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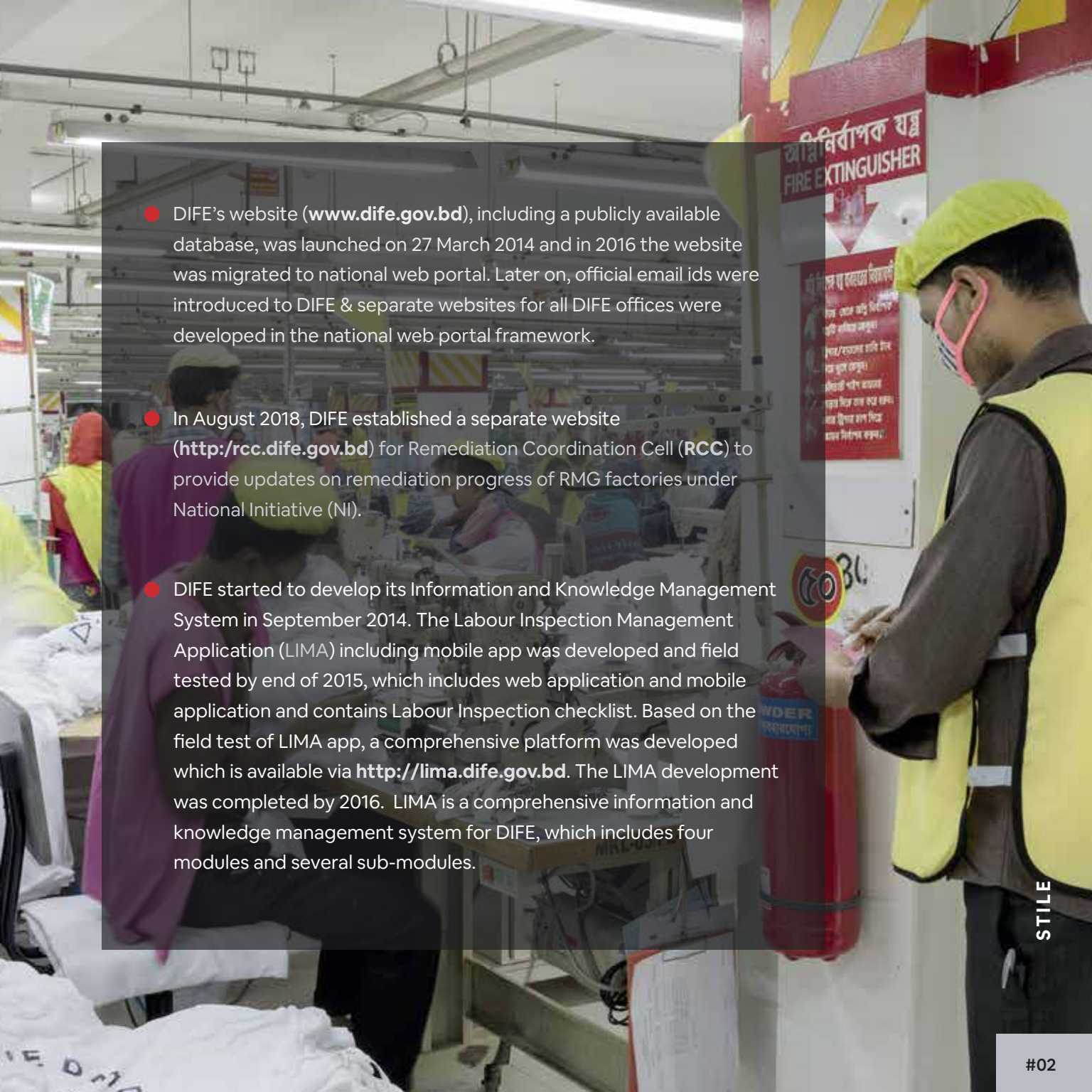
The LIMA Platform and Data Driven Decision Making

Embedding the virtual LIMA platform in a Digitalization Strategy to increase its relevance and motivate for data driven decision making

DIFE started its digital journey in 2014 by launching its first ever website and then adding RMG sector factory database to the website. Later online licensing, helpline and e-filing added to DIFE. and it is moving to a comprehensive knowledge management platform called Labour Inspection Management Application (LIMA).



