



# Digital Development: Opportunities & Challenges

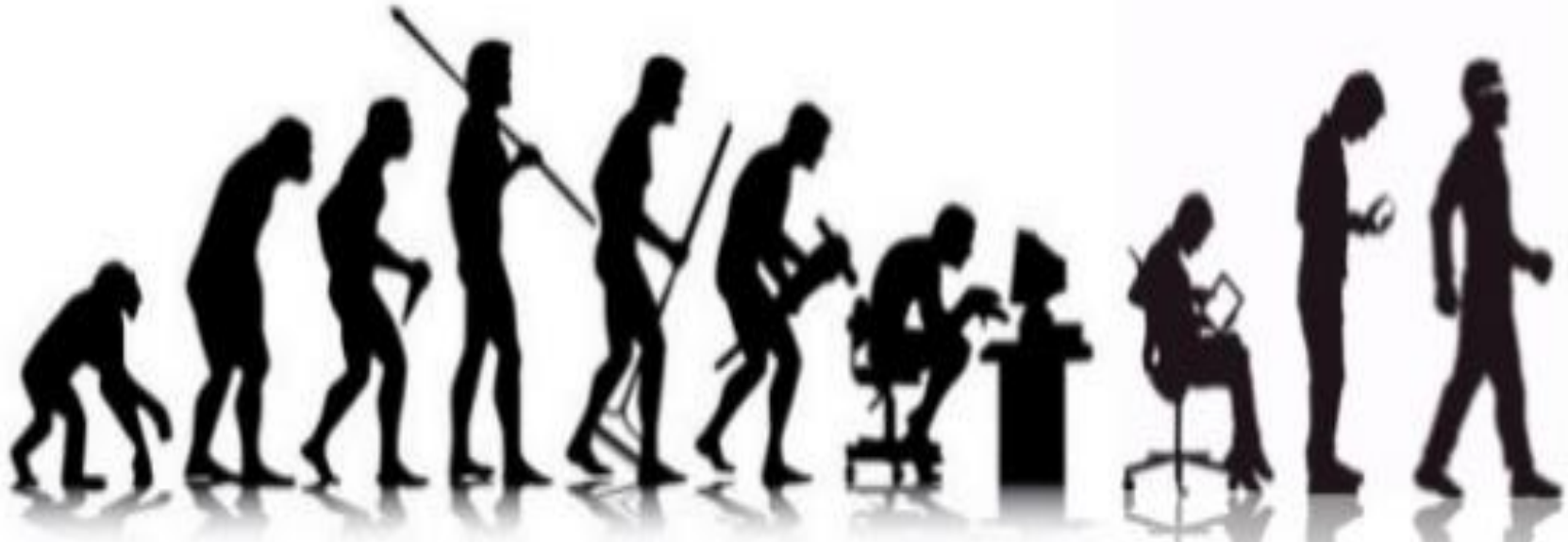
## Perspectives from Nepal

Madhu Kumar Marasini  
Joint Secretary

Ministry of Industry, Commerce and Supplies  
Nepal

# Outline

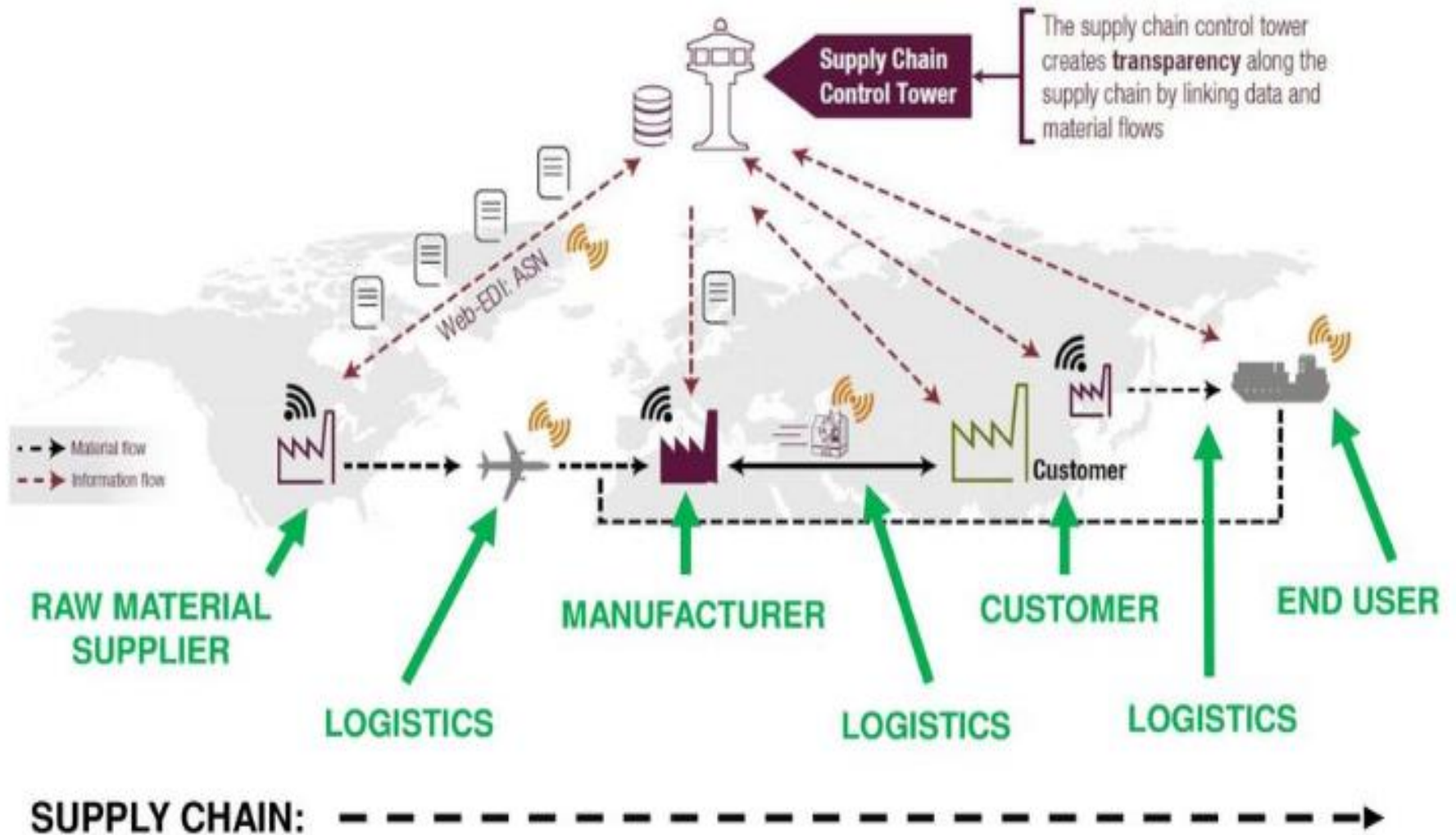
- Digital Development
- Digital Nepal Framework
- Opportunities and Challenges of DD
- eTrade Readiness Assessment and E-commerce Strategy, Nepal
- E-commerce strategy implementation
- Conclusion



# From Rural Tools to Wearable Technologies

4<sup>th</sup> G Industrial revolution, AI, Robots, internet of things, blockchain, cloud computing – the instruments of digital development

# Industry 4.0 Supply Chain



# Digital Development, Nepal





# Digital Development, Nepal

**Where food meets technology  
at your table!**

Welcome to Naulo

Naulo is the first digitized robotics restaurant in Nepal where you can order food right from your table embedded with touch screens and wait for the robots built in Nepal to serve you. Naulo restaurant is suffused with the best of technology. We strive to provide you novel soothing experiences.



