From Information to Intelligence
TCS Information Resource Centre: a Case in Point

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Introduction

Until two decades ago, organisations concentrated on outsmarting their direct competition. But when technologies converge, even indirect competition can endanger a robust business. Big traditional businesses like those in cameras and music systems, to the very recent examples of local cabbies and hotels, have been shaken up by indirect competition, which typically comes from unforeseen quarters. Disruptive technologies, agile product life-cycles, quick deliveries combined with cut-throat competitor deals, force decision makers to respond quickly to changes or lose business to the competition. In response, company leaders are now on to a nimble forecast-based strategizing. The fastest way to respond to change is to ‘anticipate’ it and to be able to ‘shift the dots’ of their strengths to redefine a better fit amidst the competition.

What companies really need to succeed is intelligence, not merely information. Intelligence is primarily data-driven and needs to be derived from useful information. Emerging terms such as ‘data economy’ and ‘infonomics’ only suggest that data is traded for bits and bytes of wealth. Businesses are on the constant lookout for information to mine and turn into clever services.

Competitive Intelligence (CI) and Market Intelligence (MI) have emerged as the big game-changers today. Analysis is the key differentiator between CI or MI (referred as CI from here on) and traditional information services. It involves ethically researching and synthesizing hard-to-find scattered data points, analysing them to be able to answer ‘so what’ and succinctly briefing the user to indicate potential action. The outcome of research should necessarily translate into input for business advantage.

The information landscape has also witnessed the emergence of other similar practices like Knowledge Management (KM), Knowledge Processing Outsourcing (KPO) and also Knowledge Services Outsourcing (KSO). Each with its own flavour, they essentially help executives cut through the noise, share information, and improve their decision-making. These activities involve a high element of intellectual intervention and judgement that leverages a combination of academic rigour and practical expertise. Such developments are yet another clear indication to library professionals that businesses can no longer rely on traditional information services alone but need an extension of all of these which typically necessitate specific skillsets. Data can offer managers a wealth of information, but processing it holistically to drive effective business outcomes is the expectation. As a consequence, functions of business libraries are expected to evolve and turn data into insightful and actionable information. Today they are redefining themselves and their activities to support their organisation and business leaders.
Re-branding of library positions are in vogue, particularly in the business environment. The likes of ‘Information Analyst’ or opting out of the term ‘Library’ to ‘Information Research Centre’ are labels that entail responsibility. Assuming these must be done with caution as they imply a knowledge of the business operations, workflows and management. In order to reorient themselves suitably, library professionals must then develop the ability to think and speak the language of business and their services should support knowledge-driven business decisions.

Introducing academic changes in library schools to include CI and related business skills will help corporate librarians to jumpstart strategic intelligence activities and sustain their institutional relevance. A formal training in CI will go a long way to help them deliver with confidence. Institutes like Academy of Competitive Intelligence (ACI), Institute for Competitive Intelligence (ICI), and Strategic and Competitive Intelligence Professionals (SCIP) are examples that offer learning in CI, combining theoretical courses with a practical approach.

Research and Analytics are clearly emerging as librarian skills of the day. MNCs are in fact looking at curricula to support this and help create information professionals suited to meet the needs of the age. Needless to say, formal changes prompted by ‘executive education’ and similar requirements, would be of limited value without practical exposure in the field.

For many, moving out of the traditional comfort zone and notching up research skills to impart intelligence in their service and delivery can be a difficult decision, but market dynamics and changing user expectations are making it a necessary one.

About TCS & IRC

Tata Consultancy Services (TCS) was founded in the year 1968 and headquartered in Mumbai. Since its inception it has seen phenomenal growth in its size and scope. With nearly 400,000 associates spread over six geographies worldwide, TCS engages with 14 industries, a range of services & technologies, products & platforms; and focuses heavily on innovation, research & development.