- DIFE's website (**www.dife.gov.bd**), including a publicly available database, was launched on 27 March 2014 and in 2016 the website was migrated to national web portal. Later on, official email ids were introduced to DIFE & separate websites for all DIFE offices were developed in the national web portal framework.

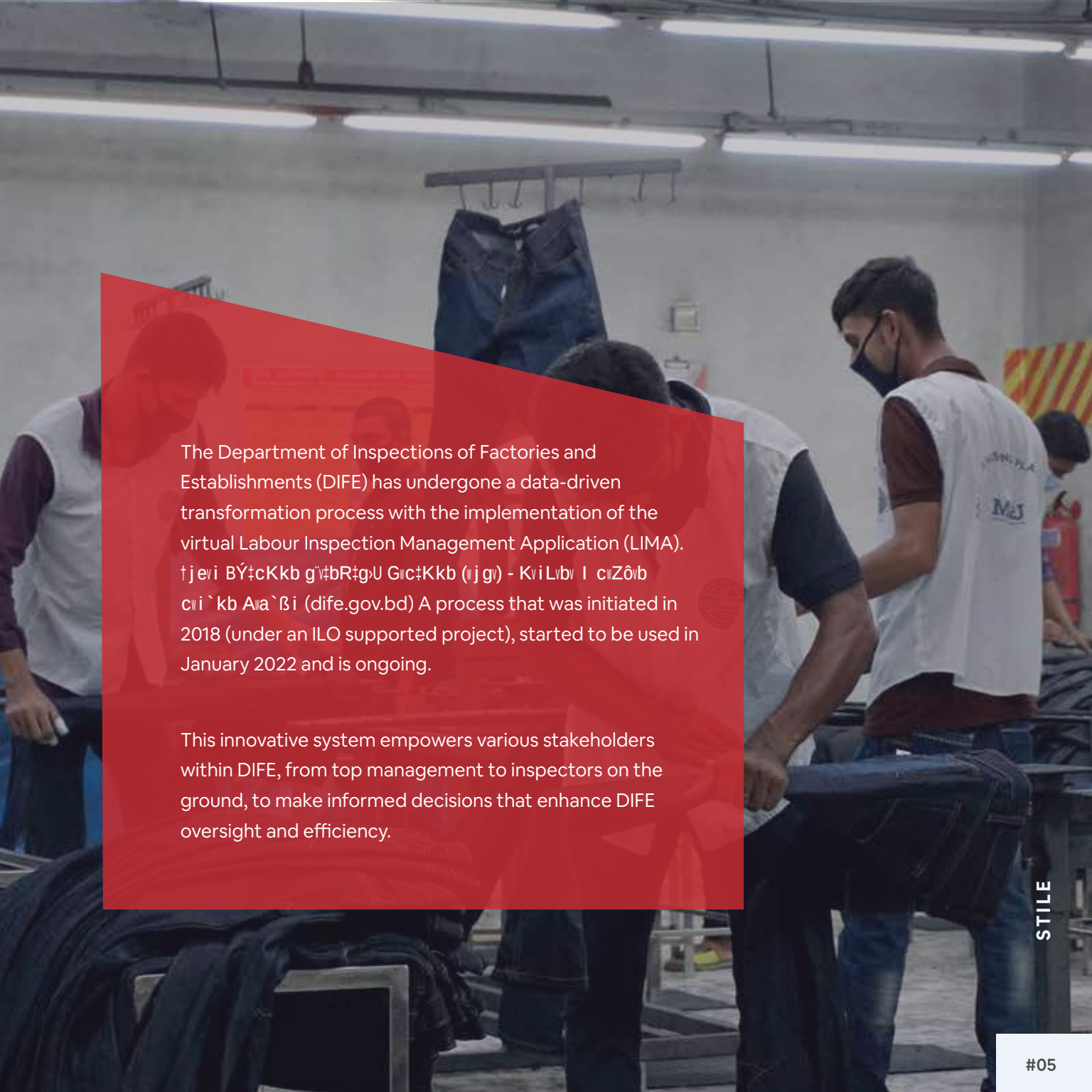
- In August 2018, DIFE established a separate website (**http:/rcc.dife.gov.bd**) for Remediation Coordination Cell (**RCC**) to provide updates on remediation progress of RMG factories under National Initiative (NI).

