

# Paper to Cloud: Digitizing the Government-to-Business (G2B) interface in Tamil Nadu, India

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## ABSTRACT

The State of Tamil Nadu, India has consistently been ranked as a high-performing state, with the highest number of manufacturing factories/ clusters, Special Economic Zones, exports, investment potential, as well as socio-economic indicators. Despite the positive growth story, businesses had pointed to challenges in obtaining business licenses. The prevalence of physical touchpoints, lack of systematic coordination between agencies, absence of robust legislation, information asymmetry on procedures, lack of enforceable timelines, and effective aftercare mechanisms, stymied the State from realizing the true economic potential. To enhance the business climate in the State, a series of reforms built around the digitization of the G2B interface through the ‘Tamil Nadu Single Window Portal’ was initiated in 2017-18. This short paper attempts to delineate factors that enabled the successful implementation of this dedicated G2B platform, and highlights the reform process, initiatives, impact on businesses / economy and transferable learnings from this transformation journey.

## CCS CONCEPTS

• Digitization; • Government-to-Business; • Digital Transformation;

## KEYWORDS

Single Window Portal, Investments, Doing Business, E-Governance, Economy, Grievance Redressal, Transaction Cost, Business licenses, Institutional Strengthening, Investment Promotion, Institutions

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## 1 BACKGROUND

Tamil Nadu, the 2<sup>nd</sup> largest state economy in India [1]<sup>1</sup> (among 28 States and 8 Union territories), home to a population in excess of 70 million people<sup>2</sup>, has consistently been a highly successful performer on various economic parameters [1–3]<sup>3</sup>. Despite the onset of the Covid-19 pandemic, the State recorded a GDP growth of 5.87% in 2020-21 over the preceding year, while the rest of the country recorded a decline of -3%<sup>4</sup>. However numerous investors continually pointed to specific challenges in the business ecosystem in the State, key among them revolving around the bottlenecks involved in securing requisite approvals to start & operate a business<sup>5</sup>. Owing in no small measure to the less than adequate digitization of services, absence of a whole-of-Government approach [4] and supporting legislative frameworks, there arose significant scope for augmentation of service delivery.

There is a growing body of academic literature that focuses on the role of institutions on businesses and the impact of transaction costs [5] on business decisions. Taking cue from ‘Transaction Cost Economics’ by Oliver E. Williamson [6] and works by economists such as Douglas North who pointed to the role of institutions in influencing transaction costs, it has widely been recognized that lower transaction costs help spur economic growth [7]. Given its centrality [8], Governments across the globe are adopting E-Government service delivery models i. e. using digital technologies as an integrated part of their modernisation initiatives to provide services to businesses / citizens thereby creating public value [9]. Government agencies are continually shifting from a “Bureaucratic Paradigm” to an “E-Government Paradigm” [10] i.e., moving from strict internal rule-based organization models, to flexible customer-centric models, given the benefits in terms of cost reduction, improved service efficiency, greater transparency, and higher citizen trust [11, 12]. Evidence also suggests that the impact of the digital transformation initiatives is not limited to one sector, but it can boost productivity across multiple sectors [13].

To streamline the Government-to-Business (G2B) interface and enhance the business climate, the State of Tamil Nadu initiated a series of reforms built around the complete digitization of the

<sup>1</sup>Based on Gross State Domestic Product at Current Prices Estimates by Reserve Bank of India for 2019-20

<sup>2</sup>Retrieved from Indian Census, 2011

<sup>3</sup>Tamil Nadu had the highest number of factories in India in the Year 2018-19 as per the Reserve Bank of India’s Report, Tamil Nadu had the highest number of Special Economic Zones in India as on 31 December 2020, Tamil Nadu had the highest number of skilled workers in 2018-19.

<sup>4</sup>Ministry of Statistics & Programme Implementation, Handbook of Statistics on Indian States 2020-21

<sup>5</sup>Feedback received in the form of formal complaints / during interaction between Guidance staff and investors

G2B interface through the ‘Tamil Nadu Single Window Portal’. This short paper attempts to highlight how Guidance, the nodal agency tasked for this massive transformation exercise, remained perpetually cognizant of the dangers of ‘computerizing inefficiency’ and strived to move beyond mere digitization of G2B services.