# 2018 DIGITAL NEPAL FRAMEWORK

## Unlocking Nepal's Growth Potential



Government of Nepal  
Ministry of Communication  
and Information Technology

FROST & SULLIVAN

# 2018 Digital Nepal Framework

- Contribute to **economic growth**
- Find **innovative ways** to solve major challenges facing society in a shorter period with fewer resources
- Identify **opportunities** for Nepal to participate in the global economy
- Demonstrated success in other similar developing markets
- **Ability to execute in the local context**



# The Digital Nepal Framework

- [?] One Nation
- [?] Eight Domains
- [?] 80 Digital Initiatives

### Digital Nepal Framework: 1 – 8 – 80

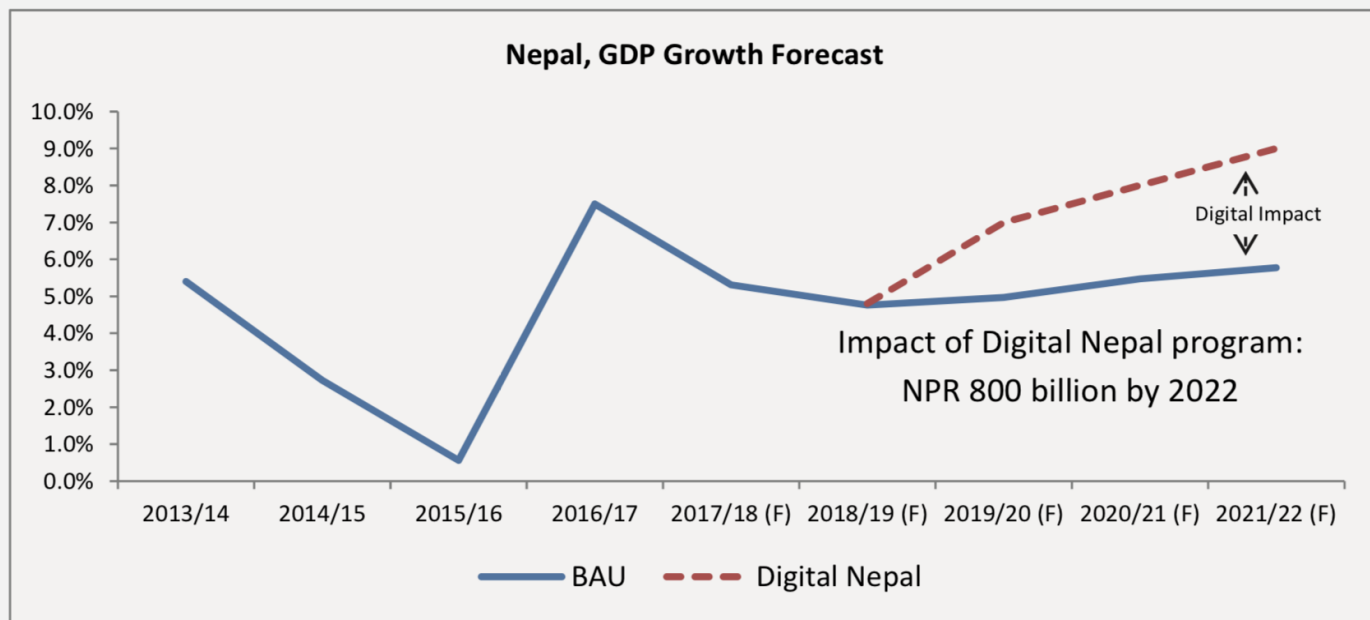
Under the Digital Nepal framework, eight sectors – agriculture, health, education, urban infrastructure, energy, tourism, finance, and connectivity – have been identified based on close engagement with stakeholders. The framework aims to guide Nepal on its journey toward becoming a Digital State.



# Growth and development potentials

## 2018 DIGITAL NEPAL FRAMEWORK

**Digital Nepal program will help Nepal in unlocking its growth potential by leveraging disruptive technologies to enable social-economic growth. The program will help Nepal in embarking on its journey to an era of high economic growth, enabling it to become developing country by 2022 and mid-income country by 2030.**



**Agriculture:** Digital Nepal initiatives in the agriculture sector encompass technological solutions aimed at maximizing yield and minimizing agricultural input. The use of Agritech solutions is anticipated to boost farm productivity and sustainability to meet growing food consumption, and in turn, increase farmers' incomes.

