

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

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**CUSTOMER RELATIONSHIP MANAGEMENT IN BANKING: ISSUES AND CHALLENGES**

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**ABSTRACT**

*Bank Marketing has evolved from Transactional to Relationship Marketing. Customer acquisition, customer satisfaction, customer retention, all is acquiring the focal point of planning and marketing strategies in Banking. Enabled by CBS and operating in a multi-channel, hi-tech environment many Indian Banks have adopted the concept of Customer Relationship Management with intent to generate better understanding of the customer and maintain long term mutually beneficial relationship with the customer. CRM is a strategic initiative which has organization wide implications. In Indian Banking sector CRM is still at a nascent stage. A very small proportion of its potential has been utilized. Also implementation wise it has been implemented on a limited scale. The paper proposes to analyze the issues and challenges pertaining to the CRM in Indian Banking Sector. Although the CRM software may be owned and customer centric initiatives be communicated, the successful implementation seems to be a scenario not evident in near future in most Banks. Implementation rests on four pillars of People, Process, Data and Technology. A coordination of all these and transformation to CRM System is a huge challenge and encompasses multidimensional problems. An overview of these problems and issues will be provided and analyzed.*

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**KEYWORDS**

Bank Marketing, Banking, CRM, Customer Relationship Management, Relationship Marketing.

**INTRODUCTION**

A global survey conducted by the IBM Institute for Business and Value and part of IBM Business Consulting Service's three part series "Doing Customer Relationship Management (CRM) Right" claims that only 15% of current CRM projects are fully successful, but that the success rate can be improved to as high as 80% through proper business process methodology and prioritization. One of the main reasons for CRM failure is the lack of understanding about the true meaning and implication of practices for managing relationships with customers.

Deloitte Consulting found that 70% firms found little or no improvement through CRM implementation. The reasons are many: The CRM system was poorly designed, it became too expensive, users didn't make much use of it or report much benefit, and collaborators ignored the system.

Indian banking system is witnessing the adoption of CRM Systems for greater competitiveness. Although the type and range of CRM enabling technologies differ from Bank to Bank, the ultimate goal is higher customer focus. Technology has successfully initiated this journey towards customer centricity, but there are large number of issues and challenges to adoption and implementation of CRM. The true potential of CRM still remains to be explored in its true sense. The paper attempts to identify these issues in the light of information about how CRM has been utilized by some leading players in International and National Banking Scenario.

**CRM DEFINED**

CRM is a sound business strategy to identify the Bank's most profitable customers and prospects, and devotes time and attention to expanding account relationships with those customers through individualized marketing, reprising, discretionary decision making and customized service – all delivered through various sales channels that the bank uses.

CRM is the practice of analyzing and utilizing marketing databases and leveraging communication technologies to determine corporate practices and methods that will maximize the lifetime value of each individual customer to the firm. (Kumar and Reinartz, 2006).

"CRM is a comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for company and the customer." (Jagdish Sheth and Atul Parvatiyar).

Paul Greenberg, the Author of CRM at the Speed of Light, has his own classic definition about CRM

"CRM is philosophy and a business strategy, supported by a system and a technology, designed to improve human interactions in a business environment. It is also a continuing business initiative that demands a dynamic, ongoing strategy of customer engagement".

Whilst Scott Hornstein, the Principal of Hornstein Associates, defines CRM as: "CRM is the delivery of customer care as a strategic product, with measurement and reward focused on generating happier customers that stay longer and buy more".

- ▶ **From a strategic standpoint**, CRM mobilizes resources around customer relationships rather than product groups and fosters activities that maximize the value of lifetime relationships.
- ▶ **From an operational standpoint**, CRM links business processes across the supply chain from back-office functions through all customer contact channels ("touch points"), enabling continuity and consistency across a customer relationship.
- ▶ **From an analytical standpoint**, CRM provides a host of resources that enable banks to fully understand customer segments, assess and maximize lifetime value of each customer, model "what-if" scenarios, predict customer behaviors, and design and track effective marketing campaigns.

