

**A Consultancy Project
for Software/ERP
Implementation**

TIN : 09372800375

AGARWAL



DUPLEX BOARD MILLS LIMITED

Office & Works : 4TH KM. STONE, BHOPA ROAD, MUZAFFARNAGAR-251001(U.P.)

☎ 0131-2614623, 2614200, 2614734, 2411509 FAX : 2614881

Ref. No.

Ref. No. RP/ SRC/ 2019-20/ 106

Date: 10.06.2019

To

The Principal
Shri Ram College
Muzaffarnagar

Subject: Sanction of Rs. 2,00,000/- to conduct Research Project.

Dear Sir

Please refer to our letter dated 17.05.2019 addressed to Dr Amit Tyagi of Department of Computer Application of our college. We are glad to sanction Rs. 2,00,000/- as a grant to conduct research work on "A Consultancy Project for Software/ ERP Implementation". The expenses shall be strictly made on the heads given in the estimate of the Project.

Kindly note that the work shall be completed in scheduled time and a utilization certificate duly signed by CA shall be provided to us.

Thanks,

For Agarwal Duplex Board Mills Limited


Managing Director

Copy to:

Dr Amit Tyagi, Department of Computer Application, Shri Ram College, Muzaffarnagar for information and necessary action.

CERTIFIED

Managing Director

Correspondence Address : 122, SOUTH BHOPA ROAD, NEW MANDI, MUZAFFARNAGAR - 251001 (U.P.)
Regd. Office : 301-AGARWAL CITY MALL, OPP. M-2-K CINEMA, PITAMPURA, NEW DELHI-110034


Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar


Principal
Shri Ram College
Muzaffarnagar

20/2

Utilization Certificate

S.N.	Detail of sanction of Fund with Project name and Duration	Amount
1.	365- Day project on A Consultancy Project for software/ERP Implementation, Date of Sanction of Fund- 17.05.2019 as per Sanction Letter	200000.00/-
	TOTAL	200000.00/-

It is Certified that out of Rs. 200000.00/- (Two lakhs Only) of grants sanctioned by Agarwal Duplex Board Mills Ltd , Muzaffarnagar during the year 2019-20 in favor of Shri Ram College, Muzaffarnagar, a sum of Rs. 203350.00 has been utilized for the purpose of the project for which it was sanctioned and that the balance of Rs. Nil remaining unutilized at the end of the year has been surrendered. The Extra amount (if any) is met out by Shri Ram College.

2. Certified that we have satisfied our self that the conditions on which the grant was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was

sanctioned.

Kinds of checks exercise-

- 1 Checking of cash book
- 2 Checking of payment vouchers.
- 3 Checking of expenses bills.

For Shri Ram College

Secretary

Place: Muzaffarnagar
Date: 10.12.2020

CERTIFIED

Principal
Shri Ram College
Muzaffarnagar

Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

For Goel Rakesh & Co.
Chartered Accountants



Rakesh Goel
(Proprietor)

M.NO. : 071858

FRN : 003374C

Executive Summary

Background Information:

The genesis for **Agarwal Duplex Board Mills Ltd. (ADBML)** was laid in 1987 in Muzaffarnagar, Uttar Pradesh (India). The company has built a strong client base in major markets of India, Nepal and the USA. ADBML used over 2 systems before the ERP project was started, which were developed by local over the last decade. These systems were expensive to operate and difficult to maintain and develop further. They did not provide accurate, consistent and accessible data. These ageing systems often did not lend themselves fully to a modern manufacturing environment. One particular down fall of the systems was the lack of communication between individual departments.

Consulting Tasks:

In order to smooth functioning and more effectively in the **Agarwal Duplex Board Mills Ltd.,** Muzaffarnagar, we decided to performed following tasks for the computerization of the industry:

Task 1: Analysis and Planning

Existing system was analyzed by performing requirement engineering's information gathering tools such as interview, questionnaire, document review, onsite reviews etc. and a Software Requirement Specification (SRS) was created.

