

## CASE (A)

### MAHARAJA COLLEGE'S GYMNASIUM (MCG) INFORMATION SYSTEMS PLANNING

#### THE SCENARIO

Mukul Gupta, the Director of Maharaja College's **Gymnasium**, sits at his desk wondering how to develop solutions to the problems facing the **gymnasium** (gymnasium cum auditorium). Since the expansion of the gymnasium was completed a year ago, the number of programs conducted have doubled, as college management wants to capitalize on the additional facilities available. Since **the** college is new and management has modern outlook the gymnasium is run as a **profit** centre and **has** various divisions to **look** after **its** numerous activities.

The information needs were easily **satisfied** before the expansion when the gymnasium hosted only basketball games, an occasional Youth Forum meeting, and three to four cultural programs a year. Additional building space and seating has **attracted** the promoters of **rock** concerts, conventions, and professional matches to the gymnasium.

Recently several programs have almost **ended** in disasters because of coordination problems. On one occasion the advertising division learned only a few days before the **program** that a souvenir to be sold at the door had not been produced. Although the printing was completed on time, the program resulted in a loss **because** the rush delivery charges levied by **the** printer were large, and the **advertising** division was **unable** to solicit **the** required number of advertisers for the souvenir.

For every event, the facilities planning division complaints about problems **encountered** preparing the gymnasium for a **program**. Requirements for the program, such as **the** seating arrangement and the **number** of chairs and tables **needed**, often are not communicated in a timely fashion. The facilities planning division has found **itself short** of chairs, tables and other resources because two programs **events** are **scheduled** in different parts of **the** gymnasium at the same time, each competing for **the** same resources. Personnel division has had difficulty in scheduling ushers, attendants, and ticket checkers. To **prepare** properly they feel that they should **be notified** as soon as **the** program is **booked** by the activities division. The lack of information about the resources **available** has caused **the** activities division to **take** up to a **week** to inform all other divisions of the requirements for a given program. Even the accounting division has had problems paying **the** promoters **because** of delays in receiving information concerning ticket revenue and **expenses**.

The worst problems seem to be in the **ticketing** division. The ticketing division handled only general admission **tickets** before the expansion. Now, the division provides **tickets** for reserved seating, special seating and general seating for different kinds of programs that have varied seating plans.

#### GETTING STARTED

Mr. Gupta knows he has to address **these** problems. The Managing Committee of the college approved the expansion of **the** facilities assuming that **the** gymnasium would host more programs, increase the variety of programs, and show a profit. At present, the **gymnasium** is losing money and credibility with the **promoters** of programs. Staff members are also unhappy because they feel **that** the problems are a **direct result** of **their** performance. Mr. Gupta, indeed, recognizes that **the only way** to **solve** this growing problem is **to take** action to meet the **increased** information requirements of **the** gymnasium.

**PLANNING FOR INFORMATION SYSTEMS**

Mr. Gupta realizes that the planned **goal** of increasing the business operations of the **gymnatorium** has been met since expanding the facilities. They could meet the goals set forth by the Managing Committee much more **efficiently**, only if **they** could achieve better communication **between** the various division in the gymnasium. An information system that integrates all **the** division of the gymnasium would provide the communication necessary to meet this requirement.

Mr. Gupta sends a memo to all his division heads asking them to meet with him and Neera **Tiwari**, the EDP Manager, next Monday for a strategic-level conference about the development of a new information **system**. He also requires each division head to bring systems project request forms (**attached** to his memo) filled out, **ready** for presentation and prioritization.

On Monday, with aid and **direction** from Neera **Tiwari** and **several** assistants, the division heads and Gupta hammer out a systems plan after some heated discussions. See Exhibit A-I for the modular design of an integrated information systems project for the gymnasium.

After the brainstorming that went into preparing the information systems plan, a consensus is reached that the **highest-priority** projects will solve immediate critical problems. The others of **lower** priority will fulfill **long-term** management goals. Based on this philosophy various ratings are provided on a 10 point scale for **TELOS** (Technical, Economic, Legal, Operation and Scheduling) **feasibilities** this listing is consolidated in Exhibit A-11.

**EXHIBIT A-I****LISTING OF PROPOSED MODULES****A. SCHEDULING AND TICKETING SYSTEM (STS)**

1. Integrate **the** activities and ticketing functions.
2. Provide the activities **office with** a system for **setup** and management for each **program**.
3. Provide the ticketing with a system for issuing tickets and provide the activities office status on demand for each program.

