



# *Team Process Report*

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## **1 Introduction to the Team**

At the start of the semester Professor Dryden instructed students to form groups for the purposes of implementing various projects/reports; the primary focus being an opportunity to gain hands-on experience towards team-work and management. Some of us already met at the orientation and decided to form a team. The three initial members got together and needed two more members. Because the three of us came from different backgrounds, we thought it was a good idea to have other members from different cultures and educational backgrounds to complete the team. The most unique thing about our team is that we are a diverse group of people with similar goals; excel in performance, receive an A in the course, and enjoy working together as a team. Our objectives were to get the assignments done on time, make the class ownership sessions enjoyable and most importantly get to know each other well. Below is a brief description of each team member:

*Kon Abdulai*, a full time student at PSU majoring in Engineering Technology Management. Graduated from Arizona State University with a B.S.E in Electrical Engineer with concentration in Renewable Energy. Enjoys cooking for friends and family, cycling, Bikram Yoga, music, traveling and learning new languages and cultures.

*Alex Julien*, a full time student at PSU majoring in Engineering Technology Management and holds a B.S. in Mechanical Engineering from Oregon Institute of Technology. He is currently working for Daimler Truck North America. For the past fourteen years, Alex has lived in five different countries and currently lives in Oregon with his wife. Alex enjoys working out, cooking, traveling and being with his family.

*Saranya Durairajan*, a full time student at the ETM Department and has her Bachelor's Degree in Computer Science and Engineering from Anna University, India. Before coming to the United States, she worked for about 3.2 years in the Information Technology Industry in Data Warehousing and Business Objects projects.

*Selen Yilmaz's* background is in Chemical Engineering and she worked 2 years as an R&D analyst in plastic molding industry, in Turkey. She has been in the U.S.A with her husband for 1.5 years and she is a full time student in the ETM Department.

*Nan Hu*, a full time student at PSU in the ETM program. His undergraduate background is communication engineering which he completed last summer. He had an internship in China Mobile Communication Corporation. His hobbies include basketball, hiking, traveling and music.

## **2 Team Charter**

During session two of the course, the team charter was created following a class exercise. The team got together, brainstormed and named our team SAMSEN. The name was formed creatively using the initial letter of each team member's first name. Namely, Saranya, Alex, Mimie, Selen and Nan.

Initially the team was not clear on how to fill out the charter. With input from all the team members, we brainstormed together to arrive at the final draft of the charter, which was submitted with mutual agreement on week 3. Our team decided on a mission that was to set achievable goals and put together a structured process to achieve them. The charter included milestones which we used to track our work deadlines and project submission. The team charter was very beneficial because at one instance when the team felt behind on a deadline, we relied on the team charter to help us get back on track with our main goal and work schedules.

### **3 Different stages of our team formation**

The first stage our team went through is the formation stage. In this stage we selected the members and everyone got to know each other. This was done quickly because some members already knew each other. Our team was the most diverse team in the class with all five members hailing from different educational and cultural backgrounds. We defined our goals with the help of the team charter. Also, during this stage, each member gained an in-depth understanding of the individual responsibilities and consequently, selected a role to play on the team. Kon played the role of the team leader who coordinated the presentations and communicated the work-related information to the team and made sure work was completed on time. Saranya played the role of an executive by quickly transforming the ideas of the team into concrete actions and work plans. Alex played the role of an explorer by being an extrovert by nature and entertained the team with his humor. Selen and Nan played the role of team players by emphasizing team cohesion.

During the second week of the class, the team became more aware of the class assignments and deadlines and this was considered the hardest stage. The team had entered the storming stage. Work was being assigned and team members started to realize the implication of not meeting the deadlines. Some confusion rose from members wanting to work on a same paper. Fortunately, the situation was resolved by assigning the work to the member who had already done research on the topic. The team also found that a group deadline for one submission paper was not met and that could result in the team missing the class submission deadline as well. After meeting and agreeing on how to proceed, the late work was distributed equally amongst all members and this resulted in the class deadline to be met and avoidance of a bad grade. This was an unplanned event resulting from a miscommunication in the team charter understanding. The team corrected this by going back to the charter and understanding the team's key milestones. Despite the incident, team members stood focused on the set goals and came out of this difficult time even stronger as a team. After coming out of the storming stage even more enthusiastic to work together, the team was clear with each team member's individual tasks. The communication skills between the team members improved noticeably while discussing assignments and projects. Each member felt confident because all ideas were welcomed and this increased the level of contribution and work efficiency. Consequently, the improved work efficiency and a high level of synergy in our team resulted in our team being voted as the highest performing team in the class by a survey done in class by another team. This is when the team moved into the 'norming stage'.

