

IT MAHA ABHIYAN October 10

2014

IT and Business Audit reports of Infinity Advertising Group. Description of the key problems identified and the proposed solutions. Implementation of the solution.

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ACKNOWLEDGMENT

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It would be incomplete without our gratitude towards our mentors at the Cluster Innovation Centre itself, Dr Bibhu Biswal, Mr. Alok Jha and Ms Parul Gulati, who took immense pain in coordinating with the company and helping us in making strategic decisions. A special thanks goes to Pixel Pals, who assisted us in solving the issues that arose time and again.

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INTRODUCTION

Under the collaborative program executed by Ministry of MSME, PHD Chambers of Commerce and Industries and Cluster Innovation Centre, University of Delhi, an internship project was carried out at Infinity Advt. Ltd, Okhla Delhi. Through this program, we carried out a basic inspection into the structure and function of the company, vis a vis the Marketing Office in Okhla Phase 1, Delhi and the factory unit situated in Faridabad.

During the stretch, the companies process of client servicing, document management and inter departmental communication was keenly studied and areas of improvement were identified. Subsequently these were formally presented to the HoDs and the Managing Director of the Company and henceforth, a solution specific to those was provided as a Web based Application.

The Application resolves their Rider Management Problem and Courier Management and is built company specifically. It has been deployed on the servers of the company and tested as well.

On 25th of June 2014, an ICT survey was conducted by three students of Cluster Innovation Centre, University of Delhi at Okhla Head office of Infinity Advertising Ltd. The purpose of this survey was to understand the Information and Communication Technology tools and solutions practiced by the company in its day-to-day operations so as to identify deficiencies, if at all present and suggest possible solutions for it.

The survey was conducted by means of a questionnaire prepared by the students, which primarily dealt with the documentation customs, web presence and intra-departmental communication of the company.

ABOUT THE COMPANY

Infinity Advertising Ltd, primarily located at Okhla New Delhi, is a private ad agency that through its three different verticals provides one stop solution to all the marketing and branding activities to its clients like printing, promotion, activation and related services. The company is strengthened by ATL (multi), BTL (channelized), Retail, Media Buying and Planning and in-house Printing and Packaging. The company has 4 primary verticals of business – Infinity Advertising, Printsmith, i9Media, Infinity Rural.

Including both workplaces, Okhla Head office and Faridabad factory, the company has two dedicated IT staff for setting up networks and providing ICT solutions. The number of desktop and laptop systems at both offices is 110, of which around 70 are present in the head office.

Human Resource:

The head office at Okhla has a workforce of around 100 employees, and around 150 factory labors are employed at the factory. The recruitment process at the company is carried both online and offline. Company's policy is to give a 10 day in job training to new recruits. All the employee details are stored digitally and are available with HR Manager Mr. Sujan Roy.

The attendance system is through biometric and up to the mark. The bio metric attendance data is used to calculate salary deductions for un-informed leaves.

Account Record Maintenance

The accounts department of the company situated at the head office maintains a record of all credits and debits, client related transactions, purchases etc. through hardcopy documentation and E.R.P (FinSys). The salaries of employees are generally paid online (NEFT) or through paycheques. All these financial records are stored in the ERP. The ERP also takes care of the inventory management at the production unit.

Sales & Marketing

The Business Development employees of the company carry out sales through a direct mode. Initial step involves department whether it is possible to deliver to the client or not. On the basis of that, the client order is either accepted or rejected. The company performs its word of mouth marketing through the B.D employees, and further referrals through existing customers. The inhouse SEO department of the company takes care of the online marketing and promotion through search engines and social media.approaching the client and preparing a brief of the job. The B.D employee then collaborates with the client service and creative department.

FINDINGS

Documentation

The documentation of bills, payments, gate entry etc. is *recorded in paper as well on ERP*. No scanned copy is kept for additional security of important documents. Microsoft Office tools like Word, Presentation and Excel etc. are used up to basic level of report making, presentations and data entry respectively.

Web Presence

Website

The company has a *dynamic*, *non-responsive* website with its *personal domain name and hosting space* which was designed and developed by two of its own staff member. The content of the website is *updated once in every two days* or so.

