Industrial design assignment

It delved onto the differences between them and showed the importance of of each of the in a business setting. According to the article, “ A literature survey made by Mathematics and Monies explained further the definition of collaboration and co operation. Cooperation Is characterized by informal relationships that exist without a commonly defined mission, structure or effort. Information Is shared as needed and authority Is retained by each organization so there Is virtually no risk. Resources are separate as are rewards. Coordination Is characterized by more formal relationships and understanding of compatible missions.

Some planning and division of roles are required, and communication channels are established. Authority still rests with the individual organization, but there is some increased risk to all participants. Resources are available to participants and rewards are mutually acknowledged. Collaboration connotes a more durable and pervasive relationship. Collaborations being full of commitment to a common mission. Authority is determined by the collaborative structure. Risk is much greater. ” (Daugherty et al. , 2006; Kava, 2000) Also The article went Into detail about collaboration In design teams.

It stated that In design (Architecture) , a finished design cannot be declared as a self-acclaimed project since mostly It Is accomplished by a group, which was named as “ participatory design” Further Is went on to say that, “ collaborative design consists of parallel expert actions, each of short duration, bracketed by joint activity of negotiation and evaluation. ” This means that collaborative design is individual, parallel and not linked intimately. Again, “ This view of the design process is supported further in

the categorization of design collaboration identified by Maier et al. Their experiment in collaborative design, namely: Mutual collaboration, in which the participants are ; busy working with the other. Exclusive collaboration, in which the participants “ work on separate parts of the problem, negotiating occasionally by asking advice from the other”. Dictator collaboration, where the participants decide who is “ in charge” and that person leads the process. Indeed, Maier et al. Note that the ‘ exclusive collaboration’ model is the most effective and the one in which they observed most productive results.

Mutual collaboration led to no result at the end of very busy exchange between the participants, whereas dictator collaboration came to a conclusion as soon as the leader made up her mind. ” (Kava, 2000) One Argument time or size. According to one researcher , Steiner’s work, the maximum number of participants in an effective working group is four. But the work of two other researchers, Seaweeds and Rafael , who took part in an extensive and prolonged exchange with over 100 scientist concluded that collaboration was possible with large numbers.

Conclusion: This can mean that collaboration is a form of Joint problem solving tool that can be seed to find solutions which will bring satisfaction to all involved. This in my opinion means that design collaboration requires a higher sense of team work in order to achieve a creative outcome than Just getting the work done. In my opinion cooperation is informal, it is in my opinion seeking help from a different group when need and not very structured. Coordination is more formal, it is structured, includes division of tasks, meetings and discussions.

Collaboration is a more complex structure, more in depth discussions and division of labor and as earlier stated in the article collaboration looks to a creative solution. In the case of mutual collaboration I believe that the playfulness and the informal environment introduced when everyone works on the same thing and together result in a fruitless outcome. SURPRISING THINGS ABOUT COLLABORATION: KNOWING HOW PEOPLE CONNECT MAKES IT BETTER Author: Integer, Henry, Jorgensen, Jan, Dougherty, Deborah, Wesley, Frances Year: 1996 This article sees to delve into the things that go on in collaboration between team, organizations or individuals.

It stated that " the medium of communication seems to play an important role in successful collaboration. " It stated that an open, face to face manner of communication is used by most big firms because they know it brings better results than a phone conversation. " Face-to-face collaboration is a richer medium because it allows for nonverbal communication, facilitating the delicate process of integrating ideas and energies. " (Integer, Jorgensen, Dougherty, & Wesley, 1996) Research 1: " One of us spent a day observing the head nurse of a hospital ward who managed in exactly the opposite way-? an open, face to face manner.

She spent almost the whole time on her feet, in the nursing station, surrounded by the nurses, doctors, orderlies, and others, all coming and going. Things got done quickly' This goes to make me believe that the presence of a person at a work site or in a team or a group gets things done much better than when messages are sent electronically. As Peter Trucker once commented, " Perhaps the best communication does not require words at all. Perhaps the best communication is simply being there together. " The

same applies to collaboration. ” ” (Integer et al. 1996) Research 2: A study of a multi-party collaboration to establish environmental standards in Canada highlighted the role of nonverbal communication. Entrenched differences between environmentalists, government, ND industry people prevented collaboration while they were sitting at a boardroom table. But when the groups visited a forest together and began examining the soil and the trees that were so important to all of them, their differences evaporated. The so that the “ adversaries” found they had much in common. The articles stated that there always arise conflicts when two or more team collaborate.

