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**IME642 PROJECT
CASE STUDY
COLLAPSE
OF
SILICON VALLEY BANK**

Case Study - Collapse of Silicon Valley Bank

In dept study on Operations Management Components in the Banking Industry, failures in OM strategies, leading to the world's biggest bank failure since 2008.



Who is SVB



- SVB was founded in 1983 and was the 16th largest U.S. bank before its collapse. They specialized in financing and banking for venture capital-backed startup companies -- mostly technology companies. Venture capital firms did business there as well as several tech executives.

BREAKING NEWS

It's been a rollercoaster few days for the tech world, as the downfall of Silicon Valley Bank (SVB) - the second-largest US bank crash ever - plunged the future of thousands of companies, from startups to conglomerates, into immediate doubt.

Interventions from the US government and HSBC in the UK have allowed those with money invested in SVB to breathe a sigh of relief - so what happened? And what are the repercussions? How operations management study is important ?



collapse

By : Richa

SVB's importance in Tech Industry Financing



- SVB provided financing for around 50% of U.S. venture-backed technology and healthcare firms
- SVB was a favored bank for the tech sector due to their support for high-risk startup companies
- SVB's services were crucial for holding cash deposits of tech companies during the pandemic in 2020
- SVB invested a significant portion of the cash deposits from tech companies as part of their banking operations.



Reasons of Failure

Negligence of Operations Management

Poor Risk management

Ineffective Business Model

Poor Financial forecasting

Importance of OM in Banking

1

Cost Control

Operations management is crucial in controlling costs within the banking industry. Banks need to have efficient operations in place to reduce their costs and increase profitability. Operations managers can analyze processes and identify

2

Risk Management

Operations management is also essential for risk management in the banking industry. Banks deal with a large amount of data and transactions, which can pose significant risks if not properly managed.

Importance of OM in Banking

3

Innovation

Operations management can drive innovation in the banking industry. Banks that embrace new technologies and processes can gain a competitive advantage. Operations managers can identify areas where new technologies can be implemented and oversee the implementation process.

4

Scalability

crucial for ensuring that banks can scale their operations as they grow. As banks acquire new customers, they need to be able to handle the increased demand. Operations managers can design processes that can handle large volumes of transactions and data, ensuring that the bank can scale efficiently.

Importance of OM in Banking

5

6

Compliance

The banking industry is heavily regulated, and operations managers need to ensure compliance with various regulations. Operations managers can design processes that comply with regulations and monitor compliance on an ongoing basis.

Efficiency

Banks need to process transactions quickly and accurately to meet customer needs. Operations managers can design processes that are streamlined and efficient, reducing processing times and improving accuracy.

Importance of OM in Banking

7

Customer Service

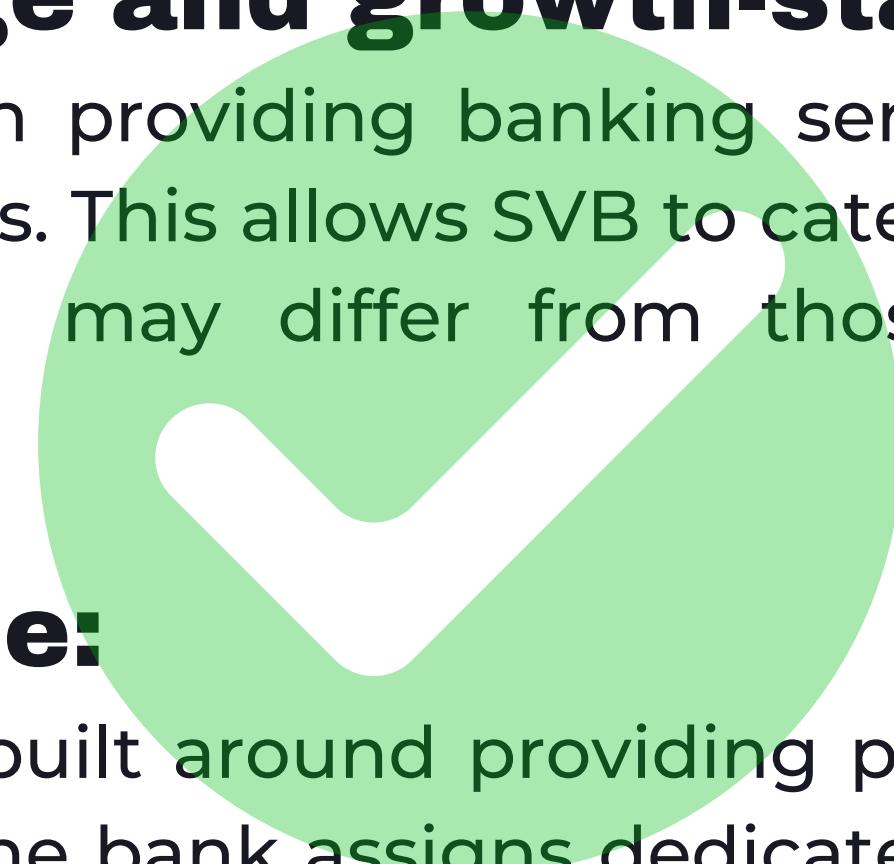
Operations management plays a key role in delivering a positive customer experience. Banks that provide personalized and efficient services can improve customer satisfaction and loyalty. Operations managers can analyze customer needs and design processes that cater to those needs, leading to a better overall customer experience.

