



TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
PASHCHIMANCHAL CAMPUS
LAMACHAUR, POKHARA

[Subject: Organization and Management]

A CASE STUDY

ON

**ORGANIZATION AND MANAGEMENT OF THE ENTERPRISE - URJA
LABS**

SUBMITTED BY:

AMRIT GIRI	[WRC077BEI003]
ASHWIN ADHIKARI	[WRC077BEI008]
BIRAT SHARMA POUDEL	[WRC077BEI015]
SANDESH BASHYAL	[WRC077BEI036]

SUBMITTED TO:

DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING

July, 2024

ABSTRACT

The pursuit of synthesizing novel images for 3D construction has evolved significantly since the 19th century, aiming to provide users with robust object experiences. This project delves into the realm of 3D image synthesis, exploring two prominent techniques: Neural Radiance Fields (NeRF) and Gaussian Splatting. NeRF utilizes deep learning techniques to synthesize novel views of complex scenes from a sparse set of images, achieving photorealistic results by learning and rendering volumetric scene functions. On the other hand, Gaussian Splatting is a point-based rendering technique that converts 3D point clouds into visually continuous surfaces using Gaussian kernels. Our investigation aims to delineate the theoretical frameworks, practical implementations and to develop interactive environment to facilitate the understanding of these complex concepts. The output is expected to be in video format for NeRF and interactive point cloud and photos for Gaussian Splatting.

Keywords: gaussian splatting, neural radiance field, novel view synthesis, point cloud

TABLE OF CONTENTS

ABSTRACT	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	iii
LIST OF TABLES	iv
1 INTRODUCTION	1
1.1 Background	1
1.2 Vision of the Company	1
2 ORGANIZATION	2
2.1 Motive to Start Company	2
2.2 Objectives	2
2.3 Services	2
3 ORGANIZATION STRUCTURE	4
4 FORMS OF OWNERSHIP	5
5 PERSONNEL MANAGEMENT	6
6 MOTIVATION	7
7 SUGGESTION	8
8 CONCLUSION	9
8.1 Conclusion	9

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

INTRODUCTION

1.1 Background

Urja lab is a ICT company and innovation hub established in 2018 in Pokhara. It offers co-working spaces, startup incubation, IT solutions and training programs. The company emphasizes engagement, exploration and empowerment, specializing in technology, branding, startup consulting, and events, while focusing on innovation and skill development. The company is of individual but the branch and establishment of other from the company is in partnership of not more than 3 people. As the decision making from the odd partnership is easy.

1.2 Vision of the Company

The mission of the company are:

- The vision of the company is to be a leading ICT company in Nepal, providing innovative solutions and services to the clients.
- The company aims to be a hub for innovation and technology, providing a platform for young entrepreneurs to grow and develop their ideas.
- The company also aims to be a leader in the field of bioinformatics research, contributing to the development of the field in Nepal.

CHAPTER 2

ORGANIZATION

2.1 History

Before joining their bachelor's program, they were self-motivated, reading business model books and always focused on starting a company. In the 3rd year of their bachelor's degree, they started their own company with a vision to contribute to society by teaching trending topics in technologies rather than being a client-service organization. Driven by a passion for entrepreneurship, they actively hosted various tech occasions. Currently, they are excited about bioinformatics research.

2.2 Objectives

The company has the following objectives:

- Initial goal: Empowerment of the youths in entrepreneurship
- Convert to a corporate company
- Create events so that youth can showcase their talents
- Research in bioinformatics

2.3 Services

The company provides the following services:

- Brand Guideline and Development
- Digital Marketing
- Event Management
- Technical Support for Business

- Courses on UTC(Urja Tech)
- Incubation and Entrepreneurship
- Human Resource Management

CHAPTER 3
ORGANIZATION STRUCTURE

CHAPTER 4
FORMS OF OWNERSHIP

CHAPTER 5
PERSONNEL MANAGEMENT

CHAPTER 6
MOTIVATION

CHAPTER 7
SUGGESTION

CHAPTER 8

CONCLUSION

8.1 Conclusion