CASE STUDY OF A MULTINATIONAL FIRM

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Abstract

This primary Job Analysis was developed for a Private multinational company in Canada with global operations in UK, USA, EUROPE, AUSTRALIA and the MIDDLE EAST. It is aimed at developing an effective Recruitment and Selection system based on an accurate, detailed, thorough and thoughtful job analysis for a 'requisite' position that of a customer care representative. Author has followed a Functional Job Analysis methodology based on a Canadian Standards approved Job Fact sheet, Job Analysis Questionnaire, and a Task Statements' sheet using which job duties, job statements and job specifications were identified. Key Knowledge, Skills, Abilities and Other Attributes from the task inventory and task statements were derived. The Job Analysis not only assures Managers that valid selection instruments can be developed based on Job Analysis, but also showed them how systematic selection decisions can be made based on Job Analysis approaches adopted in this research.

Key Words: Functional Job Analysis, KSAO's (Knowledge, Skills, Abilities, Attributes), Task Statement, Task Inventory, Job-Fit, Critical Statements

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1. Introduction:

The goal of this research is a through, accurate, detailed and thoughtful job analysis aiming for a perfect organization and job fit for an requisite position within a private Canadian multinational organization by evaluating the right task and contextual behaviors required in a job. A person-organization fit was carried out to 'assess potential employees in terms of their fit with both the job and the organization to ensure that the job candidate fits with the organization's values and culture and to have the contextual attributes desired by the organization' (Catano, V.M., Wiesner,W.H., Heckett,R.D., Methot,L.L., & Belcourt, M. (2010) Recruitment and Selection in Canada p. 243. The 'requisite' position chosen in the multinational company was of a Customer Care Representative and the job description (JD) taken was a standardized JD based on Canadian National Occupation Code (NOC). Job analysis is an effective and a thorough technique of gathering data about all aspects of a job including but not limited to important tasks performed on the job, the knowledge, skills and abilities required to perform the job, the physical abilities needed to do the job, the environmental conditions within which an employee performs the job, and typical working incidents, supervisory responsibilities, etc., Catano et al. (2010). Data gathered and analyzed through job analysis helps in designing job descriptions and job specification and used in a variety of other HR functions including preparing job classification, job evaluations, selection and recruitment, performance appraisal and training, incentive pay and compensation, improving work conditions, charting lines of responsibilities and so on.

Job analysis not only helps the employer effectively recruit and screen applicants based on correct job related criteria but also helps in determining what tests can be administered to select or promote, based on the knowledge, skills and abilities and other abilities (KSAO) identified through the process of job analysis for the job. Job Analysis gives managers a legally defensible tool against pleas of discrimination against protected groups, when hiring and selection decisions including performance appraisal and other HR decision related to pay increases, promotion, training etc are based on job analysis. The US and Canadian guidelines on Employee Selection stipulate that JA is a crucial step in validating all personnel activities. Merritt-Haston and Wexley (1983) conducted an analysis of court cases involving minimum educational requirements. They found that employers who set minimum educational requirements were likely to win a court case when the jobs were highly technical, or the jobs involved risk to the

safety of the public, or jobs required advanced knowledge. Employers were also successful if they could demonstrate evidence of criterion-related and content-related validity for these requirements. All of this is achieved through conducting a job analyses that can demonstrate these 6 factors - that the job is highly technical, involves the safety of the public, requires advanced knowledge, or entails performance that is linked to education requirements (criterion-related validity). The above highlight the importance of research on job analysis.