Silicon Valley Business Model

Positive element

Focus on early-stage and growth-stage companies:

- SVB's primary focus is on providing banking services to early-stage and growth-stage companies. This allows SVB to cater to the specific needs of these companies, which may differ from those of more established businesses



Personalized service:

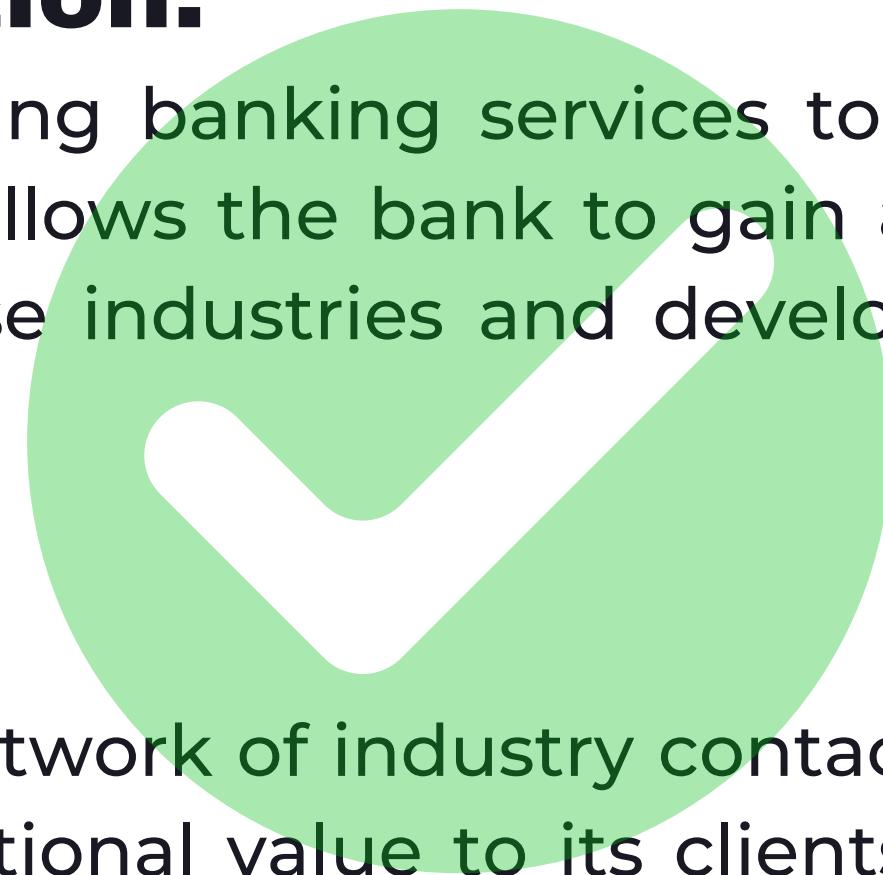
- SVB's business model is built around providing personalized service to its clients. This means that the bank assigns dedicated relationship managers to each client, who work closely with them to understand their needs and provide customized solutions

Silicon Valley Business Model

Positive element

Industry specialization:

- SVB specializes in providing banking services to the technology and life sciences industries. This allows the bank to gain a deep understanding of the unique needs of these industries and develop tailored solutions that meet those needs.



