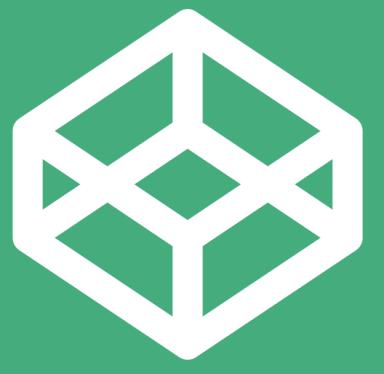


## TEAM MEMBERS

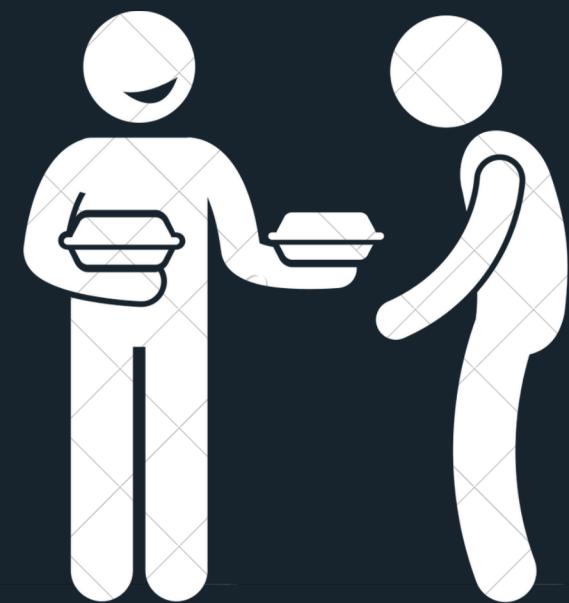


Syeda Areesha Najam

Shalin Amir Ali

Sana Fatima

Rabeea Atif



# Zariya

Engineering Project Management

# Statistics



20.5% population is  
undernourished



40% of children are  
stunted



92nd out of 116 nations  
in the Global Hunger  
Index (GHI).

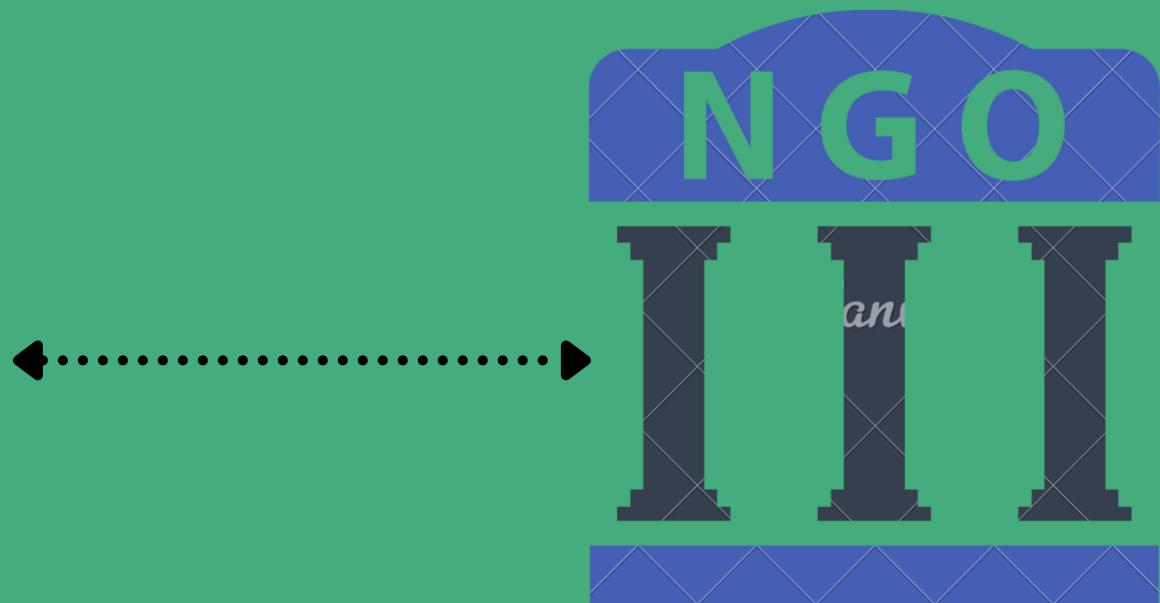


36 million tons of  
food are wasted every  
year ai.e. 40 % of  
total food produced

12% comes from the hospitality industry, including cafes, restaurants, retail stores, etc

# Objective

To establish a centralized food waste management system by creating a mobile application that can link restaurants/wedding halls with the NGOs to scale up the existing systems.