Recognition in terms of being the highest performing team served to give a boost to our team and provided more incentive to work together and deliver the highest level of work for the class. The team had reached the 'performing stage'. The contribution from every member for our

selected readings was of the highest quality as reflected by the scores achieved. Despite being a culturally diverse team, our work was always cohesive; our class presentations were dynamic and enthusiastic due to the interpersonal skills developed and the joy of working together. The team worked well in compensating each other's weaknesses and improved communication by giving constructive feedback and encouraging member participation. The team leader guided the team on developing interpersonal relationships and focusing on the team goals.

The team diversity could be seen as a drawback for some in the management environment. However, our team took time to get to know each other, understand each other's culture and celebrate our diversity. In the beginning, clear communication of what needed to be done was a little difficult. After developing interpersonal skills, the team was able to communicate ideas and share concerns openly. Because we are friends before team members, we were able to solve the small conflicts that came up with ease and laughter. Looking back, we feel that our team learned the following from team formation stages; there are people from all over the world in this program. Any company that we will be part of will have a similar structure. Not only do people have different backgrounds, but they also have different beliefs and ways of completing a project that can affect the way they perform within a group. The key to address all these scenarios is to have an improved level of understanding and communication between team members

#### **4 Team Communication and Motivation**

Team communication is vital to a team's success on a project whether it be at school or in the workforce. We used several different modes of communication to stay in contact throughout this term which include internet, phone calls and group meetings. Our group members found emailing each other very convenient because we had to do a lot of research on the internet. We also used Google docs through PSU webmail to share our research with one another, upload documents, get feedback and make corrections simultaneously. We met every weekend to discuss the progress on our project and also made sure that everyone was clear on their specific parts. This was a good strategy because we were able to catch mistakes along the way and keep all the members on track. This approach worked well as at the completion of the project, we did not accumulate any major corrections to be done. Additionally, we used the phone to communicate when team members didn't have access to the internet, needed clarification or were on the way to the meeting and would be a little late. Compared to the communication over the internet, we realized that a phone conversation was helpful in avoiding some misinterpretations and alleviating the consequential problems.

There were several reasons why we worked well together. We did not make any assumptions as whether team members would be able to complete their tasks, which helped prevent disastrous results. We tried to help each other along the way so that everyone would have a clear understanding as to how to proceed on their part of the project. This strategy was beneficial because everyone works differently, and being this a group project it is essential that all members are on the same page so that we have a final product that everyone agrees with.

Another reason we worked well together is that we tried to understand how everyone works. We are a multicultural group and have had different experiences throughout our lives. We all are engineers but we have different educational backgrounds. Therefore, it was important that from the beginning we made it clear how each of us would go about doing the projects. In the first

meeting, we gave everyone the opportunity to give their input as to which project we would work on and which topics interest each person the most. We also discussed the location and time of meetings, how often we would meet and agreed on when each member should turn in their part for the project. In the end, all of us would sit down and put the entire project together, and we made sure that we all were happy and in agreement on the final product.

Also, we worked well together through mutual support and motivation. We always gave positive feedback and encouragement to each other on the time and effort spent; the hard work that everyone was putting in, to make sure that we succeed together. We also supported each other by answering each other's questions, carpooling and being flexible because people had different schedules and a life outside of school. We could have done a better job, but we think that the outcome was very positive; we learned a lot from each other and we are quite certain that this experience will make each of us a great team player in the future.