Task 2: System Initialization and Design

ERP phases were decided and the foreground designing, i.e. screens like input screens, output screens, reports etc. and background design, i.e. database tables along with the integrity keys were designed.


Task 3: System Configuration

The integrated software configuration was validated to ensure that it satisfies the specified performance measurements. And was also validated to operate efficiently and effectively as an integrated product. This involved engineering analysis of the integrated s

CERTIFIED




Principal
Shri Ram College
Muzaffarnagar


Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

taking into account the performance of the specified computing environment and interfaces to external systems and applications.

Task 4: Testing and Training

Beginning from individual module (unit testing) to the system as a whole(system testing), the ERP system went through a series of test cases, so that a bug-free, consistent and efficient system could be developed. After that the training starting from top management to the end-user was provided.

Task 5: Deployment/Go-Live

Once Testing and Training was completed, we finally implemented the ERP system in the organization and made it available for the users.

Task 6: Maintenance / Ongoing Support

After an organization has implemented an ERP system, it must be updated and maintained regularly in accordance with the changing situation of the organization. No matter what your concern is, for a better performance of your ERP system, you need proper maintenance.

Outcomes Analysis and Recommendations:

As per understanding with the current system of the organization and communication with the employees of the organization we came to know that the organization and its employee were ready to move on computer for the efficient and effective functioning for the organization. We suggested to the management of the organization for the computerization and recommended for the LAN [IPv4] as well as high speed wi-fi for the computer network with several NODES on the point of working. Also recommended for the training of employees for effective working on the computers.

- With the business landscape changing, it's imperative to keep an eye on the developments in the ERP space. Keep getting updated about new ERP modules and sub-modules.
- Not to overlook the importance of updating ERP and ERP modules in the future, as 80% of the ABDML run with ERP solutions

CERTIFIED


Principal
Shri Ram College
Muzaffarnagar


Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

- In the future, I recommend that the organization will keep the ERP maintained for more efficient working in the organization. For on-premises systems, companies must also factor in IT support and infrastructure costs, such as server hardware.
- The company may need to purchase additional add-on services or software as the organization evolves and operational needs expand.
- Companies must allocate internal employee resources to make ERP system operational. That can be an in-depth process involving finance, operations, IT and potentially sales, marketing and HR leaders.
- For ADBML with disparate spreadsheets, there may be a lengthy data migration process that may require hiring an integration specialist.
- Unless you have buy-in from leadership, there may be internal resistance to new processes and technology.

and

CERTIFIED

KG

Principal
Shri Ram College
Muzaffarnagar

[Signature]

Final Consulting Report

Introduction

Agarwal Duplex Board Mills Ltd. is a well known Manufacturer and Supplier of Duplex Boards, Kraft Papers, Poster Paper, and Tissue Paper. Fabricated from the finest grade of raw material, their range of products is known for its smooth surface and high quality. They are serving several reputed clients owing to the high quality of their products. Their products are extensively used in educational institutions for arts and crafts, offices, restaurants etc. Moreover, they are very strict on delivery deadlines, reasonable prices, and quality of our products. Also, their team of skilled employees works in close coordination with the clients to meet their requirements and expectations.

Agarwal Duplex Board Mills Ltd., Muzaffarnagar have a talented team of professionals with rich experience in their respective domains. Their team includes procuring agents, quality professionals, manufacturing staff, and skilled workers. These professionals work in close coordination with clients to serve them efficiently.

General Study

Firms around the world have been implementing ERP systems since the 1990s to have a uniform Information system in their respective organizations and to re-engineer their business processes. ERP system implementation process involves a wide range of complicated resources and issues. With no plan or supporting procedure, companies may spend tons of money, resource, and time on ERP implementation but not enjoy a bit of the benefit ERP system. A successfully implemented ERP system has the advantages of reduced cost and high system quality. It can also yield benefits to share the data of the production line in real time. The benefit of ERP systems is highly dependent on the success of its implementation. In order to get the best out of ERP system the implementation must be managed as a program of wide ranging organizational change initiative rather than as a software installation effort.