**CRM: PAY OFFS TO BANKS**

- ▶ Restoring the personal-service connotation that was previously removed.
- ▶ Fostering greater long-term loyalty through relationship building.
- ▶ Maximizing lifetime value of each customer through cross-selling.
- ▶ Enabling immediate action to retain the most valuable customers.
- ▶ Identifying high-risk customers and adjusting service accordingly.
- ▶ Enabling the bank to fulfill customer needs at the right time with the right offer.
- ▶ Increasing the rate of return on marketing initiatives.
- ▶ Efficient fraud detection

**REVIEW OF LITERATURE**

Berry (1983) recommended the following five strategies for practicing relationship marketing -

- i. Developing a core service around which to build a customer relationship,
- ii. Customizing the relationship to the individual customer,
- iii. Augmenting the core service with extra benefits,
- iv. Pricing services to encourage customer loyalty,

v. Marketing to employees so that they will perform well for customers.

Gartner's Research shows that less than 10% of Banks have a single integrated view of their customers and those that do are just beginning to leverage their investments to improve customer loyalty and profitability. Payne's<sup>1</sup> study summarizes the barriers to CRM implementation as: Lack of skills; Poor Data quality; Failure to understand the business benefits; Functional Boundaries; Lack of leadership and management involvement; and inadequate measurement systems.

Several authors (Boulding, Staelin, Ehret and Johnson, 2005; Newwell, 2003; Ngai, 2005; Payne, 2006) point out some problems that lead to CRM failure such as: Lack of skills in building and using the new IT based CRM systems; Inadequate investments, as many projects dramatically exceed their planned cost and sometimes even their scope; poor data quality and quantity, mainly for companies that are at early stage of CRM development; Lack of leadership and top management involvement; inadequate measurement systems (sometimes organizations do not exactly know what they want from a CRM operation); cultural problems; alignment of organizational vision, mission, technology and goals is an important CRM adoption issue; employee resistance to CRM.

Wharton's George Day concludes that one of the reasons many CRM failures occurs is that companies concentrate on customer contact processes without making corresponding changes in internal structures and systems.

Mishra H. in IBA special Report on 'Operational Business Intelligence in Banking' November 2007 notes that information needs of banking are unique. There is a large variety of banking services and this variety has given rise to multiplicity of technology solutions in banking. No single software solution today can satisfy even the transaction processing requirements of a large bank. Ramchandra S. J. suggests CRM implementation requires revolutionary changes in the entire organization, top management support and long term view.

Managing individual customer relationships has a profound effect on enhancing long-term customer loyalty, thereby increasing the enterprise's long-term profitability. Relationship strategies, for example, have a substantial effect on customer retention in the financial services sector. A study conducted in 2000 by Peppers and Rogers Group (with Roper Starch Worldwide) found that only 1 percent of consumers who rate their financial services provider high on relationship management say they are likely to switch away products. One-fourth of consumers (26 percent) who rate their primary financial services provider as low on relationship management attributes say they are likely to switch away one or more products during the next 12 months. The financial implications of these findings are staggering using a conservative average annual profitability per household for U.S. retail banks of \$100, a reduction in attrition of 9 percentage points by providing excellent customer relationship management (e.g., recognizing returning customers, anticipating their needs, etc.), that institution with an average household profitability of \$500, the increase in profitability climbs to \$900,000.

## CRM: GLOBAL SCENARIO

### WACHOVIA BANK

Wachovia Bank uses customer transaction data to support modeling processes that evaluates each branch's current and long term profitability. In Atlanta, Bank's largest market, significant performance improvements were attained when it used the outputs of modeling process as a basis to decide which of its 96 branches to close and which location to open new ones.