- DIFE started to develop its Information and Knowledge Management System in September 2014. The Labour Inspection Management Application (LIMA) including mobile app was developed and field tested by end of 2015, which includes web application and mobile application and contains Labour Inspection checklist. Based on the field test of LIMA app, a comprehensive platform was developed which is available via **http://lima.dife.gov.bd**. The LIMA development was completed by 2016. LIMA is a comprehensive information and knowledge management system for DIFE, which includes four modules and several sub-modules.

- The LIMA is currently being hosted at national data center managed by Bangladesh Computer Council (BCC). LIMA was developed and introduced with the assistance of the International Labour Organization (ILO) with funding from Canada, Netherlands and United Kingdom. Later, GIZ supported LIMA's further upgradation, which includes the roll out of the OSH module of LIMA, integration with the government systems such as eNothi, ekpay, echallan.

- Beyond the technical upgradation, under the STILE also a Digitalization Strategy was drafted and approved. The strategy lays out a roadmap for DIFE to its digitalization journey for renovating work process, introducing paperless office, ensuring satisfactory public services and establish as a result base coherent data driven process by using digital tools and technology to ensure SMART DIFE.

Strategic Goals	Objective
Strategic Goals 01 Digitalization of Services	Digital transformation of all DIFE services according to citizen charter
Strategic Goals 02 SMART DIFE	Digital Transformation of DIFE. Setting Digital vision and prioritization to assist key operations including changing old systems, improving the services of Government process & supporting SMART Bangladesh vision.
Strategic Goals 03 SMART Officials	Knowledge Creation and Upskilling human resources by adapting digital tools and technology
Strategic Goals 04 Data Driven Analytics	Promote Data Driven Decision Making for strategic approach to improved monitoring process.
Strategic Goals 05 Promote OSH Culture using Digital Media	Creating awareness among citizens about OSH culture using digital media



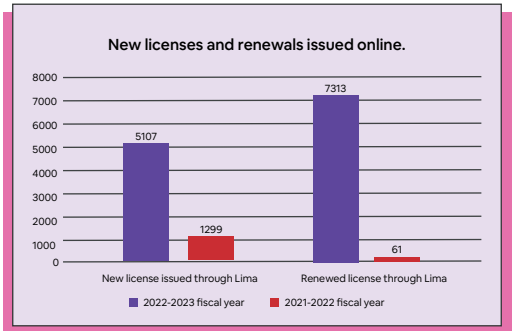
The Department of Inspections of Factories and Establishments (DIFE) has undergone a data-driven transformation process with the implementation of the virtual Labour Inspection Management Application (LIMA). †jevi BÝ‡cKkb g¨v‡bR‡g›U G‡c‡Kkb (‡jgv) - KviLvbv I c‡Zôvb c‡i `kb A‡a`ßi (dife.gov.bd) A process that was initiated in 2018 (under an ILO supported project), started to be used in January 2022 and is ongoing.

This innovative system empowers various stakeholders within DIFE, from top management to inspectors on the ground, to make informed decisions that enhance DIFE oversight and efficiency.

STILE

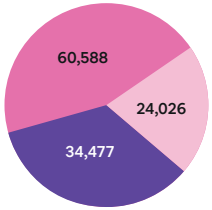
Data insights

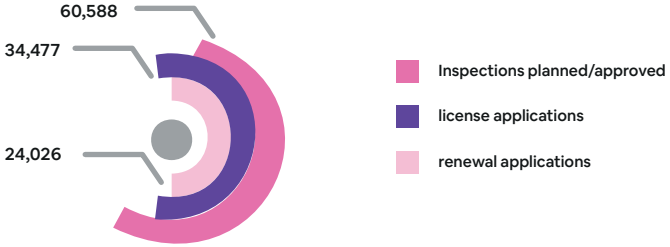
At the helm, the Inspector General leverages LIMA's comprehensive data analytics. By analyzing key metrics like total license applications (34,477, until March 2024), renewal applications (24,026), and inspections planned/approved (60,588) – trends and patterns emerge.



