

ATTRITION RISK: A BIG BUSINESS RISK OF SERVICE SECTOR INDUSTRY: A CASE STUDY

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ABSTRACT

Company XYZ is a wholly owned Government of India Non-Banking Finance Company – Infrastructure Financing Company (NBFC-IFC). XYZ provides long terms finances to commercially viable infrastructure projects. There are various organisational verticals viz. Resource Generation, Resource Deployment, Risk Management and Governance & enabling functions operational in the Company. Company XYZ floated an open tender to invite bid from the IT service sector consultant to implement SAP ERP (enterprise resource planning) software solutions for its organisations verticals. M/S ABC (A Tier 1 Company in the industries) was awarded the assignment in January 2016. The assignment was to be completed within 39 weeks (approximately 8 months) i.e. by 31st August 2016. The project was awarded for a value of Rs. 23, 58, 93,373.00/- (23.5893 crore). This project is yet to be completed even after passing 4 years. The project cost and mile stone payment received by M/S ABC as on 02.04.2020 is as under:

Total Contract Value	23,58,93,373.00
Total Paid till date	11,71,46,703.37

M/S ABC, which initially envisaged for investment in Human Assets for 39 weeks only, are continue to invest in the maintenance of its Human Asset up till 4 years and further in this project. Certainly, such a big delay in completion of the project has cost overrun effect resulting into decay in profit of M/S ABC.

The main objective of this study:

- *To carry out study of various milestones of initially envisaged project completion period of 39 weeks.*
- *To carry out study of movement (Joining and attrition) of Human Asset of M/S ABC deployed to undertake this project.*
- *Find out the relation between frequent attrition of Human Asset and delay in project completion and subsequently decaying the profit.*

*This case study will bring out the perspective as how attrition has become a big **Business Risk** for a Service Sector Industry.*

Keywords: NBFC-IFC, ERP, Attrition, Profit, Project, Business Risk, Service Sector.

Introduction

Consideration of Human in an organisation as “Capital” has travelled a long journey. In the initial days the Employer- Employee relationship was considered as “Slave Management”. Then it started being considered as “Labour Force Management”, and then comes “Workforce Management, and then “personal Management”. It took really a long time for employee in an organisation to be considered as “Human Resources Management” or “Human Resources Development”. This was the phase when organisation started considering Human as “Resources” which can be developed. With the advent of Service Industry and continuous increase in Knowledge Based Organisation (KBO) in the recent years, the organisation has started viewing Employer-Employee relation as “Human Capital Management” or HCM.

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Changing Business Scenario

In any economy, following are the three major activities which constitute Gross Domestic product of country's economy:

- Service Sector
- Manufacturing Sector
- Agriculture Sector

Depending upon the nature of business activities, various types of resources are deployed to undertake the economic activities. The resources deployed to undertake the economic activities are mainly Money, Machinery, Land, Material and Human Asset. Also, there are certain types of Business Risk associated with the above three business activities.

The 2011 World Development Indicators show that the services sector accounted for almost 71% of global GDP in 2010 and is expanding at a quicker rate than the agriculture and the manufacturing sectors (UNCTAD, 2014). Contribution of service sector in GDP over the years in India (Latha CM and Dr, 2014)(Latha CM and Dr, 2014)has been depicted in below table:

Share of service sector in GDP (in per cent) At Constant 2004-2005 Prices Rs Crore

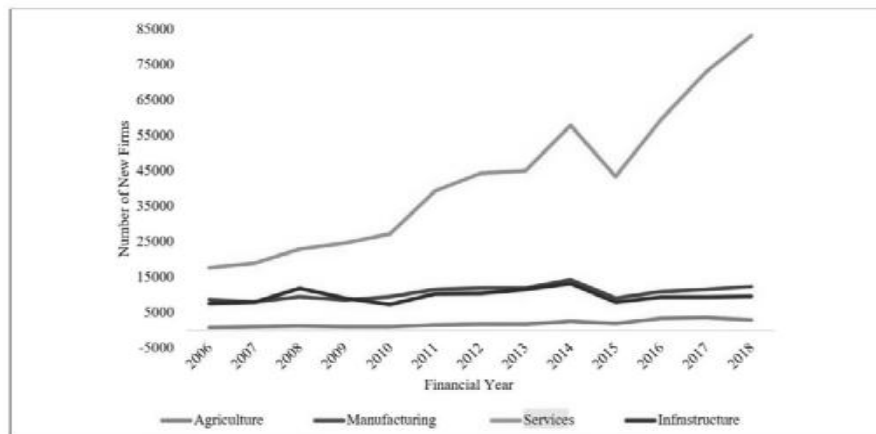
Year	Service Sector	G.D.P	Per cent (%)
1950-1951	82591	279618	29.5
1960--1961	123872	410279	39.1
1970-1971	196158	589787	33.2
1980-1981	300613	798506	37.6
1990-1991	573465	1347889	42.5
2000-2001	1179976	2342774	50.3
2010-2011	2818125	4885954	57.6