**B. FACILITATING AND SEATING SYSTEM (FSS)**

1. Provide information to the facilities division necessary to prepare the gymnasium for **each program**.
2. Provide feedback to **the** activities office about availability of resources and progress reports on facility set up for upcoming programs.

**C. ADVERTISING AND PRINTING SYSTEM (APS)**

1. Provide information about printing and advertising needs to the **advertising** department to prepare for each program.
2. Provide feedback to **the** activities office on the **status** of advertising and printing efforts.

**D. PERSONNEL AND SCHEDULING SYSTEM (PSS)**

1. Provide information **about** required **staffing** for each event to the **personnel** division to schedule **staff**.
2. Provide feedback to **the** activities office on **staffing** and scheduling status.

**E. BOOKING TRACKING SYSTEM (BTS)**

1. **Provide** **the** activities office with the information necessary to contact **representative** for **programs** scheduled.

2. Provide the activities office with the information necessary to manage current booking at the gymnasium.

#### F. ACCOUNTING AND TRACKING SYSTEM (ATS)

- Provide accounting **information** to all levels of management in a timely manner.
- Provide accurate reporting for all financial data to Maharaja College Central financial management division.

#### G. PROGRAM CATALOGING SYSTEM (PCS)

- Provide master catalog of types booking criteria and other **information** for all **programs** which may potentially be booked in the future.
- Provide cost information for all **potential** future programs.

#### Information Systems Planning

PROJECT NAME	STRATEGIC FACTORS			STRATEGIC- IC FACTOR SCORE	FEASIBILITYFACTORS					FEASIBILITY FACTOR SCORE
	* PROFIT	** SERVICE	*** DECISION MAKING		TECHNI- CAL	ECONO- MIC	LEGAL	OPERA- TIONAL	SCHE- DULE	
A. Scheduling and Ticketing System (STS)	9	8	7	8.0	8	8	9	7	9	8.2
B. Facilitating and Seating System (FSS)	5	6	7	6.0	6	3	9	7	5	6.0
C. Advertising and printing System (APS)	7	4	3	4.7	8	4	6	7	5	6.0
D. Personnel and Scheduling System (PSS)	2	2	2	20	8	8	7	7	9	7.8
E. Booking Tracing System (BTS)	4	5	7	5.3	7	3	9	3	1	4.6
F. Accounting and Tracking System	8	4	6	6.0	2	1	7	2	4	3.2
G. Program Cataloging System (PCS)	1	5	3	3.0	2	3	2	4	9	4.0

#### \* EXHIBIT A-11 PROJECT REQUEST PRIORITY WORKSHEET

\* Profits : Increase Revenue and Decrease Expenses

\*\* Service : Provide Organized and **Problem-Free** Programs

\*\*\* Decision Making : Coordination Between Divisions of MCG

#### ASSIGNMENT ON MCC CASE (A)

- Prepare a mission statement and systems goal list based on outline of MCG's information systems plan.
- Discuss the validity of various FACTOR rating given by Mr. Gupta and his information systems planning team,
- How can Neera Tiwari, the EDP Manager can prioritize the various modules listed for analysis and design?

Ans 1:

Mission Statement

To develop an information system **that** will increase the effectiveness **and** efficiency of the planning and **controlling** functions of the gymnasium by providing more timely, relevant and **accurate information** to managers and their staff.

**Goals Listing**

1. Better communication between the various **divisions** of **MCG**
2. Adequate **reporting** to each division.
3. **Centralised** management reporting and decision support
4. Accurate and timely **control** of programme
5. **Timely reporting** of accounting activity
6. Efficient and controlled ticket handling
7. **Cost-effective** system

Ans 2:

Factor ratings are clubbed into two **broad** categories viz. Strategic Factors and Feasibility Factors. Strategic factors include; profits, **service** and decision making whereas the feasibility **factors** comprise of **TELOS**—Technical, Economic, Legal, Operational and Scheduling.

Let us take example of STS module listed as **A** in the Exhibit A- II. On strategic factors it **scores** 9, 8, 7 on a **10-point** scale. High strategic factor scores were recommended by **Gupta** and his team because this module has strong influence on strategic factors of profit making, providing **service** and quick decision about the program selection. All **these** factors are essential for a business **to** succeed in a competitive market (similar discussions can be done for other modules also).