Issuance of new licenses and renewal of licenses through Lima

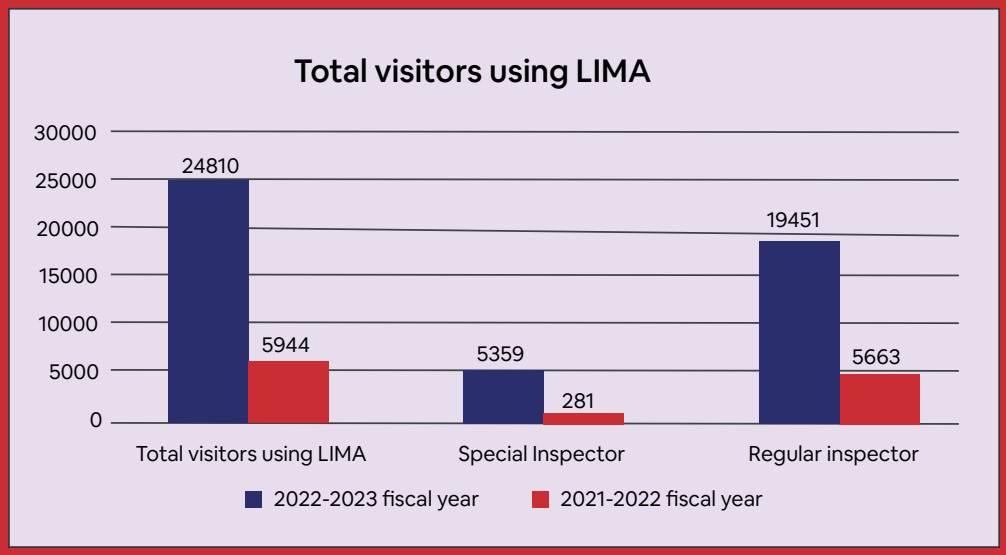
This enables proactive decision-making, allowing the DIFE to address emerging challenges based on divisions, localization and factory categories also it helps to optimize resource allocation, and extends smooth inspection processes, increase the coverage of DIFE and identify which areas needs more coverage by the DIFE inspectors.





Additionally, analyzing online challan (invoices) payments (1,40,73,664.50 BDT) and offline registrations (9,77,06,546.00 BDT) shows that the online services are less than 15% and confirms a slight gap between reality and expectations.

Local Staff Meets Data Power

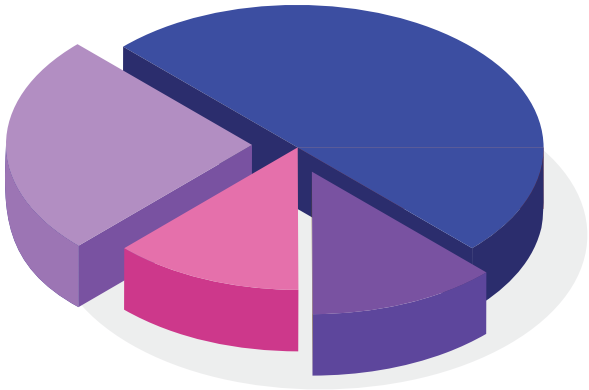


Total visits completed through Lima, 2022-2023 fiscal year and 2021-2022 fiscal year

Assistant Inspector Generals utilize LIMA data for targeted interventions. For instance, the total number of OSH incidents reported (127 incidents – January 2022 to March 2024) pinpoints high-risk areas. This data empowers them to allocate resources strategically, preventing workplace accidents and promoting occupational safety. Inspectors can pinpoint hotspots necessitating heightened inspection efforts. This proactive approach ensures resources are channeled effectively to safeguard workers' welfare and uphold regulatory standards.