In this case, the articles states Mary Parker Fillet’s research on collaboration. SSH states that in collaboration conflicts, the outcome might be that one side dominates and the defeated side Just waits to get a chance to dominate. On the there hand both sides come to a compromise where both side don’t get exactly what they want. She stated that all these two outcomes have loopholes. In the issue of compromise, she stated that the same problem will come up again in other forms. She therefore suggested that a solution be found that has a solution for both or all parties involved.

This she explained as integration, all the solutions for all parties involved are integrated and neither has to make sacrifices. She stated that integration involves invention and creativity. Aside Communication, the article addressed another important point in collaboration trust. Collaboration for new product design depends on people’s ability to trust each other, and to appreciate one another’s expertise. Innovation teams need the time and the psychic energy to learn how to work together. ” Furthermore, the article talked about the importance of collaboration. People create new knowledge

for product design as they work together on real problems. That knowledge, in other words, has to be connected to, indeed be a part of, actual practice. ” It also, talked about the fact that the relationship within collaboration can determine the outcome of the collaboration. Also the article sated that “ Collaboration can be a pain in the ass” (Integer et al. , 1996), that after a while the excitement or interest people found in a group dies away so the best form of collaboration is one that is temporary and non-exclusive.

Again the paper explained that it is normally easier to work with your enemy than a friend. This I understand that the introduction of familiarity in a collaboration breeds a sense of nonchalance when makes people feel reluctant in the completion of their work. “ Having a close, regular relationship may be no better, because both sides may e so locked into fixed patterns of behavior that ad hoc deals might be difficult to achieve. In other words, there may be no room to maneuver, since both sides are unable to break out of fixed positions.

We all know about the NIH syndrome (not invented here) in R teams. Research has suggested that if a team of researchers has been together too long, it reduces the amount of communication with outside people; the team becomes inclined to see only the virtue and superiority of its own ideas. People need to be moved around to a certain extent; teams need new blood from time to time (occasionally even an “ enemy” or two), and collaborations homeless often need to be seen as temporary. ” (Integer et al. , 1996) IS COLLABORATION PAYING OFF FOR FIRMS?

Author: Daugherty, Patricia J, Richey, R Glenn, Roth, Anthony S, Min, Singsong, Chem., Haze, Arrant, Aaron D, Cinched, Stefan E Year: 2006 working together to Jointly achieve greater success than can be attained in isolation. ” It was stated that Collaboration (between the companies)” can facilitate both strategic and operational foci, allowing individual supply chain members to exploit their core competencies. In turn, these individual core competencies can help to strengthen the entire supply chain. Conventional wisdom suggests that all firms involved in collaboration should reap greater benefits from working together. (Daugherty et al. , 2006) A research was conducted: Our panel members were asked to answer questions based upon the one collaborative relationship they believed to be most important to their companies’ future success. A list of ten items was provided, and they were asked to indicate their level of agreement on a 7-point scale, with 1 equaling “ strongly disagree”, 4 equaling “ neutral”, and 7 equaling “ strongly agree”. One item was subsequently dropped during analysis due to low response. The nine call items measure communications-related formalization.

As shown by the mean scores in Table 1, panel respondents reported fairly high levels of formalization. Variations in responses provide important insights into the dynamics of supply chain collaboration. ” (Daugherty et al. , 2006) The Results: “ The profile that emerges indicates recurrent communication is common between the panel firms and their partners, and it appears as though many of the firms have made the effort to detail exactly how the collaborative relationships will work. These issues were further reinforced by respondents’ comments made during interviews.

Panel members suggested that dynamic communications are, in fact, a cornerstone of collaborative efforts. Information is considered to be a resource for gaining competitive advantage in the market, and is also considered one to be safeguarded, in some instances. Trust must be developed before sensitive information is divulged to collaborative partners. Properly leveraged, information can also have significant strategic value and can be used to develop a synergistic advantage. ” From this research I came to understand that communication is a very importance aspect of having a successful collaboration.