## **5 Team Diversity and Challenges**

Understanding the diversity within our group was one of the biggest challenges that we faced. Not only did we come from different educational backgrounds, but we came from different countries, spoke with different accents and had different cultural norms. Starting with education, we had people with varied engineering backgrounds: electrical, mechanical, computer engineering, to name a few. This was challenging because we all had unique experiences in our fields and we brought diverse skills to the table. We had to figure out a way to get everyone involved and make sure that each person had their input on the final product. Furthermore, communication was a bit challenging because English is not our native language. Sometimes there were mix-ups because people could not express themselves as clearly as they would like due to a lack of vocabulary. Therefore, we had to spend extra time clarifying concepts and ideas to make sure we were at the same point.

Cultural backgrounds also played a big role in our development as a team. The way people express themselves within different cultures can be misconstrued. Because of our unique backgrounds, there were some conflicts that were caused by lack of familiarity to a certain culture. For instance, in some cultures some people express themselves loudly and their facial expressions could be misread by others as anger. However that gesture might not necessarily be indicative of anger; it is just their natural expression. So, it is vital that if a team member does not understand someone's behavior that they have a discussion to clarify any misunderstandings. This happened in our group and due to the fact that we were prepared, we were able to overcome this issue. Coming from all over the world to study at PSU has been a great experience, but it has also provided challenges that will help us be better as future managers and most importantly as human beings.

## **6 Conflict Avoidance**

Diversity made us realize that communication can both breed and resolve conflicts within the team. We always made sure to communicate our team problems in team meetings and looked at ways to resolve the issues and to avoid them in future.

The time of the team meeting was conflicting as a few members were working full-time, and some had packed schedules due to multiple classes that they had taken. To avoid timing conflicts, we met on Saturdays at PSU to prepare presentation slides and complete project assignments. Moreover, it really helped us spend quality time together as a team and have candid discussions both inside and outside of the class content.

There were few instances in which a conflict was about to rise in our team, but we made sure we addressed the matter effectively and came up with solutions in a timely manner. To quote an instance, for the team research report, we all agreed to come up with two articles and two textbooks each, due on a date agreed upon. But a few members did not stick to the timelines and it created confusion within the team. We discussed the importance of sticking to timelines in our next meeting and it helped us evolve as an effective team from then on.

We strongly believe that conflicts can damage productivity if not addressed positively. Not all conflict is bad. The key is to handle it positively and emerge from it with new ideas and even stronger as a team. If possible, it is better to avoid conflicts rather than letting it set and trying to deal with it later. Our team was always determined to reach a consensus with critical evaluation of alternative ideas and viewpoints.

## **7 Constructive Feedback**

Our team believes that constructive feedback is one of the critical tools to help us correct our mistakes and improve on our performance. Constructive feedback is both useful and beneficial to the receiver because it provides encouragement, support, corrective measures and directions. Our team members gave both the positive and the negative feedback in a constructive way, so that comments were communicated in the right spirit. Members were always respectful and helpful when giving and receiving feedback; it was followed-up with proper remedial action. This really helped in the improvement of team work because there was constructive feedbacks and not criticism. In our view, the feedback was clear, supportive and motivating. Many times the team members shared their feedback by means of a joke/funny comment and it was shared with a goal of improvement; so others in the team did not get offended or hurt by any of the feedback.

We also made sure to appreciate other team members' work which motivated everyone to work as a team. Timely appreciation and timely feedback really worked in the team and we were able to improve the team's performance.

Giving constructive feedback is a skill that managers and leaders practice and work hard to perfect. We are happy that we learned this essential skill in the communication and team building class which will definitely help us in the long-run.

## **8 Commitment, Responsibility and Accountability**

The commitment of team members to work together effectively to accomplish the goals of the team is a critical factor in team success. Although we were assigned different roles and responsibilities, our purpose was to coordinate work towards the common task.

Every team member fulfilled their individual responsibilities promptly and kept other team members informed, which developed a sense of commitment. However, when a team member was unable to accomplish their individual responsibility, that member informed the team and the deadline was either extended or the work load was shared. For example, one of our members had to leave the town so he fulfilled his responsibility before he left. During the presentation, the rest of our team accommodated his absence by sharing the portion of his work. We also made sure that we communicated any concerns beforehand and did not wait until the last minute in order to prevent any significant accountability problems.

Since all the team members took responsibility for their individual task, the team achieved the goals in the desired time. This situation increased team satisfaction and motivation. All members worked hard in a goal-directed manner, because each member knew the other team members' dedication to succeed. We all had an agreement that commitment, responsibility and accountability in a team would increase team efficiency and work quality.