Source: GOI, 2012 Economic Survey .

If we take a look at exponential growth of firms related to service sector in India, number of new firms of service sector has increased from approximately 15000 in year 2006 to approximately more than 85000 in year 2018. In the contrary, the growth trajectory of new firms in agriculture, manufacturing and Infrastructure sector over these years has remained flat as can be seen as depicted in below graph.

(Government of India, 2020)

Figure 2b: Growth in new firms over time in India



The service sector has not only evolved as dominant sector in India's GDP but it has also contributed substantially in foreign investment flows, exports and employment. This sector cover wide varieties of activities having different features and dimensions which includes ITES, Finance, Communication, Education, Hospitality, Insurance, Real estate etc. It is pertinent to mention that despite having different varieties and dimension among the activities of service sector, one aspect is predominantly common that only asset deployed to undertake business in each activities of service sector are Human Asset.

Strength and Weakness Analysis of service sector in India

- Strengths – Highly skilled, English-speaking workforce. – Abundant manpower – Cheaper workforce than their Western counterparts. According to Nasscom, The wage difference is as high as 70-80 percent when compared to their Western counterparts. – Lower attrition rates than in the West. – Dedicated workforce aiming at making a long-term career in the field. – Round-the-clock advantage for Western companies due to the huge time difference. – Lower response time with efficient and effective service. – Operational excellence – Conducive business environment – High technology for database.
- Weaknesses – Recent months have seen a rise in the level of attrition rates among ITES workers who are quitting their jobs to pursue higher studies. Of late workers have shown a tendency not to pursue ITES as a full-time career. – The cost of telecom and network infrastructure is much higher in India than in the US. – Lack of financial suppliers – Local infrastructure – Political opposition from developed countries.

It is pertinent to mention that all the strengths and weaknesses of the service sector industries revolve around Human Resources especially their efficiency, performance, skill, knowledge, attrition and retention.

Case

Company XYZ is a wholly owned Government of India Non-Banking Finance Company – Infrastructure Financing Company (NBFC-IFC). XYZ provides long terms finance to commercially viable infrastructure projects. There are various organisational verticals viz. Resource Generation, Resource Deployment, Risk Management and Governance & enabling functions operational in the Company.

Company XYZ floated an open tender to invite bid from the IT service sector consultant to implement SAP ERP (enterprise resource planning) software solutions for its organisations verticals. M/S ABC was awarded the assignment in January 2016. The assignment was to be completed within 39 weeks (approximately 8 months) i.e. by 31st August 2016. The project was awarded for a value of Rs. 23, 58, 93,373.00/- (23.5893 crore). This project is yet to be completed even after passing 4 years. The project cost and mile stone payment received by M/S ABC as on 02.04.2020 is as under:

Total Contract Value	23,58,93,373.00
Total Paid till date	11,71,46,703.37

It is pertinent to mention that only resources deployed to undertake this project by M/S ABC is Human Resource. M/S ABC, which initially envisaged for investment in Human Assets for 39 weeks only, are continue to invest in the maintenance of its Human Resource up till 4 years and further in this project. Such a big delay in completion of the project has cost overrun effect resulting into decay in profit of M/S ABC.

An important phenomenon is apparent in this extant case of delay in project is of frequent attrition of the Human Resource. Delay in project has resulted M/S ABC in loss of income and time.

Problem Statement/Hypothesis

Problem Statement

“Phenomenal Delay in project completion.by M/S ABC.”