### ROYAL BANK OF CANADA

RBC is Considered Canada's largest bank when measured in terms of assets and market capitalization with \$270 Billion in assets, 23 Million retail accounts, 700 Products, 58,000 Employees and 10 Million personal, commercial, corporate, and public sector customers served in North America and much of the world. RBC Royal Bank (personal and commercial retail banking) comprised of 1,300 branches, 4,800 ABM's, 87,250 proprietary POS terminals, 900+ mobile sales staff, 1.4 million online banking customers and 2 million telephone banking customers with 300 offices in 30 countries

RBC developed superior computing and database power, along with sophisticated statistical programs, to analyze customer information and test specific actions it should take with specific customers. Once profitability and lifetime value was determined, these measures were included when determining customer decisions. For RBC this meant: Customized Marketing Campaign, Establishing Service Levels, and Product Design & Pricing. Customer profitability was a determinant used for segmenting and targeting. The CRM system used customer profitability and future potential calculations to give pricing parameters to account managers to determine how to price products depending on the customer. RBC also determined a set of customer treatment strategies using the customer segment categories. A customer's category would determine the length of wait and type of customer service representative the customer talks to. To learn the most about its customers, RBC has undertaken an intense ongoing statistical analysis of them. It is developing and refining the prototype for an algorithm to model the long-term lifetime values of its individual customers. Part of this effort includes a "client potential" model that measures how "growable" certain kinds of customers are to the bank. It also analyzes a customer's vulnerability to attrition and tries to flag the most vulnerable before they defect, in order to take preventive action in a focused effective way.

### BNP PARIBAS

BNP Paribas became one of world's most admired Banking brands, leader in European Financial Services Sector which operates in more than 85 countries and over 100,000 employees. The business challenges were:

Restructuring its services around customers to achieve ever-increasing satisfaction levels and to create a fully integrated customer experience across all channels, using technology fusion as the foundation for future success and enhanced revenue streams, CRM enabled integrated multi-channel retail banking platform providing consistent customer interactions across channels. It enabled Back office process engineering. Also Integration of Banks database of 6 million retail clients was done, with daily reporting of events leading to daily updating of customer profiles. Results were that: More than 300 million discrete customer contacts, Management of 4.3 billion individual transactions, peaking at 800 per second, over a single infrastructure, Improvement in customer service, Customer relationship centers handling more than 2 million calls and 3.7 million appointments booked by electronic appointment system.

### WELLS FARGO

Wells Fargo is one of the largest Internet Banking entities in the world. It is recognized as industry leader in US for alternative delivery strategies of banking Services

The goal of CRM is providing "Every channel our customers want, every product our customers need, anytime our customers choose". The focus is on Innovation efforts in customized service, speed and Convenience. One of its main concerns is that of servicing its high net worth customers by better integration of customer information and service applications and to assist representatives of customer sales and services to easily provide a one-stop-shop for any banking service or transaction.

### CAPITAL ONE

Capital One is reaping the rewards of full-fledged Customer Value Management. It uses customer value in its segmentation process as well as its behavioral indicators, offering open data access to its front line with a uniform and holistic view of its customer data. Capital one was also one of the first players in the industry to conduct offer prioritization based on expected increase in customer value (across value drivers), using propensity models for cross-selling to maximize the value of customers it had acquired. It also analyzes client purchase patterns and dates to infer its risk and propensity to buy specific products. As a result, it is able to target tailored customer offers (over 3,000 credit card variations) to over 100,000 segments. It also conducts highly flexible test-and-learn campaigns at a rate of more than 65,000 tests a year. These efforts are given top-priority support by the organization via elements such as a unique relational database management system, specific customer acquisition targets for employees at all levels, and an extra bonus to staff who sell higher-yielding products.

## CRM: INDIAN SCENARIO

### YES BANK

Yes Bank adopted Collaborative CRM, which has two logical separation models: a pre-acquisition and a post-acquisition service cycle for customers. The customer information captured in the YCCRM is mapped to blog-like entries made by employees. These entries include ideas, suggestions and perceptions of