Social Networking

The company has a *Facebook* page, a *LinkedIn* account and a *YouTube* channel for connecting with its clients and showcasing its functions. Though, it does not have any Twitter handle for itself.

SEO

There is a *Search Engine Optimization* of the company website which is done by the company SEO task person.

Intra-Departmental Communication

Various departments of the company communicate using *Intranet*, which was developed and deployed by the IT staffs. The front-end of the Intranet is developed in HTML, ASP and JavaScript while the back-end uses MS Access for storing database.

Intranet is used for broadcasting company news and events, forms, sharing database and applying for leaves.

Apart from that, Intercom is available at each desk of the office for quick interactions.

Hardware Devices

There are a total of 70 PC systems, 3 Printers, 3 Scanners and 3 Photocopiers in the Okhla office. All devices are *fully connected* to each other and are secured with McAfee Antivirus and Sonic wall Firewall.

CAD

All the creative digital and print products are designed in Photoshop, Corel draw, Adobe CS6 etc.

Security of Workplace

The Okhla office has *biometric* access to the workplace as well as *gate entry*. The Faridabad factory is fully under CCTV surveillance.

Document Authentication

All official documents are authenticated either by hand signatures or digital signatures.

Enterprise Resource Planning

The company owns an *outsourced* ERP system which was built by Finsys InfoTech Ltd. for a fee of 5 Lakh along with an annual payment for support & maintenance.

The ERP consists of following modules:

- Finance
- Production & Operations
- Inventory
- Sales & Marketing
- Engineering & Planning
- Purchase & Payment
- Quality Inspection
- Gate Entry
- Excise & Sales Tax
- Payroll
- Maintenance

- System Admin
- Pre Sales Management
- MIS Top Management

The ERP system is also connected with the Biometric software (Savior) to register attendance of the employees.

Summary

The company well documents its business process documents in ERP as well as paper. Generally, all staffs have at the least basic knowledge of MS office tools. The self-developed official website is dynamic, Search engine optimized but non-responsive. The company has also embarked social media sites like Facebook, YouTube etc. The office is well equipped with PCs, printers, scanners and photocopiers. All the hardware devices are connected in a network and secured with firewall and antivirus. The intranet is deployed and used efficiently. An intercom service eases hasty communication between all the employees. Product designing too is being done on the best software solutions available. A fully developed ERP, with wide-ranging capabilities, is extensively used and referred to.

All things considered, the company can be termed as being IT enabled.

PROBLEMS IDENTIFIED

Rider Management

It has been observed that the company has a few issues with their riders, who are employed for picking and dropping articles, advances, samples, bills, cheques, inputs etc. There are a total of 5 riders, out of which two majorly work for specific departments and rest three carry out tasks related to various departments. The riders work in two shifts: 11:30 and 3:30. Whenever any department requires a rider, an e-mail is sent to Ms. Jyoti requesting their work to be done along with venue and time. Jyoti then compiles all such requests that are sent to her till 11 am and deploys riders accordingly while keeping a written record with her for reference. The e-mails requests sent after 11 am are considered for second shift.

Issues

- No record of rider requests given by employees.
- No common and dedicated portal for receiving requests (requests are sent to e-mail address of Ms. Jyoti)
- No common format of requests. Since all requests are sent in e-mail, thus Ms. Jyoti reads each mail which may be long or short depending upon the sender. A common format would increase readability.
- No record and status tracking of work done by each rider each month.
- No record of petrol expenses of the rider.

Solution

For proper and systematic management of riders, an application has been proposed for development which keeps record of all requests for riders, their work status and acts as a portal for their appraisal.