Estimated

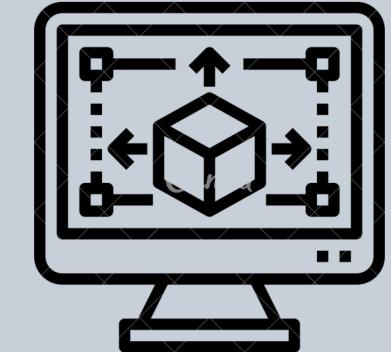


10 months

19 million

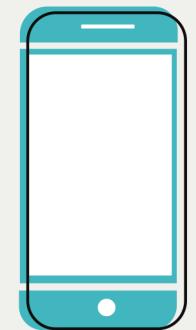
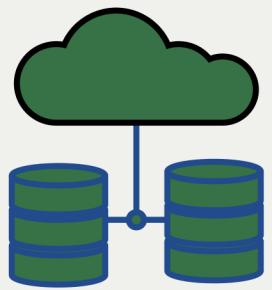
## Application Model

- NGOs and Restaurant will have an option to register on the application
- Restaurants and wedding halls will list down the left-over food & price.
- The NGOs can request and pick up food from their nearest restaurant



# Deliverables

- Market Research
- Requirements Specification
- Prototype Designing
- Application Design & Development
- Marketing and Launch
- Monitoring and Maintenance



# Milestones

## Step 1

Market Research  
April 01 - May 01



## Step 2

Requirements Specification  
May 01 - May 25



## Step 3

Prototype Designing  
May 25 - June 30



## Step 5

Launch and Marketing  
September 15 - November 15



## Step 4

Application Design and  
Development  
June 30 - September 15



## Step 6

Expansion  
(Karachi)  
November 15 -  
31 Decemb



# Scalability

## Phase 1

Launch in some areas  
of Karachi  
Test for system errors  
Improvise System

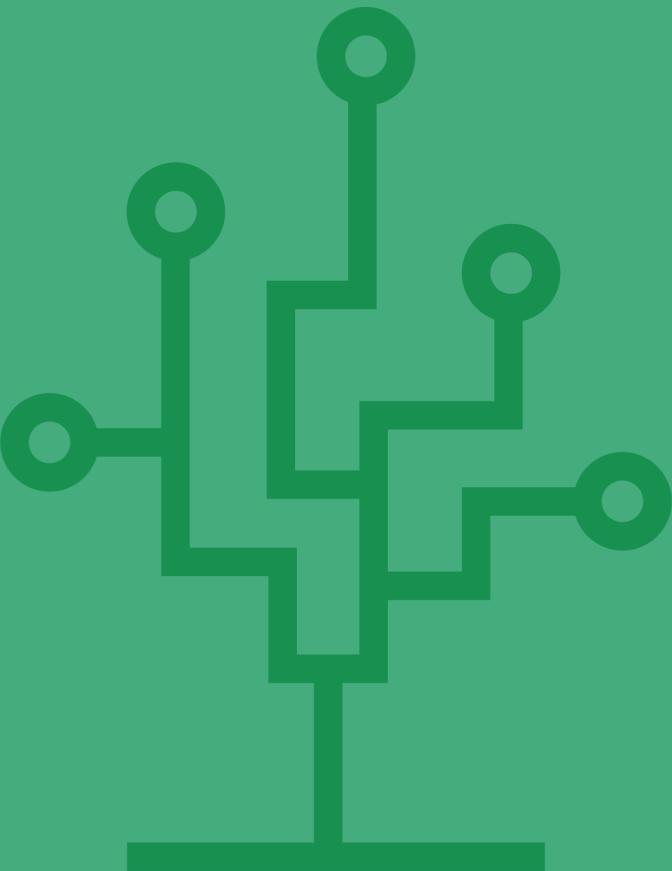
## Phase 2

Expand all over  
Karachi  
Take customer  
feedback  
Improvise System

## Phase 3

Reach out to another  
city (Lahore)  
Maintenance  
Future Works

# Technical Requirements



## Working Teams

- Software Design Team (5 members)
- Software Development Team (7 members)
- Software Testing Team (4 members)
- Marketing Team (4 members)
- Data Analysis Team (3 members)

## Availability

- Availability of 99%
- Throughput of 500
- Response time of  $\leq 1$  sec
- Upgrades

