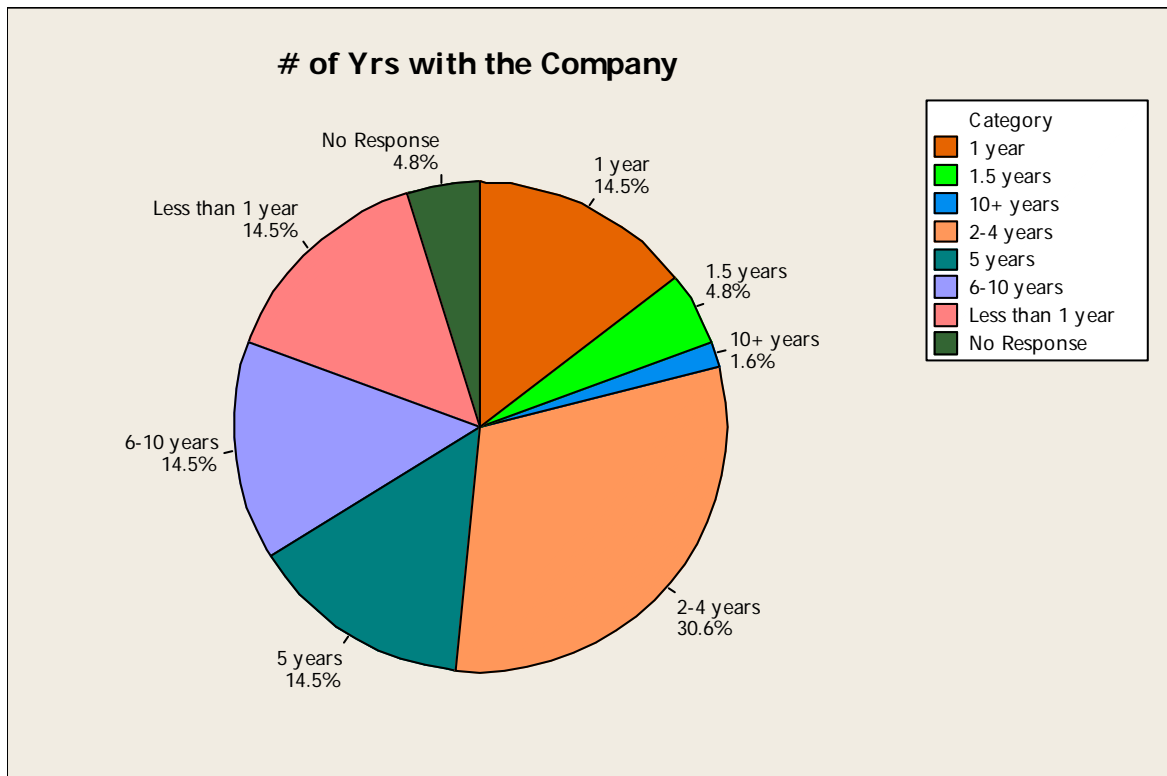
When was the last time you received a promotion within your company?

What's your definition of "success"?

Participants' Profiles

Responses were collected in order to understand their profiles - i.e. how many years they have worked with the company, their current role, the year of their last promotion, and their current job satisfaction level.

When looking at the participants' profiles, 33.8% have been with the company less than 2 years, 30.6% have been with the company 2-4 years, and 30.6% have been with the company 5 years or more.

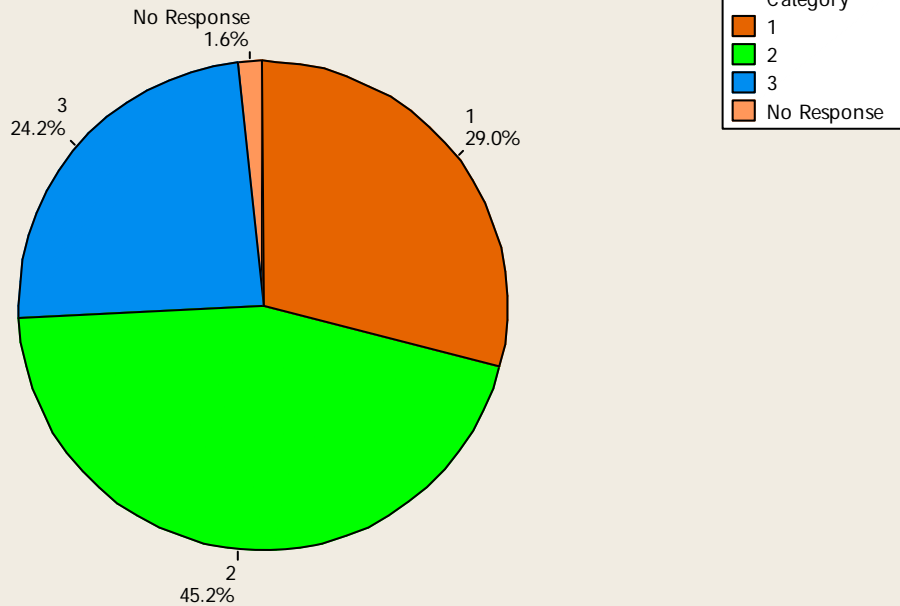


When asked what the participant's current job satisfaction level was, they responded as such:

- 29% (1) Could be better
- 45.2% (2) Satisfactory
- 24.2% (3) Excellent

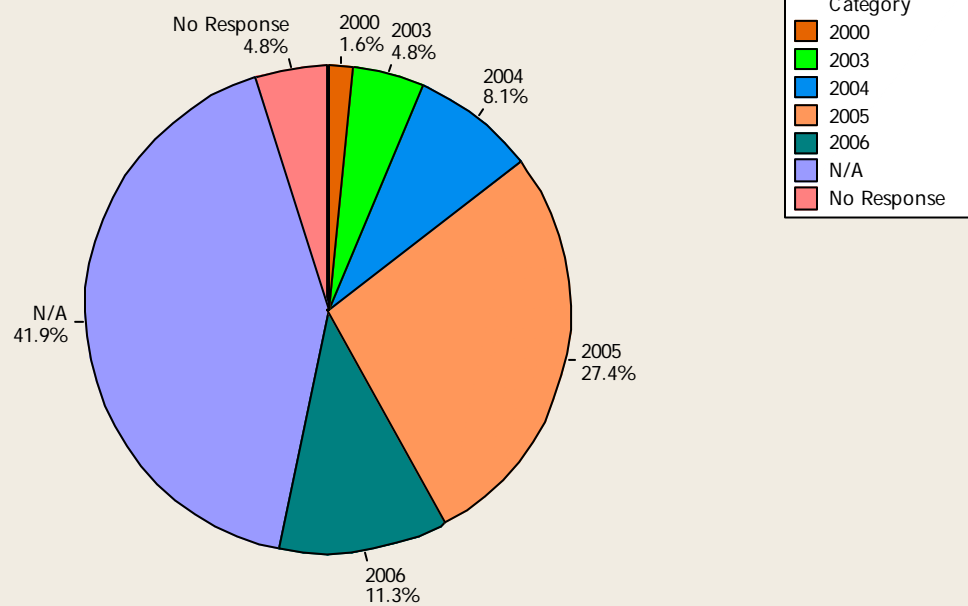
The majority of the participants, 69.4%, felt that their job satisfaction level was either satisfactory or excellent.