Also trust which was mention in previous article was also mentioned here, that also reinforced my understanding that trust is also needed in a collaborative work. Another research was conducted: Panel members were asked to indicate the levels of success their companies have experienced from the collaborative relationships. Seven common business metrics (information visibility, service levels, etc.) were selected for examination. Again, a 7-point scale was used, with 1 equaling “ not at all successful”, 4 equaling “ neutral”, and 7 equaling “ highly successful”.

THE BIG FIVE PERSONALITY FACTORS AND TEAM PERFORMANCE: IMPLICATIONS FOR SELECTING SUCCESSFUL PRODUCT DESIGN TEAMS Author: Chuck, Susan L. , wetness, Will H. Year: 1997 One of the first mentions in this article is that the first logical step to making a product development team is the selection process. It states that some factors like cohesiveness and ‘ cognitive problem-solving orientation’ have been suggested to possible if the behavioral tendencies of the team members are compatible at some minimal level that allows interpersonal interaction to

occur without destructive interpersonal conflict. Cognitive problem-solving orientation' (COPS) is simply a fleeting of the propensity of a person to pursue the solution to a problem in a certain manner (e. G. , searching for novel solutions versus adhering to commonly accepted ways of doing things). In other words, COPS is an indicator as to how we can expect a certain person to behave when confronted with a problem or task. " It was stated that having the knowledge of individual behavior of team members can help make a more compatible team. It was then suggested that a conduction of a personality test prior to the team formation might Just be what is needed.

This article s about study attempts made to etch a starting place " for future research in personality as a predictor of team success for a product design team and to provide some preliminary rules in the selection of product design teams. " Personality trait has being categorized into five factors: "(conscientiousness', ' Extroversion', ' Agreeableness', ' Emotional Stability', and ' Openness to Experience). " CONSCIENTIOUS: This was described as a person that displays characters like being dependable, careful, thorough, responsible, organized, hardworking and achievement-oriented.

It also stated that a research conducted " an individual response selection research" showed that " the factor ' Conscientiousness' has been shown to be a valid predictor of future Job performance for all occupational groups (Barrack and Mount, 1991; Teeth al. , 1994). Given that each person in the team is performing his/her Job by participating in the team task, it is logical that the factor of ' Conscientiousness' may also be related to the task performance of the group.

This extension of logic is also supported by recent findings by Thorns et al. (1996) which show that ‘ Conscientiousness’ is positively related to self-efficacy (which the authors intend is predictive of performance) for participation in self-managed work groups. Other support for the contention that the level of ‘ Conscientiousness’ of the members in the group may be related to group performance can be found by the studies that have related the groups’ need for achievement with their subsequent performance on a task.

Groups whose members showed a high need for achievement outperformed groups whose members had a low need for achievement (French, 1958; Schneider and Delaney, 1972; Gander and Forward, 1968) on a variety of tasks. Leadership orientation was also found to correlate positively with group performance Shaw and Harked, 1976). In addition to this, Drinkers et al. (1987) proposed that ‘ ambition’ (which includes ‘ need for achievement’) may be predictive of team performance for a variety of tasks. ” This went to show that the level of conscientiousness will positively related to the performance of the team.

EXTROVERSION: this was explained with traits such as sociability, gregariousness, assertiveness, talkativeness, and activeness. The level of ‘ sociability, which is a characteristic of extroversion, of the group members was also stated to relate positively to group performance. The degree of participation within the group is usually personalized as the amount of talking done by each group member. Williams and Sternberg (1988) found that both the average amount of talking done by the group was positively correlated with the performance of the group. The factor ‘ Extroversion’ as

measured by the Essence Personality Questionnaire was not found to correlate significantly with team performance (Williams and Sternberg, 1988). However, Thorns et al. (1996) found that ‘ Extroversion’ as measured by the NEO-IF (Costa and McCrae, 1992) was positively correlated with self-efficacy (and, hence, reference, according to Thomas et al. , 1996) for participation in self-managed work groups. ” This goes to show that, there exists evidence that ‘ extroversion’ is related to the performance of a group.

NEUROTICS: “ The factor of ‘ Neurotics’ may also be thought of as a lack of ‘ Emotional Stability, or ‘ Adjustment’ (which is the degree to which one exhibits ‘ Emotional Stability’). ‘ Neurotics’ is characterized by traits such as anxiety, depression, anger, embarrassment, emotionality, and insecurity (Digamma, 1990; Barrack and Mount, 1991). ” Initially the personnel research that was conducted wowed that, the emotional stability of the person doesn’t correlate with the group performance. However in the realm of groups and teams, it was stated that ‘ Adjustment was one of the best factors in predicting group performance.

