The Digital Transformation of the Organization

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Agenda

• Purpose
  o To explain how digital technologies have transformed and are continuing to transform
    ▪ the working methods and operations of the Organization,
    ▪ the delivery of its services, and
    ▪ its work program

• Four parts
  1. Key messages
  2. Our Internal operations
  3. Externally facing services
  4. Member-State discussions and negotiations on the development of the international IP framework
Requires Significant and Continuous Investment

- 20.7% (est.) of the total expenditure of the Organization in 2018 was on ICT

- 12.8% of the workforce is engaged as technical staff on ICT
  - Additionally, 42.2% of contractual services (of total of 90 million CHF) relate to ICT

- In general
  - Recurrent expenses on existing ICT systems funded through Program and Budget
  - Major investments in improvements or new systems funded through Capital Master Plan, which is, in turn, funded out of surpluses
Nine Key Messages

1. ICT has transformed the whole of the internal operations of the Organization and the whole method of service delivery to stakeholders, enabling important new functionalities

2. ICT enables the global nature of the Organization

3. Improves productivity, efficiency, transparency and the performance of the oversight function by Member States and oversight bodies

4. Maintains the competitiveness, attractiveness and security of the Organization services, which account for 96% of its revenue

5. The only way to manage growth and high volumes and to contain staff costs
Nine Key Messages

6. The data generated through the various systems can be used to create unique and valuable knowledge products
   • eg, WIPO Technology Trends Report on AI (January 2019)

7. ICT systems and tools are an integral part of development cooperation and capacity building and enhance the sharing of knowledge and technologies

8. Enable global partnerships

9. Present significant challenges for recruitment and human resource management
Internal Organization of IT Services

• Federated system of ICT organization
  o Central ICT Department providing backbone, common services such as network, common enterprise architecture, data storage and standards
  o Separate IT units associated with each of the major business units (PCT, Madrid, the Hague, Arbitration and Mediation Center, ERP, language services)
  o Global Infrastructure Sector providing databases, IT platforms for IP Offices, AI applications and ICT-assisted business solutions for developing, least developed and transition countries
  o Global Infrastructure Sector includes Advanced Technologies Application Center (ATAC)
  o Information Security Division

• Global Office architecture links external offices seamlessly with Headquarters

• IT Board oversees policy and projects
The Performance Cycle

Internal Operations
Program Performance & Delivery enabled by Enterprise Solutions

Planning

Performance Assessment & Reporting

Implementation & Monitoring

The Performance Cycle

EPM
ERM
AIIMS FIN
AIIMS HR
ORACLE/PeopleSoft

Performance and Budget data
Risk data
Financial Procurement and Travel data
Human Resource data

Acuity Stream
WIPO DIGITAL TRANSFORMATION: Common Payment Platform

- Automatic Notifications
- Authorization
- Org. hierarchy
- Role based access

Global IP Portal

- Filing Systems
- PCT
- Madrid
- Hague

CUSTOMERS

Automatic Reminders

Finance

Real-time integration

XML Payments

Deposits
Continuous Improvement of WIPO’s Information Security Posture to combat evolving threats

- Engaging Security Awareness Program
- Mandatory Security Training
- Simulated Phishing Campaigns
- Security Awareness Week
- Targeted Technical Training

- ISO27001 certified for 6 years
- Up-to-date Security Policies
- Enforced and monitored for compliance
- Security Classification and Handling Program

- 24/7 Information Security Operations Center
- Continual monitoring, detection and response to cyber threats

- Information Risk Management Program
- Risks identified, managed and reported
- Third Party risk management

- Enabling secure use of emerging technologies
- AI, Cloud Computing, Mobility, Internet of Things

- Proactive Vulnerability Management Program
- Continuous scanning and Remediation
- Independent Penetration Testing
Externally Facing Systems
Global IP Systems

• PCT, Madrid, Hague
  o Objective is to develop complete electronic environments for
    ▪ all internal processing
    ▪ interactions with IP Offices and users

• PCT environment complete
  o 97% e-filing
  o 97% electronic document exchange with Offices
  o 40 IP Offices using system for functions as Receiving Office

• Madrid
  o elements of electronic environment
  o design of new platform 2019
  o development of new platform 2019-2021
Externally Facing Systems
Global IP Systems

- Hague
  - New platform for internal processing deployed December 2018
  - Development and deployment of platform to encompass all interactions with IP Offices and users 2019-2020