## 2 CHALLENGE

A business seeking to set up operations in the State are required to procure sector-specific and sector-agnostic business licenses covering critical aspects such as building plan approvals, safety certificates, electrical drawings, emissions, labor engagement etc.<sup>6</sup>. These licenses are to be procured both prior to establishment, and subsequently prior to initiation of commercial production and operations. Despite the tremendous economic growth trajectory, businesses had pointed to challenges faced in procuring these licenses in a timely and hassle-free manner. A plethora of challenges and bottlenecks were identified through stakeholder consultations with industries, state agencies, industry associations and trade commissions of various countries. The prevalence of physical touchpoints, lack of systematic co-ordination between concerned state agencies, absence of robust legislations, information asymmetry on procedures, lack of defined /enforceable timelines and effective aftercare mechanisms, stymied the State from realizing its true economic potential and cast tremendous onus on businesses. Investors were compelled to visit state agencies to secure business-related licenses, with little or no knowledge of applicable procedures, and lack of recourse to effective aftercare / grievance redressal. In light of such challenges, it was critical to recalibrate the interface between Government and Businesses.

## 3 INITIATIVE:

Beginning in 2017-18, Guidance Tamil Nadu, under the aegis of the State Industries Department, initiated a 5-year transformation exercise of the entire G2B interface ranging from attraction to after-care of business. A team consisting of a global technology partner and project consultants with experience in large scale government transformation projects were onboarded to work with Guidance.

As a first step, Guidance identified the various G2B licenses / approvals required for starting a business in the State. Following a historical and trend analysis based on volumes of applications, a prioritization of 200 G2B services encompassing 40+ Government departments to be digitized was evolved. In coordination with various departments, the digitization of these services was initiated. Each department was assigned a dedicated functional and technical consultant. A technological solution comprising a java-enabled platform (n-tier Service Oriented Architecture) deployed on a cloud solution (AWS) was leveraged.

Simultaneously, a legislation termed as the ‘Tamil Nadu Business Facilitation (Act & Rules) 2017-18’ was tabled in the State legislature and implemented subsequently. This legislative framework encompassed the G2B services being onboarded, stipulated the timelines for grant of licenses, mandated the setting up of institutional monitoring mechanisms, punitive measures for officers who are non-compliant to defined timelines, and document checklists for investors. A Single Window technical committee comprising

Heads of Department of 40 involved agencies, headed by the Managing Director & Chief Executive Officer, Guidance, was constituted to monitor and remove bottlenecks encountered in the course of project implementation.

To ameliorate the information asymmetry challenge and bridge the knowledge/ procedural gap faced by investors, the comprehensive list of clearances required by a business was addressed through the development of an online wizard “Know Your clearances”. Through this module a business could enter relevant details of the investment proposal, to secure a comprehensive list of clearances/ approvals required to set up the business.

In order to execute an efficient aftercare strategy for businesses, a dedicated industry grievance helpdesk “Biz-buddy” was developed. Biz Buddy is an industry helpdesk portal, designed to facilitate G2B interactions between investors and the State Government. Issues that could be raised through this online helpdesk were all-encompassing ranging from licensing delays, incentive disbursements (as per applicable policies), as well as any operational issues faced. Some of the other key features that were initiated as part of this reform-driven portal to enable ease of investors included contactless/ paperless submissions, real-time support for query resolution, automated deemed approvals, real-time updates, secured cloud storage of documents etc.

## 4 IMPACT

At present<sup>7</sup>, 143 services covering 25+ state agencies have been onboarded on to this portal. As a result of this comprehensive revamp of the G2B interface, there were numerous primary and ancillary benefits that accrued to the State, as listed below.

- **Reduction in time taken to obtain approvals:** Out of 6,977 applications received on the portal for 33 services offered by 11 Departments, 5,770 applications (i.e., 83%) have already been processed. Out of 33 services, the applications for 24 services (73%) were processed within defined timelines [14]<sup>8</sup>. The average time to secure business-related licenses, and to commence commercial production, has reduced to 90 days now compared to the previous average of 6-9 months<sup>9</sup>.
- **Improvement in Business Ecosystem:** As a result of this initiative, and other business-centric reforms, Tamil Nadu witnessed a rise in the Ease of Doing Business domestic ranking from rank number 15 in 2017-18 [15], to rank number 3 in 2020-21 [16].
- **Increase in grievance resolution and reduction in grievance redressal time:** Out of 260 grievances received on the BizBuddy portal, 240 have been resolved. The average processing timelines for these grievances was 24 days as compared to the defined timeline of 42 days [17].
- **Increase in Investment Inflows:** Literature points to the impact of Ease of Doing Business initiatives on the economic output as the result of increased inflows of investments [18]. This G2B initiative, among other factors, has undoubtedly played a critical role in boosting investor sentiment, and

<sup>7</sup>As on 25 April 2022

<sup>8</sup>Timelines refer to the timeline defined in the Tamil Nadu Business Facilitation Act and Rules, 2017-18 and related Amendments

<sup>9</sup>Management Information System (MIS) Reports as on 27.04.2022, Government of Tamil Nadu

<sup>6</sup>Accessible on the Know your clearances sub-tab, Tamil Nadu Single Window Portal

increasing the investment inflows into the State. Between 2019 and 2021 the total investments committed to the State stood at 22 billion USD<sup>10 11</sup>.