**Health:** Digital Nepal initiatives in healthcare aim to assist the country in meeting its objectives of providing quality basic healthcare to all citizens. The program intends to leverage digital technologies (e.g., videoconferencing, e-learning, and mobile health) to address issues relating to access, affordability, and quality of healthcare for the Nepali people.

**Education:** Digital Nepal initiatives in education aim to prepare human capital to capture new economic opportunities through the creation of an enhanced teaching and learning environment. This entails the use of digital technologies to support teaching, enrich the learning experience, and improve educational outcomes.

**Urban Infrastructure:** Digital Nepal initiatives in urban infrastructure aim to leverage disruptive technologies to improve the quality of life in Nepal's urban cities by improving essential services, such as water management, solid waste management, public transport, and traffic management.

# Collaboration of GoN and UNCTAD on E-Commerce in Nepal

- E-trade readiness assessment was carried out in August 2017.
- Input from more than 60 institutions of Nepal, private sector, government agencies, university professor, bankers, Payment service providers, expert team

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD



## Nepal Rapid eTrade Readiness Assessment



UNITED NATIONS



# METHODOLOGY

Figure 1. Survey methodology

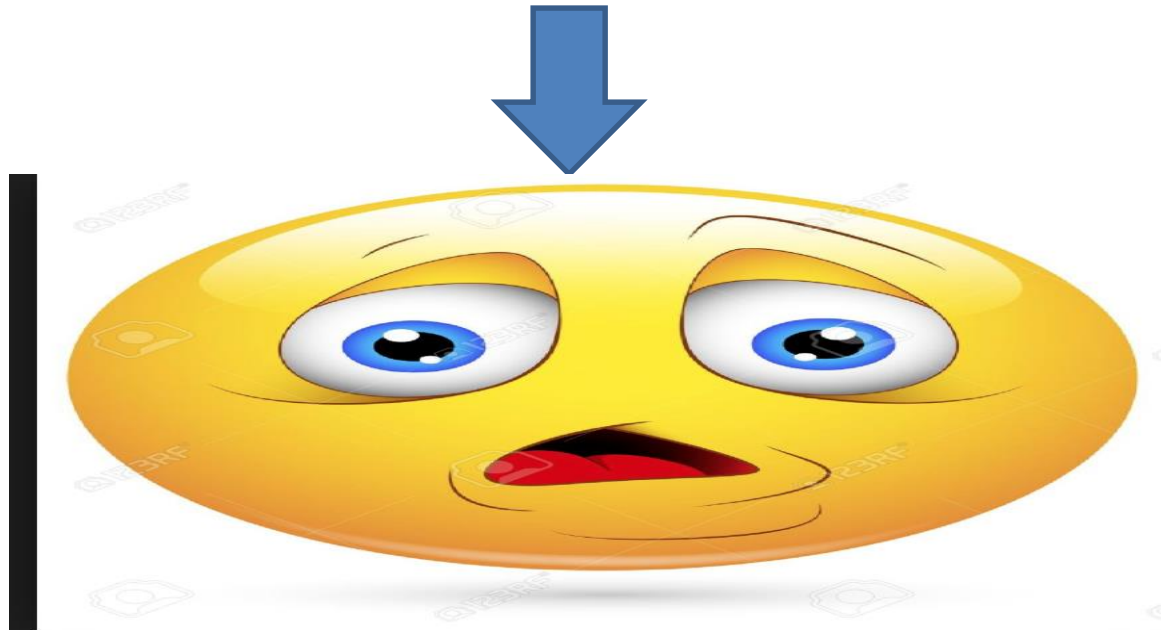


# The recommended 7 policy areas:

- E-commerce readiness assessment and strategy formulation
- ICT infrastructure and services
- Trade logistics and trade facilitation
- Payment solutions
- Legal and regulatory frameworks
- E-commerce skills development
- Access to financing