2. Literature review:

Job analysis is 'one of the most widely used organizational data collection techniques' (Morgeson & Campion, 1997). Schultz & Schultz, (1998, p.74) defined Job analysis as 'the study of a job to describe in specific terms the nature of the component tasks performed by the worker'. Brannick and Levine (2002) defined the job analysis as 'an organized process whereby the nature of a job is discovered. Job or task is divided into smaller units'. 'Job analysis is any systematic procedure by which one describes the way a job is performed, the tasks that constitute a job, and/or the skills and abilities necessary to perform a job', Friedman, Lee; Harvey, Robert J. (1986). Byars & Rue, (2006) discussed that the backbone of most human resource activities is Job analysis, which can serve a number of functions. Job analysis is thus key to Recruitment, Selection, Orientation, Training, Career Development, Counseling, Health, Safety, Performance Management and Compensation. Competency with regards to job analysis is a list of tasks, duties, responsibilities, knowledge, skills, and abilities that a person must have in order to be sufficiently competent at a given position, Bodnarchuk (2012). Competency modeling has also replaced traditional job analysis in many organizational human resource applications Sanchez & Levine(2009). Nankarvis et al. (2002) have presented a strategic model for HRM clearly depicting the strategic association between Job Design and Performance Management. The fact is that through job analysis, two important documents i.e. Job Description and Job Specification are developed, which set the bases for Performance Management. However, Job Analysis must be done under the light of the overall organizational strategy that is derived from overall organizational objectives and goals. Jones et al. (2001) suggest that 'a job analysis should tell you what KSA's are necessary for someone performing a job'. Knowledge and skills that can be easily taught and that are very specific to the job are knowledge and skills that should be included in training, while more stable individual characteristics such as mechanical and

cognitive abilities should be the basis for screening applicants. Levine and Sanchez (2007) even suggested the term job analysis be replaced with the more appropriate term 'work' analysis to address criticisms of the process. Therefore, there is a need for further research on the topic of accuracy in job analyses. According to Brannick & Levine (2002), how many task statements might be generated for a job, or a set of points to consider when interviewing incumbents, but more of the former, because different situations do in fact call for different job analysis approaches. Visser et. al., (1997) studied in Psychology literature that 'core competencies were characteristically unoriginal by means of various job analysis methods. Job performance may be defined as how glowing the job is being completed as per well-known standard operating procedures'. According to Clifford (1994), an effective growth program for an organization cannot be formed without performing a job analysis. There are several reasons why this is true including that an organization will not know where it needs to grow and how much it can effectively grow without these procedures. Patrick and Moore (1985) wrote that it is an important requirement that data from a job analysis reliably describe a job, yet little attention has been paid to this topic of accuracy. Job analysis answers the questions of what tasks, performed in what manner, make up a job. Outputs of this analytical study include: (a) a list of the job tasks; (b) details of how each task is performed; (c) statements describing the responsibility, job knowledge, mental application, and dexterity, as well as accuracy required; and (d) a list of the equipment, materials, and supplies used to perform the job Clifton P. Campbell, (1989).

3. Methodology:

3.1 Introduction of the job position

The Customer Care job position is based on the National Classification Code of Canada and a sample of 9 customer service representatives and 3 Groups' subject matter area experts were taken from a multinational Canadian company. These were chosen form three different branches involved in retail and from contact centers. Customer service representatives in retail establishments answer in person or on the phone, enquiries from customers and investigate complaints regarding the establishment's goods, services and policies; arrange for refunds, exchange and credit for returned merchandise; receive account payments; and receive credit and employment applications. Contact centre agents take customer orders for goods or services;

promote goods or services; respond to enquiries and emergencies; investigate complaints and update accounts.

3.2 Employment requirements

- Completion of secondary school is usually required.
- Completion of some college or other post-secondary programs may be required.
- Clerical or sales experience may be required.
- Valid driving license

3.3 Job analysis methodology chosen

Functional Job Analysis (FJA) has been chosen as it is more structured, reliable, thorough and a more rigorous method. Cronshaw, S. F., Best, R., Zugec, L., Warner, M. A., Hysong, S. J., & Pugh, J. A. (2007) develop and present a five-component model for the validation of FJA task data based on linguistic, experiential, ecological, hypothetical-criterial, and social-organizational validation strategies for Veterans Affairs hospitals.

3.4 Standardized job analysis interview questionnaire

Standardized Job Analysis Interview Questionnaire was used to understand important tasks, knowledge, skills, abilities required, physical abilities, environmental conditions, typical working incidents, supervisory responsibilities, etc., and to objectively describe the critical components of the job. This questionnaire was used on the job incumbents of the selected position.

3.5 Task statement bank sheet

This was used to evaluate worker function orientation and to evaluate the percentage of data, things and people needed to perform the job. It helped evaluate the general educational development of the worker to determine reasoning, language and math abilities required for the job. This was used with the subject matter experts.