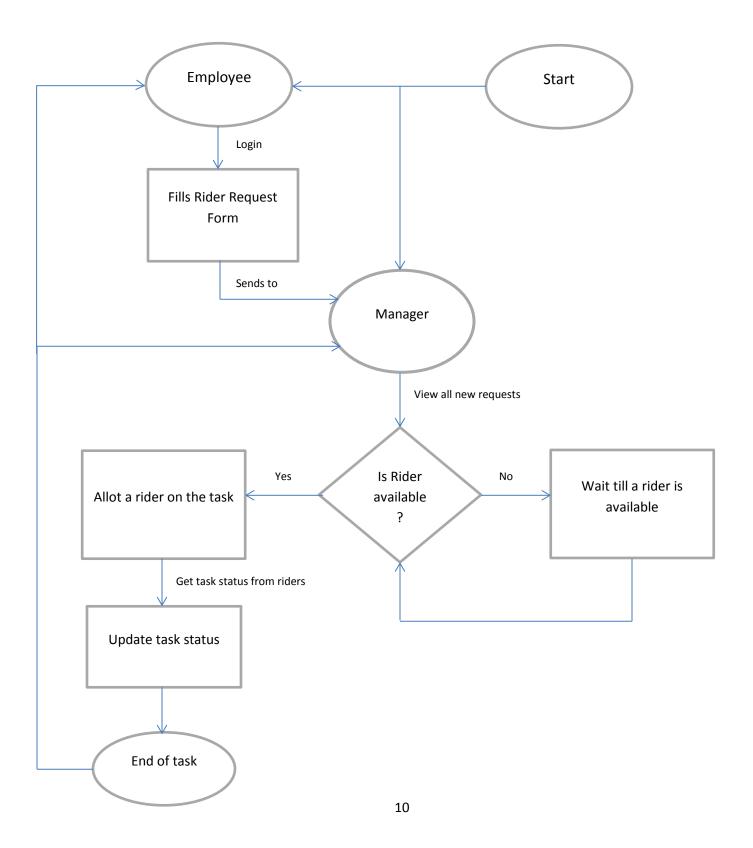
The application backend would be developed in PHP while frontend in HTML, CSS. It would be divided into three types of accounts: Employee, manager, admin.

Each account can be accessed by the employee code issued by the company. After the login, each type of account has different kind of access rights and features unique to it.

The following flow chart explains the process flow diagram for the application. As soon as the employee logins, he can send a request form to the manager in which he has to fill details such as Job title, Type of Job, Address, Deadline for the completion of job and additional details if

required. The manager receives these requests in a readable tabular form and assigns rider for each such request while simultaneously updating their statuses.

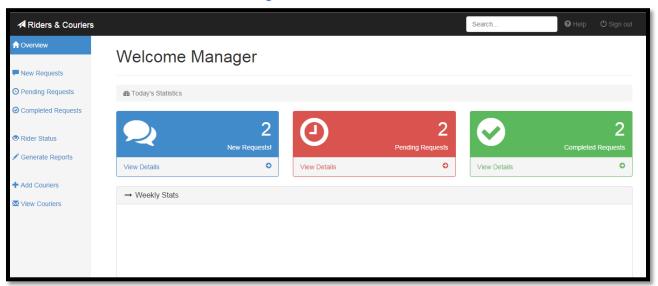
 $Flow chart\ 1: The\ overall\ process\ diagram\ can\ be\ summarized\ through\ the\ flow chart.$



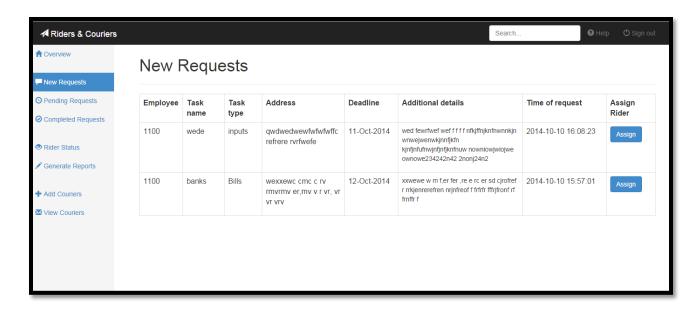
	Employee	Manager	Admin
Add accounts			
Delete accounts			
Change password			
Add Rider Profile			
Delete Rider Profile			
Request Rider			
View requests			
Edit requests	[] (own requests only)		
Allot task to rider			
View Rider Status	(of own tasks only)		
Update Rider Status			