Participants Current Job Satisfaction Level



In regards to the last year that the participants were given a promotion 41.9% of our participants did not receive a promotion; however 51.6% did receive a promotion within the last 5 years (2003-2006).

Year of Participant's Last Promotion



Mean comparisons were made between the participants number of years in the company and the last year that the participant received a promotion with their current job satisfaction level (1=could be better, 2=satisfactory, 3=excellent).

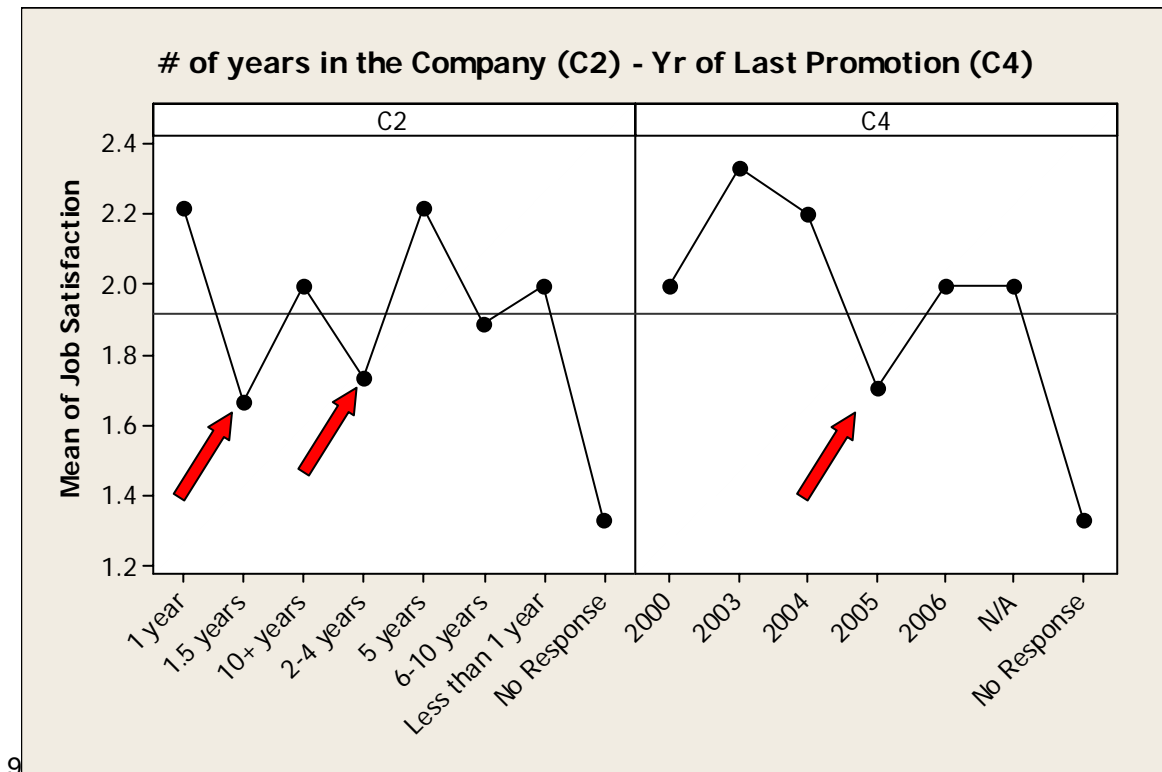
of years in company versus job satisfaction level

In general, participants who have been with the company for 1.5-4 years believe their job satisfaction “could be better.” In contrast, those who have been with their company for 1 year or 5 years, stated their job satisfaction level is *above* "satisfactory". If they have been with the company less than 1 year or 6 years or more, their responses were satisfactory.

Last year of promotion versus job satisfaction level

Surprisingly, looking at the data for promotions in 2005, it shows that although participants (27.4%) received a promotion in 2005, their mean job satisfaction level was lower than satisfactory. Those who received promotions in 2006 and those who have not received a promotion both had the same levels of satisfaction. For the most part, participants described their job satisfaction as “satisfactory.”

Looking at these data points, it seems that the young professional's perspective of their job satisfaction level is most vulnerable from 1.5-4 years.



Participant's responses to "What's your Definition of Success?"

During the beginning of the study, the participants were asked to write their definition of success. The purpose of this question was to identify if they defined success based on career/company's definition or based on a personal definition. 58% of the participants provided definitions which required their career or their organization to fulfill, 30% of the participants provided definitions which required the individual to fulfill, whereas 10% provided definitions which could be satisfied by their career/company *and* individually. The remaining 2% did not provide a response. Sample definitions are provided for each category:

Career/Company-Related	Individual	Both
Being properly acknowledged & compensated for a job well done. Being accountable owning issues you feel you can handle	Doing your best and then pushing on past that	Knowing what you are doing is beneficial to yourself and your company. Enjoying what you're doing
Continuously increasing scope of responsibility, accountability, and pay at market rates	Always making improvements learning & growing into goals	Continuous learning & being satisfied personally & professionally with your career choice
Receiving regular promotions and salary increases. Obtaining a management type position and responsibilities	Happy with current situation, flexible enough continue to grow and learn that success will surely follow	Progression, stability, balance, good financial compensation, & spiritual balance
Being able to communicate well with your colleagues and counterparts, have a solid technical background, get rewarded for your achievements	Being happy and having no regrets	Happiness with career & personal life - Balance of time and being able to do what you want

Questions for "What's Critical to Your Success?"

After profiling the participants, more specific questions were asked in relation to the characteristics of their jobs. The following ten questions were asked:

1. What are 3 skills that are required for your job?
2. What 3 skills do you excel at to do your job well?
3. What 3 skills do you wish to improve so that you can add value to your organization?
4. What are 3 characteristics of your job that you enjoy?
5. What are 3 characteristics of your job that you don't like?
6. What are 3 actions you would recommend to your employer to increase your job satisfaction?
7. What are 3 reasons you stay at your company?
8. What reasons would you consider leaving your company?
9. What are the barriers that prevent you from doing your job well?
10. In your opinion, what are the top 3 skills your employers' value?