It was the vision of Mr. F C Kohli, widely acknowledged as the Father of Indian IT, which helped shape and position TCS as the largest IT organisation in Asia and among the top globally. Kohli’s keen interest gave TCS its first library in 1969. Arguably, the library established its roots of customising information services since then. This trail-blazer and pioneer of India’s IT revolution, remains a demanding customer of the library even today. TCS now boasts of a network of 70 Information Resource Centres (IRCs) pan- India, managed by 120 library professionals and 7 points of services overseas.

Agile and dynamic, TCS can be best described in software terminology as perpetual beta. In the IT environment one works with ever-changing costs, technology advancements, and high pitched business demands. This translates into relentless strategizing and re-aligning of business goals to remain competitive and ahead. Information Services in TCS IRC keep pace with the organisation by constantly evolving in its offerings. TCS’ sheer magnitude of operations makes it imperative for the IRC to mould itself to encompass its users effectively.

Inroads of IRC into CI Services

With the digital boom, the IRC faced new challenges and paradigm shifts in the information needs exhibited by users. Dramatic changes in the vendor and publisher business models put further
pressure, as database content distribution was clamped down by premium publishers with caveats in the contract on usage, deep-linking and crawling: stifling the flexibility of use. Its flagship services viz. the Online Global Help Desk (GHD) - a ticketing platform with a dedicated team to resolve user queries; Info Watch - a periodic alerts on news, technologies, customers, geographies & industry, and other CAS & SDI services, occasionally exposed inadequacies in the content provided. The longstanding role of library as a ‘disseminator’ of information started to dissipate and services came under threat.

The IRC revamped its approach to address these challenges and as new and effective alternatives started to emerge, information services went through significant modifications in both content and format. For example, to circumvent non-compliance when content sharing ‘as-is’ was restricted, IRC team started to read through reports, understand key points, discuss with subject matter experts, consolidate and deliver. This had a manifold impact. To begin with, it improved the understanding on domain and user requirements vastly. Additionally, database acquisitions improved to include niche and aligned coverage. The copyright-sensitised IRC team further put to use these databases to innovatively design information products within the legal framework. This marked the advent of IRC’s synthesised value-added CI products such as Competitor Digest, Competitor Analysis, Deals Analysis and Operating Metrics, Destination Digests, Track your Customer, Info Watches and more.

As advised by Scott Brown (cited by Constance)3 anticipating the organisation’s information needs would be best done by identifying ‘content-hungry units’, ‘discovering the ‘pulse’ or organisations hot topics, and go deeper than the organisation chart’. IRCs helpdesk (GHD) log report analysis provides useful insights into the organisation’s information needs. It highlights repeat users - who are our content-hungry units - and the recurring research queries on competition, emerging markets, financials, products, geography and industry - which would be our hot topics. User queries received on the GHD for the last five years saw a surge of requests from Sales-Presales, a team which is constantly information-hungry for atypical, hard-to-find information. Curating actionable data on-the-go helps them engage and close the buying cycle quickly. There was a huge potential for IRC to support this team with actionable intelligence that would free them to engage in pitching for core business. Focusing on Sales queries helped IRC realise the importance of mining for Business Opportunities. Products like Client Prospector, Deals Analysis and Tender Alerts took a firm shape from here.

The uptake of these products among business developers, business relationship managers, heads of Sales – Marketing and Human Resources (HR) buoyed the visibility and importance of the IRC in a big way. It came as a pleasant surprise both to the IRC as well as Business Units (BUs), Business Analysts (BAs) and Market Research (MR) teams to find that some proactively initiated IRC products replicate their groundwork in terms of scope, parameters, analysis, graphical representations and even the product nomenclature. This triggered a trust in IRC capabilities. Business Teams recognised that IRC
could be leveraged to take their load off from these tasks, and they roped in the IRC for collaborations to create more such analytical products under their guidance.