Strong network:

- SVB has built a strong network of industry contacts and partners, which it leverages to provide additional value to its clients. For example, the bank may introduce its clients to potential investors or provide access to industry events and conferences.

Silicon Valley Business Model

Negative elements

Concentration risk:

- SVB relies heavily on a small number of key clients, which can be risky as the loss of one or more of these clients could have a significant impact on the bank's financial performance.

Limited Geographic Diversification:

- SVB's operations are mainly focused on the United States and a few other countries, which limits the bank's ability to expand its customer base and reduce its exposure to local economic conditions.

Silicon Valley Business Model

Negative elements

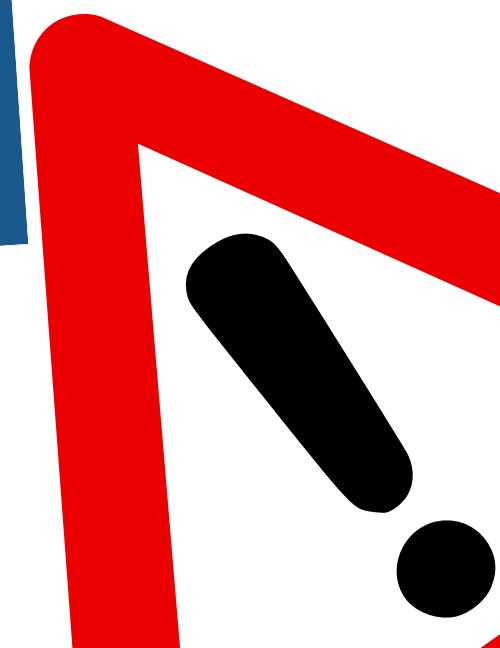
Exposure to credit risk:

- As a result of its focus on early-stage and growth-stage companies, SVB may be exposed to higher credit risk than other banks, which could result in higher loan defaults and loan loss provisions.

Regulatory challenges:

- SVB operates in a heavily regulated industry, which means that changes in regulations could have a significant impact on the bank's operations and profitability. In addition, compliance with regulatory requirements can be expensive and time-consuming, which can impact SVB's ability to innovate and respond quickly to market changes

12 Component failure of OM



In 2023, the bank collapsed due to a combination of factors, including increasing bad debts, overexposure to risky loans, and inadequate risk management practices. In this essay, we will explore the operations management components of SVB and the potential reasons behind its collapse.

12 Component failure of OM

Product and Service Design

the bank's product design process may have been too focused on the needs of clients, leading to a lack of diversification and overexposure to risky loans.

Quality Management

the collapse of the bank suggests that its quality management practices may have been inadequate, particularly in terms of managing risk and bad debts.

Process Design

Process design was centered on providing a seamless and efficient experience for clients, with a focus on technology and innovation. However, the bank's process design may have been too rigid, leading to a lack of flexibility in responding to changing market conditions.

Capacity Planning

SVB had a reputation for being able to quickly and efficiently scale its operations to meet the needs of its clients. However, the bank's capacity planning may have been insufficient to handle the rapid growth of its loan portfolio, leading to overexposure to risky loans.

12 Component failure of OM

Supply Chain Management

As a financial institution, SVB did not have a traditional supply chain. However, the bank's relationships with its clients and partners may have been a key component of its success.

Inventory Management

the bank's loan portfolio could be seen as a type of inventory, and the collapse of the bank suggests that its inventory management practices may have been inadequate.

Human Resource Management

SVB was known for its strong culture and focus on hiring top talent in the technology and innovation industries. However, the bank's human resource management practices may have been insufficient to attract and retain the talent needed to effectively manage risk and bad debts.