For each idea that was reported, participants were asked to rate their idea in order of importance: 1-low, 2-medium, 3-high. Rated responses were then averaged to provide the importance rating for each of their submittals.

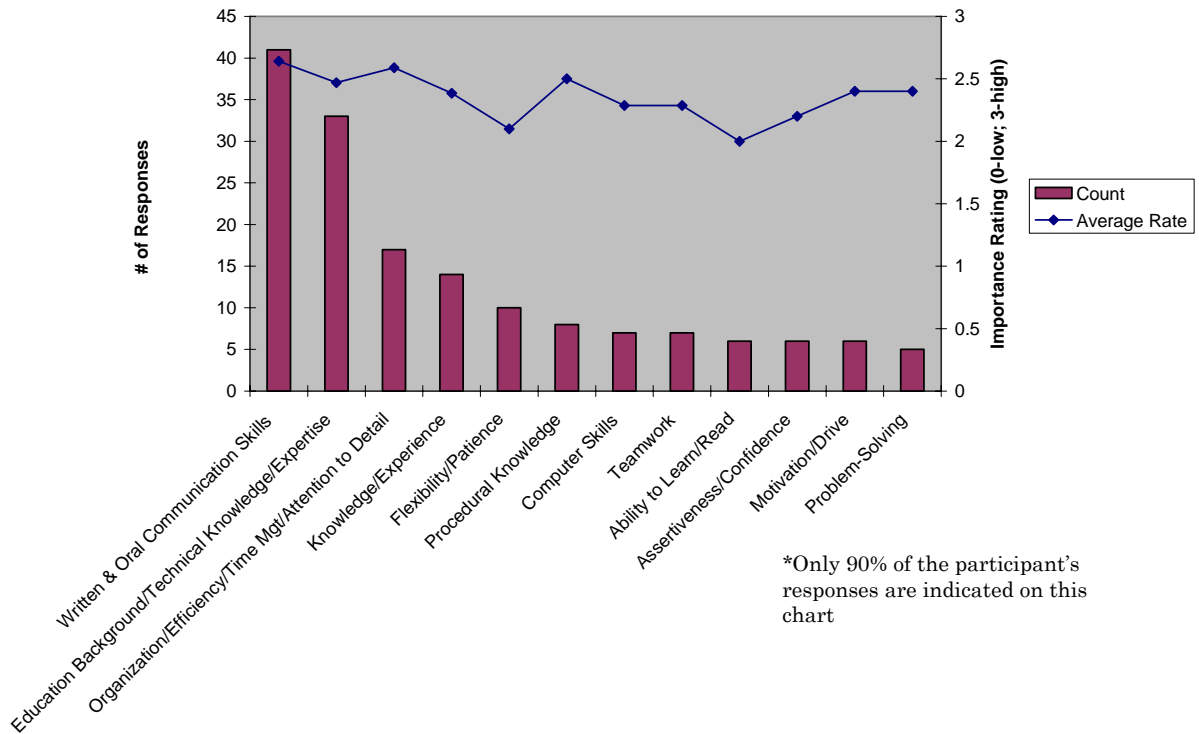
Continuing with the study, participants were asked a series of questions related to their jobs and skills.

Question 1: What are 3 skills that are required for your job?

In general, participants' responses indicated that the top two core skills required for their jobs were Written & Oral Communications skills and their Education Background, Technical Knowledge and/or Expertise. Written & Oral Communication skills received the highest average importance rating of 2.64. The average importance rating for Education Background was ranked at 2.47 which was the third highest rating. Participants whom felt that Organizational/Efficiency/Time Management/Attention to Detail Skills were more important for their job rated these skills with the average importance rating of 2.59.

In reviewing skills which have the highest average importance ratings, 13.6 % of the participants indicated that the second highest skill was Procedural Knowledge with a rating of 2.5.

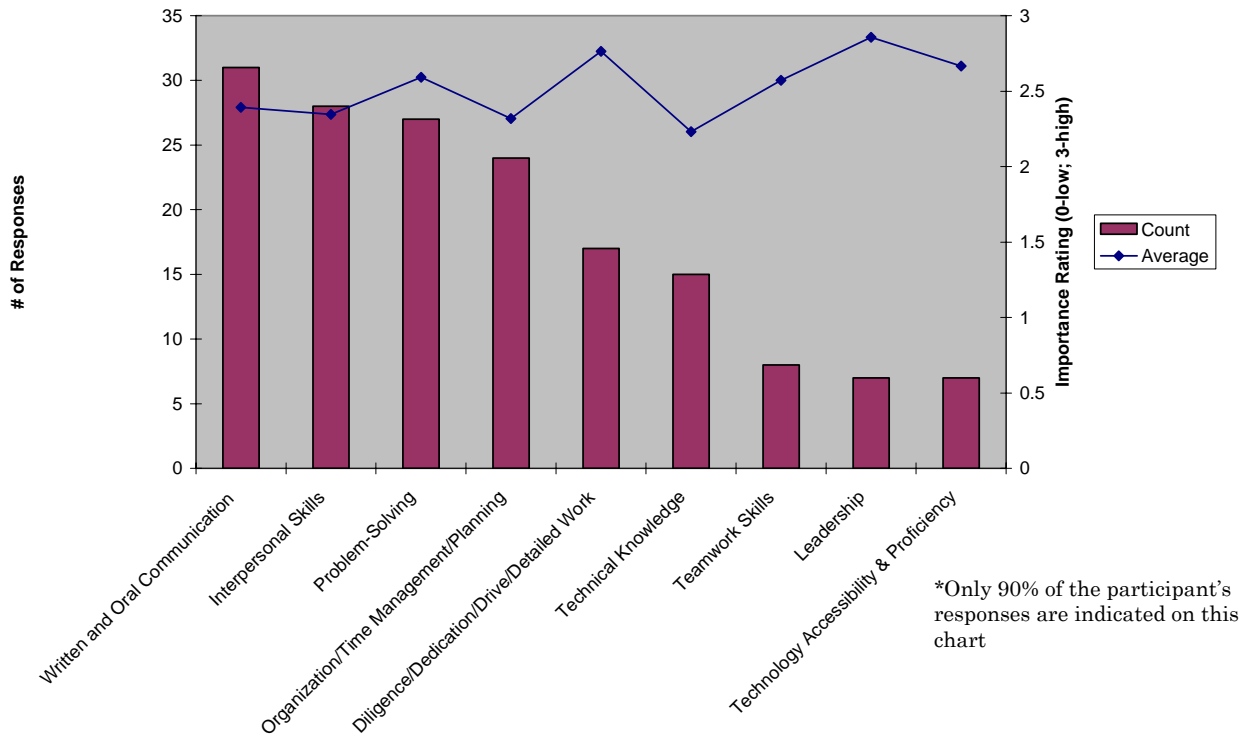
Required Skills For Their Jobs



Question 2: What 3 skills do you excel at to do your job well?