# E-commerce in Nepal

- E-commerce industry at a nascent stage and represents an underexplored market.
- Uncertainty surrounding the development and adoption of emerging technologies



# The conditions for digital readiness Nepal

- Mobile penetration exceeding 130%
- Internet penetration around 62%.
- There was an addition of 2.25 million new Internet users in 2017 alone, translating into approximately 250 new Internet users every hour
-

# Issues of e-commerce development as identified in eTrade Readiness Assessment

- A **lack of** adequate logistics and transportation **infrastructure**
- Volumes low for logistics players.
- **Cash-On-Delivery**- around 85 per cent of e-commerce users using COD.
- Digital payment gateways such as eSewa, IMEPay serving only about 10 percent of e-commerce transactions.



# Issues as identified in eTrade Readiness Assessment

- Difficulties in cross-border transfer
- Capital account restriction: Cannot use payment cards to purchase goods from international e-commerce platforms.
- Legal restriction on FDI in retail trade
- Quality, security, privacy, data protection issue
- MSMEs marketing and export facilities
- *Cultural, behavioral aspects !*

# Hope & opportunities

- E-commerce **could become a key contributor to economic growth and foreign trade.**
- The enablers:
  - Growing ICT infrastructure and innovation.
  - The steady rise of Internet use in Nepal has improved accessibility of e-commerce for the population.
  - **Trickle down effect from neighboring India and China**
  - Potential for job creation, both in the urban and rural areas

# E-Commerce Strategy (Draft)

- Vision: Building technology friendly economy through e-commerce and boost trade
- Mission: Promote & facilitate internal and external trade through development and capacity enhancement of IT
- Objectives:
  - To ensure smooth availability of quality products, competitively by reducing the cost and time of trade through E-Commerce
  - To link MSMEs in global value chain through E-commerce
  - To promote export of goods and services through E-Commerce

# Six Strategies

- Build **policy and institutional framework** for development & promotion of E-commerce
- Develop & strengthen **trade logistics and trade facilitation** mechanism
- Ensure financial access and strengthen **electronic payment and make it trustworthy**
- Develop and strengthen **services and infrastructures of ICT & data security**
- Public **awareness, skill and capacity development**, and promote private sector
- Develop and expand Backward and Forward linkages of goods and services & **link Nepali goods and services in global value chain**

# Implementation plan of action

| Action plan   | Activities   | Existing condition  | Expected result                                      | Responsible Agency                                      | Supportive Agency  | Time   |
|---|--|---|--|---|--|--------|
| Strategy 1. Build legal and institutional framework to promote e-commerce |  |   |  |   |  |        |
| Legal provisions in place to regulate the e-commerce                      | Allow registration, website development, refund/return and quality | No unified law in e-commerce regulation consumer protection payment | E-comrc. law in place, consumer right protected, etc | Commerce, Supplies, and Consumer right protection dept, | Ministry of Industry, Commerce and Supplies, Central Bank of Nepal | 1 year |
|   |  |   |  |   |  |        |



# Implementation plan of action

| Action plan   | Activities   | Existing condition  | Expected result  | Responsible Agency      | Supportive Agency                                    | Time                   |
|---|--|---|--|-------------------------|--|------------------------|
| Strategy 2. Building ICT Infrastructure & data security |  |   |  |                         |  |                        |
| Accessibility of general public in affordable broadband | Capacity enhancement of service providers, service expansion and quality improvement | Lacked access in ICT facilities, Not universal provision of internet services , high data charges | Availability of affordable & secure ICT infrastructure, Minimized rural-urban digital divide ! | Nepal Telecom Authority | Ministry of Information and Communication Technology | 2 years and continuous |

# Inter-agency Coordination, facilitation and supervision committee

- The committee be headed by the Secretary, Ministry of Commerce and represented by members from ministry of ICT, Finance, Central Bank, FNCCI, Computer association .