- **Monitoring/ tracking:** Besides delineating the exact clearances a business requires, the portal allows applicants to track the exact status of their application (official with whom the application is lying, number of days pending with the respective official) on a real-time basis. This has significantly helped increase investor confidence and ability to understand the otherwise complex ecosystem of setting up and running a business.
- **Concurrent Evaluation/ Feedback Loops:** In a third-party survey conducted periodically, the users of the Tamil Nadu Single Window Portal rated the portal 91% out of 100 based on various parameters such as effectiveness, timeliness, ease of use, accessibility, technical/ functional assistance in the process and overall satisfaction<sup>12</sup>.

## 5 KEY LEARNINGS

Global e-government determinants in transition economies and developing countries (TEDC) point to the criticality of quality human resources, innovative capacity, rule of law, technological infrastructure, coordination and robust e-government strategies and policies in achieving quality e-governance [19] [20]. Tamil Nadu constantly drew on the enforcement of the Electronic Service Delivery Rules (2016), high-level coordination with agencies, skilled manpower, innovative capacity [21], integrated world-class IT infrastructure to effectively execute this project. Some of the key learnings can be summed up as below;

1. **“Transform, do not just digitize”:** Digitization without a model of change and supportive ecosystem enablers may hold back the initiative from realizing its full potential and creating positive impact for the target audience.
2. **“Perfect the procedures”:** Application of Standard Operating Procedures (SOPs) in tandem with timelines enshrined in robust legislation and active governance plays a critical role in successfully implementing a digitization initiative. Periodic circulars listing out procedures, best practices and steps to be followed by concerned state agencies played a critical role in ensuring alignment with the larger programme.
3. **“Avoid computerizing inefficiencies”:** Continuous Business Process Re-engineering (BPR) and brainstorming sessions with concerned agencies on simplifying procedures and processes is absolutely essential to ensure that redundant procedures are constantly reviewed, remapped and realigned.
4. **“Empathize”:** Customer-centricity ought to always take precedence over administrative efficiency. A continuous third-party survey with clients who made use of the newly digitized services, continuously helped fine-tune the system on various aspects covering digital payments, upload of documents, tracking of applications, user-interface etc.
5. **“Training & Change management”:** Constant training of stakeholders on new online procedures, best practices, digital security measures was critical to ensure higher take up, acceptance and sustainability of this new initiative, by numerous agencies. State agencies professing a lower degree of technological capability in digitization were handheld and supported by Guidance, throughout the journey with funding and knowledge support.
6. **“Keep your stakeholders close”:** With the need to coordinate with 25+ state agencies, communication of a clear vision, and a shared mission helped push this initiative forward. Effective communication, review of milestones through institutionalized mechanisms and appreciation of completed tasks helped maintain and build a strong and healthy working relationship. Those relatively unconvinced stakeholders, acquiescing to the onboarding process, were invited to more in-depth consultations and brainstorming sessions to ensure their wholehearted buy-in.
7. **“Aftercare matters”:** Access to effective grievance redressal has been critical in delivering a comprehensive solution for investors. It has helped in funneling various grievances to the state agency directly responsible for taking action.

In conclusion, the execution of this reform process led to significant value additions on all the aspects that posed a challenge prior to this transformative exercise. A point that ought to be noted is that Guidance, the nodal agency for the execution of this initiative, was also strengthened in parallel, by the infusion of additional funds from the State Government, and the recruitment of investment specialists from the private sector to actively engage in external facing investment promotion activities for the State. The success of the transformation of the G2B interface can perhaps be attributed in part to the strengthening of the institution as a whole, the actual impact of which can be quantified in subsequent analysis/ studies.

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<sup>10</sup>Industries Department records, Government of Tamil Nadu

<sup>11</sup>Conversion rate 1 US\$ = Indian National Rupee (INR) 76.59

<sup>12</sup>Third party survey conducted by M/s. Akara Research & Technologies Pvt. Ltd.

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