- Arbitration and Mediation Center
  - 43,000+ Internet domain name disputes processed online
  - IT support system for conduct of arbitrations and mediations

- WIPO IP Portal
  - Single entry point for applications and management of portfolios for users of WIPO Global Systems
  - Uniform customer experience
  - Uniform financial management
  - Single identity management
Global Databases

- **Patentscope**
  - 73 million documents (PCT, ARIP, EAPO, EPO and 51 national patent collections)
  - multilingual search in 14 languages
  - WIPO Translate: neural machine translation using artificial intelligence
  - the most visited WIPO web site with an average of 30,000 visits (23,000 unique visitors) per day

- **Global Brands Database**
  - 37 million records (Madrid, Lisbon, emblems, EUIPO and 38 national TM collections) with a
  - pioneer image-search tool

- **Global Designs Database**
  - 10 million records (Hague, 16 national designs collections)

- **WIPO Lex**
  - 14,000 national IP laws and regulations and 800 treaties
  - More than 4.4 million users in 2018, an increase of 114% from 2016
Advanced Technologies Application Center ATAC

- **Objective**
  - Explore the use of the latest technologies for IP Administration

- **Initial Applications**
  - WIPO Translate (machine translation)
  - Trademark image similarity search (2019)
  - Speech to text for meetings (2019)
WIPO Translate usage (PATENTSCOPE)

1.5 - 2 Million words translated every day

Most uses are from Chinese (zh) to English
Organizations benefiting from WIPO Translate services

- 10+ UN Agencies
ICT in Support of Development

- **Industrial Property Administration System (IPAS)**
  - WIPO free of charge software, supplemented by free services of advice on digitization, data capture, quality improvement, workflow optimization
  - In use in 81 IP Offices in all regions

- **WIPO Connect**
  - Supports the business operations of Collective Management Organizations (CMOs) in the Digital marketplace
  - Deployed in 7 pilot CMOs (4 in Africa, 2 in Asia, 1 in Caribbean) at the end of 2018

- **Technology and Innovation Support Centers (TISCs)**
  - Over 750 in 78 national networks in developing and least-developed countries

- **Public-Private Partnerships on Access to Information and Knowledge**
  - **ARDI**
    - part of UN partnership “Research4Life” with free/affordable access to 28,000 science and technology books/journals
    - 1,250 institutions actively using ARDI
  - **ASPI** – free/affordable access to seven commercial patent databases
    - 120 registered institutions
WIPO Academy’s distance learning courses, 2014-2018

DEMAND FOR GENERAL AND ADVANCED IP KNOWLEDGE

155,550 participants from 191 Member States followed the DL courses in 2017 and 2018
Major Projects Underway or Planned

• Internal Operations
  o Cloud Migration
  o Enterprise Content Management: Records, Archives, Documents, Collaboration
  o Treasury Management

• Externally Facing Services
  o Launch of WIPO IP Portal (June 2019) for single sign-on and enhanced digital payment for PCT, Madrid and the Hague
  o Completion of the Hague Platform
  o New Madrid Platform
  o Development and deployment of the Integrated Conference Services Platform
  o PCT Resilient and Secure Platform project
  o AI projects
  o WIPO Digital Time-Stamp Service
Global Partnerships

- SDG emphasis on “a revitalized Global Partnership … bringing together Governments, the private sector, civil society, the United Nations system and other actors and mobilizing all available resources”

- ICT has enabled global partnerships

- WIPO partnerships: WIPO Re:Search, Accessible Books Consortium, WIPO Green,

- Example: Accessible Books Consortium (ABC):
  - International (Accessible Format) Book Exchange
    - 47 Authorized Entities
    - Catalogue of 424,000 works in 76 languages
  - Capacity Building
    - Capacity building projects in Argentina, Bangladesh, Botswana, Burkina Faso, India, Indonesia, Mexico, Mongolia, Nepal, Nigeria, Sri Lanka, the United Arab Emirates, Uruguay and Vietnam
    - 6,700 educational titles produced in accessible formats
Member State Discussions
The Impact of ICT on IP

• Treaties
  o 1996 “Internet Treaties” (WCT, WPPT)
  o Beijing Treaty on Audiovisual Performances
  o Discussions on possible Broadcasting Treaty

• Discussions
  o Use of AI in IP Administration (May 2018)
  o Conversation on IP and AI (September 2019)
  o SCCR discussions on impact of digital technologies on creative industries
  o CDIP Meeting on WIPO program activities in the digital era (May, 2019)