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<tr>
<td><strong>Deals Analysis</strong></td>
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<td>An offshoot of our product “Deals Tracker”, this is an analysis of deals signed and expiring, for TCS and competitors. IT deals information is gathered from many paid sources, and collated by removing duplicates. The TCS industry classification is tagged for easy search and understanding. Analysis is done for market opportunities on Total Contract Values (TCVs), Industry, Service lines, and Geography. It helps sales to initiate discussions on pitching TCS capabilities to prospects. It is confidential and sent to restricted users. Feedback: This is very important and valuable for us. It gives very good understanding of current traction/market trend - helps us to plan and propose to our customers in industry leading solutions/trends - helps us align ourselves and focus into business strategies that might require a re-look. All in all very impressive analysis and inputs. Appreciate all the efforts and support. Delivery Manager</td>
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IRC’s team strength and locational presence pan India proved advantageous for collaborations to happen in close proximity, as other information research teams are small in size and perpetually overburdened. Typically, the IRC team is initially trained and supported by the business team. Depending upon the complexity and nature of the collaboration, some projects are completely owned by IRC after the training, while others continue as collaborated efforts. For instance, an IRC offering called Track your Customer (TYC), which requires understanding of annual reports and calculations of financial parameters, began as a collaborative effort but is now completely owned by the IRC. Beginning with one vertical and 20 accounts involving 4 IRC team members, today it releases TYCs for 5 verticals and 70 accounts with a team of 10. Overall, IRC offers various segmented products most of which have seen sustainability, high usage and noteworthy business value.

It can be seen that IRC’s involvement in CI services began more like a chain-reaction, one need arising out of the other. Quick to pick up opportunities, the IRC today is increasingly engaged in conceptualizing, designing and compiling niche information products. Its services are clearly going up notches on the value-chain. On the other hand, our physical IRC set-ups are also transitioning from print to digital content, releasing more members for product development. The experience gathered in previous product launches has helped the IRC in formulating a systematic product development strategy for CI services. This will prove to be a useful guideline not only to the IRC team but for anyone who plans to hitch up their information services to embed within the business layer of their organisation.

**Crafting Information Products**

It is necessary to carve out a workflow for crafting information products. Establishing a systematic process that can be reused is the best way to approach it. The IRC has put in place certain flows that lend themselves to such an organized method. **Conceptualize > Ideate > Incubate > Release** and all of this goes into periodic reviews for change & relevance and is updated suitably.

While **Conceptualize** is about connecting the dots to draw a skeleton of the eventual product, to **Ideate** would be to flesh it out to match the requirement. What follows is rigorous **Incubation** before taking its final shape and **Release**. These stages are dependent on factors and actions as depicted in Figure 1 below.
Strategic Marketing

Just as the choice of formats is important in information collation, the strategic use of appropriate product delivery platforms plays a crucial role in maximizing usage and visibility of information products. Your message and research is only as good as your ability to share it. Multiple conduits can help connect with more of potential users who have scattered preferences and behaviour of accessing information. TCS provides multiple channels of delivery and the IRC has chosen its presence on them suitably viz. IRC Home Page, Intranet Portal, Knowledge Portal, and Community pages of business verticals & horizontals and Sales-Marketing. It uses TCS’ social media platform to announce releases of products. Instant feedback and user discussions are triggered. It is also an interactive platform for database evaluations which are piloted with respective user groups. All collaborative product deliveries are co-branded with the IRC logo and with due credit to IRC compilers. It ensures that end-users are fully aware of the products that are powered by the IRC and they stay connected with IRC for them. Email forwards have been eliminated where possible and the IRC now encourages pull technology to get users to come to their products. This way IRC is very sure of serious users who are setting alerts to be notified for every release and hitting the links, compared to email subscribers where usage is uncertain.
This process has been ingrained in the IRC and continues to reinvent itself as the organization evolves. It remains alert to flux and is arguably one of the few departments that embraces change and realigns itself in anticipation.

**Building Team Competency**

Proficiencies required for CI services are quite distinct from traditional library information services in that they transcend beyond delivering raw ‘as-is’ content to a set of analysed and interpreted delivery revealing patterns, trends, inter relationships, impacts etc. PESTLE (Political, Economic, Sociological, Technological, Legal & Environmental), STEEP (Social, Technological, Economical, Environmental and Political), SWOT (Strength, Weakness, Opportunity, Threat), Win-Loss, and Predictive are some types of analyses that provide insights for informed decision-making. The type of research needed here is non-linear. Requirements are granular, information resources are non-traditional, fragmented and require careful synthesis. The packaging is user-defined, data-points and variables change dynamically. No fixed template can be re-used for delivery and so automated curation is a challenge.