Table 1: Privileges of all types of user account in Rider Management software

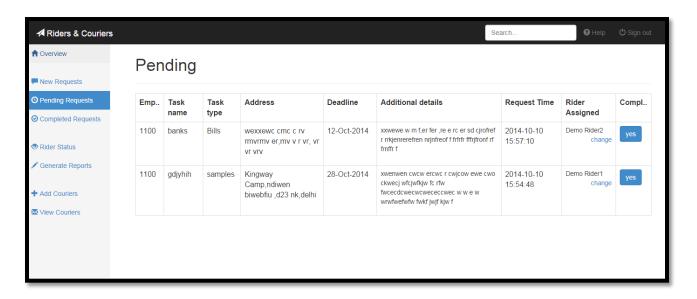
Frames of front-end UI of the developed software



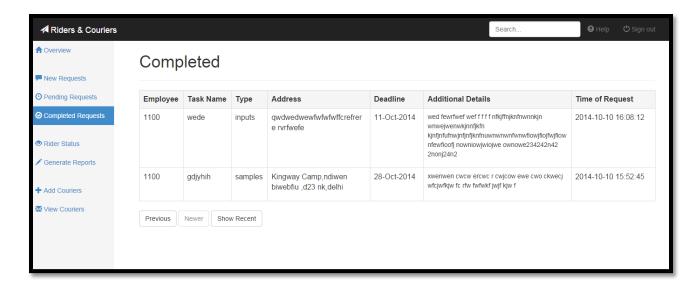
Screenshot 1: Dashboard of manager panel



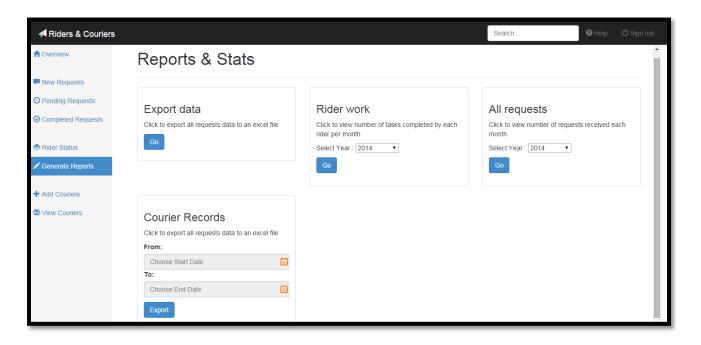
Screenshot 2: New requests sent by employees



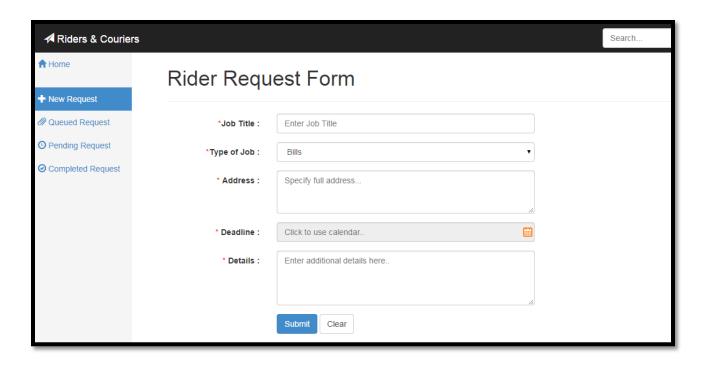
Screenshot 3: Pending requests i.e. request to which rider has been assigned