CERTIFIED



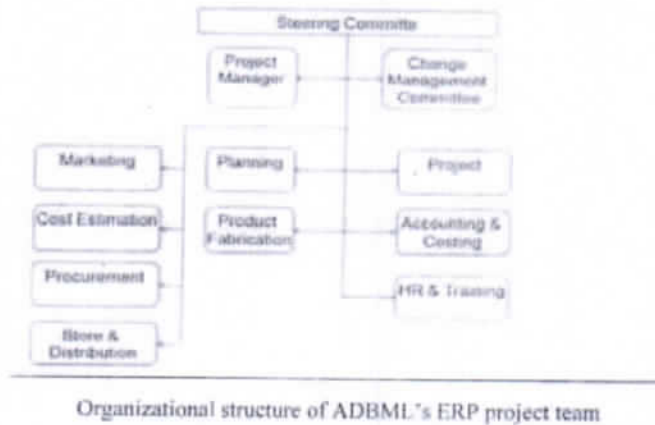
Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar


Principal
Shri Ram College
Muzaffarnagar

ERP Implementation: Background Study

The genesis for Agarwal Duplex Board Mills Ltd. (ADBML) was laid in 1987 in Muzaffarnagar, Uttar Pradesh (India). The company has built a strong client base in major markets of India, Nepal and the USA. ADBML used over 2 systems before the ERP project was started, which were developed by local over the last decade. These systems were expensive to operate and difficult to maintain and develop further. They did not provide accurate, consistent and accessible data. These ageing systems often did not lend themselves fully to a modern manufacturing environment. One particular downfall of the systems was the lack of communication between individual departments. Work in progress was often transferred between departments and could not be tracked accurately; often causing inventory and stock take problems. These systems had problems interfacing with each other, as they had different databases and file formats.

At this point ADBML recognized that the adoption of ERP system was the most significant factor that could enable the company to overcome the challenges and led to business success. ADBML's ERP project team was organized as shown on figure below.



[Signature]
Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

CERTIFIED
[Signature]
Principal
Shri Ram College
Muzaffarnagar

There were several problems the implementation project faced and they are grouped into three areas of cultural, business and technical difficulties.

Cultural Problems

The implementation project team expected a high acceptance of the system in areas that provide just as good or better functionality than the old system. However, some functions and processes might not get the full appreciation the traditional systems once had. The project team decided to resolve this by illustrating the improvements made to the company as a whole, thus breaking the traditional segregation of departments.

Business Problems

ERP requires a fairly rigid business structure for it in order to work successfully. The participants of cross-functional workshops/departments soon understood that their working practices must be adjusted in order to fit ERP. The program consisted of four steps, the first involved drawing and mapping the current processes. The second step involved identifying any problems or issues raised from the mapped process. The third step involved applying some of these issues to a demonstration, to identify potential problems within the new system. The fourth step involved the re-mapping or modification of the processes in line.

Technical Problems

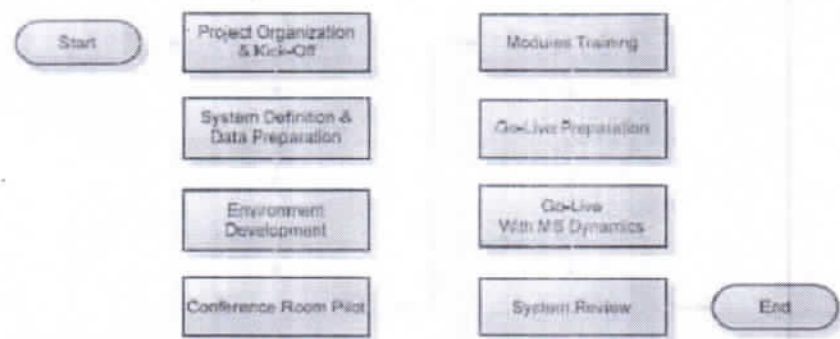
The main technical problems that ADBML has encountered have been with the accuracy of data. The new system requires the retrieval of old data from the traditional systems that has to be normalized, screened and stored in a sensible data format within the new systems data repository. The duplication of data was a major concern. The IT department built interfaces between the systems.