3.6 Identification of critical statement

Identification of critical statement is an important pre-requisite for building task statements and subsequently for creating a task inventory. For identification of critical statements the following steps were followed:

i. *The actions performed by the incumbent who was interviewed was analyzed and used in making the task inventory.*

ii. *The person, data or things affected by the actions were evaluated.*

- *Person*: Customer, Branch, Account and Group Managers
- *Data*: Information Management System (IMS) Database
- *Things*: Written Reports

iii. *The intended outcome or product of action was analyzed*

iv. *The material, tools and procedures used in performing the action were formulated*

3.7 ***Task statements***:

On the basis of identification of critical statements, task statements were created for the task inventory incorporating the following 4 elements – a verb describing the action; an object of the verb; a description of tools, equipment, aids and processes used on the job; and the expected job output.

3.8 ***Task inventory***:

Task statements, which indicated at least 75% employees engaged in the task, were included in the final task inventory. The following task statements were made and distributed to a sample of job incumbents and other SME's, who rated these tasks in order of its Frequency, Importance and Difficulty an a 5 point scale of 1-5

- *Frequency* – (Scale: 0-Never; 1-Few times/Year; 2-Once a Month; 3-Once a week; 4-Once a Day; 5-Several Times a Day)
- *Importance* – (Scale: 0-None; 1-Little; 2-Some; 3-Moderate; 4-Very; 5-Extremely)

➢ *Difficulty* – (Scale: 0-Never perform; 1-Very easy; 2-Easy; 3-Average; 4-Very; 5-Extremely)

i. *The person, data or things affected by the actions*: These reflect the way in which the worker interacts with sources of information, other people, and the physical environment

Question asked: 'What are the subject matter areas covered by each task?'

Answers were analyzed to arrive at the major duty being performed, what the duty entailed and the subject matter areas that each of that duty belonged to. Thus, the following was uncovered.

Major duties	*Each task was done by*	*Subject matter areas*
1. Download a customer list –	Press key F9 to email the list –	Database Operation
2. Research about customers -	Use the internet -	Internet Browsing
3. Contact customers -	Make Phone calls -	English & Verbal Communication, Cold Calling (CC)
4. Ask standard questions -	Customer Interaction -	Standard Questionnaire
5. Record conversation -	Typing -	Basic Computers
6. Inform the branch -	Email and phone calls -	Written Com. & Interpersonal
7. Prepare cover letters -	Correlate information; -	IMS & Preparing a draft Creative Writing
8. Prepare packages -	Compile Company PR –	Basic Computer & Printing /Technology
9. Deliver packages -	Driving -	Branch Locations
10. Disable the customer -	Use IMS tools -	Judgment, Decision Making & Database Management

11.	Evaluate monthly sales -	Calculate sales figures -	Mathematics
12.	Record all statistics -	Prepare tables, graphs, charts -	Advanced Computers, Analyze Data & Statistics

Environmental conditions of the job:

Question asked: 'Describe the frequency and degree to which you will encounter working conditions such as these: cramped quarters, moving objects, vibration and inadequate ventilation'

	Frequency	*Degree*
Cramped quarters-	Once in a month	Low
Moving objects-	Never	0
Vibration-	Never	0
Inadequate ventilation-	Never	0

ii. *The worker function orientation*: This describes the extent of the worker's involvement with data, people and things.

Question asked: 'What facts or principles must you have an acquaintance with or understand in these subject matter areas?'

	Subject matter areas		*Must have facts or principles*
1.	Database Operation	-	Training for operating IMS Database
2.	Internet Surfing	-	Browsing skills and research ability
3.	English	-	Knowledge of the English language
4.	Verbal Communication, CC	-	Speaking in English
5.	Standard Questions, Jargon	-	Company and Product USP's
6.	Basic Computers	-	Microsoft Word
7.	Written Communication	-	Writing Sentences and Grammar

8.	Interpersonal	-	Emotional Intelligence
9.	Creative Writing	-	Innovative, Intuitive, Creative
10.	Printing/ Hardware Technology	-	Knowledge of Computer Hardware
11.	Branch Locations	-	Branch Addresses
12.	Driving	-	Driving license
13.	Judgment	-	Discretion
14.	Decision Making	-	Subject Matter Command, Authority
15.	Database Management	-	Training in IMS and its tools
16.	Advanced Computers	-	Excel Graphs, Charts; Power Point
17.	Mathematics and Statistics	-	Mathematics, Statistical Tools, Data Analysis

iii. *The worker instruction*: This describes the amount of control a worker has over the specific methods of task performance

Question asked: 'Describe the level, degree, and breadth of knowledge required in these areas or subjects?'

