



PSW

PAKISTAN SINGLE WINDOW

Enhancing Regional Trade Facilitation
through National Single Window:

Pakistan's Experience

SESSION 2: LEVERAGING TECHNOLOGY FOR SEAMLESS CROSS-BORDER TRADE

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Organized by: CAREC Institute & PSW

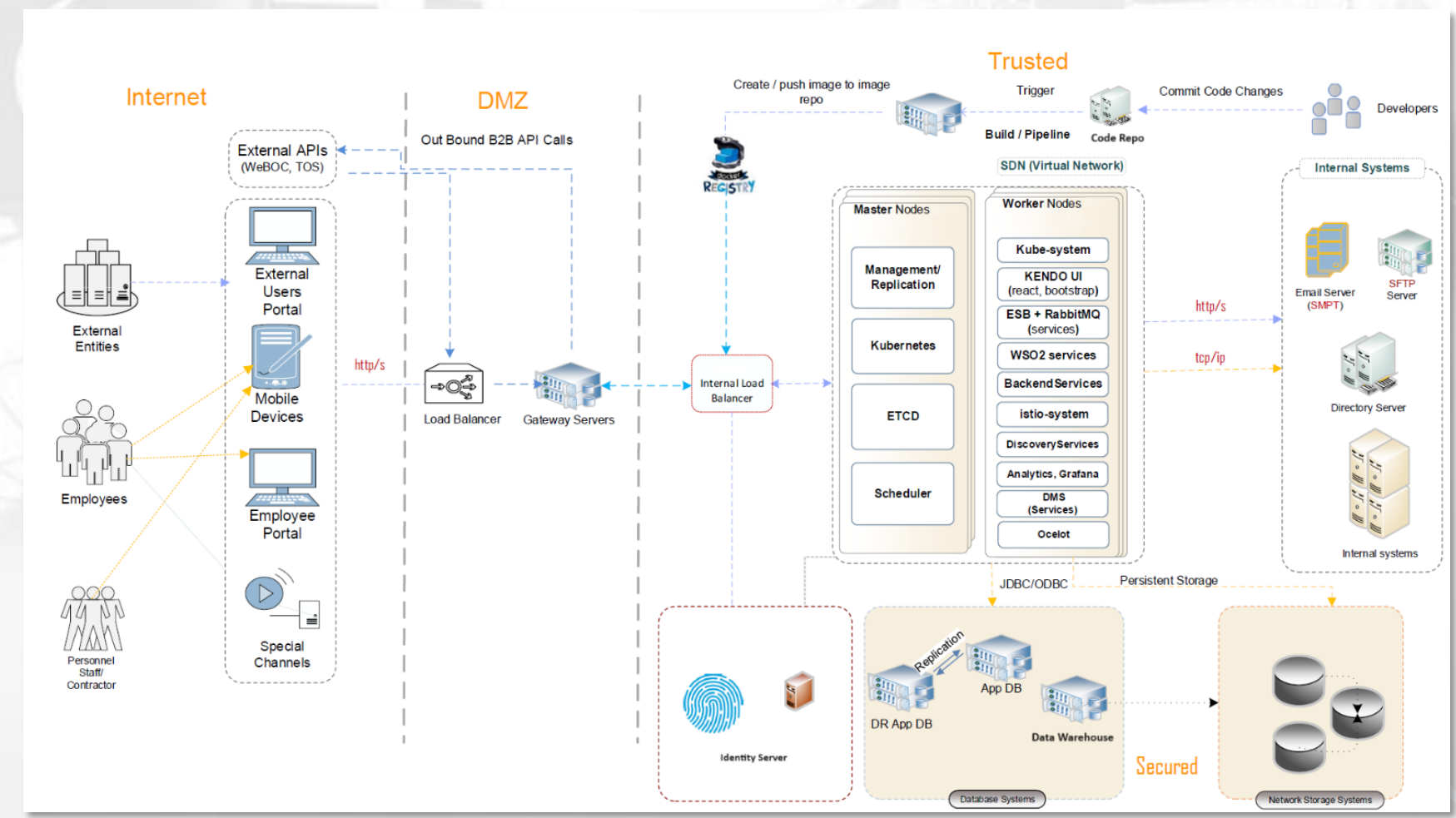
Embracing the Digital Transformation Journey

Pakistan Single Window aims to bring change in the way cross-border trade compliance related processes are conducted by the Other Government Agencies (OGAs).