## Information Security

- Internal Controls
- Database security

## Productivity

- User friendly Interface
- Interoperability

- Internet access required
- Limited stakeholders
- No transportation
- No food quality assurance
- False price commitments

## Limits and Exclusions



# Priority Matrix

	TIME	PERFORMANCE	COST
CONSTRAIN			
ENHANCE			
ACCEPT			

# Process Breakdown Structure

<https://drive.google.com/file/d/1JTbfVGzW98vLoGbj774iWycqHpg-5UGs/view>

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# Coding of the PBS

<https://docs.google.com/document/d/1JKGMadUBfA6X7DL3ozSkvj44C69MIAiz2dnM8izKu78/edit>

# **Integrating PBS with OBS**

<https://drive.google.com/file/d/1JTbfVGzW98vLoGbj774iWycqHpg-5UGs/view>

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# Coding PBS wIth Information System

Market Research 1.1: Estimation for printing cost of each paper is Rs 30

Research Team 1.1, 1.2, 1.9: Allocated budget of Rs 50,000

Development Team 1.4: Estimated budget of Rs 200,000

Product Management Team 1.1 - 1.9: Expected cost of Rs 100,000

Finance Team 1.2.1: Expected budget of Rs 200,000

Design Team 1.3: Estimated cost of developments is Rs 500,000

Testing Team 1.6: Estimated cost for unit testings is Rs 100,000

Marketing Team 1.8: Budget for marketing is Rs 400,000

Data Analytics Team 1.1, 1.9: Estimated cost for hiring experts is Rs 100,000

Integration 1.5: Integration shall require Rs 200,000

# Responsibility Matrix

Deliverables	Sana	Areesha	Shalin	Rabeea
Market Research	R	S	S	S
Requirements Specifications (SRS)		R	S	
Finance / Budget Finalization			S	R
Awareness	S	R		
Architectural Requirements			R	S
Testing Strategies			S	R
Feedback	R	S		
Application Development			R	S
Testing	S	R		S
Launch and Marketing	R			S
Customer Feedback	S	R		

key

R Responsible

S Support

# Project Communication Plan

Subject	Audience	Timing	Method of Communication	Responsible Department
Milestone report	Managers and Executives	Bimonthly	Meeting	Project manager
RND report	Senior Managers	Weekly	Email and Meeting	RND department
Accepted change requirements	Project manager, staff, RND, senior managers	Anytime	Email	Development department
Escalation report	Staff	When needed	Email	Project manager
Project status report	Staff	Monthly	Email	Project manager
Scrum meeting	RND, Project Manager	Daily	Meeting	Design, development and Testing department
Financial Report	Senior Managers	Bimonthly	Email and Meeting	Finance department
Team status report	Project manager	Weekly	Email	Project manager
Marketing report	Senior Managers	Bimonthly	Email	Marketing department

# Project Network Diagram

<https://app.diagrams.net/#G1JTbfVGzW98vLoGbj774iWycqHpg-5UGs>

# Gantt Chart

[https://habibuniversity-my.sharepoint.com/:x/r/personal/ra04419\\_st\\_habib\\_edu\\_pk/\\_layouts/15/Doc.aspx?sourcedoc=%7BFFE2B4C3-25B7-464C-9CC8-D81AB4A20D6B%7D&file=Gantt%20Chart%20-%20Zariya.xlsx&action=default&mobileredirect=true&DefaultItemOpen=1&login\\_hint=ra04419%40st.habib.edu.pk&ct=1652795529945&wdOrigin=OFFICECOM-WEB.START.EDGEWORTH&cid=742bda89-b06a-4416-af0f-7f12e519ed7a](https://habibuniversity-my.sharepoint.com/:x/r/personal/ra04419_st_habib_edu_pk/_layouts/15/Doc.aspx?sourcedoc=%7BFFE2B4C3-25B7-464C-9CC8-D81AB4A20D6B%7D&file=Gantt%20Chart%20-%20Zariya.xlsx&action=default&mobileredirect=true&DefaultItemOpen=1&login_hint=ra04419%40st.habib.edu.pk&ct=1652795529945&wdOrigin=OFFICECOM-WEB.START.EDGEWORTH&cid=742bda89-b06a-4416-af0f-7f12e519ed7a)

# Risk Register

- Risk Identification
- Risk Assessment
- Risk Severity Matrix
- Risk Response Plan
- Contingency Funds
- PERT

