

TASK ANALYSIS

(Functional Job Task Analysis)

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- So let's jump out of the realm of TEACHING and into the realm of TRAINING
- TRAINING is not very different except that the process takes place in THE REAL WORLD and not in an ACADEMIC ENVIRONMENT
- In the REAL WORLD the emphasis is on DOING and not on just KNOWING
- In a BUSINESS, EVERYTHING that is "DONE" can be broken down into a series of TASKS, which is why knowing how to do a TASK ANALYSIS is so KEY, and why it is such a good skill to know.
- TASKS ARE TIED TO EACH JOB and usually DEFINE HOW THAT JOB IS DIFFERENT from any other JOB.
- The HUMAN RESOURCES DEPARTMENT of any business spends much of their time DEFINING each JOB in order to write JOB DESCRIPTIONS
- Since a TASK ANALYSIS is designed to define ANY JOB it must be BROAD
- **CLICK**

Examining DATA

Interaction of a Worker with Computers or Data (D)

LEVEL	DEFINITION		
1	<p>COMPARING</p> <p>Selects, sorts, or arranges data, people, or things, judging whether their readily observable functional, structural, or compositional characteristics are similar to or different from prescribed standards.</p>	5A	<p>INNOVATING</p> <p>Modifies, alters, and/or adapts existing design, procedures, or methods to meet unique specifications, unusual conditions, or specific standards of effectiveness within the overall framework or operating theories, principles, and/or organizational contexts.</p>
2	<p>COPYING</p> <p>Transcribes, enters, and/or posts data, following a schema or plan to assemble or make things and using a variety of work aids.</p>	5B	<p>COORDINATING</p> <p>Decides time, place, and sequence of operations of a process, system, or organization, and/or the need for revision of goals, policies (boundary conditions), or procedures on the basis of analysis of data and of performance view of pertinent objectives and requirements. Includes overseeing and/or executing decisions and/or reporting on events.</p> <p>SYNTHESIZING</p> <p>Takes off in new directions on the basis of personal intuitions, feelings, and ideas (with or without regard for tradition, experience, and existing parameters) to conceive new approaches to or treatments of problems and the development of system, operational, or aesthetic "solutions" or "evolutions" of them, typically outside of existing theoretical, stylistic, organizational context.</p>

(Fine, Holt, & Hutchinson, 1974)

a particular discipline, art, technique, or craft to determine interaction effects (consequences) and to consider alternatives.

- And as you can see it is both DETAILED & BROAD
- YET IT IS PRETTY SIMPLE
- These TASK DESCRIPTIONS are broken into 3 CATEGORIES
 - DATA – PEOPLE – THINGS
- YOU would use this SET OF DESCRIPTIONS to analyze the TASKS of ANYONE WORKING WITH A COMPUTER OR DATA
- NOTE that every CHUNK of DESCRIPTION IS NUMBERED into a HIERARCHY
- --READ #2 --
- CLICK

Examining PEOPLE

Interaction of a Worker with People (P)

LEVEL	DEFINITION	LEVEL	DEFINITION
	TAKING INSTRUCTIONS-HELPING	4A	CONSULTING
1A	Attends to the work assignments, instructions, or orders of supervisor. No immediate response or verbal exchange is required unless clarification of instruction is needed.		Serves as a source of technical information and gives such information or provides ideas to define, clarify, enlarge upon, or sharpen procedures, capabilities, or product specifications (e.g. informs individuals/families about details of working out objectives such as adoption, school selection, and vocational rehabilitation; assists them in working out plans and guides implementation of plans).
	SERVING	4B	INSTRUCTING
1B	Attends to the needs or requests of people or animals, or to the expressed or implicit wishes of people. Immediate response is involved.		Teaches subject matter to others, including animals, through explanation, demonstration, and test.
	EXCHANGING INFORMATION		TREATING
2	Talks to, converses with, and/or signals people to convey or obtain information, or to clarify and work out details of an assignment within the framework of well-established procedures.		Acts on or interacts with individuals or small groups of people or animals who need help (as in sickness) to carry out specialized therapeutic or adjustment procedures. Systematically observes results of treatment within the framework of total personal behavior because unique individual relations to prescriptions (chemical, physical, or behavioral) may not fall within the range of prediction. Motivates, supports, and instructs individuals to accept or cooperate with therapeutic adjustment procedures when necessary.
	ENTERTAINING		
3C	Amuses to entertain or distract individuals and/or audiences or to lighten a situation.		