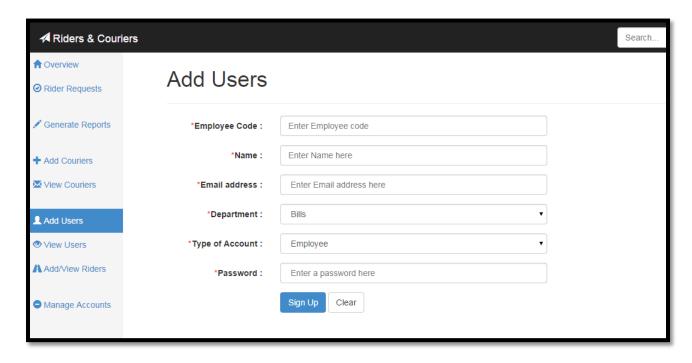
Screenshot 4: Completed requests



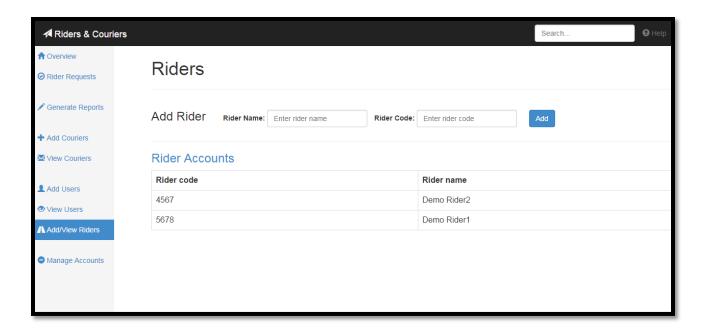
Screenshot 5: Automatic report generation



Screenshot 6: Rider request form in employee panel



Screenshot 7: Adding user in admin panel



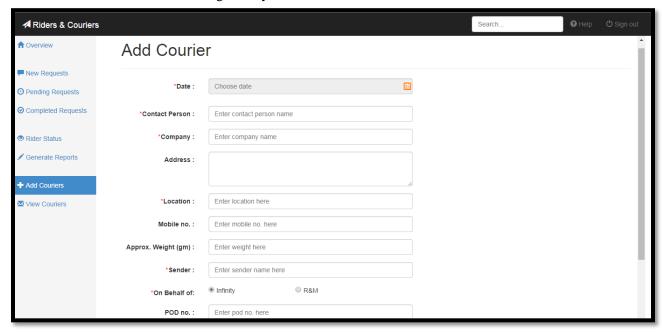
Screenshot 8: Rider details and adding rider

Courier Management

The company used to maintain its sent courier records in excel file manually. Due to this, any form of data retrieval was quite cumbersome as the manager had to go through all the sheets of data. Also, this kind of data storage was highly insecure as the excel file was not password protected.

Solution

A software module was added to Rider management system, which keeps record of all outgoing couriers in a form which can be searched through easily and was secure.



Screenshot 9: Add couriers to courier management system

TIMELINE OF THE WORK DONE

Timeline	Dat	es of J	uly –	Aug m	onth							
Tasks	10	12	14	16	18	20	22	24	28	30	2	4
Understanding the problem, taking inputs from target audience												
Identifying database attributes and forming tables												
Designing frontend UI												
Backend data manipulation and coding												
Integrating backend and frontend												
Testing the application												
Training target audience												

The above timeline chart represents the layout of the Application Development Process as planned by the company mentors and the students

APPENDIX

1. IT Survey Form

		Infi	nity A	dvertisir	ng Private	Limited IT S	urvey Questionnaire	
Organization	Organization name: Infinity Advertising Private Ltd							
No. Of Comp	uters			No	o. of Dedicat	ted IT Staff		
Documentat	ion							
Manual		Softw	are		Both			
Software use	ed							
Excel		Power	r point		Word		Others	
		_						
	И	ord		Exce	l		Power point	
Basic Use	Heading,	Γext, Images	I	Data Entry. Calculat		Presentations, U	se of own Templates and logo	
Advanced use	PDF, Secu	ecurity, Reports,		rts, reports Securi		Audio/	Video Clips, Security	
337 3 44		Taxes				□ v :::		
Website		No				Yes		
If yes,		Static				☐ Dynamic		
		Self-made				Outsourced		
If outsourced		rganization n	ame:					
	Fe	ees paid						
If self-made,	St	aff who depl	oyed it					
	St	aff designation	on					
	St	aff qualificat	ion					
Frequency o	f updating	website:						
Facebook pa	ge		Yes			□ No		
Twitter page						□ No		
Youtube channel Yes Google plus account					□ No			
Google plus a			Yes			No		
Intranet		Yes				□ No		
1 I	Maha Ab	hiyaan Clus	ter Inno	vation Ce	entre			