Also other researches showed that ‘ Emotional Stability or lack of nervous tendencies was positively correlated with group effectiveness and also distinguished leaders from non-leaders. In conclusion it was found out that ‘ Neurotics’ negatively and positively affects group performance.
AGREEABLENESS (Likeability): “ A person exhibiting traits included in the Agreeableness’ factor is courteous, flexible, trusting, good natured, cooperative, forgiving, soft-hearted, and tolerant. The results linking ‘ Likeability’ with group performance are not consistent across studies. Most studies came up short with finding a significant relationship between group

member likeability and performance or productivity. While some found negative correlation between likeability and performance others found positive relationship between social insight and group performance and person-orientation of team leader and team satisfaction and ‘ agreeableness’s and self-efficacy. “ From these results, Drinkers et al. 1987) hypothesized that ‘ Likeability’ would only be positively related to performance on social (e. G. , training, assisting, or serving others) and manipulative/persuasive (e. . , organization or motivation of others) tasks. Given the intellectual nature of the optimizing task, it is not known if the factor of ‘ Agreeableness’ will be related to team performance and thus no hypotheses are proposed. ” A research was conducted to find out how the five personality factors work in real life. Research: This experimental study conducted required the subjects to complete and engineering design task within a given time. The subjects were administered a standardized general ability test, a personality test, and a demographic profile (gender and age only).

A laboratory design was chosen in this case to control for extraneous factors (e. G. , organizational politics, status differences) so that effects attributable to the personality variables under investigation would be more obvious (Drinkers and Salsas, 1992). However, it is acknowledged that laboratory designs have several disadvantages. The major the general population. The subjects were 419 first year undergraduate Engineering Students enrolled in problem-solving course. Twenty percent of the subjects were female.

The subjects ranged in age from 16 to 32 years of age with the median age being 19 years. ” (Chuck & Wiser, 1997) Each Team consisted of three

members as to many people in one team would make the experiment dysfunctional. INFORMATION SEEKING AND SHARING IN DESIGN TEAMS Author : Poltroon, Steven, Grudging, Jonathan, Dumas, Susan, Fidel, Ray, Bruce, Harry, Pesters, Annelids Mark YEAR: 2003 This paper describes field studies of collaboration information retrieval carried out by design teams at two companies.

The research methods used it stated was an integrated approaches from information retrieval and computer supported cooperative work." We worked individually or in pairs at each site. We first interviewed the team leader about the team's goals, objectives, and organizational context. Then we observed and recorded meetings, interviewed team members and people who worked with the team, monitored group email communication, and observed members at work.

We interviewed most team members twice, first asking general questions about their work, its organizational context, the decisions they make, the information they seek, and their work with other people; and the second time focusing on specific information-seeking events. We gave each team member a structured notepad on which to take notes about their information needs, how they searched for the needed information, and the results. In the second interview we asked them to describe these events in detail. We also shadowed and recorded a designer for several hours.

All interviews, team meetings, and the shadowed work activity were transcribed and analyzed. " The two teams that we put under observation were: a software design team and a hardware design team. The software

design team consisted of: a manager, program coordinator, two senior product designers and two Junior product designers, one visual designer and two usability engineers. The hardware design team consisted of: a team leader, eight engineers and two technicians. They were designing a Web-based help and support service and airplane system respectively.

SOFTWARE TEAM: It was stated that the much of their intra-team communication was via emails, but they went to each other’s offices to talk about something interesting and exciting. They also talked in hallways or during lunch. This was analyzed as an effective mode of oral communication because the email will give you the needed tidbits of the information but meeting the person has an added effect of passion and emotions (which I think will increase the motivation in the work place and propel everyone to work harder).

Also the tasks were divided according to each Job title and experience. This division it stated was “ central to the coordination of their work. ” This made it easier to know who to ask certain information from, and gave the chance for individual work the work the members didn’t see it as a collaborative work as they normally did their assignments individually of in sub group. (This shows me that there still exists subgroup in the design teams in the product development process).