Notebook →

[https://habibuniversity-my.sharepoint.com/:x/g/personal/sn05985\\_st\\_habib\\_edu\\_pk/EbEaaUo0sg1DkZv4rYtvqDcB\\_KPwjFOkVcGs7eS9pTPjgQ?e=kyeZt5](https://habibuniversity-my.sharepoint.com/:x/g/personal/sn05985_st_habib_edu_pk/EbEaaUo0sg1DkZv4rYtvqDcB_KPwjFOkVcGs7eS9pTPjgQ?e=kyeZt5)



# Performance Evaluation

Deliverables	DUR	Schedule Information					Total PV
		ES	LF	LS	SL		
Market Research	16	0	16	0	0	0	60000
Planning and Requirements gathering	13	16	29	16	0	0	40000
Design	7	29	36	29	0	0	300000
Development	78	36	114	36	0	0	900000
Integration	6	114	120	114	0	0	400000
QA Testing	10	120	130	120	0	0	200000
Deployment	7	130	171	164	34	0	50000
Marketing	15	137	171	156	19	0	600000
Monitoring	34	137	171	137	0	0	50000

# Performance Evaluation

Schedule Information		Baseline Budget Needs									
		Time Period									
Deliverables	Total PV	16	29	36	75	114	120	130	137	152	171
Market Research	60000	60000									
Planning and Requirements gathering	40000		40000								
Design	300000			300000							
Development	900000				500000	400000					
Integration	400000						400000				
QA Testing	200000							200000			
Deployment	50000								50000		
Marketing	600000									600000	
Monitoring	50000									30000	20000
Total PV by period		60000	40000	300000	500000	400000	400000	200000	50000	630000	20000
Cumulative PV by Period		60000	100000	400000	900000	1300000	1700000	1900000	1950000	2580000	2600000

# Performance Evaluation

Most Recent Status Report - Time Status 75							
Task	%Complete	EV	AC	PV	CV	SV	
Market Research	100%	60000	70000	60000	-10000	0	
Planning and Requirements gathering	100%	40000	30000	40000	10000	0	
Design	100%	300000	220000	300000	80000	0	
Development	50%	450000	470000	500000	-20000	-50000	
<b>Cumulative Totals</b>		850000	790000	900000	60000	-50000	

Cost Performance Index(EV/AC)

1.076

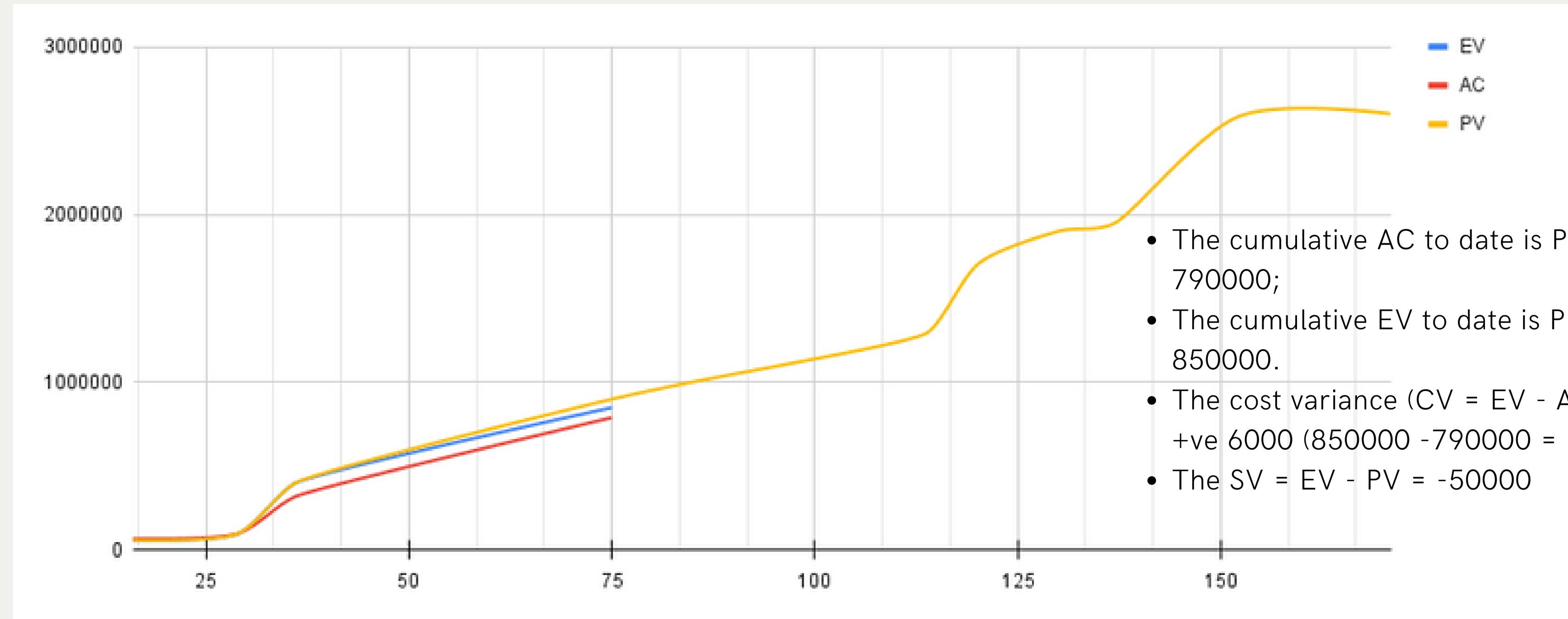
Scheduling Performance Index(EV/PV)

