



# BAHRIA UNIVERSITY, (Karachi Campus)

Department of Software Engineering

Assignment 1 - Fall 2024

COURSE TITLE: **ENTREPRENEURSHIP**  
Class: **BSE-VII (B)**  
Course Instructor: **DR. MUHAMMAD YASIR**  
Submission Date: **15/10/2024**

COURSE CODE: **HSS-421**  
Shift: **Morning**  
Time Allowed: **1 Week**  
Max. Marks: **5 Marks**

Name	Enrollment
Muhammad Shoaib Akhter Qadri	02-131212-009

## Question No. 1

[CLO4: 5 Marks]

Make Lead Model Canvas for your Project. Make this model in Excel and paste here.

<b>Problem</b> Top 3 problems	<b>Solution</b> Top 3 features	<b>Unique Value Proposition</b> Single, clear, compelling message that states why you are different and worth buying	<b>Unfair Advantage</b> Can't be easily copied or bought	<b>Customer Segments</b> Target customers
	<b>Key Metrics</b> Key activities you measure		<b>Channels</b> Path to customers	
<b>Cost Structure</b> Customer Acquisition Costs Distribution Costs Hosting People, etc.		<b>Revenue Streams</b> Revenue Model Life Time Value Revenue Gross Margin		
PRODUCT		MARKET		

Lean Canvas

Designed for:

Designed by:

Date: 16/Oct/2024

Version 1

Problem	Solution	Unique Value Proposition	Unfair Advantage	Customer Segments
<div><div>1. <b>Inconsistent Quality Control:</b> Due to variations in date size, color, and texture, maintaining consistent quality control is a challenge.</div><div>2. <b>Variety Identification:</b> Accurately distinguishing between different date varieties with distinct characteristics.</div><div>3. <b>Efficiency in Large-Scale Production:</b> High-volume date processing facilities face efficiency challenges.</div></div>	<div><div>1. Develop a computer vision and machine learning system for automated date classification.</div><div>2. Train a deep learning model for precise variety identification.</div><div>3. Implement a high-speed image capture and processing system for large-scale efficiency.</div></div>	<div>Efficient and accurate date fruit classification, ensuring consistent quality and variety identification in large-scale production.</div>	<div>Proprietary machine learning algorithms and an extensive dataset of date fruit varieties.</div>	<div><div>• Date processing companies</div><div>• Date growers and suppliers</div></div>

Existing Alternatives

• Manual quality control and sorting processes.

• Traditional visual inspection methods, often prone to subjectivity and inefficiency.

• Limited use of basic sorting machines without advanced image recognition capabilities.

Key Metrics

• Classification accuracy

• Processing speed in date sorting

• Customer satisfaction and adoption rates

High-Level Concept

Develop an automated date classification system using computer vision and machine learning for precise quality control, variety identification, and efficient large-scale production.

Channels

Mobile app developed with React Native for communication and interaction between users and the classification system.

Early Adopters

• Date industry stakeholders

• Software suppliers

• Data labeling service providers

Cost Structure

• software development

• Data collection and labeling

• Marketing and outreach

Revenue Structure

• Licensing the classification system

• Service contracts for ongoing support and updates

• Data labeling services for other industries