Course Name: O Level(B4-Ist sem.)

Subject: ITT&NB

Topic: Digital Financial Tools

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And OTP

Digital Financial Tools

Now a days, everything is digitized. Digitized means we can access or get every service in digital format through mobile phones, computers, tablets, etc. The invention of computers and smartphones has created a huge impact on financial services. Today using computers and mobile phones, a person can access his/her bank account, verify account details, transfer funds, deposit cash, renew deposit, pay bills, book tickets, etc. Also, the invention of ATMs reduced the time taken to withdraw money from banks.

Digital services help to save time by providing services in a single touch. Customer wants to know where they are, and what's happening with their property. They want immediate access to information at any time. The development of digital financial tools which on one hand represents value that is of use to us.

Key components of any Digital Financial Service:

1. Digital transactional platform

It enables a customer to use a device to make or receive payments and transfer and to store values electronically with a bank or any such non bank institute which permitted to store electronic values. The important thing is that there is no contribution of cash money in it.

2. Retail Agent:

Retail agents use a digital service connected to communications infrastructure to transmit and receive transaction details. It enables customers to convert cash in to electronically stored value and to transform stored value back to cash. Their main task is to manage the promotion and dissemination of digital service to the customer.

3. Devices:

The customer's device can be digital like mobile phones that is mean of transmitting data and information or an instrument like payment card machines that connect to a digital device like POS terminal.

Objective of digital financial tools

The main objective of digital financial service is to delivering financial services through technological innovations like mobile phones. Digital finance also has an important role to play for small business. It not only provides them with access to financing but also to electronic payment system, secure financial products and a chance to build a financial history. It can be a catalyst for the provision and use of a diverse set of other financial services including credit, insurance, savings and financial education.

OTP(One time password)

A one-time password (OTP) is an automatically generated numeric or alphanumeric string of characters that authenticates the user for a single transaction or login session. A one-time password (OTP), also known as one-time pin or dynamic password.

An OTP is more secure than a static password, especially a user-created password, which can be weak and/or reused across multiple accounts. OTPs may replace authentication login information or may be used in addition to it in order to add another layer of security.

How to get a one-time password

When an unauthenticated user attempts to access a system or perform a transaction on a device, an authentication manager on the network server generates a number or shared secret, using one-time password algorithms. The same number and algorithm are used by the security token on the smart card or device to match and validate the one-time password and user.

Benefits of a one-time password

- The one-time password avoids common pitfalls that IT administrators and security managers face with password security. They do not have to worry about composition rules, known-bad and weak passwords, sharing of credentials or reuse of the same password on multiple accounts and systems.
- Another advantage of one-time passwords is that they become invalid in minutes,
 which prevents attackers from obtaining the secret codes and reusing them.

Exercise:

- 1. Define Digital financial tools and its main components.
- 2. Write shorts notes on OTP.