The majority of the participants indicated that their top four skills to which they excel were related to Written & Oral Communication, Interpersonal Skills, Problem-Solving and Organization/Time Management/Planning. Of these four skills, Problem-Solving Skills received the highest average importance rating at 2.59, however, respondent's who responded with Diligence/ Dedication/Drive/Detailed Work and Leadership rated these skills higher at 2.76 and 2.86, respectively. Although respondent's indicated that Technical Knowledge is one of the top required skill for their jobs, they do not feel it is a skill to which excel at for their jobs. Technical knowledge drops to the sixth skill with the lowest importance rating of 2.23.

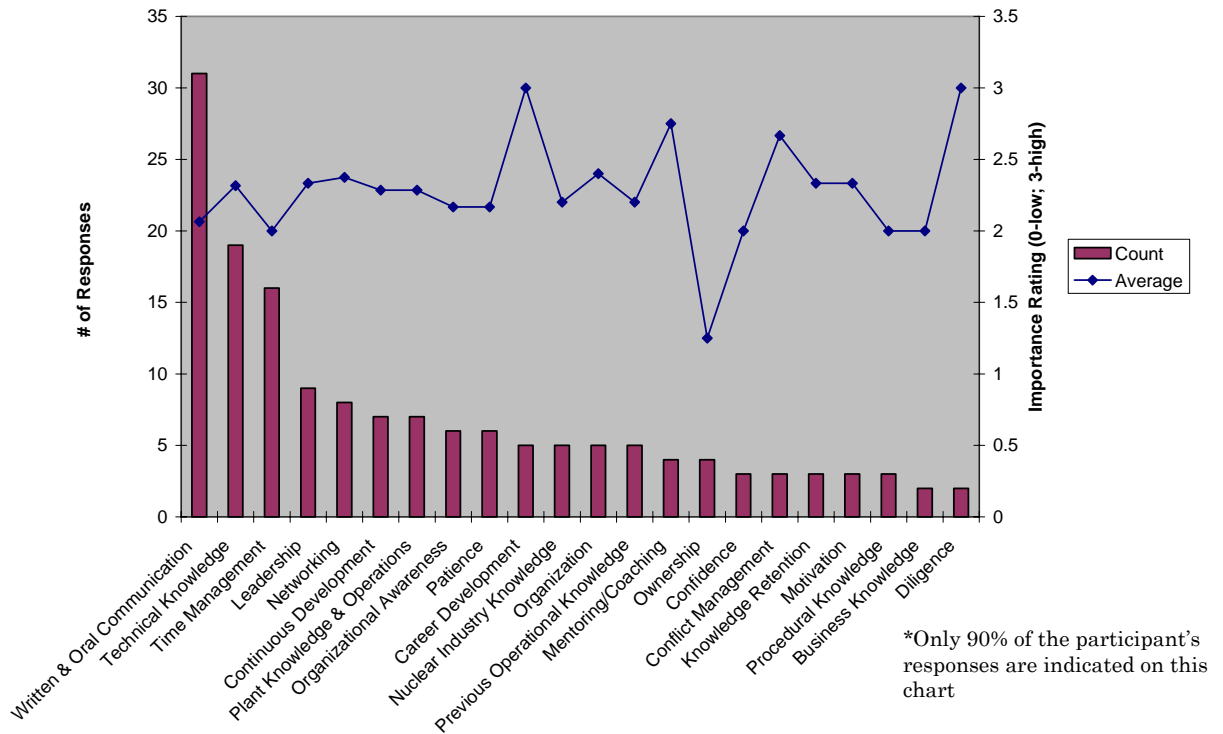
Skills To Which They Excel At For Job



Question 3: What 3 skills do you wish to improve so that you can add value to your organization?

Although most participants felt that their Written and Oral skills and Time Management Skills were more than adequate, they are still two skills they wish to improve as they are within the top three improvement skills. Moving up the ranks for improvement areas are Technical Knowledge and Leadership skills, with average importance ratings of 2.32 and 2.33, respectively. The top five improvement skills, Written & Oral Communication, Technical Knowledge, Time Management, Leadership and Networking, were not listed with the highest average importance rating as their ratings were from 2.00 to 2.38. The skills which received the highest average importance rating were Career Development, Diligence, Mentoring/Coaching, Conflict Management, and Organization with ratings from 2.40 to 3.00. Career Development and Diligence shared the highest average importance ratings of 3.0.