0.944

Our cost performance index that turned out to be 1.076 shows that 1.076 pkrs worth of work planned to date has been completed for each pk 1.00 actually spent—a favorable situation indeed! Our CPI > 1 hence we can say that we under cost.

The scheduling performance index indicates pk 0.944 worth of work has been accomplished for each pk 1.00 worth of scheduled work to date. Our SPI < 1, which indicates that we are behind schedule.

# Performance Evaluation



# Project Closure



# Wrap-up Closure Checklist

	Task	Completed? Yes/No
	<strong>Team</strong>	
1	Was the team able to meet all the requirements/deliverables of the project?	
2	Are all the outstanding tasks completed?	
3	Is the project review done and are all the issues resolved?	
4	Have the staff performance evaluations been completed?	
5	Are adequate arrangements for handing over the project been made?	
6	Are the final project reports complete?	
	<strong>Users/Clients</strong>	
7	Is the project authorized by all the stakeholders?	
8	Are all the deliverables been closed down by the clients?	
9	Have all the clients used the application developed once?	
10	Are all the queries of the clients answered?	
11	Was the manual good enough for the clients to help them use the application?	

# Wrap-up Closure Checklist

	Task	Completed? Yes/No
	<b>Equipment and facilities</b>	
12	Are all the project-related contracts and processes terminated?	
13	Have the facilities used for the project closed down?	
14	Have all the materials and equipment used been discarded?	
15	Completion of storage for all the project files?	
16	Are all the remaining equipment been transferred to the upcoming project?	
	<b>Vendors</b>	
17	Are the performance reviews for vendors done?	
18	Have the billings/payments of all the vendors been done?	

# Individual Evaluation

Element	Performance Level	Rating
1. Dependability	Absent more than once or absent, no call/no reason Absent once, but called with a valid reason (overtime, illness, etc.) Always present, but sometimes stayed for less than half of the team meeting Always present, and stayed for most of the team meeting Always present for the entire team meeting	1 2 3 4 5
2. Preparation	No apparent effort made to prepare for the team meeting Occasional incomplete preparation, no valid reason Occasional incomplete preparation due to a valid reason (overtime, illness, etc.) Generally completes all assigned work Consistently completes all assigned work + able to explain concepts clearly to others	1 2 3 4 5
3. Contributions	Sometimes behavior actually hinders a successful team meeting No individual contribution to promote a successful team meeting Minimal individual contributions to promote a successful team meeting Significant individual contributions to promote a sucessful team meeting Significant individual contributions + actively involved fellow team members	1 2 3 4 5
4. Attitude	Vocally rude, mean-spirited Shows non-vocal, but critical attitude toward fellow team members Cooperative, but not really focused on learning Cooperative, focused, works hard Not only meets assigned responsibilities but encourages and motivated fellow team members to succeed	1 2 3 4 5

# Team Evaluation

Decision Making	Collaborative 1	2	3	4	Unilateral 5
Cooperation	Members Help Others Out 1	2	3	4	Members Do Only Their Own Work 5
Ability to work through conflicts / differences	Explore and Solve Conflicts 1	2	3	4	Avoid or Ignore 5
Balance of Participation	Balanced Workload 1	2	3	4	A Few Do Most of the Work 5
Focus / On Schedule	Focused / On Schedule 1	2	3	4	Off Topic / Off Schedule 5
Communication	All Members Informed at All Times 1	2	3	4	Members Unaware of Others Work 5
Accountability	Team Holds Members Accountable 1	2	3	4	Shortcomings Are Ignored 5
Support	Members Support and Appreciate Others 1	2	3	4	Only Individual Work Appreciated 5
Commitment	Common Values 1	2	3	4	Group of Individuals 5