Hypothesis

- Delay in project completion has resulted into the loss for M/S ABC.”
- Cause of Delay in completion of the project is due to frequent attrition of the Human Asset deployed on *the project*.

Objective

The main objective of this study:

- To carry out study of various milestones of initially envisaged project completion period of 39 weeks.
- To carry out study of movement (Joining and attrition) of Human Asset of M/S ABC deployed to undertake this project.
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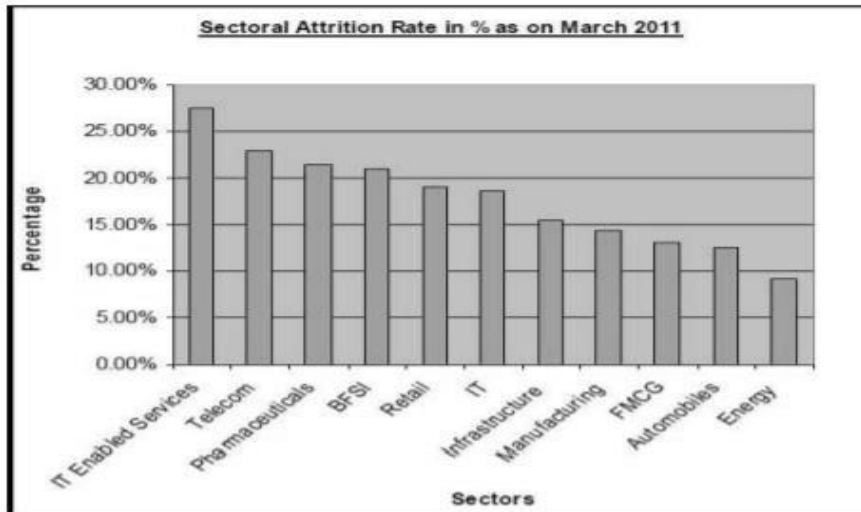
Literature Review

The separation of Human Resources from the organisation may be either by employer (Non volunteer) or by employee (Volunteer). The organisation loses control on human resource, who undertake sudden attrition. Continuity of association of Human Resources, deployed with projects in an IT project is very important for time bound successful completion of the project. Knowledge and skill of the Human Resource is the core factor for success of the project. Frequent disruption in this continuity of association or attrition in the project might pose a huge business risk. Knowledge/skill retention and transfer is never smooth in case of frequent attrition.

Usually the attrition process starts after a person is employed in an organization and ends when the person quits or retires the job

Attrition Scenario in India: (guru vignesh sridhar and sarojini venugopal, 2018)

In India, almost all the sectors are facing major attrition problems. But the cause for attrition and its significant effects are distinct to each sectors. The attrition rate is depicted in the below diagram. The attrition rates are very high for IT enabled services and there are significantly high attrition rate in sectors such as Pharmaceutical, Retail etc. Now various strategies are been followed by various organization to minimize the attrition rate. It is also said that women tend to stay in jobs for a longer period of time than men. From the source of survey conducted by HR Consultancy Firm Aon Hewitt, The attrition rate for various sectors in India is calculated and graph is shown below.



As regard trends of attrition in ITES is concerned, the same can be analysed by reviewing churning of manpower in some of the ITES Company during year 2019. The source of information is **M/S Altezzasys**, which is one of the leading IT manpower outsourcing and staffing company and provide manpower to these ITES Company.

Organisation	Skill	Type	No. of openings total	Fresh	Replacement Due to Attrition	Percentage of Replace demand of total Demand,
Zensar	Technical	Contract	38	18	20	52
Zensar	Non Tech	Permanent	50	35	15	30
ABC	Technical	Contract	50	45	5	11
Sopra	Technical	Contract	20	10	10	50
Birla Soft	Technical	Contract	100+	60+	35+	35
Hinduja	Technical	Permanent	75	50	25	33
Cap G	Technical	Contract	80	70+	5+	6
TechBrawn	Technical	Permanent	10	8	2	20
ABD	Technical	Permanent/ Contract	114	78	36	32
Integra	Technical	Permanent	99	58+	11	11

Negative Consequences of Attrition: (Semu bacha, 2016)

Attrition has many hidden or invisible costs affecting the profitability of the organization and customer service and satisfaction. Some of them include:

- Operational disruption
- Demoralization of employees
- Create negative image on the organization:
- Employee development plans fail:

As regard this case specific consequence, study of Operational Disruption is important. Operational disruption aside from the recruitment, selection, training and development costs associated with turnover, the loss of large numbers of personnel or key members of the organization will sometimes prove costly in terms of general disruption. When people leave it may affect the ability of others to produce their work because of interdependence of work roles within the organization. If a key person leaves the whole system may break down if the organization is both highly interdependent and specialized. According to, the following are some of the factors that impact on staff turnover and organizational effectiveness:

- Increased customer grievances about the service.
- Decreased quality of service because of staff shortage.
- Unfamiliarity of replaced staff with existing ones and task or duties to be performed which results with inefficiency and commitment of different errors. (important as regard this case)
- Sometimes a personnel member in the unit is in the lower categories of staff. Therefore they are restricted by their scope of duty. They can perform certain duties under the direct supervision of a trained member or sometimes they are completely forbidden to do certain duties.

Data Collection, Methodology, Interpretation and analysis

The main data in this case study are:

- Key Milestones of the project,
- Payment details received by M/S ABC till date ,
- Average number of resources deployed on the project at a given time, their average salary and
- Pattern of manpower attrition deployed on this project.

Key project milestones and timelines of completion of each milestone across 39 weeks. (IIFCL, 2015)

S. No	Project Phase	Submission Timeline. Effective date of the Contract (T)
1.	Project Preparation	T+ 1 Week
2.	Business Blueprinting	T + 4 Week
3.	Realization (Critical business & regulatory requirement of Company XYZ demands Credit, R&T, Accounting, ALM & Risk modules to be delivered first)	T+32 Week (All the documents mentioned in the section are to be submitted in T + 32 Week)
4.	Final Preparation and Go Live	T + 36 Week
5.	Training, Operations & Maintenance Support.	To commence from T + 20 Week till T + 39 Week and to be extended till the completion of support & maintenance phase.

Key project milestones including deliverables to be submitted by the Supplier at each milestone and timelines of completion of each milestones is placed at **Appendix I**.

Payment details received by M/S ABC as on 01.04.2020

Total Contract Value: **23, 58, 93,373.00/-**

Total Paid till date: **11, 71, 46,703.37/-** (date wise payment details are as below)

S. N	Amount (in Rs.)	Date of Payment
1	3,38,42,230.00	27.04.2016
2	34,36,774.50	15.07.2016
3	51,55,161.00	30.09.2016
4	2,52,40,681.00	06.12.2016
5	75,89,884.20	14.03.2019
6	56,92,413.15	14.03.2019
7	75,89,884.20	22.07.2019
8	2,76,28,908.93	19.03.2020
9	9,70,766.39	19.03.2020
10	1,78,22,522.71	02.04.2020

Details of payment with achieved milestone are attached as **Appendix II**.

Manpower churning pattern in this project

Below mentioned table gives us an insight about year wise churning of manpower:

Year	No. of Manpower Deployed	No. of Manpower Left in Year	Retained Up till Now	No. of Employees Left in Subsequent Year
2016	35	08	07	20
2017	33	28	02	03
2018	14	10	02	02
2019	13	03	10	--

Details of the table is attached at Annexure III

Average Salary

As per the information provided by the management of M/S ABC, the average salary of one employee is RS. 1.5 lakh per month.

Average Number of Human Resources Deployed

As per the information provided by the management of M/S ABC, the average number of resource deployed on the project at a given point in time is 18 to 20.

Interpretation

- Most of the attrition i.e. close to 90% (in Year 2017 and 2018) has taken place during critical milestones of the project or transition between critical milestones of the project. The 2nd milestone of the project and 3rd milestone of project consists of Business Blueprinting (BBP) and Realisation.
- Smooth knowledge transfer or knowledge retention during the critical milestones of the project is very important as the new resources require phenomenal time for in-depth understanding in comparison to the resources that has been deployed continuously on the project.
- Unfamiliarity of replaced staff with existing ones and task or duties to be performed might have resulted into inefficiency and commitment of different errors.
- Decreased quality of service because of shortage of competent resource might have compelled the company to re-work on the certain assignment resulting into delay.