Subject matter areas		*Level, Degree & Breadth*
1. Database Operation	-	Very Good, High, Medium
2. Internet Browsing and research	-	Good, Medium, Wide
3. English	-	Good, Proficient, Extensive
4. Verbal Communication, Cold Calling	-	Good, Fluent, Conversant
5. Standard Questions, Technical Jargon	-	Very Good, High, Moderate
6. Basic Computers	-	Advanced, Proficient, Extensive
7. Written Communication	-	Good, Grammatically Correct, Extensive
8. Interpersonal	-	Basic, Advanced, Fair
9. Creative Writing	-	Good, Medium, Letter

Writing

10.	Printing/ Hardware Technology	-	Basic, Printing, Narrow
11.	Branch Locations	-	Very Good, High, Extensive
12.	Driving	-	Good, Moderate, Medium
13.	Judgment	-	High, Often, Focused
14.	Decision Making	-	Low, Often, Wide
15.	Database Management	-	High, Often, Wide
16.	Advanced Computers	-	Medium, Often, Narrow
17.	Mathematics and Statistics	-	Basic, Fair, Medium

Question asked: 'Of the major tasks in your job, how much time does it take to do each one? How often do you perform each task in a day, week or month?'

Major tasks/duties are:		Duration; Periodicity
1.	Download a customer list from the database -	1 hr ; 1 day/month
2.	Research customer company -	1 hr ; 4 day/month
3.	Call up non-trading customers -	3 hrs ; 4 days/week
4.	Ask customers questions -	3 hrs ; 4 days/week
5.	Drive to Branches -	4 hrs ; 2 times/month
6.	Record the conversation on the database -	1 hr ; 4 days/week
7.	Inform/update the managers via email -	1 hr ; 4 days/ wk
8.	Prepare customized cover letters/packages-	1 hr ; 1 day/week
9.	Prepare promotional packages-	2 hrs ; 1day/week
10.	Deliver promotional packages -	3 hrs ; 1day/month
11.	Disable the customer on the database-	1 hr ; 4 days/week
12.	Evaluate sales generated each month -	1 hr ; 1 day/month
13.	Record all statistics in the excel sheet-	3 hrs ; 5 days/week

iv. *General education*: Assessing the abilities required in the areas of reasoning, math, and language skills

Question asked: 'What reasoning or problem-solving ability must you have?'

➢ *Reasoning*– Good Judgment ability to decide which customer has potential and who has to be disabled from the database

Question asked: 'What mathematical ability must you have?'

➢ *Math* - Basic additions, multiplications and subtraction and basic statistics – mean and averages

Questions asked: 'What is the nature and level of language ability, written or oral, required of you on the job? Are complex oral or written ideas involved in performing the task, or do you use simple instructional materials?'

➢ *Language* – Understand complex written ideas, following standards and instructions and complex oral as well as follow simple and detailed instructions and instructional materials

3.9 Final task statements

These indicated at least 75% employees engage in the task, were included in the final *task inventory*

➢ *Sample of*: Task Inventory in order of its *Frequency*, *Importance* and *Difficulty* on a 5 point scale of 1-5

➢ The following are the *14 Task statements* **before** *the 75% rating were done by other Incumbents and SME's*, as shown below in Table 1:

Table 1

			Frequency	Importance	Difficulty
		CC Task List	(***Scale***: **0**-Never; **1**-Few times/Year; **2**-Once a Month; **3**-Once a week; **4**-Once a Day; **5**-Several Times a Day)	(***Scale***: **0**-None; **1**-Little; **2**-Some; **3**-Moderate; **4**-Very; **5**-Extremely)	(***Scale***: **0**-Never perform; **1**-Very easy; **2**-Easy; **3**-Average; **4**-Very; **5**-Extremely)
T	1	Download non-trading customer list from IMS Database			
T	2	Research about company on the internet to gather customer information			
T	3	Contact customers to find out their potential for sales			
T	4	Use standard questionnaire and technical jargon to convey company USP's			
T	5	Use a product list to inform customers about new product lines			
T	6	Use IMS database to gather, update and record customer information			
T	7	Prepare customized letters for each interested customer			
T	8	Deliver packages for Branch staff to hand deliver them to customers			
T	9	Disable uninterested customers from the database			
T	10	Evaluate sales generated each month from the customer list			
T	11	Report monthly to Manager on financial and performance outcomes			

T	12	Record statistics pertaining to the customers as a result of action taken			
T	13	Send emails to Customers and Managers to update on positive responses			
T	14	Use laptop/computer to carry out the work of regenerating old customers			

The following initial KSAO's derived from analyzing Table 1= 37

Knowledge:

K1. Knowledge of IMS Database Management

K2. Knowledge of Research

K3. Knowledge of English Language

K4. Knowledge of Computers

K5. Knowledge of Cold Calling

K6. Knowledge of Creative Writing

K7. Knowledge of Products

K8. Knowledge of Using Computer Hardware

K9. Knowledge of Branch Locations

K10. Knowledge of Advanced Computer Skills (Excel, Graphs, Charts)

K11. Knowledge of Math / Statistics (Statistical Averages, Means etc)

Skills:

S1. Skill in Operating IMS Database

S2. Skill in Internet Browsing

S3. Skill in Written Communication

S4. Skill in Verbal Communication

S5. Skill in using Microsoft Word, Excel and Outlook

S6. Skill in Writing Letters

S7. Skill in making Promotional Packages

S8. Skill in making Charts and Graphs

S9. Skill in Mathematical Calculations

Abilities:

A1. Ability to Understand and Follow Verbal and Written Instructions

A2. Ability to make Judgment

A3. Ability to work Concurrently

A4. Interpersonal Ability

A5. Ability for Self-Management

A6. Ability to do Simple Mathematical Calculations

A7. Ability to Problem Solve

A8. Ability to Multitask

A9. Ability to work in a cramped Environment and Space

A10. Ability to lift 15 kg weight

A11. Ability to deal with new People and Situations

A12. Ability to Make Decisions

Other Attributes:

O1. Attribute of Emotional Intelligence

O2. Attribute of Mental Endurance

O3. Attribute of Resilience

O4. Attribute of Honesty

O5. Attribute of Empathy

3.10. ***Final task inventory:***

Out of total 14, final 11 Task statements (the highlighted ones) were taken as shown in Table 2, after 75% rating were completed by Incumbents and SME's and; after evaluating and considering those with a Mean of 3 and upwards on a 5- point scale:

Table 2:

			Aver. Mean	Freq. Mean	Imp. Mean	Diff. Mean
		Final Task Statements'				
		Download non-trading customer list	2	1.33	2.67	1.33

		from IMS Database				
T	1	Research about company on the internet to gather customer information	3	3.00	2.67	2.67
T	2	Contact customers to find out their potential for sales	3	1.67	2.67	3.33
		Use standard questionnaire and technical jargon to convey company USP's	2	1.67	1.33	1.67
T	3	Use a product list to inform customers about new product lines	3	3.33	2.67	2.00
T	4	Use IMS database to gather, update and record customer information	4	3.33	5.00	2.33
T	5	Prepare customized letters /packages for each interested customer	3	3.33	4.33	2.67
		Deliver packages for Branch staff to hand deliver them to customers	1	0.67	1.33	0.67
T	6	Disable uninterested customers from the database	3	3.33	4.00	2.00
T	7	Evaluate sales generated each month from the customer list	3	2.00	4.67	2.67
T	8	Report monthly to Manager on financial and performance outcomes	3	3.00	4.67	2.33
T	9	Record statistics pertaining to the customers as a result of action taken	3	3.33	4.67	2.33
T	10	Send emails to Customers and Managers to update on positive responses	4	5.00	4.67	2.00
T	11	Use laptop/computer to carry out the work of regenerating old customers	4	5.00	5.00	3.00

Each KSAO was rated in order of Importance on a 5 point scale of 1-5 and in order of Proficiency an a 3 point scale of 1-3

- *Importance* – (Scale: 0-None; 1-Little; 2-Some; 3-Moderate; 4-Very; 5-Extremely)
- *Proficiency* – (Scale: 0-Not needed; 1-Needed upon entry to job; 2-Can be learnt through training; 3-Needed at end of training).