# Creating the Final Report

*Executive Summary  
Review and Analysis*

*Recommendations and Lessons Learned*

# Executive summary

- Name of project: Zariya
- Aim: To reduce the food crisis
- How: by creating a mobile application that can link restaurants/wedding halls with the NGOs to scale up the existing systems.
- Completion time of the project: 171 time units (estimate)
- Total Budget allocated: 6670000
- Monetization techniques: advertisements, subscription fees from wedding halls/restaurants

# Review and Analysis

Factual review statements of the project

- Mission
- Objective
- Procedures and Systems used
- Resources utilized

How will we get the data? Questionnaire (part of Retrospectives)

# Recommendations

- Problem: Requirements are not met  
Preventive measure: Create a detailed work plan
- Problem: Activities are not completed within the time limit  
Preventive measure: Track progress regularly
- Problem: Team member is unsure if he/she has implemented the task in the correct manner.  
Preventive measure: Take feedback from your peers and try to improve
- Problem: Lessons learnt into blame sessions  
Preventive measure: Monthly workshops and one-on-one meetings
- Problem: Can't seek advice from senior managers  
Preventive measure: Maintain a friendly environment

# Lessons Learned

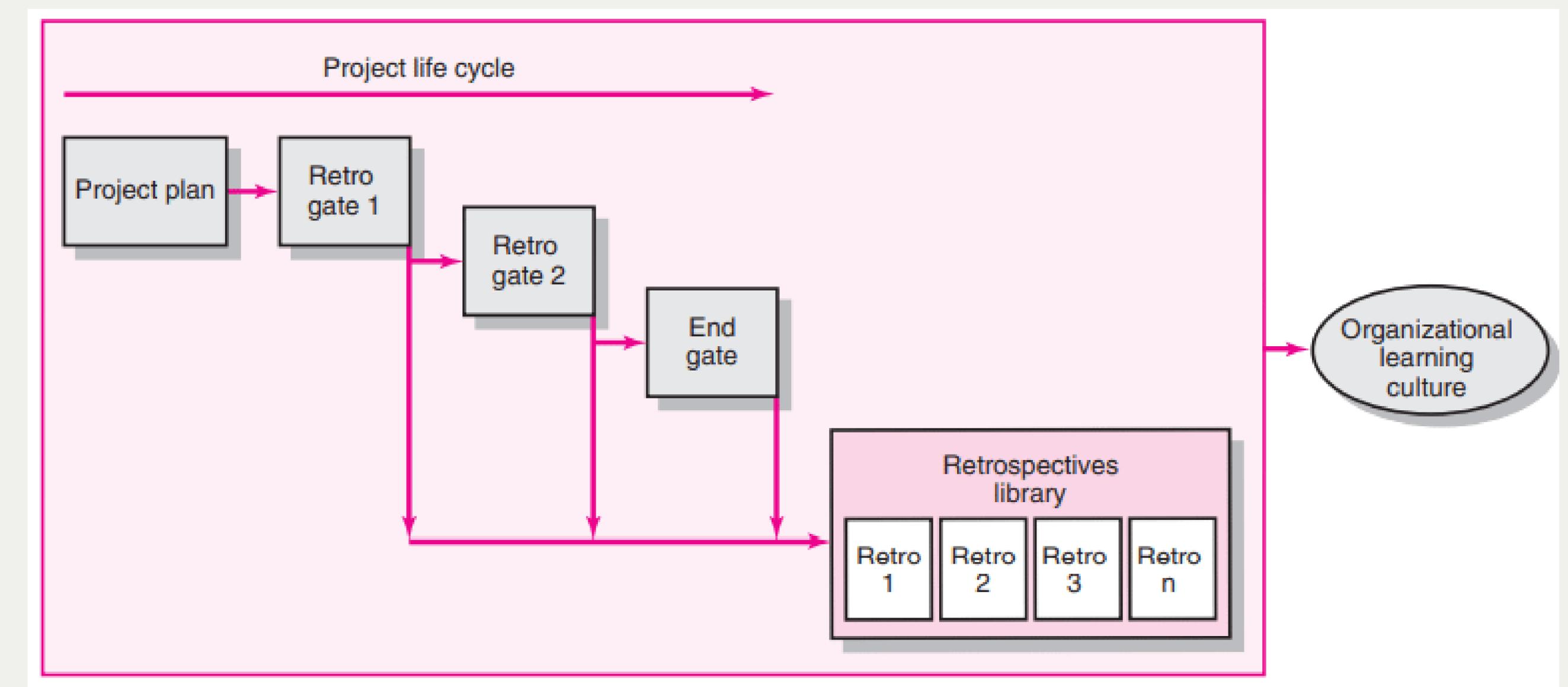
- Identify ways to approximate the cost and time closest to the realistic values
- Set priorities and resolve dependencies among different activities
- Manage time to meet all the deadlines
- Identify ways to minimize the number of resources used