# Potential risk and instruments of minimizing risk

| Potential Risk  | Risk Minimizing instruments  |
|---|--|
| Lacked priority due to existing priorities                                  | Follow up from the Prime Minister's Office                         |
| Lagged readiness and involvement of all stakeholders                        | Implementation based on the Gantt Chart                            |
| Involvement of multiple agencies may hamper the proper implementation       | The Facilitation Committee to supervise                            |
| Cyber security and privacy issue  | Creating awareness, full implementation of ICT Act                 |
| International companies, supplying in scale may capture whole Nepali market | Executing the safeguards and anti-dumping act within WTO Framework |
| Foreign currency misuse   | Controlling through the banking system                             |

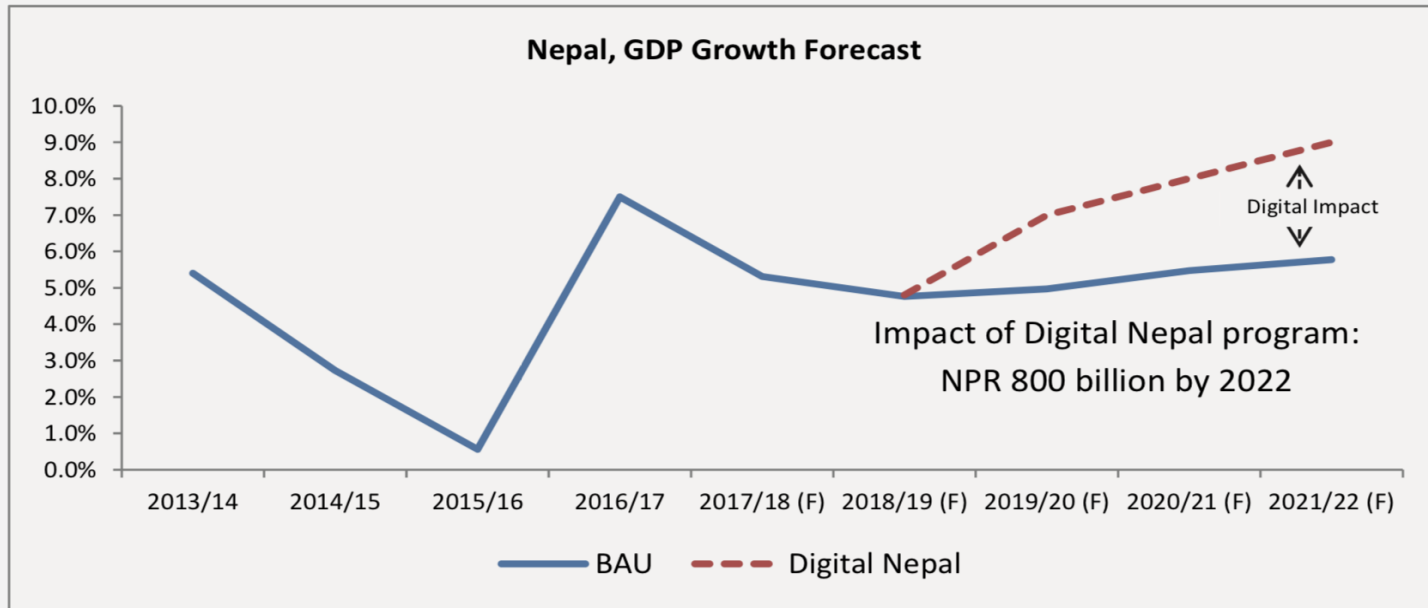
# Progress review, monitoring & supervision

- All implementing agencies to have e-commerce **implementation milestones and results framework**
- Facilitation committee chaired by Secretary Commerce to monitor the activities
- **Quarterly review of the progress at the Prime Minister's Office**
- Mid-term review of the e-commerce strategy within 3 years.

# Conclusion

## 2018 DIGITAL NEPAL FRAMEWORK

**Digital Nepal program will help Nepal in unlocking its growth potential by leveraging disruptive technologies to enable social-economic growth. The program will help Nepal in embarking on its journey to an era of high economic growth, enabling it to become developing country by 2022 and mid-income country by 2030.**





**THANK YOU**