The depth of analysis required in CI work leaves it to be taken up by IRC’s experienced researchers, drawing on their inherent passion and potential. They acquire the skills required on the job through collaborative engagements. Going forward the IRC will clearly have to work in siloes to focus effectively on segmented user needs across the large organisation. The IRC Leadership is making conscious efforts on the change management process to formally orient and establish a larger team on CI services. Two major moves in this direction are (i) the formation of a Core Function team on Professional Development and (ii) engage in Embedded and Collaborative services.

**CORE FUNCTION TEAM ON PROFESSIONAL DEVELOPMENT**

The objective of this team is to imbibe a culture of continuous learning for skill development in the IRC. This team identifies and informs suitable trainings both external as well as courses available through the internal LMS (Learning Management System). They also design custom-made training programmes to close gaps. For example, the IRC conducts an annual training programme where team members are nominated for a 3 day intensive hands-on training on areas such as Domain overview, CI, Research methods, Databases, competencies demanded by digital workflows (Copyright, IPR, DRM, Contracts, Licensing, Access), and soft-skills. These are imparted by invited faculties and TCS experts. Methods like WebEx training sessions, instructor-led trainings and state-of-the-art learning management systems are deployed. Particular importance is placed on credits and assessment-based learning, and is a target set in the team’s performance goals. Training or seminar take-away including limitations, challenges and other observations is mandatory on the feedback form. Eventually this team will form Centres of Excellence (COE) for various IRC competencies, and one among them is CI.

**EMBEDDED SERVICES AND COLLABORATIONS**

Embedded services require the team members to work with the business units full-time. Short-term projects are advantageous to IRC where the skills and competencies picked up by the team can be integrated in the IRC’s services quickest. They can be passed on to other team members through training sessions. Collaborative learning under the guidance of research and analyst teams is encouraged to jumpstart the process. Beginners are acquainted with ethical and legal gathering of data and organizing the collected data and information into the functional form and representation. The IRC team is already
well adept in compiling thematic alerts and releases around 80 different alerts periodically. In collaboration with Market Research, the team is also trained to compile alerts on key pursuits for Sales Directors. These alerts are a level higher in value as news are provided ‘with interpretations’ for quick comprehension and insight.

Some important competencies picked up by the IRC through the various collaborations include:
- Advanced searches on hard-to-find data and discovering hidden intelligence in social media.
- Data elicitation and representation
- Reading balance-sheets, investor-relations pages for financial tracking
- Capturing sentiments from news and field inputs of Sales & Marketing
- People information from databases, LinkedIn
- Industry, company and customer profiling
- Tracking customer and vendor products
- Vendor positioning
- Creating infographics
- Making presentation decks for go-to-market
- Interpreting graphs, charts, and news
- SWOT, PESTLE and Timeline Analysis

There is clearly still much to achieve and it will have to be done a step at a time. A multitude of products of varying relevance may emerge with these proximities. Being embedded in the business development workflow provides immense hands-on learning, a good understanding of the operations, strategy and market positioning resulting in the creation of business aligned products. The concurrence of stakeholders, their feedback and enhancements through governance calls are immediate. The team can actually see how the information is used which gives them a sense of achievement that no other service does. Human connects act as good referrals or pointers for sourcing field information. Building such strategic relationships will help information professionals become an integral part of the organization’s scheme of business. This would be a significant, influencing factor in the long-term survival of corporate libraries.

**Return on Investment (ROI) and Value of Investment (VOI)**

Librarians have long struggled to stay afloat by demonstrating their ROI with financial and transactional metrics. Some direct ROI’s are workable like percentage usage of collection for a given invested cost, time & man-hour effort savings due to automation, costs saved by in-house newsletters than buying from aggregators. But how does it all translate in the CI deliveries, where multiple stakeholders on the project continuum contribute to the intelligence at various points?