# Retrospectives

"Lessons learned are worth their weight in gold. I do not understand why we don't do a better job nurturing, dispersing, and implementing lessons learned." - an executive.

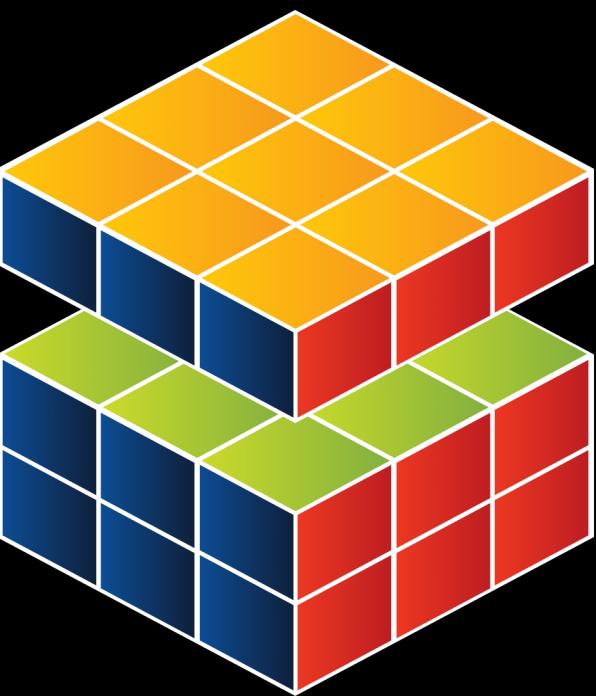
# Retrospectives

- What worked and what did not.
- Reuse solutions
- Stop repetitive mistakes



# **Project Process Review**

## **Questionnaire**

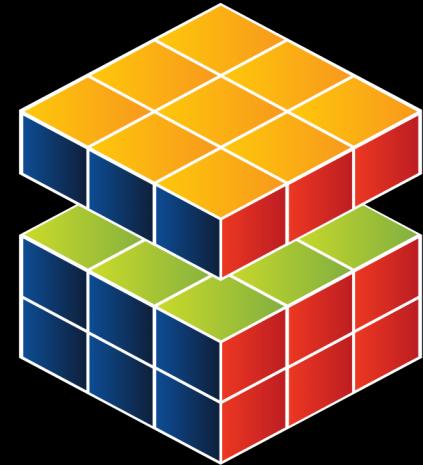


Item	Comments	
Were the project objectives and strategic intent of the project clearly and explicitly communicated?		
Were the role of every team and the time scale followed were clear?		
Were time estimates reasonable and achievable? If not then specify the area.		
Were the process and practices (documentation, reporting etc) appropriate for this type of project? Can this project layout be used further in future for similar projects?		
Was a Risk Management process applied adequately and dependencies solved?		
Were project resources adequate for this project?		
Were people with the right skill set assigned to this project?		
Were the external and internal communication properly managed?		
Did outside contractors (for marketing, testing etc) perform as expected? Explain briefly.		
Were the schedule, budget and scope standards met?		
Were the stakeholders satisfied with the strategic intent of project delivery?		
Is there any one important area that needs to be reviewed and improved upon? Can you identify the cause?		

