What is OTP/TOTP?

When we sign up for banking services, we usually submit our emails or phone numbers to the bank service provider.

If we want to make a payment towards any recipient, we usually receive a PIN or number so that you can type in into a box for extra verification purposes. The PIN or the number that sent to our emails/phone numbers is a form of OTP/TOTP.

Pros (Advantage)

1. Users can just type the PIN or number into the box as it's quite convenient in doing so.
2. If users lost their devices, they can switch another phone number or email so that the same mechanism works again.
3. Users don't need to mess with the generation of the PIN/number as it has been properly configured on service provider side.

Cons (Disadvantage)

1. Phone number and email address are considered as private information to users. It's uncertain whether banks or any of the other platforms able to protect them well enough. It's a 50%-50% ratio because even Facebook messes this up (Recent Facebook data leakage). For more information, try to search if your emails or phone numbers (international format) have been leaked here.
[https://haveibeenpwned.com/]

If the credentials were leaked, it's possible that users might experience social engineering attacks though it's another story regardless if it's a successful attack or failed attack.

2. Unlike normal passwords which we deal with hashing, the PIN or the number is both visible to the server and the client's device. If the server or the client's device was hacked, this PIN or number will be rendered as useless.