Job Design

SVB's job design was centered on providing a challenging and innovative work environment for its employees. However, the bank's job design may have been too focused on individual performance, leading to a lack of collaboration and teamwork in managing risk and bad debts.

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SWOT ANALYSIS

- 1. Specialization in the technology industry
- 2. Strong reputation as a leading financial institution
- 3. Efficient and streamlined processes
- 4. Strong commitment to innovation

STRENGTH

OPPORTUNITY

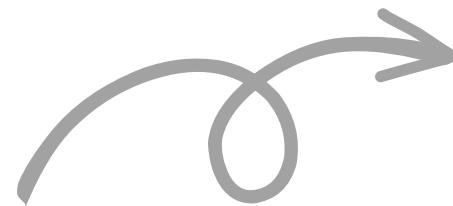
WEAKNESS

THREAT

- 1. Limited geographic presence
- 2. Over-exposure to the technology industry
- 3. Dependence on a small number of key clients

- 1. Increased competition from other financial institutions
- 2. Volatility and uncertainty in the technology industry
- 3. Regulatory changes impacting operations

OPERATIONAL RISK ASSESSMENT

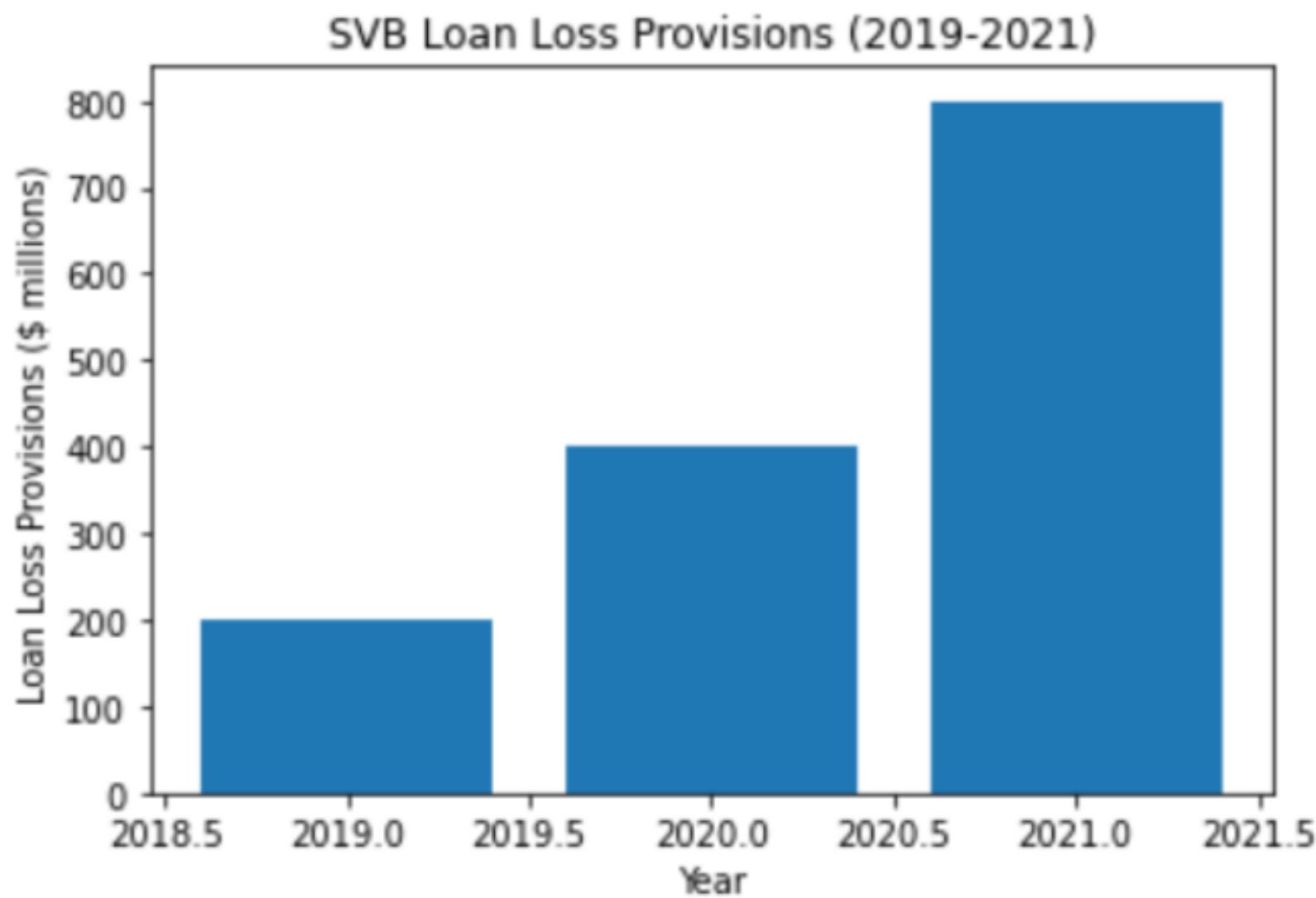
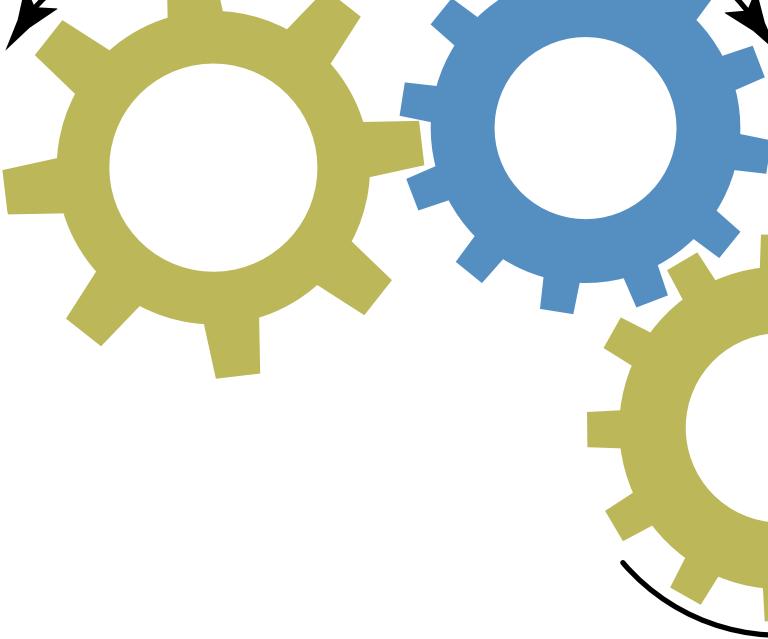