ERP Implementation Phases

ERP implementation project goes through several phases. The detail implementation model plan is shown in Figure and Table 1 respectively.

CERTIFIED


Principal
Shri Ram College
Muzaffarnagar



ERP implementation model

Phases of an ERP Implementation

The development team utilized a structured implementation methodology to ensure that existing system has been configured and ERP would be implemented in a manner that best supports ADBML's business requirements. We communicated this six-phase process from the onset of the project and all the way through to ongoing support and after:

Phase	Tasks	Days	Start Date	End Date
Phase 1	Analysis and Planning	120	01.07.2019	28.10.2019
Phase 2	<i>System Initialization and Design</i>	33	29.10.2019	01.12.2019
Phase 3	<i>System Configuration</i>	29	02.12.2019	30.12.2019
Phase 4	<i>Testing and Training</i>	64	01.01.2020	04.03.2020
Phase 5	<i>Deployment/Go-Live</i>	15	05.03.2020	19.03.2020
Phase 6	<i>Ongoing Support</i>	9+ months	20.03.2020	31.12.2020

1. Analysis and Planning

The purpose of this phase is to identify, investigate, analyze and systematize the factors that can influence creation and functioning of the ERP system in ADBML and create methodology of ERP system implementation.

This phase focused on a detailed analysis of the ADBML's business processes and requirements. In this phase workshops were conducted with the representatives from each business area or department. In these workshops, the detailed functioning in each of the business processes was analyzed and also performed a "fit/gap analysis" to map the processes to the ERP solution. The

[Signature]
 Co-ordinator
 IQAC, Shri Ram College,
 Muzaffarnagar

CERTIFIED

[Signature]
 Principal
 Shri Ram College
 Muzaffarnagar

documented solution were reviewed and accepted by the customer. This document then becomes the focal document for the next phase of the project. We tried to work as much out-of-the-box as possible and left customizations as a last resort.

This phase can and will be an extremely frustrating time because customers don't see anything happening, as most of the work is internal to the ERP implementation team. Communication and transparency was critical during this phase.

Key Activities during this phase:

1. Planned and held a series of meetings to establish a baseline of understanding of the company's business structure, current operational practices and business requirements.
2. Prepared and delivered a "Software Requirement Specification" (SRS) document outlining the key operational practices that might impact the project's budget, timeline and scope etc.

2. System Initialization and Design

During the System Initialization and Design phase, we started the process of core configurations within the system (master records such as Accounts, Sub-accounts, Customer, Vendors, and Inventory). During this phase we typically went on-site for an Orientation session which helped us to expose the functionality of ongoing system. The Orientation also helped us by going through the majority of the transaction screens and key reports.

Key Activities during this phase:

1. Planned and conducted a series of EPR Orientation Meetings to establish a baseline understanding of ADBML's configuration requirements and impact to aid the Company to make informed decisions in its configuration.
2. Established and documented an initial *Configuration Design* of key components within the application.
3. Established module-level preferences and validating components to be used within by the system's master and transaction levels.
4. Established a *Pilot Configuration* to test and validate the basic configuration of ADBML.