On TELOS **feasibility** also STS module consistently **seems** high **resulting** in an average score of 8.2. The reason again in Mr. **Gupta's** mind is that STS is **justifiable** in terms of **TELOS** feasibility and is executable in terms of technical **competency** has sufficient funding and meets legal, operational and scheduling constraints,

Ans 3:

To prioritize Neera can **utilise** a system project priority grid (a concept akin to BCG matrix analysis in marketing).

This grid is shown as below:

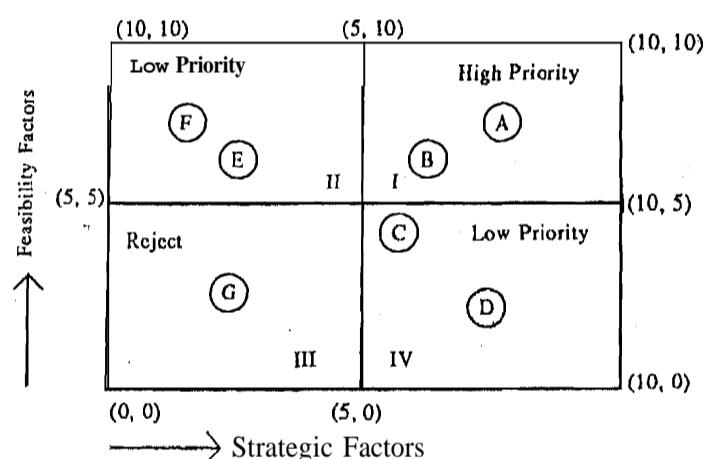


Figure A-1: System Priority Request Grid

In this Grid **projects** in **quadrant I** are of **immediate** priority, ones in **quadrants II, IV** can be taken up slightly later and the ones in quadrant **III** can be put on blackbumer.

## CASE (B)

### MAHARAJA COLLEGE'S GYMNASIUM (MCG) PREPARING FOR SYSTEMS ANALYSIS

#### GETTING APPROVAL FOR SYSTEMS DEVELOPMENT

The accounting division with guidance from Gupta and Tiwari, prepared a cost **estimate** of Rs. 20 Lacs to support the **Information** Systems plan. Mukul **Gupta** then requested sanction for this amount to support systems development effort. Realizing the urgency of this request, the Management Committee immediately allocated Rs. 12 Lacs, less than what was requested, but possibly enough to complete some of the higher-priority modules over the next year.

Mukul Gupta was elated and quickly got in touch his divisional heads and Neera to tell them the good news. The budget of Rs. 12 Lacs enables a **substantial** portion of the systems plan to be funded.

Then Mr. Gupta gave a general directive **for** systems work to begin immediately starting with the scheduling and ticketing system, and **within** two weeks, also **the** modules B, C and D. Mr. Gupta also had a meeting **with** Mr. Anoop Sarin, Head of Scheduling and ticketing department. He was told to get his people to interact with systems people **first** thing in the morning.

#### REQUESTING SYSTEMS ANALYSIS

Mr. Anoop Sarin called Neera **Tiwari** over the intercom and told her, "Well, it looks like we are ready to get started on my scheduling and ticketing system." "Yes, I **heard**," Neera said, "What I'm going to do is **to** ask Sarita Kakkar, our chief systems analyst **to** get in touch with you. She will be able to get us off to a good start. Why don't I transfer your call to her office?"

"OK, thanks."

"Hello, Sarita **Kakkar** speaking."

"Oh, yes. Hi! I'm Anoop **Sarin**, Head of scheduling and ticket sales at the **gymnasium**. Neera told me that you are going to do our systems work. Great to have you on our side."

"Thanks, I'm looking forward to working **with** you," Sarita responded. "Actually, Anil **Abraham**, one of our systems analysts is all set to be with you **this** morning and prepare an information systems **service** request."

"Oh, I've already filled out one of those forms," said Anoop.

"You know, the one we did for planning."

"No, that was a systems project request **form** that you people use for planning and for budgeting purpose," responded Sarita. "The **information systems service** request **form** that you fill out for us is just that, a request from **you** for our service. It's a **little** more specific than what **you** did earlier, and it gives us a **starting point** and serves as an agreement, if you will, 'between our users and the information systems group. It's a 'meeting of **the** minds,' so to speak,"

"Another form?" complained Anoop, "I **don't know** anything about it or how **to fill it out**. And we just started using the systems project request form."

"Well, **you** know us, we couldn't operate without forms," laughed Sarita. "Don't **worry**, Anil **Abraham** will **help** you fill it out. Then we can get started."