- Risk management is an essential component of operations management in the banking industry, and it involves identifying, assessing, and mitigating risks associated with lending activities. In the case of SVB, the bank's lending activities were focused primarily on the technology and innovation industries, which are known for their high growth potential but also carry significant risk.



- Furthermore, the collapse of SVB highlights the importance of effective risk management in the banking industry. Banks must have robust risk management practices in place to assess and manage risks associated with their loan portfolios, as well as diversify their portfolios to reduce their exposure to any one industry or type of loan. Additionally, banks must have effective capacity planning and inventory management practices to ensure that they can handle rapid growth without becoming overexposed to risky loans.
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Risk Analysis - 1

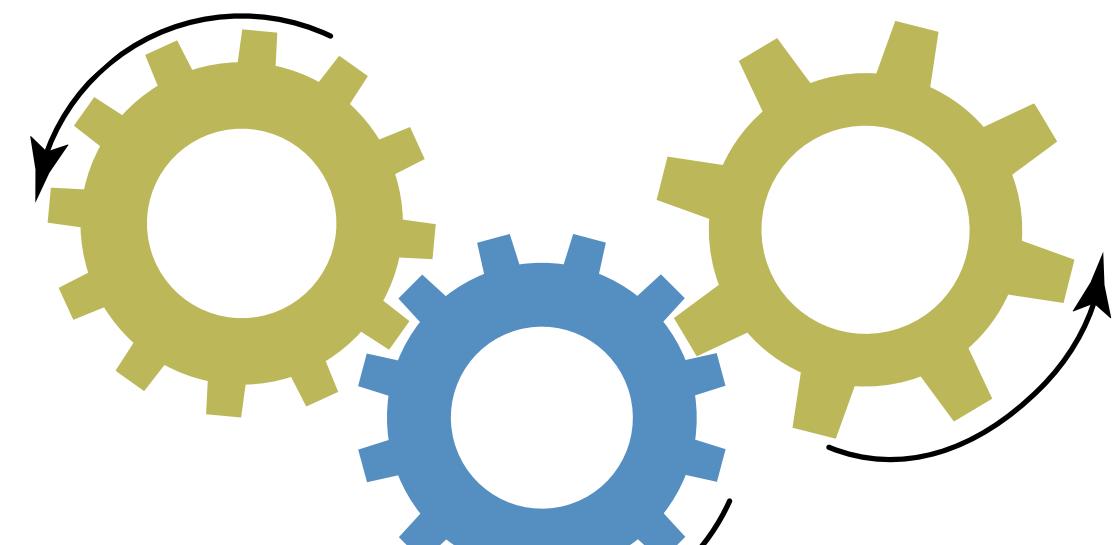
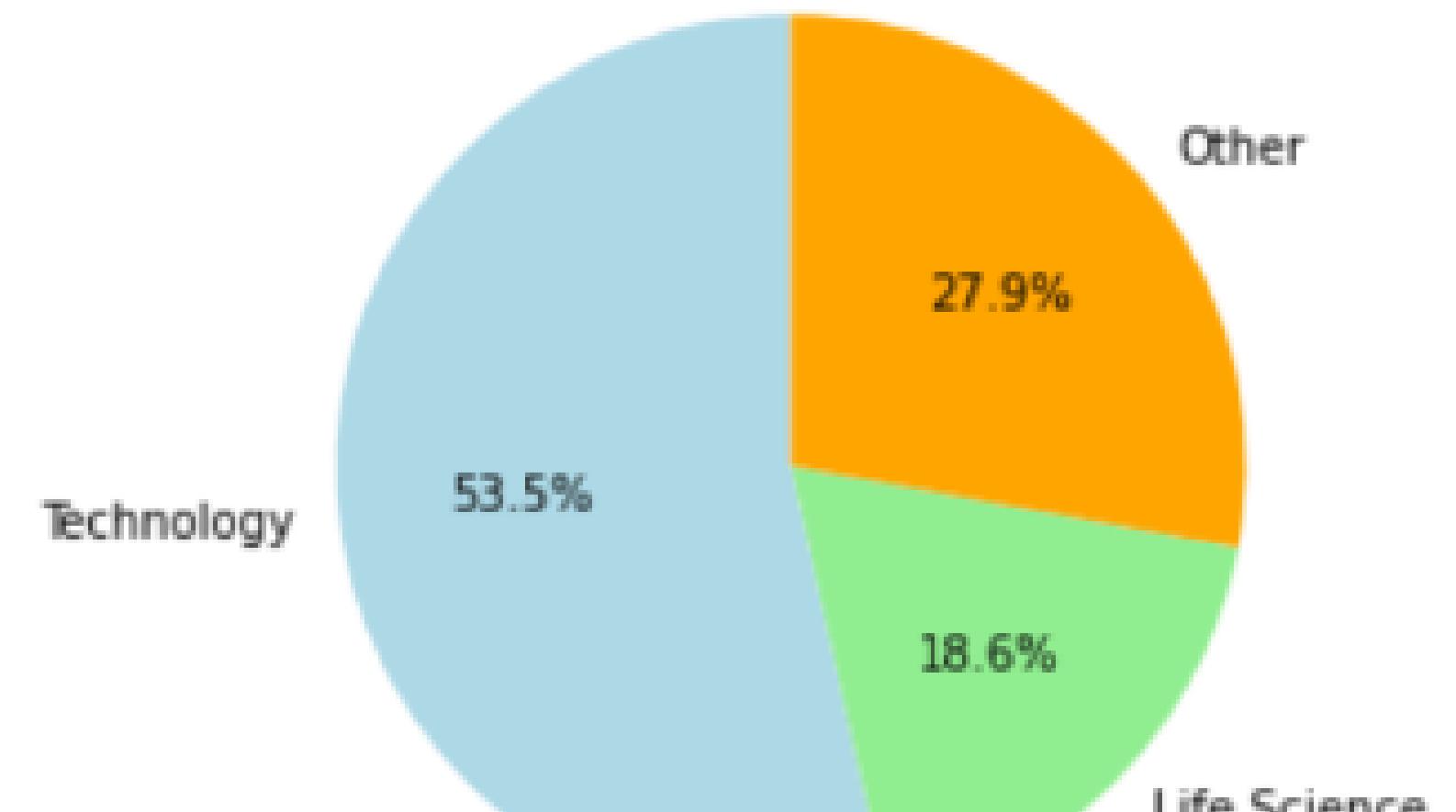