<sup>1</sup> Roy SK, (2008) ICAFI Journal of Management Research , Vol. 7



the sales representatives. The sales and product teams can then analyze this information and figure out related business opportunities. Such information can also be leveraged to customize existing products or conceive new products altogether. Through YCCRM, officers are provided with a template where they can fill details (other than the standard keywords) noted during their interaction with the customer. Typically, sales staff interacts with customers over the phone, jotting down the most important parts of their conversation on little pieces of paper. This information is filled on a separate form. Sales representatives can now upload or download scribbled information from their phones to the main CRM System. As a sales representative, part of the job includes being constantly on the field, which leaves them little time to fill in their reports. As a result, it is not always possible to feed detail of their interaction with customers on the day they meet them. YCCRM provides an additional tab of source date (the date mentioned as the source date) when they meet the customer and the system date when it is registered in the system. The integrated and personalized dashboard with an activities planner enables the smooth functioning of a sales representative. And its social value-based relationship management helps in cross-selling. There has been a drastic improvement in customer acquisition after sales leads were passed on via discussion boards. "There is servicing of 10 lakh leads and around 5 lakh service requests per year. Customer service has improved by 60 per cent and turnaround time for its processes by almost 70 per cent. The repository also enables geography wise customer segmentation to plan a promotional campaign better. Customers can directly send their feedback or use blogs to interact with the bank. Same time it will provide the bank with a new set of opportunities in understanding the customer.

#### **PUNJAB NATIONAL BANK**

Moving ahead of CBS, PNB deployed CRM software Customer First which comprises of modules for Business prospect management, Lead Management, activity management, Product management, complaint management and business intelligence reporting. The pay offs to PNB are in terms of increased customer base, cross selling, sales force optimization, efficient lead management and higher productivity. It has helped increase PNB's customer base from 5.81 crore (as on March 2010) to more than 6.5 crore. In 2009-10, the Bank generated 61243 Leads, out of which 353,250 leads were converted amounting to RS.788 crore of Business.

#### **ICICI BANK**

In ICICI, the situation before CRM implementation was marked by waiting line, high cost per transaction and scenarios like call centers providing only account information. ICICI adopted an enterprise CRM strategy. Nycamp consulting Group prepared a detailed and comprehensive CRM action plan. ICICI identified five functional areas which when integrated will give Bank its CRM Business transformation map. Core areas of business transformation were – Business focus, organization structure, Business matrix, marketing focus and Technology. ICICI ensured that all the functional areas like Strategy Development, Value Creation Process, Multi-channel Integration Process, Information Management Process and Performance Assessment Process should be integrated for implementation of CRM. The payoffs were: Lower total cost of ownership, efficient management of volume growth, greater responsiveness to market needs, improved operations, decrease in operational costs, reduction in turnaround time, and integrated platform for all applications of the Bank. This technology platform had several benefits: A decreased need for data management as data is now taken from a central system; up to date information appearing on the screen of the employee to improve performance and higher degree of coordination and services; All customer contact points are now coordinated.

#### **SBI**

SBI has presence in 32 countries with more than 13 crore customers and over 13,800 branches and 5 associate banks. The business data of SBI spreads over several domestic and international source systems such as Core Banking, Trade finance, Treasury, ATMs, Internet Banking etc. The top management didn't have a mechanism of having a consolidated view of business across all functions of the bank on a real time basis. To overcome this challenge the Bank decided to employ, a Business Intelligence system which integrated data from nearly 15 source systems (with nearly 70 databases) to form a single enterprise data warehouse logical model. The system has empowered the decision makers to have actionable data leading to faster decision making based on latest information. The system generates 248 reports daily for the top management and each of the branches have access to reports generated particularly for them. Dash board covering the key focus areas is available to the top management with the ability to drill down to each individual branch in each of the matrix being tracked. With the help of campaign management solution bank has managed to successfully execute 71 campaigns targeting 4.88 million customers.

#### **CRM ISSUES AND CHALLENGES**

The previous section described the various forms in which CRM was adopted and utilized, and in each case the pay offs have been worth while. This cannot be considered as the complete picture of CRM implementation. Many banks are still struggling to make proper use of this very useful mechanism. However, the adoption and utilization is dependent on a number of factors and impediments. Broadly the issues are pertaining to: People, Processes, Data and Technology. Also a major drawback is the general perception of CRM being a Technology imperative. There is a great need to understand that technology is only the enabler to CRM. In the real sense it is an organization wide strategy. The success of this depends on a careful integration of Organization's goals, structure, systems, processes and resources. Some common observations of CRM related problems in Banks are:

- Inability to recognize high value customers during interactions
- Not differentiating service levels based on the importance of each customer to the Bank
- Providing Customers the wrong level of service through the right channels or right level of service through the wrong channels
- Non optimizing cross-sell and up-sell opportunities because they lack information about how to the right customers, through the right channels at the right times
- Not effectively leveraging their diverse product and service suites to customize "Bundles" that meet the specific needs of high value customers at their various life stages
- Wasting resources on campaigns that do not target the customers most likely to respond and buy
- Missing opportunities to increase wallet share or reduce customer attrition because they are not tracking the predictive purchase and "Churn" indicators and communicating recommended responses to those who interface with customers
- "Under investing" in their most profitable customers and "Over investing" in their less profitable customers.