Skills They Wish to Improve



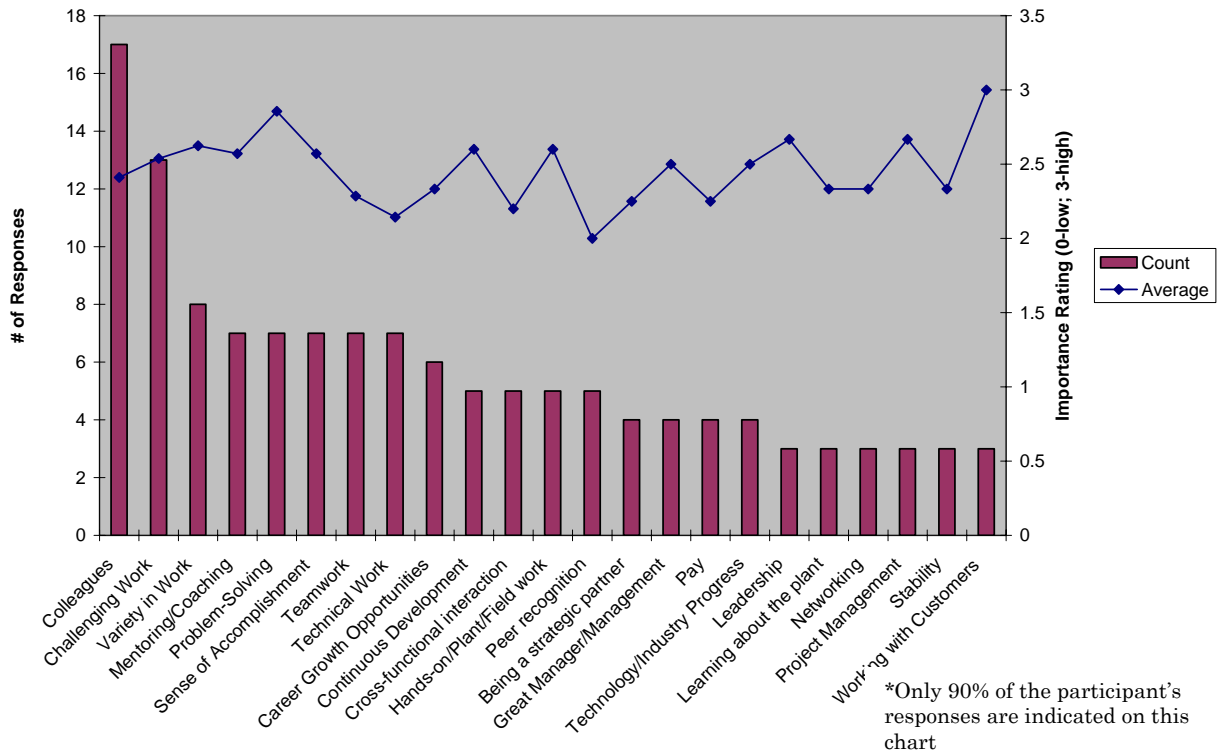
Question 4: What are 3 characteristics of your job that you enjoy?

For the most part, many of the characteristics enjoyed by the participants related to either working with people or their work itself. Pay received four responses and received an importance rating of 2.25.

Overall, the top three job characteristics that are enjoyed by participants were their colleagues (2.41), the challenge their work provides (2.54) and having variety in their work (2.63).

However, participants who responded working with their customers (3.00), problem-solving (2.86), and leadership (2.67), identified these three characteristics with the highest importance ratings.

Reasons They Like Their Jobs

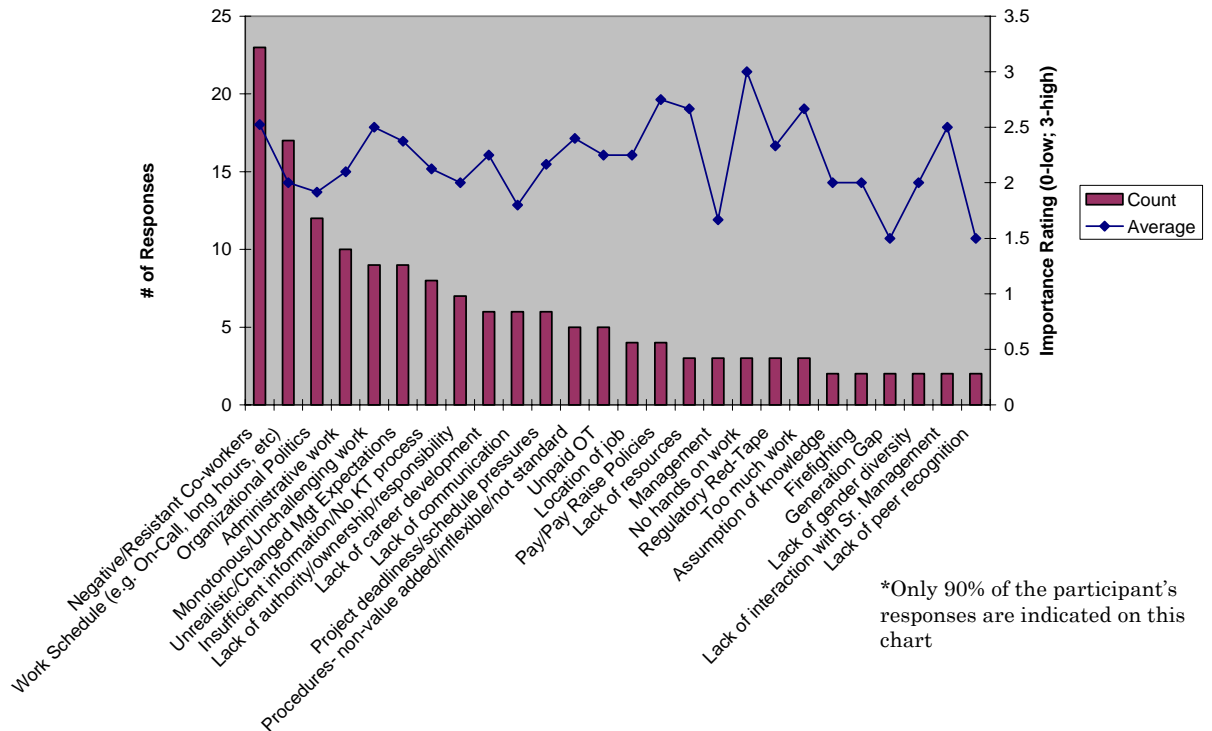


Question 5: What are 3 characteristics of your job that you don't like?

Although 29% of participants identified their colleagues as the reason they like their jobs, 39% of participants identified colleagues who are negative or resistant to change as the top reason why they don't like their jobs, with an importance rating of 2.52. The second most disliked characteristic of their jobs were their Work Schedules with an importance rating of 2.0. Participants do not like changing/rotating of shifts, the long hours, and/or making the decisions to choose work over their personal lives. The third most disliked characteristic of their jobs were the Organizational Politics with the rating of 2.0. Specifically, participants do not like having to deal with the politics, the need to chase people down for deliverables and a cut throat environment.

Participants who identified the lack of hands-on work, pay/pay raise policies, lack of resources and too much work attributed these with the highest importance ratings, 3.0, 2.75, 2.67 and 2.67, respectively.

Reasons They Don't Like Their Jobs



Question 6: What are 3 actions you would recommend to your employer to increase your job satisfaction?

Participants provided recommendations to employers which can be categorized into two main areas: career development/training and organizational changes. In their opinion, these activities would help increase their job satisfaction.