- Collaborative and Consultative exercise
- Requirements are elicited and systems are designed with the aim to deliver value
- Using technology and innovative solutions for achieving effective compliance



 132 OGA's legal documents	 154 Import/Export Regulatory Measures	 25 Import sources trade statistics	 153 Application forms	 143 Procedures for regulatory measures
 27721 Unique Commodity Codes	 10 Top commodities trade statistics	 96000 Active tariff linkages	 25 Export destinations trade statistics	



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Challenges

Barriers to Entry

- Product registration, local partnerships, licensing, subscription & renewal
- Language and cultural barriers
- Discriminatory practices

Compliance & Regulations

- Import/Export/Transit regulations
- Safety Standards
- Product certifications

Complex Taxation and Duty Structures

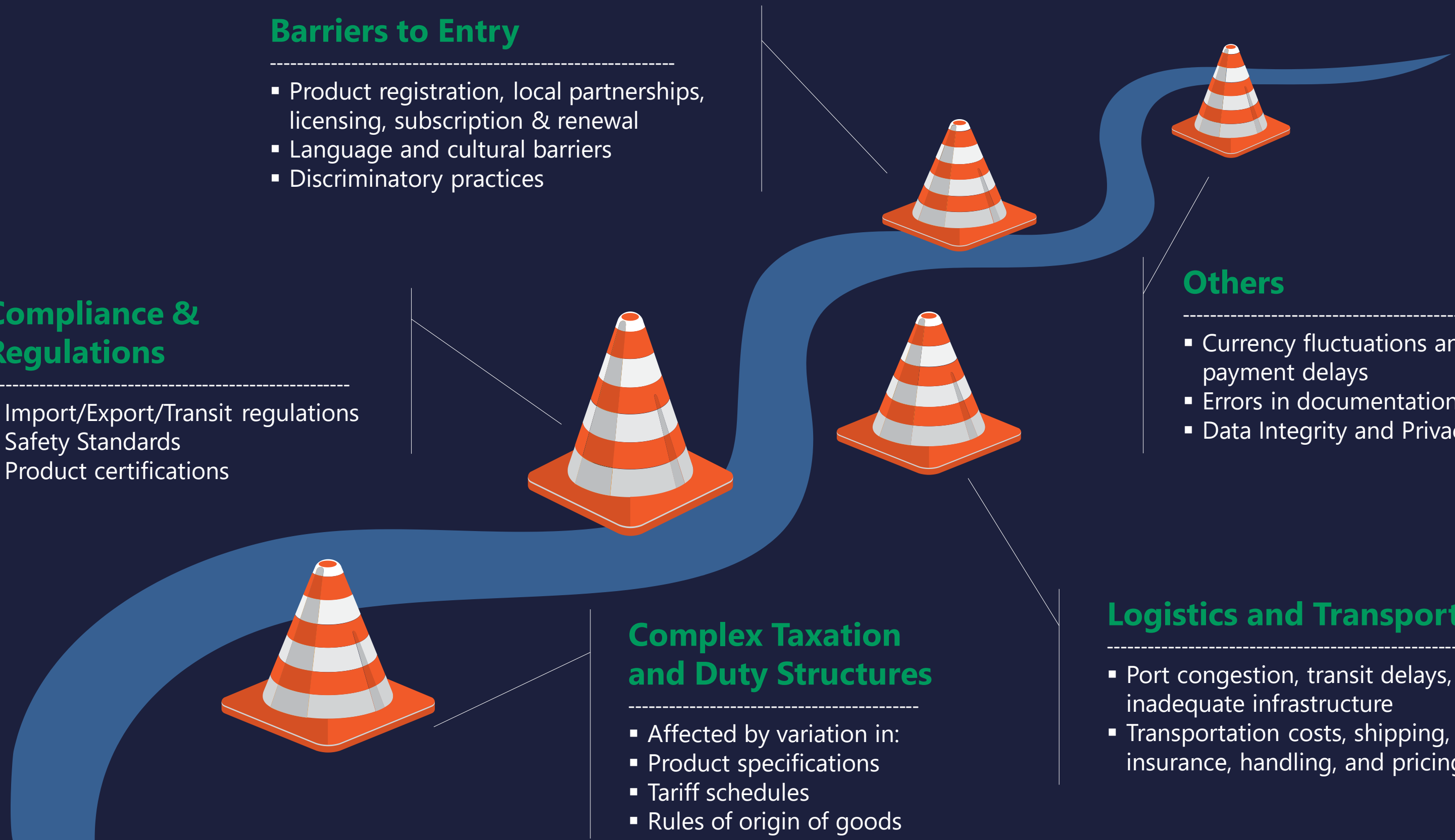
- Affected by variation in:
- Product specifications
- Tariff schedules
- Rules of origin of goods