4 Results:

Initial 37 KSAO's were derived from the task statements, which were further reduced to 14 KSAO's. Competency modeling is typically defined as the identification, definition, and measurement of the KSAOs that are needed to perform successfully on the job (Bartram, 2004; Schippmann, et al., 2000).

The tables below (Tables 3,4,5 and 6) show the KSOA attributes determined in terms of the importance and proficiency scales assigned by researcher.

Table 3:

		Knowledge:	Importance	Proficiency
K	2	Knowledge of Research	3	2
K	3	Knowledge of English Language	5	1
K	4	Knowledge of Computers	4	1
K	5	Knowledge of Cold Calling	5	2
K	6	Knowledge of Creative Writing	3	2
K	7	Knowledge of Products	2	2
K	8	Knowledge of Using Computer Hardware	2	2
K	9	Knowledge of Branch Locations	4	2
K	10	Knowledge of Advanced Computer Skills (Excel, Graphs, Charts etc)	5	2
K	11	Knowledge of Math / Statistics (Statistical Averages, Means etc)	5	2

Table 4:

		Skills:	Importance	Proficiency
S	1	Skill in Operating IMS Database	5	2
S	2	Skill in Internet Browsing	3	1
S	3	Skill in Written Communication	3	1
S	4	Skill in Verbal Communication	4	1
S	5	Skill in using Microsoft Word, Excel and Outlook	4	1
S	6	Skill in Writing Letters	3	2
S	7	Skill in making Promotional Packages	5	2
S	8	Skill in making Charts and Graphs	4	2
S	9	Skill in Mathematical Calculations	4	2

Table 5:

		Abilities:	Importance	Proficiency
A	1	Ability to Understand and Follow Verbal and Written Instructions	5	1
A	2	Ability to make Judgment	5	1
A	3	Ability to Work Concurrently	4	1
A	4	Interpersonal Ability	5	1
A	5	Ability to Self-Manage	5	1
A	6	Ability to do Simple Mathematical Calculations	3	1
A	7	Ability to Problem Solve	4	2
A	8	Ability to Multitask	4	1
A	9	Ability to work in a cramped Environment and Space sometimes	3	1
A	10	Ability to lift 15 kg weight	2	2
A	11	Ability to deal with New People and Situations	5	1
A	12	Ability to Make Decision	5	1

Table 6:

		Other Attributes:	Importance	Proficiency

O	1	Emotional Intelligence	5	1
O	2	Mental Endurance	3	1
O	3	Resilience	4	1
O	4	Honesty	4	1
O	5	Empathy	5	1

4.1 **Task statements by KSAO matrix**

The last step finally integrated the information by compiling a task * KSAO matrix as shown in Table 7 (Final Task Statements and Knowledge matrix), Table 8 (Final Task Statements and Skills matrix), Table 9 (Final Task Statements and Abilities matrix) and, Table 10 (Final Task Statements and Other Attributes matrix) - a useful tool as many tasks require same KSAO's. Each cell in the matrix states whether the KSAO applies to a task (Yes = Y) or not (No = N).

Matrixes below show the result of 37 KSAO evaluated after taking only the 75% rated 11 final task statements.

Table 7:

		K	**N**	**O**	**W**	**L**	**E**	**D**	**G**	**E**	
		K	K	K	K	K	K	K	K	K	K	K
TS		1	2	3	4	5	6	7	8	9	10	11
T	1	Y	Y	Y	Y	Y	N	N	N	N	N	N
T	2	N	N	Y	N	Y	N	Y	N	Y	N	N
T	3	N	N	Y	N	N	N	Y	N	Y	N	N
T	4	Y	N	Y	Y	N	N	Y	N	Y	N	N
T	5	N	N	Y	Y	N	Y	Y	N	Y	N	N
T	6	Y	N	N	N	N	N	N	N	N	N	N
T	7	Y	N	N	Y	N	N	N	N	N	Y	Y
T	8	N	N	Y	Y	N	Y	N	N	N	Y	Y
T	9	Y	Y	Y	Y	N	N	N	N	N	Y	Y
T	10	N	N	Y	Y	N	Y	Y	N	N	N	N