Findings

- The frequent churning of manpower might have impacted knowledge retention and smooth knowledge transfer which might have caused delay in completion of the project.
- Project has been going on since last 48 months against 8 months, as envisaged at start of the project. Keeping in view the average salary of 1.5 lakh per resource per month, M/S ABC has incurred an additional expenditure on account of salary of Rs. 12 crore (40 months*1.5 lakh*20 resources). This is a calculation only on average salary. The actual amount will be more since there is additional cost on Travel, Accommodation, per diems etc.

Assumption/Limitations

- The resource deployed on this project is dedicated resource for the project.
- Knowledge transfer and transit documentation has not been managed effectively.
- Effective notice period regulation is not apparent in the Company.
- Mass attrition during critical phases indicates that there is a competency shortage in domain knowledge.

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Appendixes

- Appendix I
- Appendix II
- Appendix III

Appendix I

SI No.	Project Phase	Deliverables from M/S ABC	Submission Timeline
1.	Project Preparation	Performance Bank Guarantee for 10 % of total contract value. Project Goals & Objectives document. Project Organisation, Standards and committee. Implementation Strategy Document. Kick-off presentation document Project Preparation Sign-off Document.	Effective date of the Contract (T)
		Detailed Project Work Plan/ Inception Report for Design, Development & Implementation of COTS product based company XYZ. Project Charter.	T+ 1 Week
2.	Business Blueprinting	Organisation Structure – Document System Requirement Specifications (SRS) Document for the complete solution. List of Gaps and Developments Document Business Blue Print Finalisation Document Functional Requirement Specification Manual. Technical Requirement Specification Manual.	T + 4 Week
		Test server Installation Document Development server Installation Document Level 1 Training Presentation Document	
3.	Realization (Critical business & regulatory requirement of company XYZ demands Credit, R&T, Accounting, ALM & Risk modules to be delivered first)	Project documents, containing, but not limited to: User interface designs; Customization/ development requirement reports including source code documentations. Functional and technical design documents including configuration documents training documents and manuals; System Architecture Document; Network and communication specification; Hardware sizing specification and other documentations.	T+32 Week (All the documents mentioned in the section are to be submitted in T + 32 Week)

		And any other document, as may be necessary. Quality server Installation Document Production server Installation Document Data Migration and Cut-over Document Unit testing Document Integration testing Document Issue Log & Resolution Document Realisation Phase Sign-off Document Level 2 Training document	
4.	Final Preparation and Go Live	UAT scripts End User Training Document End User Training attendance Document End user Manual Help Desk Support Document Final Preparation Sign-off Document Go-Live Sign-off Document	T + 36 Week
5.	Training, Operations & Maintenance Support.	Post Implementation Support to Purchaser. Security and access controls documentation including Segregation of duty matrix ERP administration manuals. ERP Configuration manuals. Disaster recovery document and back-up plan. Performance Monitoring Reports for the company XYZi. Software change logs, etc. Annual Certification stating all patches/ upgrades/ service releases have been properly installed Issue Log Sheet with resolution Document	To commence from T + 20 Week till T + 39 Week and to be extended till the completion of support & maintenance phase.

Appendix II

S.N.	Payment Milestone	Amount (in Rs.)	Date of Payment
1	SAP ERP Licenses (License Cost)	3,38,42,230.00	27.04.2016
2	Completion of Milestone 1 of Implementation, Configuration, Customization, Integration, Training and Stabilization Support Service Costs Phase.	34,36,774.50	15.07.2016
3	Completion of Milestone 2 of Implementation, Configuration, Customization, Integration, Training and Stabilization Support Service Costs Phase.	51,55,161.00	30.09.2016
4	Completion of Milestone 1 and 2 of Supply of Hardware (3 Yr Warranty), Software (1 Year Warranty/AMC Included)	2,52,40,681.00	06.12.2016
5	ATS Cost for SAP (Apr-2017 to Mar-2018) Licenses	75,89,884.20	14.03.2019
6	ATS Cost for SAP (Apr-2018 to Dec-2018) Licenses	56,92,413.15	14.03.2019
7	ATS Cost for SAP (Jan-2019 to Dec-2019) Licenses	75,89,884.20	22.07.2019
8	Hosting Charges (July-2016 to June-2019)	2,76,28,908.93	19.03.2020
9	Hosting Charges (Adjusted Amount) (July-2016 to June-2019)	9,70,766.39	19.03.2020
10	Completion of Milestone 3 of Supply of Hardware (3 Yr Warranty), Software (1 Year Warranty/AMC Included)	1,78,22,522.71	02.04.2020