Others

- Currency fluctuations and payment delays
- Errors in documentation
- Data Integrity and Privacy

Logistics and Transportation

- Port congestion, transit delays, or inadequate infrastructure
- Transportation costs, shipping, insurance, handling, and pricing



Role of Technology

- Electronic BLs
- Certificates of Origin
- Declarations
- SPS Certificates

Electronic Documentation



- Online submission of declarations, application requests and supporting documents

Automated Data Submission



- Digital platforms provide access to standardized coding systems and centralized information, making it easier to understand and comply with regulations

Harmonized Systems and Trade Facilitation Portals



- Standardized Formats and Protocols
- API Integration
- Data Quality
- Trusted & Secure Connections

International Interoperability



- Internet of Things (IoT) devices
- GPS technology
- Sensors
- QR Codes

Supply Chain Visibility



- Data Analytics
- Machine Learning
- Business Intelligence
- Data Sciences
- Artificial Intelligence

Predictive Analytics



- Blockchain technology provides a tamper-proof and transparent way to verify the authenticity of documents and ensure agreements are trackable & irreversible

Document Verification



- Digital marketplaces and e-commerce platforms provide businesses with global market access, reducing barriers to entry into international markets

E-commerce Platforms



- Advanced analytics tools process vast amounts of trade data to identify trends, risks, and opportunities, aiding in decision-making and strategy development