ROI must be estimated wherever possible, but ‘value’ must also be assessed. These concepts differ in important ways. VOI was first introduced by Gartner, the world’s leading information technology research and advisory company as intangible assets that contribute heavily to an organization’s performance. Unlike ROI which is a tangible measure, VOI is the measure of intangible assets like knowledge, processes, the organizational structure, and the ability to collaborate. Value takes time to build, and is created when users become aware, engage and collaborate or even recommend further.

Articulating VOI to measure the impact of IRC products only endorses that the products are actually worthy of the significant investments being made. It clearly reflects how the value aligns with and contributes towards achieving the desired business outcomes.
VOI OF IRC PRODUCTS

- User base (who vs. how many) includes key decision makers like Vice Presidents, Country Heads, CxOs, Sales Directors, Marketing Heads, Research Analysts, Finance and HR Domain experts. Followers to niche products are low in number, but are high in importance.
- TCS’ flagship Leadership Development Programme prepares TCS associates for global sales roles. IRC Awareness Session is a part of this programme to induct future Sales leaders especially on IRC’s CI, Biz Op, Customer and Industry offerings.
- IRC products are hosted on cross-platforms like CRM, Sales and Marketing community platforms for their targeted users
- Research teams invite IRC to collaborate in their new initiatives
- IRC products have replaced outsourced and commercial products and services
- IRC Products are re-used by other units for further analysis
- Products compiled by other units were found to be identical in scope and presentation endorsing that the IRC Products were appropriately aligned to business needs
- Products that started for one domain got replicated to others in offshoots or flavours
- RFPs are coming in for IRC Services
- Palpable increase in complex research queries, and repeat users. The same queries are being marked to both IRC and other research teams for solutions.
- IRC success stories and ‘when-is-the-next-release’ prods from users.
- IRC ranks among top 2 across the organisation among all support functions in surveys for years in succession
- MBAs Associates from other units show willingness to join IRC

All of these transcend beyond monetary gains and are telling examples of their worth. They are leading indicators to suggest that the IRC products are relevant, the initiatives are influential enough to support project life-cycles. Slowly but surely, the IRC gains its foothold as trustworthy partners in organisation’s business growth.

Challenges

RE-SKILLING

Not all library professionals are inclined to take up CI activities. Inherently, some are traditional in orientation and will not perform well in the CI role. Some Business units have small research teams equipped with qualified business analysts and technological support that use BI, SAS, data mining and visualisation tools to draw computational and quantitative analysis.

IRC team is today primarily involved in qualitative analysis which covers more than 70% of the total data mining effort for a research. Though collaborative projects have helped uplift the CI skills, for the IRC to independently and completely take on complex system-based analysis unless it diversifies its skill-set in future recruitments, is still a distance away. Until then, the catch line is - if you can’t defeat them, join them.
SCALE OF OPERATIONS

Large organisations deploy specialised task-force to undertake global responsibilities. It can be argued that allied roles like KM, Content Acquisition, Web Content Management, and Learning Management can naturally fit into IRC’s basket of responsibility. But in organisations as huge as TCS, these are owned and administered by separate units, requiring high-end expertise due to the scale and complexities of the operations involved. However, there are certain overlaps in the functions and lateral movement of IRC team members is a possibility.

USER PERCEPTION

For long, librarians have suffered from archaic perceptions of their capabilities. In many cases it still proves to be an uphill task, to assure users that librarians have moved beyond traditional library work and embraced newer skills, synthesis and analysis of information among other things. Given their base skills of information organisation and retrieval it isn’t really a very surprising uplift in their ability, but it still takes an effort before users are convinced of their competency. However, with more exposure and hands on training – at least in the business environment, things are looking up and there are a reasonably good number of opportunities coming their way which endorses that they may finally be getting their due recognition.