Appendix III

Employee No.	Join Date	Exit date
1	01-Jan-16	Current
2	01-Jan-16	30-Apr-17
3	01-Jan-16	01-Aug-16
4	01-Jan-16	Current

5	01-Jan-16	20-Mar-17
6	01-Jan-16	30-Dec-17
7	01-Jan-16	31-Dec-17
8	01-Jan-16	20-Sep-18
9	01-Jan-16	31-Aug-19
10	01-Jan-16	10-May-19
11	01-Jan-16	20-Sep-16
12	01-Jan-16	11-May-17
13	01-Jan-16	01-Oct-16
14	01-Jan-16	Current
15	01-Jan-16	09-Aug-16
16	01-Jan-16	Current
17	01-Jan-16	Current
18	01-Jan-16	Current
19	01-Jan-16	03-Aug-19
20	01-Apr-16	Current
21	01-Jun-16	26-Sep-16
22	24-Jun-16	30-Apr-17
23	09-Aug-16	30-Sep-16
24	09-Aug-16	23-Jan-17
25	14-Aug-16	20-Jan-17
26	16-Aug-16	21-Feb-17
27	01-Sep-16	02-May-17
28	11-Sep-16	30-Dec-16
29	01-Oct-16	03-Aug-19
30	01-Oct-16	31-Mar-19
31	01-Oct-16	23-Mar-18
32	20-Nov-16	14-Feb-17
33	12-Dec-16	30-Apr-17
34	12-Dec-16	30-Mar-17
35	01-Jan-17	31-Dec-17
36	05-Jan-17	31-Jul-18
37	23-Jan-17	30-Apr-17
38	01-Feb-17	20-Jun-17
39	28-Feb-17	30-Aug-17
40	03-Mar-17	30-Jun-17
41	03-Apr-17	12-Dec-17
42	17-Apr-17	29-Nov-17
43	19-Apr-17	20-Jul-17
44	01-May-17	Current
45	15-May-17	30-Sep-17
46	22-May-17	24-Dec-17
47	01-Jun-17	26-Oct-17
48	01-Jun-17	25-Nov-17
49	18-Jun-17	30-Jun-17
50	20-Jun-17	31-Aug-17
51	26-Jun-17	13-Oct-17
52	01-Jul-17	Current
53	14-Jul-17	27-Dec-17
54	14-Jul-17	27-Dec-17
55	17-Jul-17	31-Aug-17
56	20-Jul-17	31-Dec-17
57	22-Jul-17	31-Dec-17
58	26-Jul-17	30-Aug-17
59	01-Aug-17	24-Dec-16

60	16-Aug-17	15-Nov-16
61	03-Sep-17	31-Oct-17
62	06-Sep-17	30-Dec-17
63	11-Sep-17	31-Dec-17
64	12-Sep-17	30-Mar-18
65	28-Sep-17	31-Dec-17
66	01-Oct-17	31-Dec-17
67	14-Oct-17	20-Mar-18
68	01-Jan-18	20-Nov-19
69	01-Jan-18	30-Aug-18
70	01-Apr-18	21-Dec-18
71	01-Apr-18	31-Dec-18
72	01-Apr-18	15-Oct-18
73	10-Apr-18	21-Sep-18
74	02-May-18	Current
75	01-Jun-18	16-Nov-18
76	22-Aug-18	30-Nov-18
77	10-Sep-18	21-Dec-18
78	28-Sep-18	31-Dec-18
79	01-Oct-18	01-Apr-19
80	01-Dec-18	Current
81	02-Dec-18	20-Dec-18
82	18-Jan-19	Current
83	01-Apr-19	Current
84	02-Apr-19	Current
85	12-Apr-19	Current
86	09-May-19	Current
87	01-Jun-19	Current
88	03-Jul-19	
89	05-Jul-19	
90	01-Aug-19	
91	05-Aug-19	Current
92	22-Sep-19	Current
93	01-Oct-19	Current
94	18-Oct-19	Current
95	1-jan--2016	