Big Data Analysis



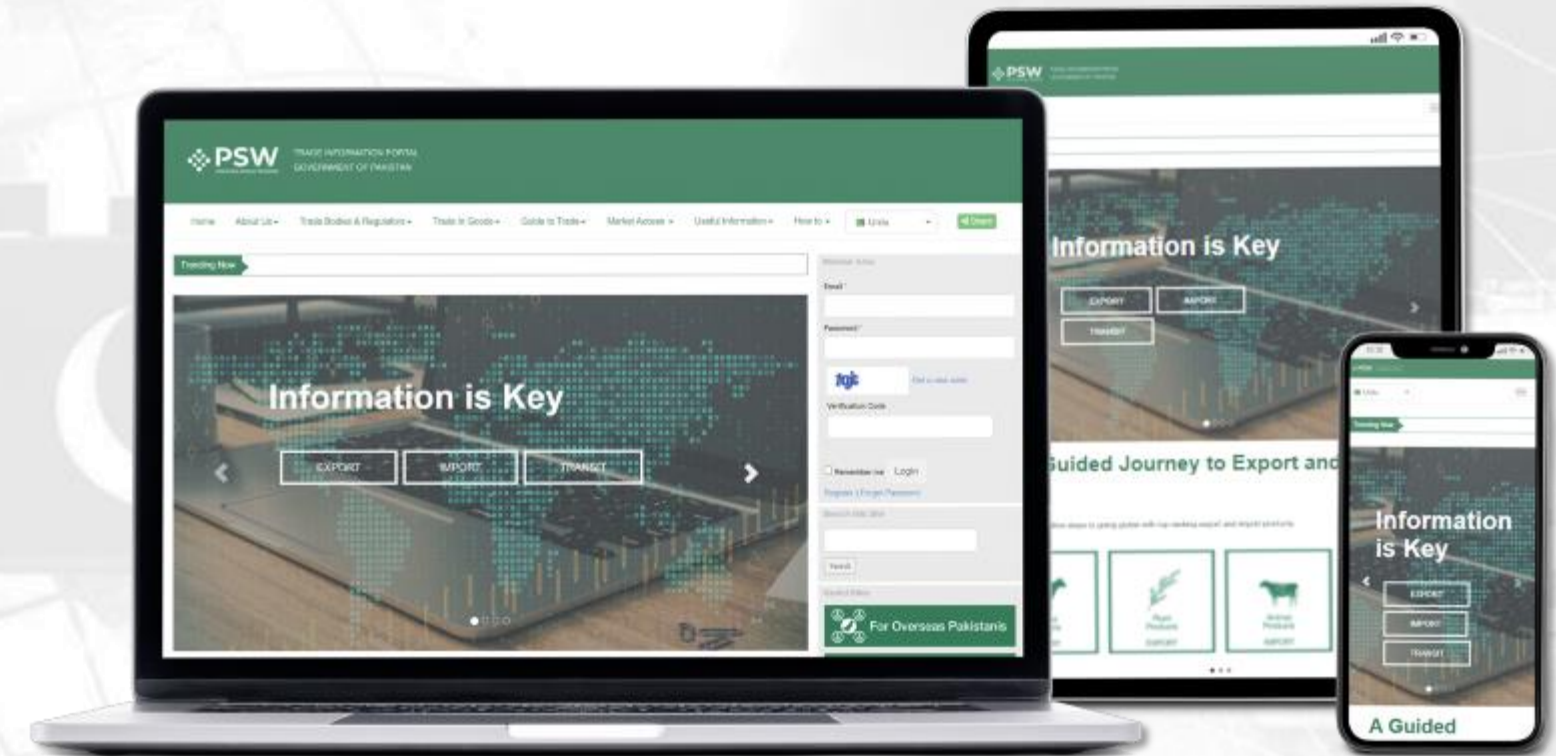
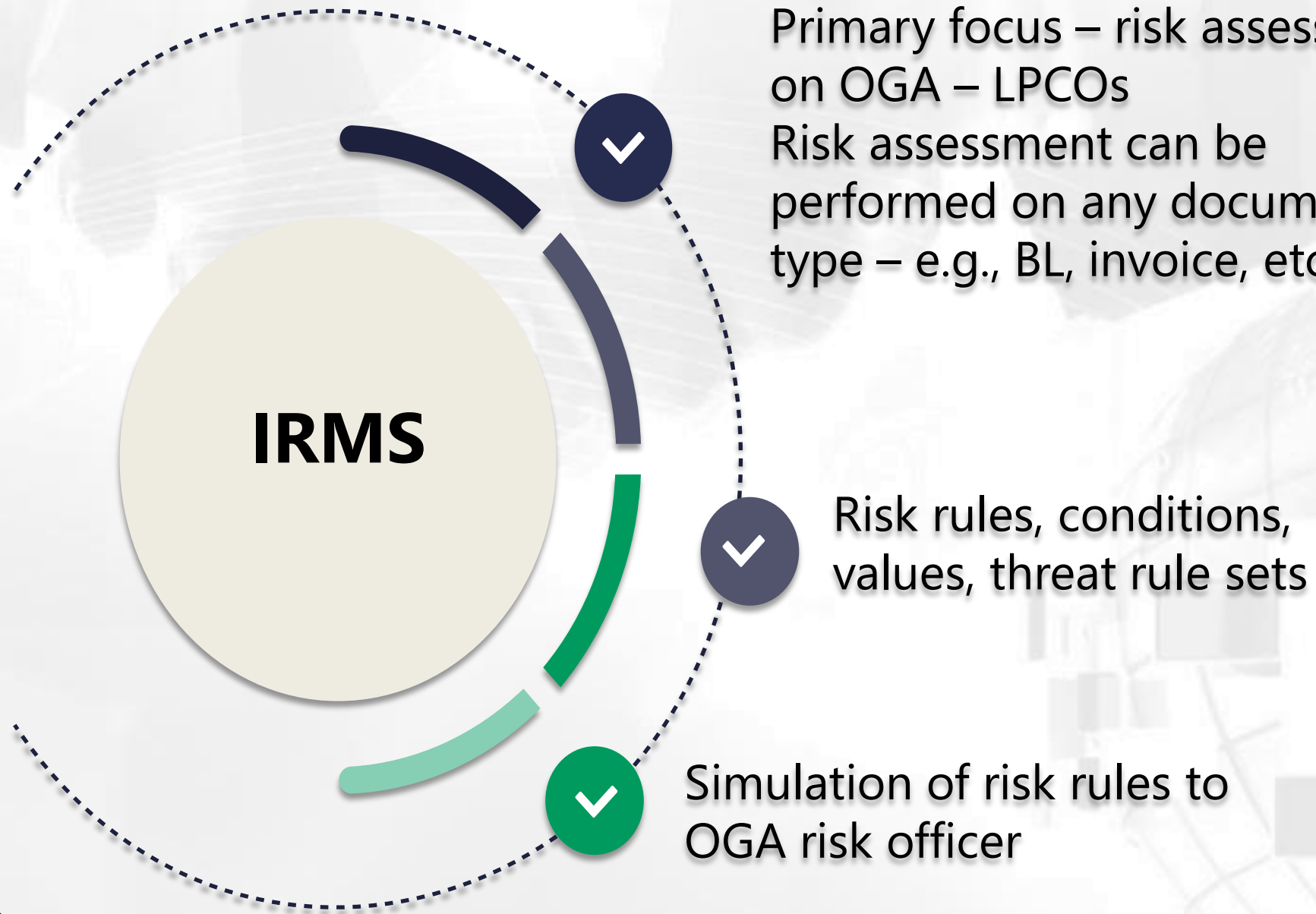
- Client Authentication
- API Subscription
- Product Bundling
- Rate Limits
- API Analytics
- Invoicing