Learning Gathered

GRAB OPPORTUNITIES

Today, the entire business of an organisation revolves around information. Opportunities of providing niche services could be many, but they do not surface easily. Close interaction with the business units can help see the hidden opportunities. TCS experience has proven that opportunities can be also be ‘carved’. E.g. Ask questions like what will you do further with our information? How will you use it? And chase the users to train you on further steps of value-addition wherever possible to move up the value-chain. A dip-stick survey asking associates about daily time they spend to search for business information helped the IRC target those spending the maximum time. These were potential candidates for IRC to get business from. Revisiting unfulfilled requests of the past is a good idea as the team would be in a better position to take up the opportunities with newer competencies acquired since then.

DISRUPT

Disrupting and destroying make the service line stronger. Defending services vs. growing existing ones is a necessary introspection that needs to be done before questions from other quarters crop up.
GET IN THE WAY

Establishing multi-channel presence through a library home-page, domain pages, LMS, Social media, posting customized collateral and content strategically is advantageous. These must be communicated well. It is important to be present where users tread, online and offline.

STAY ETHICAL

The SCIP Code of Ethics for CI Professionals advises: “Corporate attorneys should be familiar with what competitive intelligence staff does and how they do it, and there should be a close working relationship between the competitive intelligence staff and corporate attorneys. The two groups should work together to understand the business value of competitive intelligence, and to assist with developing and updating language that appropriately balances the risks and benefits of competitive intelligence activities for the organization”. It is worthwhile to follow suit.

EMBED

KM is the hub of the organisation’s connections and harnesses collective intelligence. Working closely with the KM team allows a good understanding of company data, where and how it is stored, how to access it and relate it to other data sources. The relationships established with domain experts gives the IRC a large amount of resourcefulness and empowerment to draw from as well as contribute to the information eco-system of the organisation.

RESPONSIBILITY & EMPOWERMENT

When working with business leaders, it is common to handle high-level confidential data, deliver to top management all in preparation for business-earning requirements. It plays a part in the dynamics of the organisation’s information economy, as information is most certainly used to generate profit.

BUILD RELATIONSHIPS

Product demos and discussions provide quick insights into the industry content and in building search capabilities. Comparisons and evaluation of database content is possible. The in-built analytical tools can be used effectively to turnaround the content to make an Info Product. Knowledge of the competitive suppliers, their differentiators and each one’s research methodology used for fact-finding is crucial in the game.

Conclusion

The routes to mining competitor information are many and sometimes so abstruse. But connecting the dots and looking at it holistically does make a huge business impact and this speaks for the astute vision of CI experts. Collaborative research and product development is a fertile ground for business librarians to leverage existing skills, identify gaps and hone new skill sets in sync with the business outlook. A revamped IRC structure is emerging with clear cut siloes to build meaningful relationships with niche users.
The IRC team has moved up from the primary CI role of information collection and filtering - an essential step in the CI cycle - to the secondary level of CI activities comprising analytical frameworks, techniques and processes. It is increasingly involved in data analysis, interpretations, profiling and presentation. Having hitched its services to integrate CI into its existing programs, a culture of intelligence-sharing has now set in. TCS IRC experience indicates that the learning curve for a business librarian will largely depend on the depth and breadth of involvement in the entire range of CI specialities they or their organisations expect them to get into. Skill building comes with training and librarians must be willing to invest time to build it slowly focussing on one at a time. Once user trust is gained, opportunities will knock from many corners within the organisation.

The measurement of IRC effort directly translating into revenue is difficult to gauge as IRC is one among the many, a relatively small unit in the galaxy of contributors. But the value of its services is undoubtedly perceived in many ways. And this value creates a different high, one that can be inspired into doing more. To the Business Librarians, raising the bar of their service is imperative to position themselves firmly as an important link in the value chain of the organisation.

Acknowledgement

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Endnotes


2 Sharma, Rajeshwari “How companies are nurturing leaders”, LiveMint, Feb 24, 2009, Accessed May 12 2017 http://www.livemint.com/Politics/W0mOU7ysFC8na3yzaksiiP/How-companies-are-nurturing-leaders.html