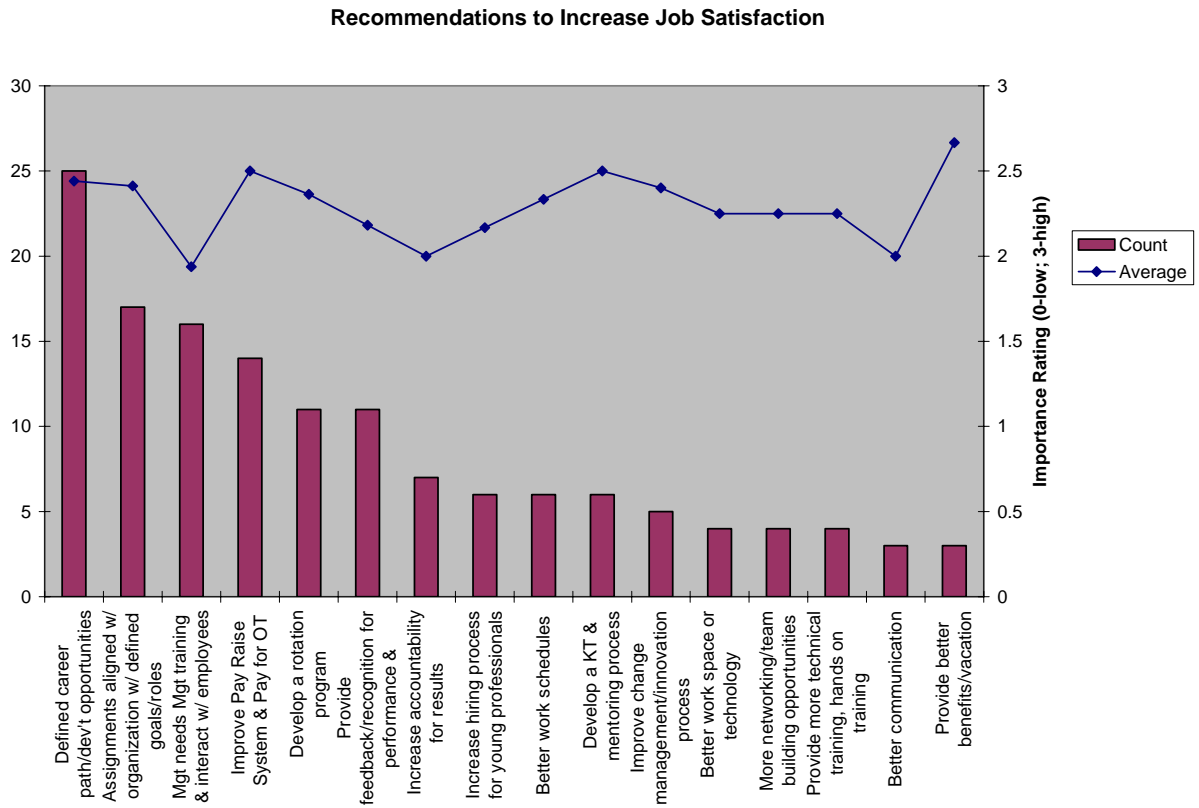
The most frequent identified action (42% of participants) recommended that employers provide defined career development path and development opportunities. The average importance rating for this action was 2.42. Ideas proposed were:

- Map out the different paths with possible avenues
- Develop a written succession plan and promotional criteria
- Increasing awareness of professional development opportunities within an organization and focus on career development for young professionals
- Increase support for continuous education, including conducting information sessions on the types of continuous education supported by an organization
- Devise an organized training schedule

The second most frequent identified action (28.8%) was to provide assignments that are aligned with the organization's business strategy which have defined goals and roles. The average importance rating is 2.41. Many of the participants responded that the organizational goals were not clearly communicated and/or visible and that the organization should trust their professionals with "the big picture". Also, they did not seem to understand how their activities supported the organizational goal or they felt that they were working on less valued projects.

The third most frequent identified action (27.1%) was to provide management training to management as well as to have more interaction with their employees. The importance rating was one of the lowest of this grouping at 1.94.

In regards to actions with highest importance ratings, the two highest were related to company benefits or payment, 2.67 and 2.5, respectively. Only 5% of the participants indicated a need for better company benefits, however, 24% of the participants would like to see an increase in their pay, being paid for their overtime, and/or a change in the pay raise system. The third most important rating was the company developing a knowledge transfer program and/or robust mentoring program. 10% of the participants provided an average importance rating of 2.5 for this action.

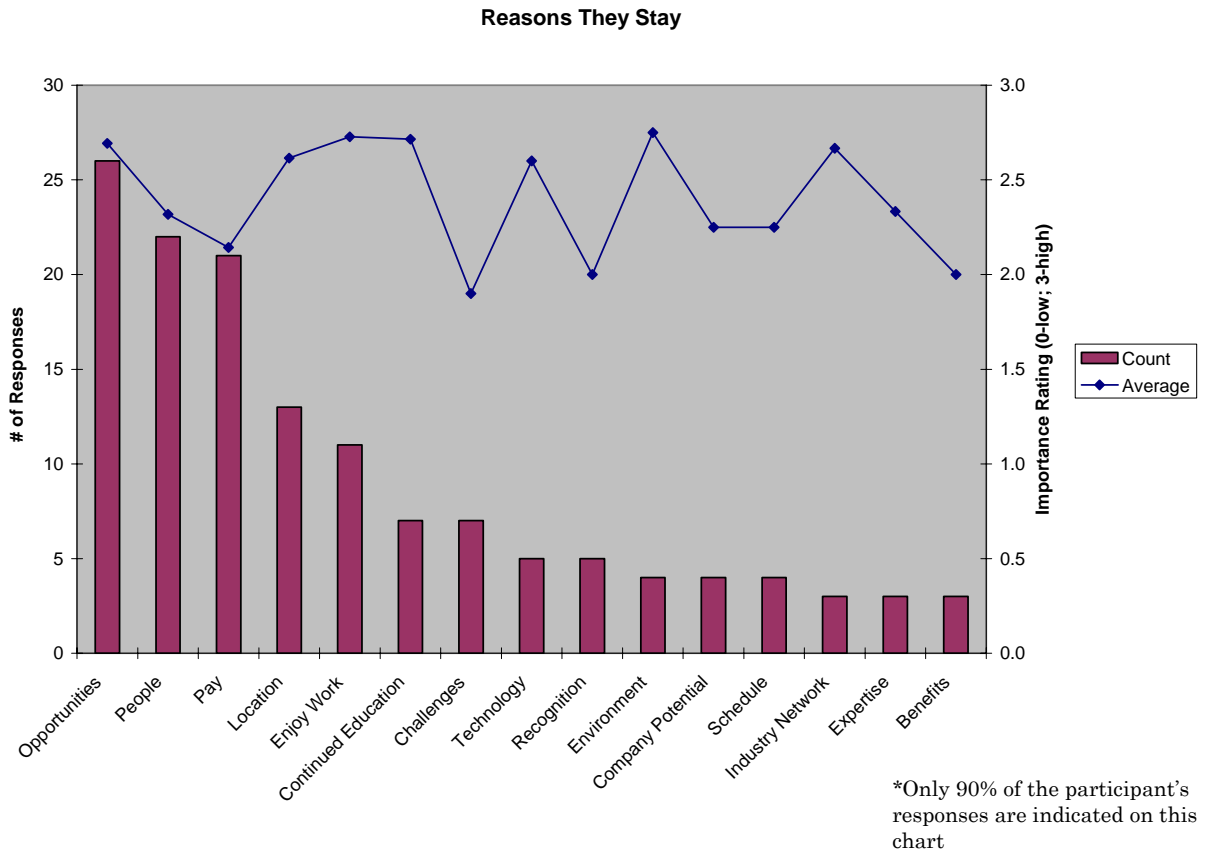


*Only 90% of the participant's responses are indicated on this chart

Question 7: What are 3 reasons you stay are your company?