API Monetization



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How PSW is leveraging technology



Tradeverse - The Trade Information Portal of Pakistan (TIPP) provides all the regulatory and procedural information to conduct international trade across Pakistan's borders.

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How PSW is leveraging technology



Bank Integration – Connected to 29 public and commercial banks for exchange of trader profile, trade account association, financial instrument details and settlement.



Electronic Data Interchange – MoUs with regional countries including CAS, China and Russia for sharing of information related to advance export declaration, certificates and statistics through SW integrations.



PSW is integrated with IPPC ePhyto HUB for exchange of SPS e-certificate. The system transforms the data elements from Phytosanitary Certificate issued by Pakistan NPPO, into XML messages based on the IPPC/ISPM 12 standard. These messages are sent to IPPC's ePhyto HUB via the SOAP based Web Services.



Bank and Insurance e-Guarantees – Paper based guarantees and federal/provincial stamps are being replaced with e-Guarantees. The entire process, including underwriting, claim management and settlement; is being digitalized through online application submission, review and approval on PSW platform via real-time integration with Authorized Dealers (Banks & Insurance Companies).



Pre-Shipment Inspection e-Documents: PSI companies arrange pre-shipment inspections of consignments overseas. PSW has developed REST APIs and exposed them over the web so PSI companies' Information Management systems can submit the consignments' data to PSW electronically as soon as it is available.



Lab Management System electronically connects Customs and OGAs to their designated labs for testing of samples for determination of HS code and other purposes. Customs and OGAs can initiate a testing request on the desired consignment which is automatically routed to the lab. The test report is electronically returned from the lab in a structured and standardized format.

How PSW is leveraging technology



Port Community System (PCS) enables intelligent and secure exchange of information between public and private stakeholders to improve the competitive position of the sea, air and land port communities. PCS will efficiently manage and optimize port and logistics processes and effectively streamline transportation and logistics chains through harmonized interconnections with Customs and OGA systems.

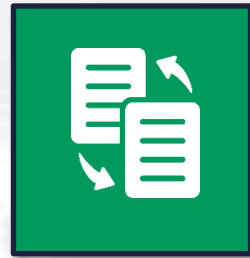


BI and Analytics provide descriptive and prescriptive analytics to PSW. This has reduced the cost and time of doing cross-border trade, resulting in enhanced revenue. To achieve this, a state-of-the-art enterprise data warehouse was created for business data and models were developed to analyze the impact of changing regulations.

TRADE+LENS

PSW successfully integrated with the IBM/Maersk-owned TradeLens system in 2022. The TradeLens Platform was accessible via an open API. Powered by Hyperledger Fabric blockchain technology and IBM Cloud, the platform enables the industry to share information and collaborate securely.

Benefits Achieved



Ability to exchange advance information between the NSWs through messages using predetermined formats



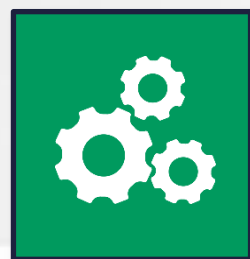
Improved risk management and enhanced supply chain visibility



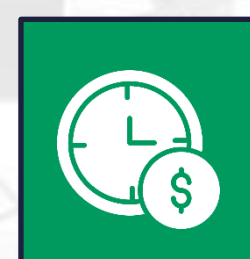
Accurate and faster access to data for timely decision making across all levels



Advanced information for detection of mistaken or fraudulent information



Minimize human intervention through automated processing of received messages and provide monitoring and better controls



Cost and time saving for traders and clearing agents at border stations, ports and export zones

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Thank you