- Another way to measure risk exposure is to look at the bank's loan loss provisions, which are set aside to cover potential losses from bad debts. SVB's loan loss provisions increased significantly in the years leading up to its collapse.

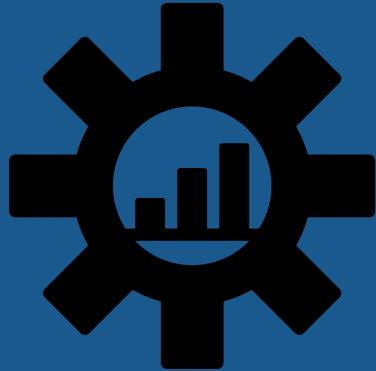
Risk Analysis - 2

- This data shows that SVB was heavily exposed to the technology industry, which accounted for nearly 70% of its loan portfolio.
- While the technology industry has high growth potential, it is also volatile and subject to rapid changes in market conditions. This concentration of risk may have contributed to the bank's downfall when the technology industry experienced a downturn

Composition of SVB Loan Portfolio by Industry



Performance Analysis



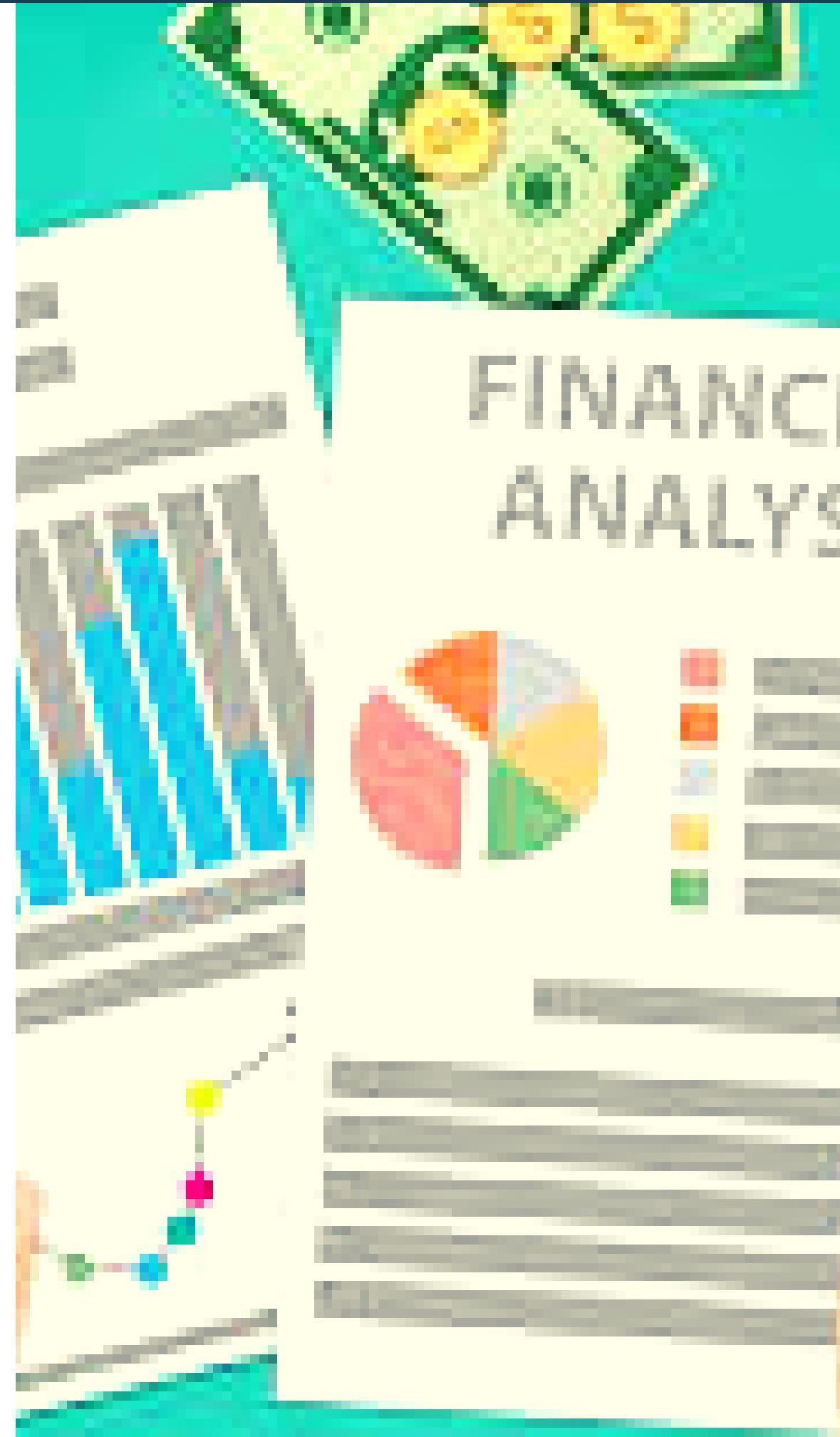
SVB is a leading provider of financial services to the technology and innovation industries, with a strong track record of growth and profitability.

