

CRITERION A: PLANNING

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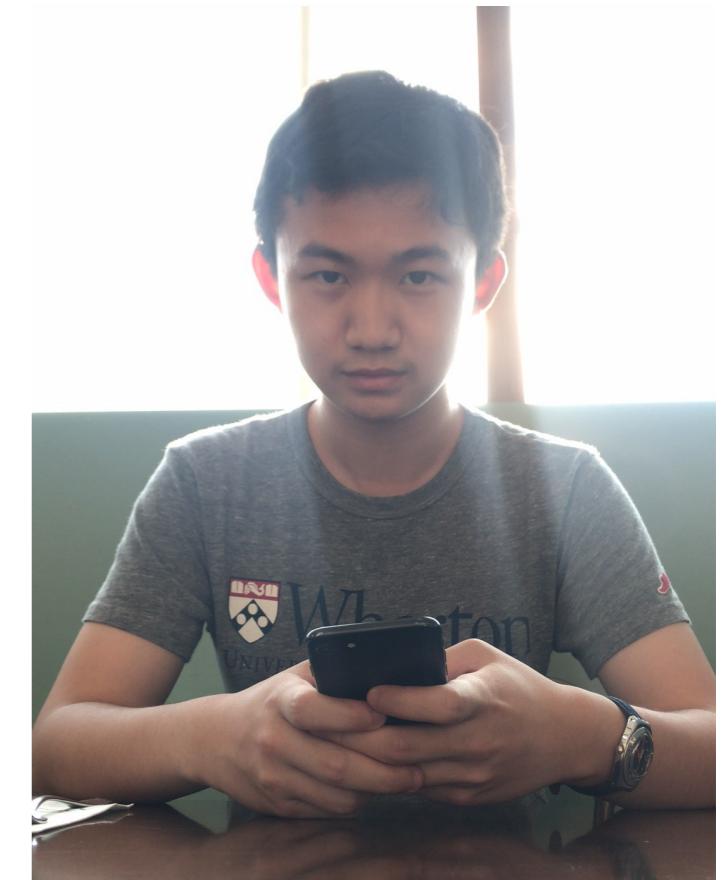
CONTENT

- Define the problem
- Solution
- Rationale for Solution

DEFINING THE PROBLEM: CLIENT

- Client: S2C5 Jerry Cai
 - Investment Competition
 - Quantitative Analysis
 - A Level Computer Science Student

- Communication
 - Daily WeChat conversations
 - Former teammate



DEFINING THE PROBLEM

- Problem 1: hard to collect data
 - Financial reports: lots of, incomplete

Period Ending:	Trend	9/29/2018	9/30/2017	9/24/2016	9/26/2015
Total Revenue		\$265,595,000	\$229,234,000	\$215,639,000	\$233,715,000
Cost of Revenue		\$163,756,000	\$145,048,000	\$131,376,000	\$140,089,000
		8,186,000	\$84,263,000	\$93,626,000	
Add'l income/e		1,581,000	\$10,045,000	\$8,067,000	
Earnings E		5,261,000	\$14,194,000	\$14,329,000	
Interest Ex			\$0	\$0	
			\$0	\$0	
			\$60,024,000	\$71,230,000	
			\$1,348,000	\$1,285,000	

$$CCC = DIO + DSO - DPO$$

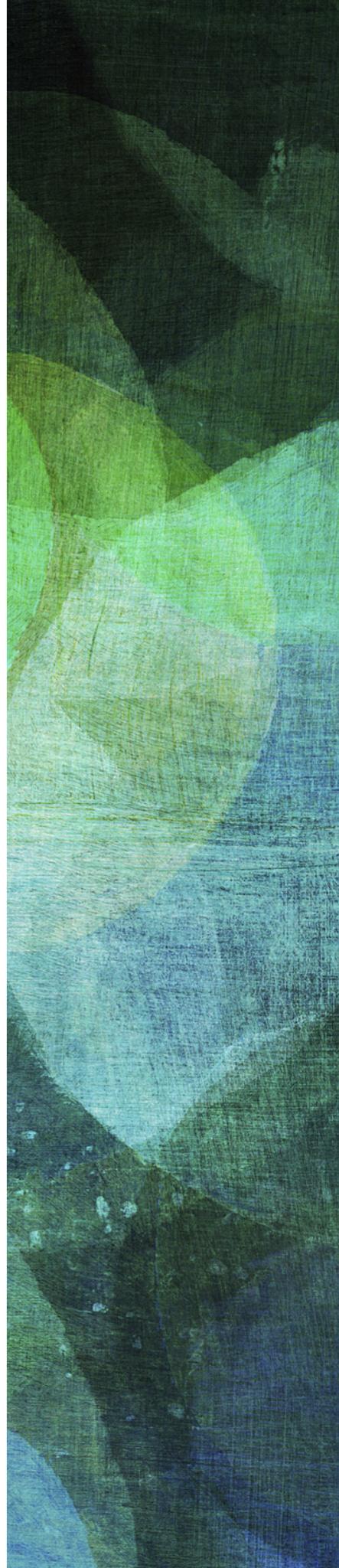
$$DPO = \frac{\text{Average Accounts Payable}}{\text{COGS per day}}$$

$$COGS = \text{Beginning Inventory} + \text{Purchases during the period} - \text{Ending Inventory}$$

DEFINING THE PROBLEM

- Problem 2: expense (cost)
 - Bloomberg: 250K
 - Wind: 80K

(In RMB, per year)
- Problem 3: unreliable
 - Pandas_datareader: not updated
 - QA-lib: false data



SOLUTION

- Objective: A reliable website (or application) with updated financial data and factor calculations
- (free & simple version of Bloomberg)

RATIONALE FOR SOLUTION

- For client:
 - Computer & QA knowledge
 - Limit budget & limit time
- For myself:
 - Knowledge in QA, programming, APP development
 - Knowledge in data mining (collecting)
 - Nearly ZERO cost
- For third-parties:
 - Data: not confidential / sensitive, no copyright
 - >No violation of ethical standards