Infinity Advertising Private Limited IT Survey Questionnaire Intranet is used for? ☐ Internal e-Mail system Company News & events Forms Company Database Web access Other: Yearly Monthly Weekly Backup In-house Deployed by Outsourced If Outsourced, Organization name: Fees paid: Staff who deployed it: If in house, Staff designation: Staff qualification: Others How do you take orders ☐ Email Telephone Through which source customers get to know Website Ads Fairs Others about you (in %)? Hardware Devices ☐PC Printers Scanners Speakers Others Connectivity Fully connected Partially ■ Not connected Security Antivirus Firewall Not secure Security of workplace RFID Register entry ☐ CCTV Biometric How do you authenticate your business document: Others ☐ Signature Digital signature How do you protect your designs: Others ☐ Copyright ☐ Intellectual property rights(IPR) How do you protect your products:

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☐ Intellectual property rights(IPR)

☐ Copyright

Others

Infinity Advertising Private Limited IT Survey Questionnaire

ERP	Yes	□ No
If yes,	Self-made	Outsourced
If Outsourced,	Organization nam	e:
	Fees paid:	
If in house,	Staff who deploye	ed it:
	Staff designation:	
	Staff qualification	:
Finance		
Human Resource		
Production/Operations		
Inventory		
Sales and Marketing		

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2. Business Survey Form

Organizational Profile

Organization Na Nature of Busine		Manager/POC:						
No. Of Employees		No. C	of Compu	ters	No. of Ded	licated IT Staff		
No. of Production Units			Division Departme		Phone/Email/Website			
Office/Setup Lo	cations	& Cou	nt:					
Interstate :	Intra S	tate:		Outside	India:			
Purchase and F			naterials					
Fixed Supplier			ders 🗌	T	orters 🗌	Open Market		
Number of employees engaged in the purchase of raw materials :								
Delivery of raw	materia	1:						
Pick Up		Supplied by vendors						
How do you kee	ep recoi	ds of F	urchase	s made :				
Manual]		Automated					
How do you kee	ep conta	act/plac	e order v	with you	r vendors:			
Face to Face inte	eraction		☐ Telephone ☐ Email ☐					
Others								

Processing done on raw r	materials :							
Standardized	andardized Customized C							
Plant Layout/Number of Machines/Maintenances								
Production/Service timing	is:							
Shifts/day	Number of Shifts Work Timings							
Designing Process:								
Manual	Software Customized/specialized Design							
Staff								
Production	Operations							
Inventory Management (R	aw Materials & Output):							
Manual	Software							
30.36546.037/330	asservations :							
Raw Materials & Output S								
Manual	Automated							
Expiry of Raw Materials/C	Dutput							
Yes	No							
Record/Estimation of raw	material procured & output produced							
Yes Manual								
Packaging/Trademark	Yes No							
Engraving Stickers	Certification Packaging Detail: Boxed/Packets							
Final output shipped/Tran	sportation:							
Personal Staff	Courier/Third Party Pick up							

Payment Mode [Credit (C)/Debit (D)/Mixed(M)]							
Procurement	Pro	cess Expe	nses 🗌	Misc	ellaneo	us 🗌	
Sales and Marketing	9						
Sales							
Direct Sales	Telepl	none 🗌	Retai	lers 🗌	E-Com	merce	
No. of Employees in							
Marketing/Advertisen	nent		Sale	S			
Type of Customers:							
B2B	E	32C		Others			
Toward Constant							
Target Customer:							
Inter-state	lı lı	ntra-state		Fixed Group	р 🗌	Global	
Advertisement/CRM:							
Product Catalogue	Ex	hibitions/fa	ir 🗌 📗	Website	Soc	cial Media 🗌	
Web Design/Develo	pment	:					
In-house			Outs	sourced			
Payment Mode for s	ellina	the produ	ct				
Credit		Debit [Mix	xed		
HR							
Recruitment Processes:							
Online Offline	e 🗌	Others:					
Training of Employe	200	·					
Training of Employe	ees					_	
On the Job Training Off the job training							

Information recor	rds:		
Employee details	Attendance	Le	eave records
Online Offline	Online Offline		nline ffline
Others	Others	175	thers
Intra Communica	tion		
Direct		Indirect	
Accounts/Finance	e		
Accounts Record	l maintenance		
Manual		Automated	
Financial Stateme	anta racard		
Yes	Manual 🔃 📗 🛭 🗚	utomated 🗌	No 🗌
Salary of the Emp	oloyees		
Cash	Cheque	Online T	ransfers