44% of participants indicated that the top reason they stay at their company is due to the opportunities they foresee in their organization, providing this factor with an average importance rating of 2.7. 37.2% stated that the people they work with are a factor in their decision, at an importance rating 2.3; and 35.6% of the participants indicated that their pay is a factor, with an importance rating of 2.1.

In reviewing the reasons with the highest average importance ratings, 7% of the participants noted that their work environment is the most important with a rating of 2.8. The next four reasons are tied at 2.7 which are: Enjoy Work (18.6%), Continuous Education (11.9%), Opportunities (44%), and Industry Networking (5%).

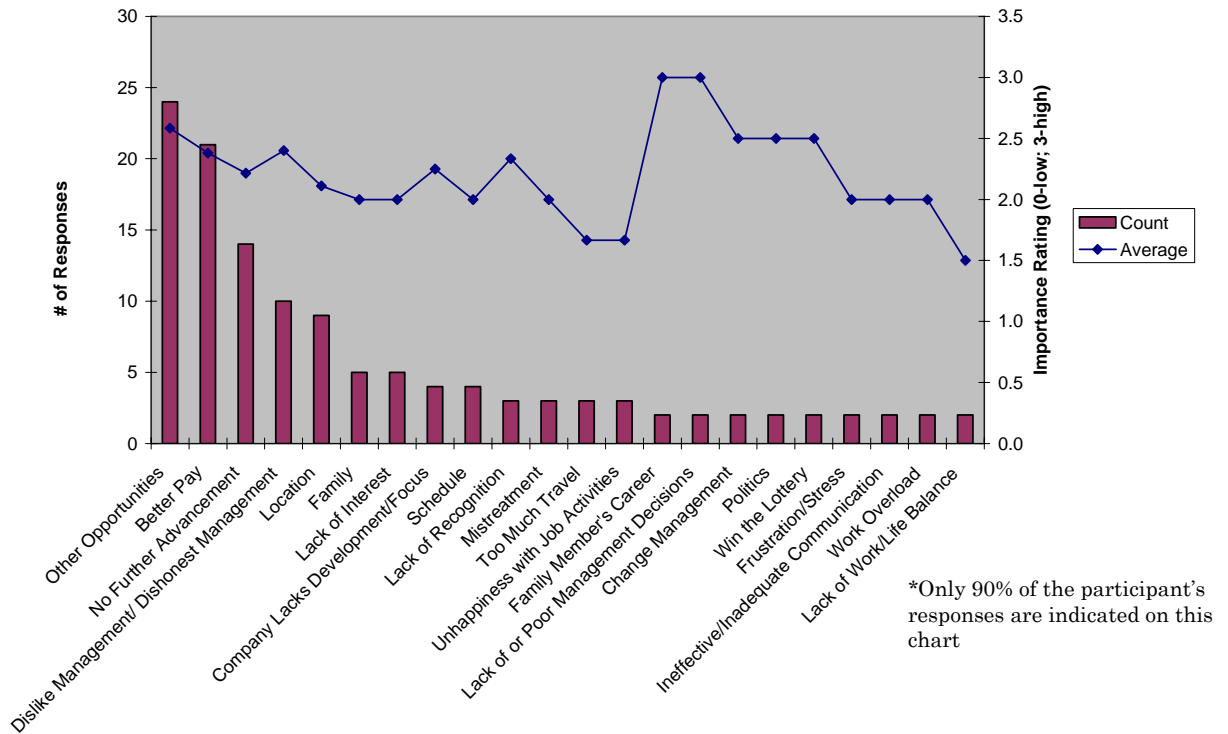


Question 8: What reasons would you consider leaving your company?

The most frequent reason (41%) the participants would consider leaving their company was for other opportunities with an average importance rating of 2.6. 35.6% of the participants would consider leaving a company for better pay with an average importance rating of 2.4. 23.7% of the participants would consider leaving if there were no opportunities for advancement within their organization; importance rating of 2.2.

In reviewing reasons with highest average importance ratings, the top three were a Family Member's Career (3%; importance rating 3.0), Lack of /or Poor Management Decisions (3%; importance rating 3.0), and Other Opportunities (41%; importance rating 2.6)