2	<p>EXCHANGING INFORMATION</p> <p>Talks to, converses with, and/or signals people to convey or obtain information, or to clarify and work out details of an assignment within the framework of well-established procedures.</p>
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- The same is TRUE of a worker whose TASK INVOLVES INTERACTIONS WITH PEOPLE
- -- READ #2 --
- CLICK

Examining THINGS

Interaction of a Worker with Equipment or Things (T)	
<p>IA</p> <p>HANDLING Works (cuts, shapes, assembles, etc.), digs, moves, or carries objects or materials; where objects, materials, tools, etc., are one or few in number and are the primary involvement of the worker. Precision requirements are relatively gross. Includes the use of dollies, handtrucks, and the like. (Use this rating for situations involving casual use of tangibles.)</p> <p>FEEDING-OFFBEARING Inserts, throws, dumps, or places materials into, or removes them from, machines or equipment which are automatic or</p>	<p>2A</p> <p>MANIPULATING Works (cuts, shapes, assembles, etc.), digs, moves, guides, or places objects or materials where objects, tools, controls, etc., are several in number. Precision requirements range from gross to fine. Includes waiting on tables and the use of ordinary portable power tools with interchangeable parts and ordinary tools around the home, such as kitchen and garden tools.</p> <p>OPERATING-CONTROLLING Starts, stops, controls, and adjusts a machine or equipment designed to fabricate and/or process data, people, or things. The worker may be involved in activating the machine, as in typing or turning wood, or the involvement may occur primarily at startup and stop as with a semiautomatic machine. <i>Operating a machine</i> involves reading and adjusting the machine and/or material as work progresses. <i>Controlling equipment</i> involves monitoring gauges, dials, etc., and turning valves and other devices to control such items as temperature, pressure, flow of liquids, speed of pumps, and reactions of materials. <i>Includes the operation of typewriter, mimeograph machines, and other office equipment where reading or adjusting the machine requires more than cursory demonstration and checkout.</i> (This rating is to be used only for operations of one machine or one unit of equipment.)</p>
<p>IB</p> <p>FEEDING-OFFBEARING Inserts, throws, dumps, or places materials into, or removes them from, machines or equipment which are automatic or tended/operated by other workers. Precision requirements are built in, largely out of control of worker.</p>	<p>2B</p>

- And lastly, a WORKER who is INTERACTING WITH “THINGS”
 - There is a WHOLE WORLD OF “THINGS” but **1B** SPECIFIES WHAT THE WORKER IS DOING WITH THAT “THING”
 - -- READ 1B --
- THESE DEFINITIONS are meant to be USED AS A REFERENCE to AID your decisions while using the NEXT CHART
- **CLICK**

FUNCTIONAL TASK ANALYSIS

	DATA	PEOPLE	THINGS
OPERATIONAL	D1- Comparing	P1A- Taking Instructions, Helping P1B- Serving	T1A- Handling T1B- FEEDING, Off-Bearing T1C- Tending
	D2- Copying	P2- Exchanging Information	T2A- Manipulating T2B- Operating, Controlling T2C- Driving, Controlling
TACTICAL	D3A-Computing D3B-Compiling	P3A- Coaching P3B- Persuading P3C- Diverting	T3A- Precision Working T3B- Setting-Up
	D4- Analyzing	P4A- Consulting P4B- Instructing P4C- Treating	
STRATEGIC	D5A- Innovating D5B- Coordinating	P5- Supervising	
	D6- Synthesizing	P6- Negotiating	
		P7- Mentoring	

- This is the CHART that you PRIMARILY USE while ANALYZING THE TASKS of a WORKER
- As she or he DESCRIBES or DEMONSTRATES her JOB, YOU would be BREAKING IT DOWN INTO INDIVIDUAL SETS OF TASKS, and LABELING THEM USING THE OPTIONS ON THE CHART
- NOTE THAT THE ROWS are DIVIDED into:
 - OPERATIONAL – TACTICAL – and STRATEGIC DECISION-MAKING which REFLECT ON THE IMPORTANCE of each TASK.
- **CLICK**