T	11	N	N	N	Y	N	N	N	Y	N	N	N
		5	2	8	8	2	3	5	1	4	3	3
		45	18	73	73	18	27	42	8	33	25	25
	Wt.			8	9							

Table 8:

				S	**K**	**I**	**L**	**L**	**S**	
		S	S	S	S	S	S	S	S	S
	TS	1	2	3	4	5	6	7	8	9
T	1	Y	Y	Y	Y	Y	N	N	N	N
T	2	N	N	N	Y	N	N	N	N	N
T	3	N	N	N	Y	N	N	N	N	N
T	4	Y	N	Y	N	N	N	N	N	N
T	5	N	N	Y	N	Y	Y	Y	N	N
T	6	Y	N	N	N	N	N	N	N	N
T	7	Y	N	Y	N	Y	N	N	Y	Y
T	8	N	N	Y	Y	Y	Y	N	Y	Y
T	9	Y	N	Y	Y	Y	N	N	Y	Y
T	10	N	N	Y	Y	Y	Y	N	N	N
T	11	N	N	N	N	Y	N	N	N	N
		5	1	7	6	7	3	1	3	3
		42	8	58	50	58	25	8	25	25
	Wt.			11	13	12				

Table 9:

			A	**B**	**I**	**L**	**I**	**T**	**I**	**E**	**S**		
		A	A	A	A	A	A	A	A	A	A	A	A
	TS	1	2	3	4	5	6	7	8	9	10	11	12
T	1	Y	Y	Y	Y	Y	N	N	Y	Y	N	Y	Y
T	2	N	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y
T	3	Y	Y	Y	Y	Y	N	N	Y	Y	N	Y	Y

T	4	Y	Y	Y	N	Y	N	N	Y	Y	N	N	Y
T	5	N	Y	Y	N	Y	N	N	Y	Y	N	Y	Y
T	6	N	Y	Y	N	Y	N	N	Y	Y	N	Y	N
T	7	N	Y	Y	N	Y	Y	N	Y	Y	N	N	Y
T	8	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
T	9	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
T	10	N	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y
T	11	Y	Y	Y	N	Y	N	Y	Y	Y	N	N	Y
		4	11	11	6	11	3	5	11	10	0	6	10
		33	92	92	50	92	25	42	92	83	0	50	83
	Wt.		1	2	14	3			4	6		15	7

Table 10:

		O	**T**	**H**	**E**	**R**
		O	O	O	O	O
	TS	1	2	3	4	5
T	1	Y	Y	Y	N	N
T	2	Y	Y	N	Y	Y
T	3	Y	N	N	Y	N
T	4	Y	N	Y	Y	N
T	5	Y	N	N	Y	Y
T	6	Y	N	N	N	N
T	7	Y	Y	Y	Y	N
T	8	Y	N	N	Y	N
T	9	Y	Y	Y	Y	N
T	10	Y	N	N	Y	Y
T	11	Y	N	N	N	N
		11	4	4	8	3
		92	33	33	67	25
	Wt.	5			10	

4. Discussion:

Analysis of final *KSAO's*: Task Statements are useful in deriving key Knowledge, Skills, Abilities and Other Attributes (KSAO's) required to perform the job. Key KSAO's were derived from the Task Statements.

Knowledge: Is a body of information, which is procedural in nature and needed for successful performance of a task.

Skills**:** These are the level of competency or proficiency expressed in numerical terms for specific tasks.

Ability**:** This is a more general capability needed by employees at the beginning of task.

Other attributes: Like personality traits or other personal specific traits that are integral to job performance.

5.1 Task characterization:

A total of 37 knowledge, skills, abilities and other attributes from the initial 14 total Tasks Statements were derived (Table 1) out of which important final 15 Knowledge, skills, abilities and other attributes required to carry out those tasks were derived (Table 11) by evaluating 11 Task Statements using the KSAO Matrixes (Tables 7, 8, 9 and 10), by concentrating on the KSAO's that applied to most tasks (derived by taking KSAO's averaging at 50% and above) in the matrix (as highlighted in Tables 7,8,9 and 10).

