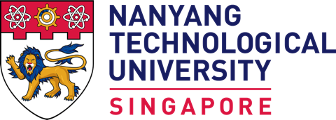
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**BC3402**

**Financial Service Process and Analytics**

AY21/22

**Seminar Group:** S01

**Name(Matric):**

NG CHI HUI (U1922243C)

After the GameStop Saga in 2021, there were calls to speed up clearing and settlement of trades, perhaps up to real-time settlement (T+0). Real-time settlement (T+0) will require all trades to be settled at the point of execution, which is even more speedy than the T+1 settlement that regulators have advocated but not achieved in the past decade.

1. From the perspective of post-trade, how will instances of exponential increase in trade volumes (e.g. the GameStop saga) impact trade?(10 marks)

The current settlement of an equities trade happens on T+2 after the transaction has taken place. With heavy trading of equities like Gamestock that was driven by social media. There means that there will be a higher risk that brokers will not have enough funds to pay shares the shares clients had bought by the time of the settlement. This causes an huge increase in counterparty risk and in order to mitigate the defaults, CCPs will demand higher collateral in order to protect the financial system from volatility. In fact, DTCC has demanded large sums of collateral from brokerages like Robinhood to reduce counterparty risk. In order to mitigate against the risk, Robinhood and other brokers had to also ban the users and institutions from certain trades. In summary, high collateral will be posed in order to redue credit risk

1. If real-time settlement of trades (T+0) is required, what are some potential drawbacks and challenges for the market participants?(20 marks)

The potential drawbacks and challenges for the market participants can be classified into technological drawbacks and non-technological drawbacks.

In terms of non-technological drawbacks, firstly, market participants, especially the buy-side, will be reluctant to switch to real-time settlement as current T+2/T+3 settlement period provide some sort of anonymity to the buy-side. This is helpful as the buy-side will not want the public/hedge funds etc to know the equities that they are trading. Introducing real time settlement of trades will cause market participants to lose freedom of control on the flow of transactions. Moreover, many firms would prefer to keep things the way they are if they are not broken. With that many parties involved in the process, different firms are likely to have different emphasis on what needs to be improved and built making it difficult to come to an agreement.

The complexity, cost and magnitude of changes required to implement real time processing will be huge. Many market participants will have to make significant changes to their primary system whereby processes now need to move in parallel instead of sequentially since settlement has to be performed within the day of the trade itself. This could incus large expenses and will be difficult and no one party will be willing to sponsor the cost.

In terms of technological challenges, with movement of trades having to be executed in parallel this means that current technologies have to be upgraded in order to ensure compatibility across parties from pre-trade to post trade. THis involves reengineering legacy systems and integrating across market participants.

Another technological challenge that market participants may face is that the massive upgrading of the system exposes the firms to cyber risks.

Real time settlement of trade can only be possible with 100% adoption rate.

1. Assuming you are consulting for SEC, sketch out an execution plan to help the market achieve T+0 settlement. Your plan should be outlined in chronological order and point form.

* Stage 1: ###########
* Stage 2: ###########(20 marks)

Stage 1: Formation: Project Initiation

* Rough proposal of project

Stage 2: Requirement Planning

* Draft out the proposed challenges in legality, function requirements, non functional requirements, estimated cost, technical requirements etc
* Come up with a implementation timeline of the project

Stage 3: Design

* Design change in the technical architecture.

Stage 4: Development

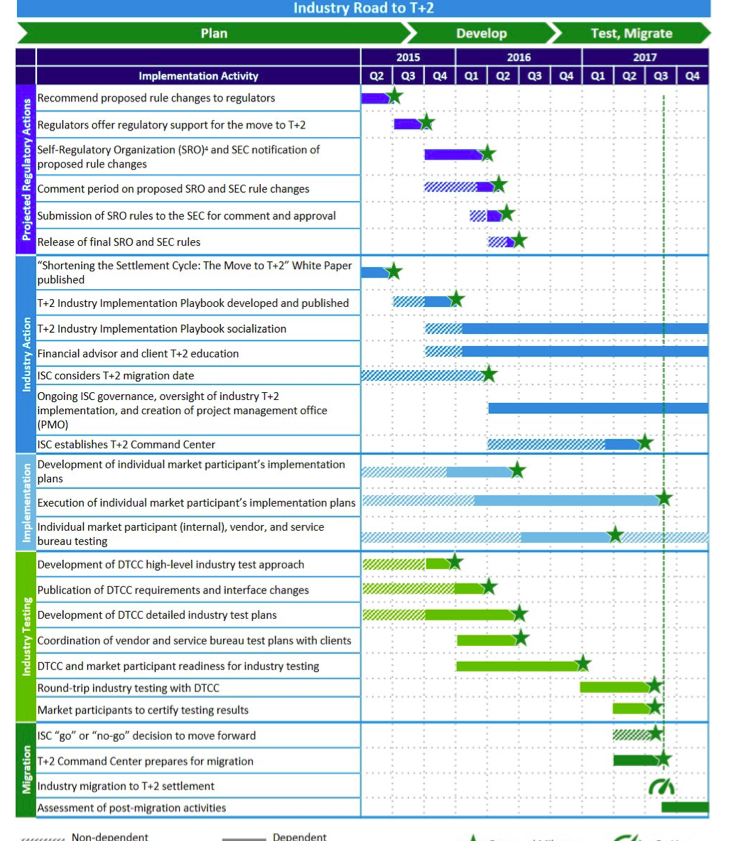
* Development implementation and test

Stage 5: Testing

* Test components and conduct training

Stage 6: Deploy

Stage 7: Maintain



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