Co-ordinator
IQAC, Shri Ram College
Muzaffarnagar

CERTIFIED


Principal
Shri Ram College
Muzaffarnagar

5. Initial *Training* to the personnel on processing transactions within ADBML for the purposes of validating the *Pilot Configuration*.
6. Initial *Training* to personnel on the configuration of areas in which company has sole responsibility (e.g. user security, creation of *Notification Templates*).
7. Obtained acceptance of *Pilot Configuration* and approval for final *System Configuration*.

3. System Configuration

System Configuration was the last phase before we took the ADBML's employees through testing and training. During this phase a pilot, or sandbox, site was created where the entire final configuration was completed. We wanted them to complete as many of these tasks as possible for a couple of reasons. One, to engage them in the processes within ADBML, and the second was for our team to take ownership of the system.

Key Activities during this phase:

1. Imported final master records as applicable to modules "in scope."
2. Reviewed final configuration to identify configuration gaps and provided guidance to correct these gaps.
3. Migrated final configuration to the pilot company file for final testing and training.

4. Testing and Training

Our development team was responsible for initial preliminary testing (alpha testing) of the setup and data converted, but the bulk of the testing (beta testing) responsibility was done by ADBML's employees. An understanding of the data was required to test the data and processes. Detailed testing was done for each module. Before testing the preliminary data entry had been completed and the initial setup was done. The testing environment was as close as possible to the live environment to establish a greater level of comfort with system processes.

Our development team trained the ADBML employees throughout the project. Our development team trained the ADBML employees once the system had been installed and the preliminary setup occurred. Training was provided mainly in the following areas:

CERTIFIED

[Signature]
Principal
Shri Ram College
Muzaffarnagar

[Signature]
Co-ordinator,
IOAC, Shri Ram College,
Muzaffarnagar

- General usage and module configuration
- Transaction processing and month-end closing
- Reporting and inquiry overview

We recommended that the different departmental heads should understand the system as a whole and its members were encouraged to attend as many of the training classes as possible. Once the system had gone through the bulk of testing, a second training schedule was created for departmental employees to receive training in their functional area as needed.

Key Activities during this phase:

1. Conducted "Train the Trainer" training to a company-designated "Super-user" responsible for transferring system and functional knowledge to Company personnel.
2. Performed a mock "go-live" dry run for the purposes of validating the successful import of open documents for in-scope modules, as applicable.
3. Obtained overall *User Acceptance* and made a "go/no-go" decision.

5. Deployment/Go-Live

Once Testing and Training has been completed, we finally implemented the ERP system after adding the following activities:

1. Migrated opening balances for all "in scope" modules.
2. Assisted in the importing of historical trail balances as needed to support comparative financial reporting.

6. Maintenance/Ongoing Support

Mentoring doesn't stop after the implementation is completed. After an organization has implemented an ERP system, it must be updated and maintained regularly in accordance with the changing situation of the organization. There are many reasons that count for the regular maintenance of the ERP system like to troubleshoot bugs cost-effectively, receive migration support, stay informed on key issues like security alerts, and leverage the global community.

CERTIFIED

[Handwritten signature]

[Handwritten signature]

Principal
Shri Ram College
Muzaffarnagar

[Handwritten signature]
Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

matter what your concern is, for a better performance of your ERP system, we need proper maintenance.


We are working hand-in-hand with ADBML throughout the year to determine areas we can improve and optimize the ERP. We want to continually add value to what our customers are doing with ERP. The time and expense are inconsequential compared to the outcomes of face-to-face meetings. We are committed that our team of experts will be available anytime to discuss the issues with your ERP system and we will be there to resolve them.

Outcomes Analysis and Recommendations:

As per understanding with the current system of the organization and communication with the employees of the organization we came to know that the organization and its employee were ready to move on computer for the efficient and effective functioning for the organization. We suggested to the management of the organization for the computerization and recommended for the LAN [IPv4] as well as high speed wi-fi for the computer network with several NODES on the point of working. Also recommended for the training of employees for effective working on the computers.