Inspectors: Armed with Data for Effective Action

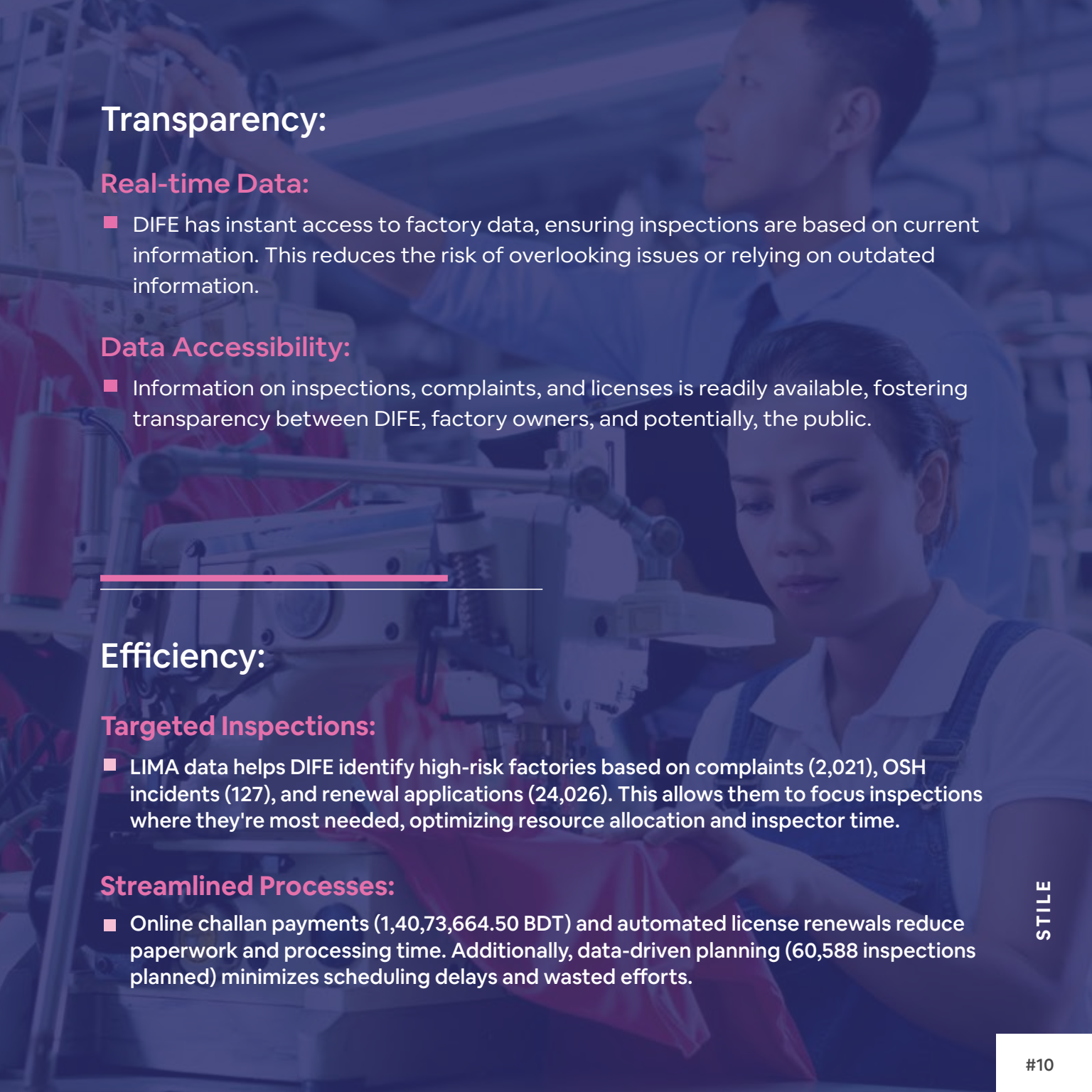
Inspectors benefit from real-time access to LIMA data, enabling them to plan and execute weekly inspections effectively. Analyzing complaints received (2,021, until March 2024) allows them to prioritize inspections based on urgency and severity. This ensures timely interventions that address potential violations and safeguard worker rights.



The "Notice of Working Hours" module within LIMA provides valuable insights, allowing inspectors to focus on factories with potential working hour discrepancies.

Data Stewards Promoting Continuous Improvement

- The Innovation Team plays a crucial role in driving continuous improvement. By analyzing success rates of online payments (17,227) and resolved support tickets (3,474), the ICT team identifies areas for system optimization, ensuring a user-friendly experience for all stakeholders.
- They can also analyze trends in OSH incidents and complaints, prompting investigations into potential systemic issues within the RMG sector.



Transparency:

Real-time Data:

- DIFE has instant access to factory data, ensuring inspections are based on current information. This reduces the risk of overlooking issues or relying on outdated information.

Data Accessibility:

- Information on inspections, complaints, and licenses is readily available, fostering transparency between DIFE, factory owners, and potentially, the public.