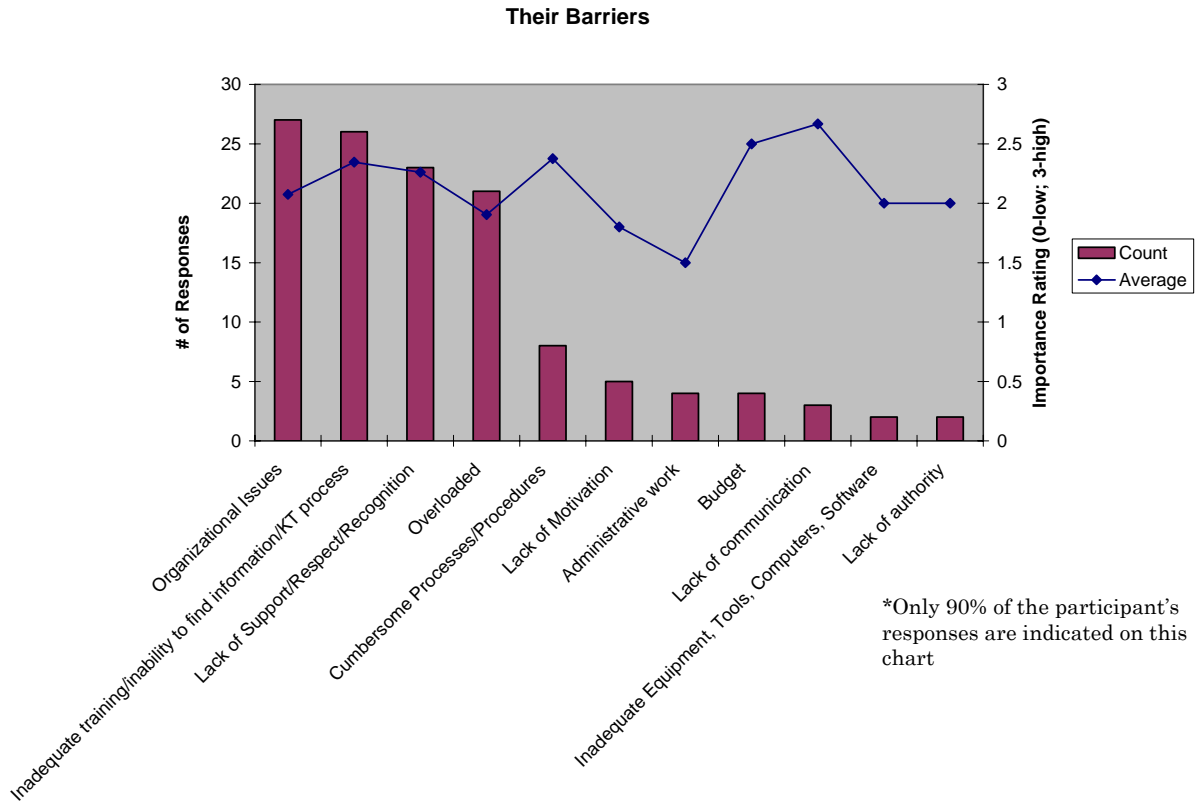
Reasons They'd Consider Leaving Their Company



Question 9: What are the barriers that prevent you from doing your job well?

The four most frequent responses for barriers which prevent young professionals to performing their jobs well were: Organizational Issues (45.8%, importance rating 2.07), Inadequate training/inability to find information/knowledge transfer processes (44%, importance rating 2.35), Lack of support/respect/recognition from their peers/management (39%, importance rating 2.26) and Overloaded (35.6%, importance rating of 1.90).

The four barriers which had the highest average importance ratings were Lack of Communication (5%, importance rating 2.67), Budget (6.7%, importance rating 2.5), Cumbersome Process or Procedures (13.6%, importance rating 2.38) and Inadequate training/inability to find information/knowledge transfer processes (44%, importance rating 2.35).

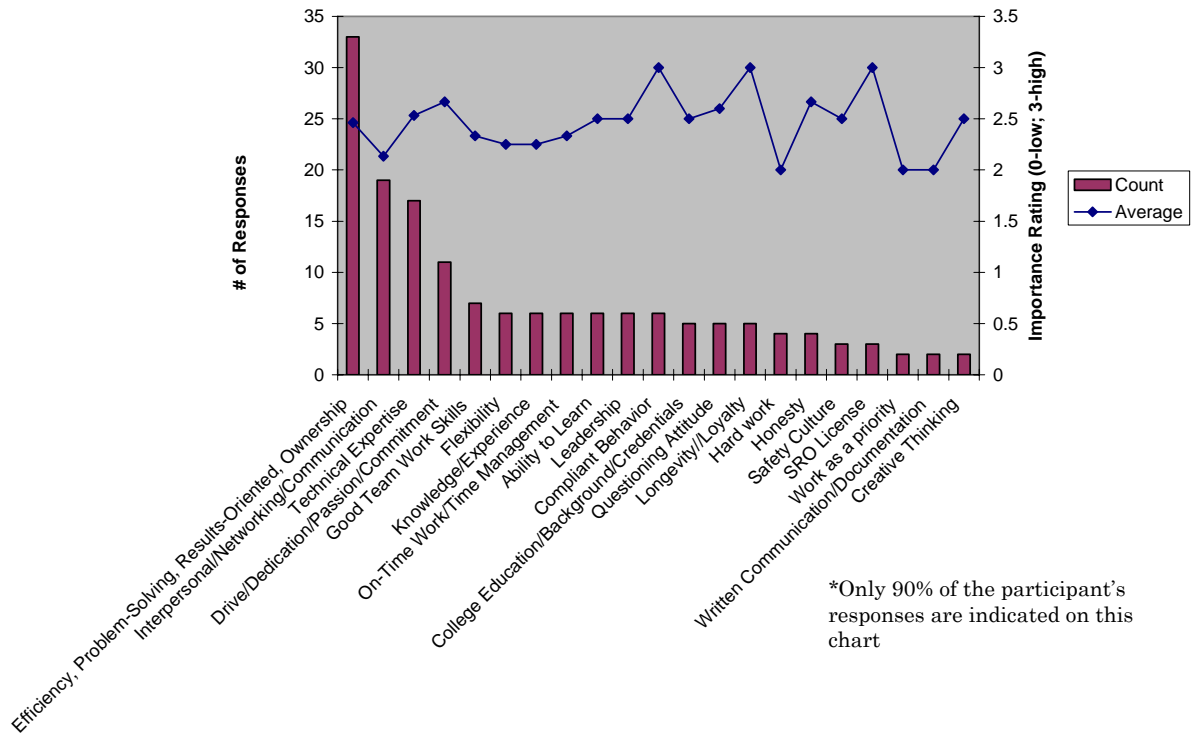


Question 10: In your opinion, what are the top three skills your employer's value?

56% of the participants indicated that the most valued skill by employers were skills that were related to efficiency, problem-solving, results-orientation and ownership for their work. The importance ratings for these types of skills were 2.46. 32% of the participants indicated that interpersonal/networking, communication skills were the second highest valued skill by employers providing these skills an importance rating of 2.13. 29% of the participants indicated that technical expertise was highly valued with 2.53 as an importance rating.

In contrast, when reviewing the highest importance rating factors three skills were tied with a rating of 3.0. Of the surveyed population, 10% indicated that Compliant behavior (or submissive behavior); 9% felt that company loyalty/longevity and 5% felt that obtaining an Senior Reactor Operating License were skills and/or characteristics that were highly valued by their organization.

Perceived Valued Attributes of Their Employers



Lessons Learned

For future assessments, the responses will be pre-defined and participants will need to select their responses. This will help in analyzing responses.

If the same format is utilized again, modifying the mechanism to collect responses should be considered as it requires significant manual data entry. However, smaller work groups would allow for the same format and less data entry.

Summary

NA-YGN would like to thank all of the participants who provided their responses to help collect data and provide insight as to how to improve career development as well as ideas to help retain the current workforce.