## **9 Factors which helped us to become a high-performance team**

There were several factors which helped us become a high performing team. First, we had a clear understanding of what our goals were, and we got well prepared and organized in order to accomplish them. We effectively communicated amongst ourselves as well as with the TA and professor. Any query within the group got addressed promptly by the available team member within the group. Also, if we had a team question, we candidly discussed and communicated that inquiry with the TA or other teams. We also supported and critiqued each other with respect. If one of us made a mistake during the session, we addressed the situation and provided support to correct the mistake. Our team had cultivated a climate of trust, thanks to our strong academic skills and dedication to hard work. Every member had a certain role and responsibility and we integrated them harmoniously. Also, we were flexible towards our meeting days. Additionally, we accommodated individual schedules. We did not dwell on our conflicts; rather we addressed them promptly and found a solution in a timely fashion. Finally, we all were very thoughtful and more importantly, we had fun working together as a team.

## **10 Affinity of team members to the overall goals**

In our point of view, our team members were easy to communicate with and showed great affinity toward the overall goals. Hailing from different countries, all team members showcased varied cultures and habits. Diversity in our cultures was never an obstacle, and language was not a barrier in the accomplishment of our tasks. Every team member showed great dedication in understanding the goals and delivered their tasks promptly. Right from the charter formation, we set up on coming up with goal-specific tasks. For example, in the case of the selected reading reviews, each member was asked to discuss a selected reading topic, get it peer-reviewed by team members and submit the refined work. This plan was instrumental in obtaining near-perfect scores in all our submissions. At the same time, we understood that in relation to a large project report, the integration of parts from different individuals needed extensive refinement both in terms of structure as well as the flow of the ideas. This required multiple revisions, but each refinement added greater quality.



## **11 Knowledge sharing**

The team interactions and techniques that we learned from the class always helped us to refine our thought process. For example, brain-storming and NGT are the basic methods to gather ideas; we employed brainstorming and NGT mostly through email or in-person meeting. But, we found that sometimes it was hard to use brainstorming during meetings. Good ideas appear anytime when we have inspiration; not necessarily during the times of a meeting. Therefore, we found emailing as a handy and a useful medium to orchestrate brainstorming and NGT. It was very convenient to share our ideas quickly with the team members that way. On multiple occasions, such random ideas or tid-bits of information, led to a series of email exchanges, resulting in a virtual brainstorming and NGT. For the purpose of sharing of ideas, dissemination of knowledge and the constraints of having in-person meetings, we found improvement in our team efficiency and output with email communication. In addition to that, state-of-the-art web tools like Google Docs supported greater productivity. Features like simultaneous editing and version control aid to transcribe the thought process, without any worry of manual oversight were of great help. Also, the evolution of the work was evident to the team members instantly, who could comment and provide feedback sooner. Overall, such tools helped us amplify our affectivity, output and benefited the sharing of knowledge.

## **12 Summary**

Our team has gained a good understanding of the various intricacies in the team formation and in the successful conduct of various projects and assignments. Right from the charter formation to the final project report submission, we adopted a methodical approach in terms of coming up with quantifiable as well as goal-oriented tasks for each team member.

The primary bottleneck of the team included miscommunications due to language and cultural barriers and conflicts due to different work schedules of each individual. But we made sure we addressed our problems and came up with necessary solutions.

Overall, team members adapted really well to one another by going out of the way to support each other when there was some miscommunication or delays in task completion. Our performance was exceptional as shown by our good scores for the selected reading submissions and class ownership sessions. These results helped motivate the team members. The team gained significant knowledge on communication and team building as well as in building interpersonal skills. We learned a whole lot of important information and gained the much needed experience through this course.

## **References**

- [1] Personality and Organizational Citizenship Behavior, Dennis W. Organ, Journal of Management 1994; 20; 465-478J.
- [2] R. Katzenbach and D. K. Smith, The Wisdom of Team: Creating the High-Performance Organization. Boston: McKinsey & Company Inc., 1993

- [3] The Team Handbook, Peter R. Scholtes, Brian L. Joiner, Barbara I. Streibel, Third Edition.