Efficiency:

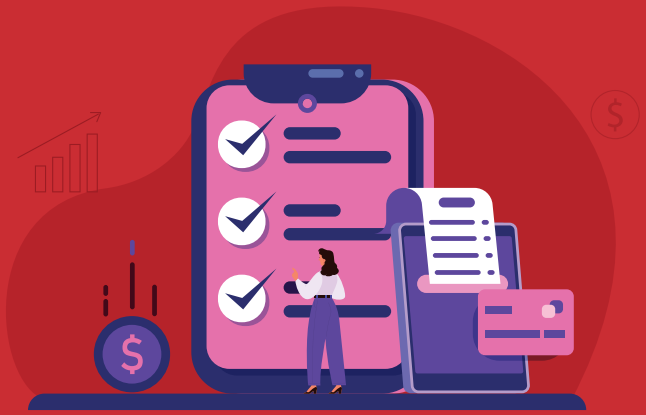
Targeted Inspections:

- LIMA data helps DIFE identify high-risk factories based on complaints (2,021), OSH incidents (127), and renewal applications (24,026). This allows them to focus inspections where they're most needed, optimizing resource allocation and inspector time.

Streamlined Processes:

- Online challan payments (1,40,73,664.50 BDT) and automated license renewals reduce paperwork and processing time. Additionally, data-driven planning (60,588 inspections planned) minimizes scheduling delays and wasted efforts.

Accountability:



Data-Driven Decisions:

DIFE leadership can base decisions on concrete data, not just anecdotal evidence. This promotes accountability as resource allocation and policy changes are demonstrably linked to addressing specific issues.

Complaint Tracking:

LIMA tracks complaints (2,021) from initiation to resolution, ensuring most concerns are addressed. This holds both factories and DIFE accountable for worker safety and fair treatment.

Ultimately, these factors combine to create a more sustainable RMG sector. Efficient inspections identify and address violations before they become major problems, reducing the risk of accidents or worker exploitation.

Transparency builds trust within the industry and fosters responsible practices by all stakeholders. Accountability ensures continuous improvement and promotes safe working conditions, ultimately protecting the well-being of the garment industry workforce.

The Future of DIFE:
Data-Driven Decisions for a Sustainable RMG Sector

DIFE's adoption of data-driven decision-making with LIMA marks a big change in how they oversee the RMG sector. By using data to make choices, DIFE focuses on being efficient, transparent, and accountable. This leads to safer and more sustainable workplaces for the people working in Bangladesh's garment industry.

Recommendations for Enhancing LIMA Utilization and Efficiency

Increase Use of LIMA for Inspections:

- **Current Utilization:**
  Presently, only less than 70% of inspections are conducted using the LIMA system on average.

- **Recommendation:**
  It is recommended that the LIMA inspection module be utilized for all types of inspections. Increasing the adoption of LIMA will enhance the accuracy, efficiency, and consistency of inspection processes.

Enhance Use of Accident Reports and Complaint Module:

- **Current Utilization:**
  The accident reports and complaint module are underutilized for registering incident data.

- **Recommendation:**
  Encourage the comprehensive use of these modules for all incidents. Additionally, the modules should be updated to include final settlements and actions taken for each incident, ensuring complete documentation and accountability.

Leverage Machine Learning for Insights:

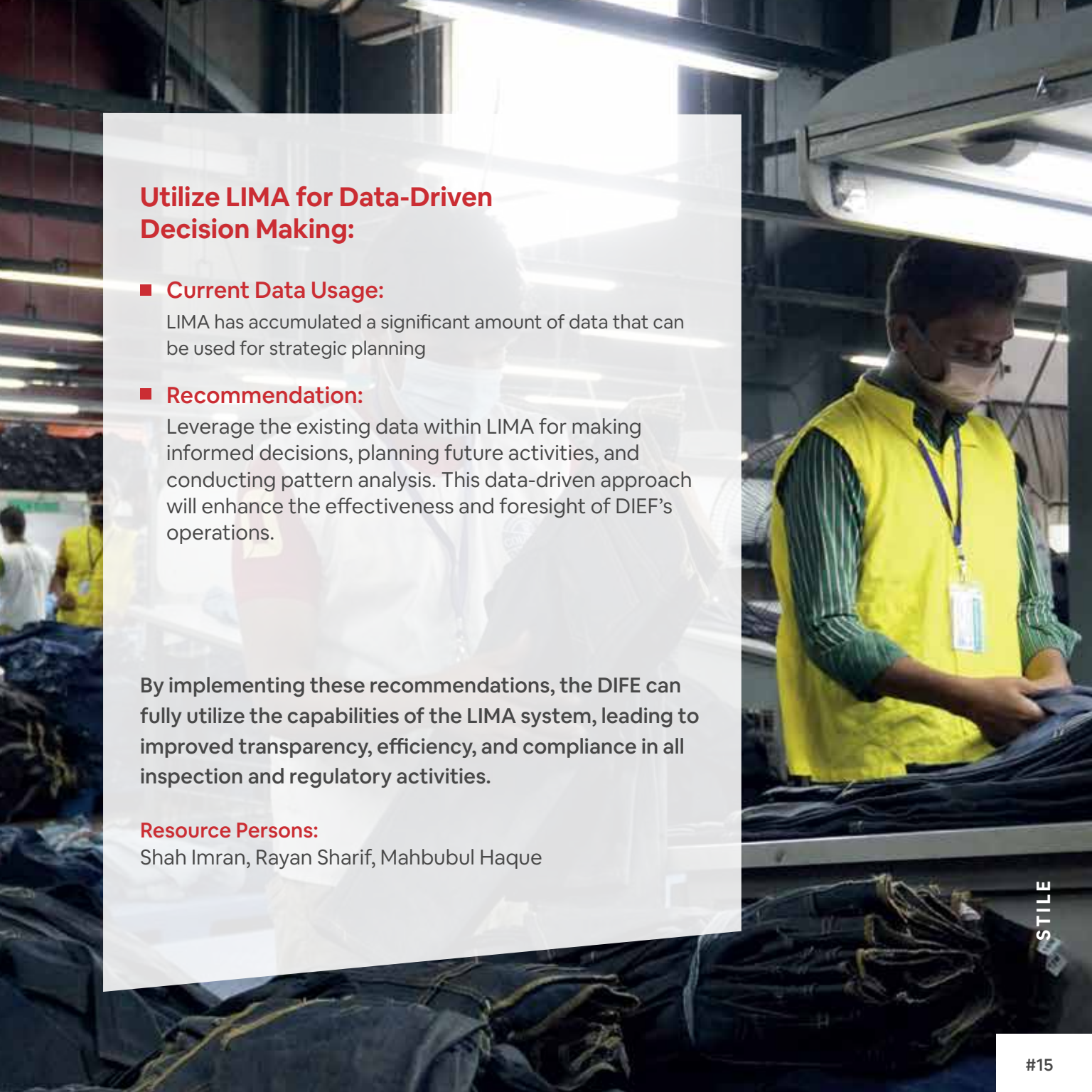
- **Potential Utilization:**
  Machine learning can be harnessed to analyze inspection patterns and incident reports.
- **Recommendation:**
  Implement machine learning algorithms within the LIMA system to extract deeper insights from inspection and incident data. This can help in identifying trends, predicting potential issues, and improving overall inspection strategies.

Mandate LIMA for Licensing and Registration

- **Current Process:**
  There are still manual processes in place for registration, renewal, and verification activities.
- **Recommendation:**
  Make the use of LIMA mandatory for all licensing and registration processes. This will significantly increase transparency, reduce errors, and streamline operations within the Directorate of Inspection of Factories and Establishments.

Ensure Compliance with SLCP, ILO BetterWorks, and Other Standards:

- **Current Compliance:**
  The LIMA system needs to align more closely with recognized compliance mechanisms.
- **Recommendation:**
  Update the LIMA system to be fully compliant with the Sustainable Labor Certification Program (SLCP), ILO BetterWorks, and other relevant standards. This will ensure that the inspection processes meet international compliance requirements and best practices.



Utilize LIMA for Data-Driven Decision Making:

- **Current Data Usage:**
  LIMA has accumulated a significant amount of data that can be used for strategic planning
- **Recommendation:**
  Leverage the existing data within LIMA for making informed decisions, planning future activities, and conducting pattern analysis. This data-driven approach will enhance the effectiveness and foresight of DIEF's operations.

By implementing these recommendations, the DIFE can fully utilize the capabilities of the LIMA system, leading to improved transparency, efficiency, and compliance in all inspection and regulatory activities.