KEY TASKS & HOURS SPENT	EXPERIENCE (TIME ON TASK) (TRAINING)	DATA	PEOPLE	THINGS	Roles/Responsibilities (in PERCENTAGES)				COMMUNICATION FLOW				
					1	2	3	4	→	←	Person		
					45% Barista	35% Server	20% Manager						
Barista													
<ul style="list-style-type: none"> ○ RECEIVE BEVERAGE ORDER FROM CUSTOMER ○ RECEIVE BEVERAGE ORDER FROM SERVER ○ SELECT APPROPRIATE GLASSWARE OR TO-GO ○ GATHER INGREDIENTS ○ OPERATE ESPRESSO MACHINE ○ OPEN CAN/BOTTLE AND POUR IN CUP ○ ADD COOL BEANS EMBELLISHMENTS ○ DELIVER TO CUSTOMER OR 	<p>WAS A BARISTA FOR TWO YEARS AT ANOTHER LOCATION</p> <p>NO PRIOR EXPERIENCE AS A SERVER OR MANAGER</p>		PB1 P2	T1C T2A T2B T2A T3A	4.50					X	X	CUSTOMER	
		D3A	P1B								X		OWNER
											X		CUSTOMER /SERVER

- This is a COMPLETED TASK ANALYSIS FORM FOR ONE WORKER following the compiling of all the DATA GATHERED – specifically for the JOB of a BARISTA
- NOTE ALL OF THE INFORMATION IT GATHERS
 - POINT OUT COLUMN HEADINGS
- Obviously this is a HUGE AMOUNT OF DATA, AND IT COMES AT YOU VERY FAST.
 - SO WE ALWAYS USE VIDEO FOR EACH INTERVIEW so that we do not LOOSE ANY INFORMATION.
- **CLICK**

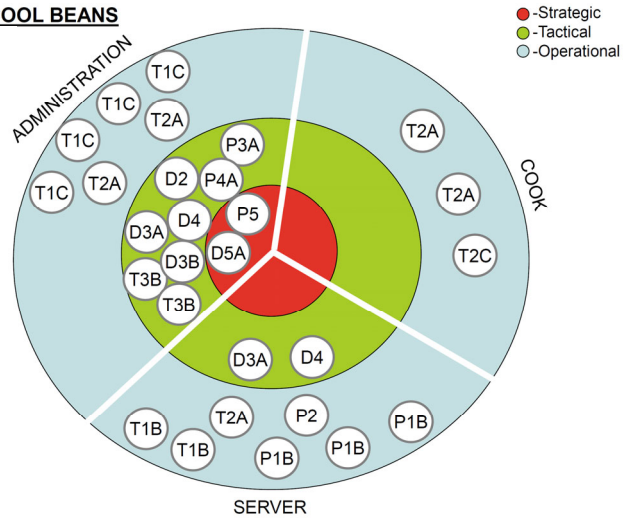
GATHERING DATA



- This is a FUNCTIONAL TASK ANALYSIS observation and interview of a WAITER (who is also the BARISTA)
- IN THIS CASE WE USED 3 CAMERAS TO CAPTURE ALL VIEWPOINTS,
 - --point out the 3 CAMERA ANGLES
- THIS TECHNIQUE ALLOWED US TO GATHER ALL OF THE NECESSARY INFORMATION IN THE SHORTEST AMOUNT OF TIME.
- --PLAY "TAKING THE ORDER, -- THEN ENTERING DATA, --ROLLING THE UTENSILS
- **CLICK**

Organizational Analysis Report

OAR: COOL BEANS



- The RESULTING REPORT included not only the COMPLETED ANALYSIS FORM for each WORKER,
- But also DISPLAYED ALL OF THE TASKS being attended to within the WHOLE ORGANIZATION.
 - (I ONLY DISPLAYED THE TASKS BEING ACCOMPLISHED, BUT COULD ALSO HAVE INDICATED WHICH EMPLOYEE WAS DOING EACH TASK)
- BUT WHAT DOES THIS ALL HAVE TO DO WITH YOU???
- SEEU can TEACH students how to do a Functional Task Analysis
- ... and then HAVE STUDENTS GO INTO TETOVO, SKOPJE, OR KUKES BUSINESSES AND PERFORM TASK ANALYSES FOR THEM
 - (as PART OF THE CLASS or as INTERNSHIPS)
 - I'VE DONE THIS WITH TWO UNIVERSITIES SO FAR AND IT HAS BEEN WELL RECEIVED BY ALL INVOLVED

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- SO THAT'S ALL I HAVE ON THAT FOR NOW SO I CAN OPEN UP FOR QUESTIONS ON EITHER TASK ANALYSIS OR GAME MECHANICS AND TEACHING