In the following section, we will examine the main issues leading to such problems:

#### **CRM: TECHNOLOGY ISSUES**

##### **TECHNOLOGY COMPONENT OF A TOTAL CRM STRATEGY**

The technology component of CRM offers banks a comprehensive understanding of its customers through data analysis and predictive modeling, to support sales and marketing Strategies. It enables:

- Single customer view - A managed and integrated view of the customer, drawn from all contact points and product purchases, enables financial institutions to better understand customers and therefore serve them more effectively.
- Predictions for profit - Banks can accurately predict which products and services will appeal to an existing customer, and which they are most likely to purchase.
- Customer lifetime value - Banks can calculate the probable profitability of a customer over their lifetime, ensuring that they don't alienate low-value customers with high-value potential.
- Personalized services - Businesses can segment the market into specific target groups by demographics or purchase types. With a closer understanding of customers by small segments, banks can adopt individual marketing approaches rather than relatively ineffective mass marketing.

The following are the impediments to CRM implementation in context of technology:

- a) Misconception about role of technology: Most officers perceive technology as a limited to record of information and transaction. The use of technology in further sophisticated information processing and dissemination is not done.
- b) Lack of Integration: There are multiple channels and multiple technologies in use simultaneously in customer interface, service and sales. The integration of this complex system of technologies is a challenge.

c) Empowerment to frontline staff: A Frontline staff has customer profile and data. Most of them have no motivation to further process these and make full utilization of these to provide better services and proactive selling effort. They are neither trained to use customer analytics nor to customize the bank's offering.

d) Underutilization: the single integrated view of customer, past transactions preferred mode of business are known, but no mechanism is in place to utilize this with aid of software like lead management and activity management for higher effectiveness in sales and service.

#### DATA ISSUES

The core of a successful CRM decision support system is a multidimensional data warehouse that:

- Integrates raw input from multiple sources and platforms, such as credit card, mortgage, and insurance and savings account systems.
- Integrates input from multiple contact point systems, such as ATMs, branch visits, Internet and call center transactions.
- Integrates with popular back-office systems (financial transaction processing, for example) and front-office systems (such as sales force automation).
- Transforms this raw data into cleansed, validated and structured information.

The issues related to data are:

a) Fragmented Data: banks have multiple repositories of data accumulated across various channels. Systematically collecting and organizing this huge data is big challenge.

b) Legacy Systems: Historical data collected from legacy systems tend not to have been collected in any standard form.

c) Quality of data: As huge amount of data has to be cleaned and a lot of missing data has to be identified and included. This process has to be carried out across branches which in addition to their core tasks have this work.

d) Lack of understanding, skill and initiative to manage and utilize data: Employees expected to organize and systematically manage data may not do efficiently because of the lack of understanding of the strategic perspective of this activity. They also lack the necessary infrastructure and skill to complete this task.

#### PEOPLE ISSUES

a) Lack of knowledge and skills in converting data to customer knowledge

b) Lack of motivation for utilizing the potential of CRM solution

c) Inadequate performance management parameters

d) Less or insufficient decision making authority : In order to use CRM concept towards customer centricity ,sufficient decision making power is required to provide customized, responsive and proactive services

e) Training: Staff lacks training in IT, its applications, the complete use of software and its applications as well as marketing skills, analytical skills, uses of customer information and service skills for implementation CRM.