Resource Persons:
Shah Imran, Rayan Sharif, Mahbubul Haque

Key Factors for Digitalization at DIFE

Topic	Impact	STILE supported
Digitalization of Services	Transformation of existing services into Digital services which are paperless, easy to access and do not require physical travel. Digitalization of services enhances service productivity, service quality and effectiveness.	Support to operationalize LIMA, from STILE more than 600 personnel trained including DIFE staff, ministry and garments factory manager and staff.
Data Interoperability	Capture data only once from citizens and reuse the data within DIFE. Through inter ministry collaboration ensure interoperability and data sharing between systems.	Integration of Dnothi/ ENothi, Echallan (iBAS) and Ekpay for data interoperability.
Data Security	Digital transformation, cybersecurity, and data privacy should given top priority to ensure the safe and secure application of technology in DIFE.	Application like LIMA is hosted in Bangladesh Computer Council Server for Data Security with standard cloud architecture.

Topic	Impact	STILE supported
Digital Inclusiveness	Use of digital platforms for integrating citizens in DIFE's decision making processes to promote citizen centric approach. Working closely with citizens and other stakeholders for the design digital services.	STILE's training initiatives ensure that all users, from newly recruited inspectors to senior officials, are proficient in using the application. This approach reduces barriers to technology adoption and fosters inclusivity.
Digital Skills	Empower DIFE officials with digital skills and capabilities to use technologies for digital service delivery. Foster digital readiness skills among all the officials of DIFE through systematic skills development initiatives.	Eight workshops conducted which included more than 300 DIFE inspector and staff.
ICT Cell	Establish a permanent ICT cell to promote digitalization among DIFE with adequate workforce and resources. Continuous and customized ability building programs on technology and service domains to ICT cell staff to support the digital ecosystem.	ICT cell is formed and they took over the LIMA regular operation in DIFE, also updating the software with support from GIZ and vendor assigned for DIFE.

Topic	Impact	STILE supported
Data Driven Decision Making	Coherent use of digital technology to promote data driven decision making culture for planning, policy formulation, monitoring and continuously improving of service quality.	LIMA is used for inspection weekly work plan, annual report and yearly inspection plan, now LIMA is highly involved in revenue collection and brining transparency to over all inspection related activities.
Privacy & Digital Security	Protecting people's data privacy and ensure digital security to the digital tools, systems and applications to preserve trust in government institutions and encourage more digital initiatives.	The LIMA software underwent thorough testing by the Bangladesh Computer Council, which provided a QA report and recommended necessary improvements. Following these recommendations, LIMA has been updated to ensure digital security and address vulnerabilities. Additionally, the database is securely hosted on BCC servers to prevent any misconduct and ensure robust security measures are in place.
Regulatory framework	Development of legal and regulatory framework to address digital opportunities and threats.	A comparison between, LIMA, SLCP and ILO BetterWorks checklist completed.
Global Collaboration	To encourage the transfer of knowledge and experiences strengthen international cooperation with governments and organizations.	The project places the results at international conferences and includes it as practical examples

The digitalization strategy of DIFE has considered four specific topics: digital capabilities, challenges, opportunities & threats from the experience of earlier and ongoing digital initiatives. Based on digital synergy analysis, DIFE can focus its strengths, improve areas of weaknesses, and prepare for threats and take advantage of new possibilities that digital technologies have created.

Challenges

Organizational Challenges:

- Organizational acceptability & readiness
- Lack of awareness
- Regulatory framework
- Legal Issues
- Risk estimation
- Integration with legacy systems

Technical challenges:

- Human Resource
- Scalability
- Cyber Security
- Privacy
- Support infrastructure
- Funding

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:
Bonn and Eschborn, Germany

Sustainability in the Textile and Leather Sector

GIZ Bangladesh
PO Box 6091, Gulshan 1
Dhaka 1212, Bangladesh
T +880 9 666 701 000
E giz-bangladesh@giz.de
I www.giz.de/en

As at
Dhaka 2024

Design
Fahud Khan, Dhaka

Photo Credit
GIZ BD/Noor Alam

Author:
Mohammad Rayan Sharif

Responsible:
Dr Michael Klode

On behalf of
German Federal Ministry for Economic Cooperation and Development (BMZ)