Thus, from the initial list of 37 KSAO's arrived at prior to the Task Statement and KSAO matrixes evaluation was completed (Tables 7,8,9 and 10) based on a 50% and above average applied; these were tapered down to 15 significant KSAO's based on 75% weightage applied (Table 11). Finally these 15 KSAO's were given ranking. The greater the number of task statements each KSAO occurred within, the higher their ranking. These final, weighted 15 significant KSAO's form the basis on which several other HR tool may be developed such as a Job Description, Job Specification, Behavioral Description Interview Questionnaire, Standard

Structured Performance Evaluation tool etc. These have been arrived using the rigorous method of job analysis demonstrated in the previous section and as explained above.

The final KSAO's and job performance dimensions are given below in their order of weighting / ranking. These were further differentiated on the basis of Tasks, Context and Counterproductive behavioral components.

As Per Ranking /Weighting: Weighting / Rank has been taken from the Task Statement and KSAO Matrixes (Tables 7,8,9 and 10)

Table 11:

Rank	KSAO's	% Weights
1	Ability to make Judgment	92 % (Task)
2	Ability to work Concurrently	92% (Context)
3	Ability for Self-Management	92% (Context)
4	Ability to Multitask	92% (Task)
5	Attribute of Emotional Intelligence	92% (Context)
6	Ability to work in a cramped Environment and Space	83% (Task)
7	Ability to Make Decisions	83% (Task)
8	Knowledge of English Language	73% (Context)
9	Knowledge of Computers	73% (Task)
10	Attribute of Honesty	67% (Counter-productive (preventing)
11	Skill in Written Communication	58% (Task)
12	Skill in using Microsoft Word, Excel and Outlook	58% (Task)

13	Skill in Verbal Communication	50% (Task)
14	Interpersonal Ability	50% (Context)
15	Ability to deal with new People and Situations	50% (Context)

5. Conclusion:

The identification of final 15 KSAO opens a lot of scope for further research to be carried out.

✓ A Performance Appraisal Tool is being developed for the same position using Graphical Rating Scale as a valid and reliable predictor based on critical criteria derived through the above job analysis to evaluate Task, Contextual and Counter Productive Behaviors.

✓ An Interview tool is being developed for the same position using a Behavioral Description Interview technique, complete with Probes and Scoring Guides based on the KSAO's identified.

✓ A Recruitment Action Plan is being developed on the basis of Internal and External Analysis, Organization Analysis and Job Analysis. Screening of job applicants' Minimum Qualifications based on KSAO's identified by job analysis and various screening methods is currently under planning stages.

6. Managerial Relevance:

Job Analysis helps today's Managers in various ways:

1. In developing a performance management tool aligned to the required (KSAO's) on the job. According to Nankarvis, A., Compton, R., &Baird, M (2002), 'Job Analysis is an important factor in designing performance appraisal tools'.
2. In developing an aligned behavioral description interview questionnaire that ensure that only candidates with job required KSAO's are selected.
3. In developing Job Descriptions and Job Specifications. As per Bodnarchuk (2012) 'the interviews show that job descriptions are considered important in the company'.
4. Job Analysis helps in recruitment, by assessing applicants to see whether there is a person-organization fit and ascertains if a candidate has the required KSAO's or competence.
5. In screening application forms for the minimum qualification (MQ), which are the required KSAO's for successful performance on the job.

6. In testing to finalize job candidates who have the required KSAO's to successfully perform at the job.

7. In conducting a standardized structured interview based on the KSAO's derived from the Job Analysis.

8. Finally, in decision making where hiring decisions will be based on valid and reliable measurement of various KSAO's, which have been tested and derived using job analysis.

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Appendix

1. NOC code
2. Job analysis interview transcript sample
3. Task statements and matrix
4. Team task statements
5. Task statements – before 75%
6. Job analysis sequence
7. Job analysis incumbent interview sheet
8. Task inventory

9. Task statements
10. Task rating
11. Task statements – after 75%