#### PROCESS ISSUES

As CRM is an organization wide strategy the entire processes need to be aligned appropriately. Some important process issues are:

a) Change in Culture: The CRM implementation demands a change in organizational culture in terms of vision, mission, philosophy, and shared values. This encompasses a fundamental change in the organizational practices and employee behavior.

b) Breaking the silos: CRM can not succeed in Silo structure of departments. It demands integration and collaboration of all departments on a continuous basis. So, Breaking of silos prevalent in traditional organization structure is a challenge.

c) Change in Structure and Systems: CRM success lies in ownership of CRM by all departments with Marketing in the strategic role of combining efforts in all these towards better customer service. This basic structural change from product centric organization to customer centric organization faces impediments in terms of role conflicts, ambiguity, resistance and attitudinal impediments.

d) Demand for more proactiveness and flexibility: The former strict hierarchical and rigid structure has to be transformed to flexible, responsive and proactive structure. This demands top management support, proper training and efficient follow up systems. In addition to behavioral issues the full utilization of CRM benefits cannot be attained unless this is enabled.

#### CONCLUSION

Customers have grown to expect comprehensive financial services from a single point of contact. They are attracted by many new products and services that non-banking institutions have been offering. The challenge for banks is to package these products and services and deliver them through convenient, user-friendly channels. Only by integrating people, processes, and technology across business lines will banks be able to forge a portfolio of virtual banking services based on the priorities of specific customer market segments.

Consumer centric practices will be at the nucleus of functioning and business plans of Banks in the next decade. The banking sector will increasingly move towards a CRM banking where the banks will have to develop and service products suited at different phases of a customer's life. The true potential of CRM will be realized only when the CRM will get buy in from all stakeholders viz. IT ,Marketing, Operations and Top Management. With this integrated effort and supporting structures and processes, a culture revolving around customer centricity will enable banks to leverage on this asset. We can enumerate certain fundamental strategies for successful CRM in Banking;

1) An organizational transformation from product centricity to customer centricity

2) CRM led and supported by top management

3) Development and adoption of processes and procedures to enable and use CRM

4) Provision of infrastructural support for CRM implementation at all levels

5) Regular follow up of implementation and communication to stakeholders

6) Performance evaluation and incentives linked to adoption and implementation of CRM procedures

7) Ownership of CRM by marketing Department with IT Department in an enabling role

8) Development of Marketing organization structure which can strategically align all the related activities throughout the towards customer focus with CRM as a key initiative.

9) A continuous effort of awareness, training and information sharing should be oriented towards generating understanding, applications, technological aspects and marketing imperative, should be carried out.

#### REFERENCES

1. Brown A., and Meesha G. (2002) "Performance Driven CRM" PWC Consulting, John Wiley and Sons Canada Ltd.
2. Coltman T.,(2007), "Can Superior CRM Capabilities Improve Performance in Banking", *Journal of Financial Services Marketing*, Vol. 12, No.2.
3. Gartner Research, (2001), "CRM at Work: Eight Characteristics of CRM Winners".
4. Gordan I., (2002), "Best Practices: Customer Relationship Management", *Ivey Business Journal*, November – December.
5. Kale, Sudhir, (2004), "CRM Failure and the Seven Deadly Sins", *Marketing Management*, September- October, Vol. 12, No. 5, pp. 42-46.
6. Khirallah K., (2001), "CRM Case Study: The Analytics that power CRM at Royal Bank", Tower Group Research Note.
7. Morgan J. "Customer information Management: The key to Successful CRM in Financial Services", *Journal of Performance Management*.
8. Mukherjee K., (2010), "Using CRM Effectively" *TMT Journal* (Vol. 8, No.2) December, pp. 59-65.
9. Nielsen S., Hathi N., (2011), "CRM: Untapped Engine for Growth", *Investment Advisor*, August.
10. Onut, Erdem I., "Customer Relationship Management in Banking Sector and a Model Design for Banking Performance Enhancement".
11. Payne, Adrian, Frow, Peannie (2005), "A Strategic Framework for Customer Relationship Management", *Journal of Marketing*, October, Vol. 69, No. 4, pp. 167-176.
12. Pepper, Don and Rogers Martha, (2005), "Hail to the Customer" *Sales and Marketing Management*, Vol. 157. No. 10.

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