Reviewing strategic intent, project objectives and project charter

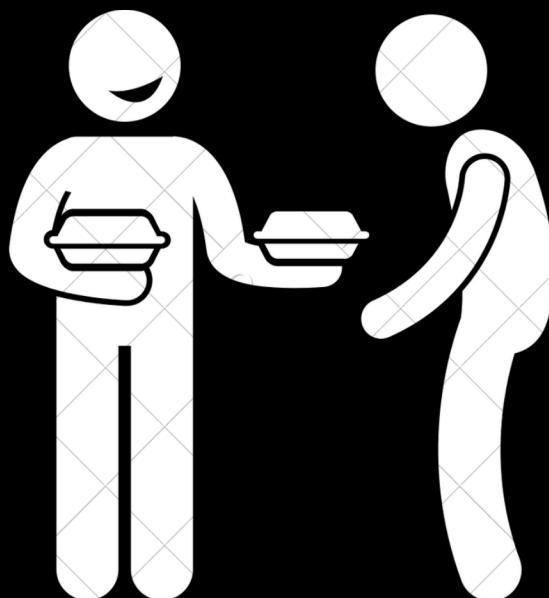
Reviewing selection and allocation of resources.

Experiences and feedback (communication, external influences and suggestions).



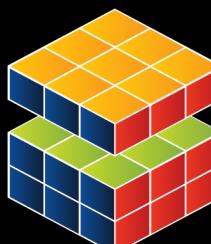
# **Organization Culture Review**

## **Questionnaire**



Item	Comments
Did the project have a clear link to organizational objectives?	
Were the efficient management activities were performed?	
Were right people hired and assigned?	
What makes you proud to work with us?	
Is risk-taking encouraged, and what happens when people fail?	
To what extent you found your seniors supportive?	
Did working with us added value in your professional growth?	
How conflicts in development processes are resolved?	
What is one thing you would change about organization, if you could?	
How would you describe "organizational politics" at this stage, related to us?	
When and how do relevant people like to give and receive feedback?	

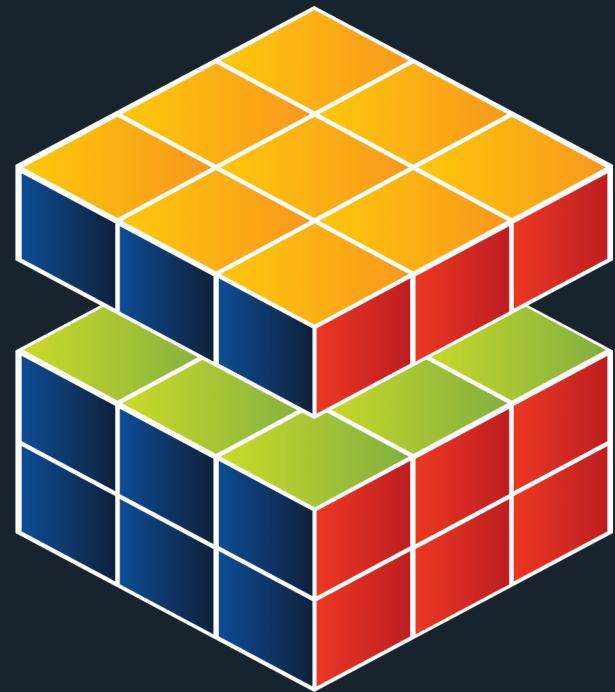
Focusing on day to day culture, professional growth of team, and working atmosphere.



Utilization of retrospectives

Archiving

And DONE!

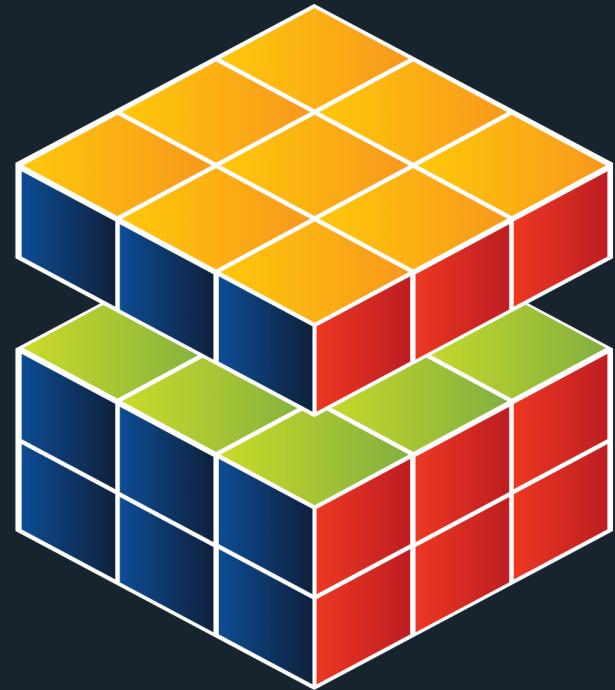


# Future Works

What do you have to offer?

Near to expire?

Expansion



*Thank You!*