- With the business landscape changing, it's imperative to keep an eye on the developments in the ERP space. Keep getting updated about new ERP modules and sub-modules.
- Not to overlook the importance of updating ERP and ERP modules in the future, as 80% of the ABDML run with ERP solutions
- In the future, we recommend that the organization will keep the ERP maintained for more efficient working in the organization. For on-premises systems, ADBML must also factor in IT support and infrastructure costs, such as server hardware.
- The company may need to purchase additional add-on services or software as the organization evolves and operational needs expand.
- Companies must allocate internal employee resources to make ERP system operational. That can be an in-depth process involving finance, operations, IT and potentially sales, marketing and HR leaders.
- For ADBML with disparate spreadsheets, there may be a lengthy data migration process that may require hiring an integration specialist.
- Unless ADBML have buy-in from leadership, there may be internal resistance to new processes and technology.

CERTIFIED



Principal
Shri Ram College
Muzaffarnagar



Co-ordinator
ICAC, Shri Ram College,
Muzaffarnagar


Team for the ERP implementation at ADBML

The members of SRC appointed for the ERP implementation at ADBML were:

S. No.	Name	Designation	Role
1	Dr. Amit Tyagi	Asst. Professor	Project Leader
2	Dr. Himanshu Hora	Asst. Professor	Asst. Project Leader
3	Mr. Akshay Maan	Student (BCA III Year)	Team member
4	Mr. Shubham Kumar	Student (BCA III Year)	Team member
5	Ms. Vanshika Nehra	Student (BCA III Year)	Team member
6	Mr. Vishwas Patel	Student (BCA II Year)	Team member
7	Mr. Himanshu Bhandari	Student (BCA III Year)	Team member
8	Mr. Abdullah	Student (BCA III Year)	Team member

CERTIFIED


Principal
Shri Ram College
Muzaffarnagar


Co-ordinator
IQAC, Shri Ram College
Muzaffarnagar

Estimated budget/expenditure for the project:

Project cost category	Explanation	Cost (in Rs.)
Human resources	Remuneration to team members	$6 \times 20,000 = 1,20,000$
	Remuneration to project leader	$2 \times 30,000 = 60,000$
Travelling spending	To travel from SRC to ADBML to do project work (including budget for meals)	9,500
Training fees	Workshops for training (by development team)	Nil
Material resources	All the items that team needed to perform the work, including software, equipment, or other materials	13,850
Maintenance Cost	To maintain the project for next 1 year	Nil
Total Cost		2,03,350

CERTIFIED

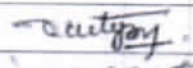
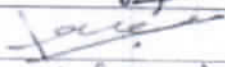
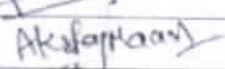
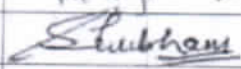
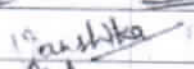
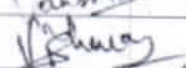

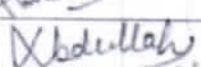
[Handwritten signature]

[Handwritten signature]

Principal
Shri Ram College
Muzaffarnagar

[Handwritten signature]
Co-ordinator
IGAC, Shri Ram College
Muzaffarnagar

Receiving of remuneration to team members

S. No.	Name	Designation	Remuneration Amount (in Rs.)	Signature
1	Dr. Amit Tyagi	Asst. Professor	30,000	
2	Dr. Himanshu Hora	Asst. Professor	30,000	
3	Mr. Akshay Maan	Student	20,000	
4	Mr. Shubham Kumar	Student	20,000	
5	Ms. Vanshika Nehra	Student	20,000	
6	Mr. Vishwas Patel	Student	20,000	
7	Mr. Himanshu Bhandari	Student	20,000	
8	Mr. Abdullah	Student	20,000	

CERTIFIED


Co-ordinator
IQAC, Shri Ram College
Muzaffarnagar


Principal
Shri Ram College
Muzaffarnagar