The bank has reported consistent revenue growth over the past several years, driven by a combination of loan growth and fee income

SVB's loan portfolio is heavily focused on the technology sector, which has historically been a high-growth industry. This has helped the bank to outperform many of its peers in terms of loan growth and profitability

Financial Analysis

- SVB has a strong balance sheet, with a high level of equity capital relative to its assets. This provides a cushion against potential loan losses and other risks.
- The bank has a relatively low level of nonperforming loans and charge-offs, which is a positive sign for asset quality
- SVB's return on assets and return on equity are both above average for the banking industry, indicating that the bank is generating strong returns for its shareholders.



SVB'S Rivals Benefits

Increased Market Share

Opportunity to capture its former clients and increase their market share in the technology industry. This can be particularly advantageous for banks with strong reputations and expertise in this sector, as they are likely to be attractive to former SVB clients

Regulatory Scrutiny

The collapse of SVB is likely to result in increased regulatory scrutiny of the technology banking industry as it may provide additional guidance and oversight, to other banks helping to strengthen the industry as a whole.

Reduced Competition

This can reduce competition for other banks, allowing them to potentially increase their pricing power and profitability.

IMPACT ON BUSINESSES & FINANCE SECTOR

Impact on small businesses

With the bank's collapse, these companies may struggle to secure financing, as other banks may be hesitant to take on the risk of investing in this industry.

Ripple effects on the tech sector

The technology sector has already been hit hard by recessionary conditions, which have led to larger tech companies cutting staff. With the collapse of SVB, there may be further concerns about funding for new companies and innovative technologies.

Government intervention

The U.S. government's guarantee of bank customer deposits helped to ease immediate panic among SVB customers

Concerns about rising interest rates

The collapse of SVB has raised questions about the impact of rising interest rates on the financial sector. Other banks may be too invested in falling bond prices, and could face similar struggles as SVB if they do not have adequate risk management practices in place.

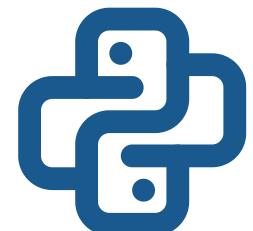
THANK YOU

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- For more detailed Insights for SVB Portfolio in python, Click on the link above.
- Detailed Description of python code used for financial analysis
- Detailed graph depiction.

