Commercial Lending Efficiency and Value Creation with Tech

MB Bank

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MB

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Executive Summary

MB is a community bank that has been serving NOC and SMC for over 150 years. The bank has continually increased revenues year over years since the addition of the commercial lending department in 2000 and surpassed $1 billion in outstanding assets in the middle of 2016. The success of the commercial lending department has been built on a strong reputation in the local communities and an aggressive staff of loan officers, portfolio managers, credit analysts and support staff. Annual increases to the commercial loan portfolio has shown that the current structure and system of processing loans lacks efficiencies that could lead to reductions in costs and better customer service. The need for the change plays into the bank's Statement of Beliefs and Core Values.

The project for the commercial lending department is the introduction of two technology platforms that would create efficiency and lead to a better customer service experience. The commercial lending project would be the adoption of a comprehensive data storage system and a commercial application underwriting system. The department currently relies on physical loan files and paper copies of approvals, financial information, loan documents and other loan documentation. The use of the physical loan files is costing the bank money on paper, storage, shredding, time lost searching for files, consuming audit times and overall lack of efficiency.

The discovery phase of the project was the gathering of information on commercial lending platforms and content management systems. Requirements of the systems were outlined to determine the objectives of the project and key employees were also interviewed to develop a cost analysis for the implementation of the two systems. Even though the two systems would serve different functions it was apparent each system had similar requirements for the commercial lending department. It was important that the systems integrated with the bank's existing core provider, provided document management, security, were customizable and adaptable, and the systems needed to be easy to use. After determining systems that would meet the needs of the department a financial and non-financial impact was determined.

Under the financial impact section it was determined under some assumptions that the projects would produce a positive net cash flow for the investment. It was determined under the non-financial section that the project would lead to increased employee efficiencies and the project has the potential to increase the satisfaction of commercial customers. It has been recommended that MB proceed with the investment in the data management system and commercial application underwriting system.

Introduction/Background

History

MB is a state-chartered, federally regulated banking institution that has operated since March 21, 1874. It is a wholly owned subsidiary of MSB, Inc., which is owned by MSB MH Company, an entity owned by the depositors of the bank. The bank most recently changed its name from M Savings Bank in July 2015 as part of a branding campaign effort to align the name and services that are offered. Historically, the bank was a savings and loan institution built off of residential and consumer loans products with commercial lending only introduced in 2000. MB currently operates eight brick and mortar branch locations throughout M and O Counties. Additions to the branch network have come over many years with the first permanent building constructed on Main Street in 1936. The next branch would not come until 1959 on Meetinghouse Road then another in B Head with the acquisition of B Head Savings and Loan in 1979. The B Head branch was the first branch in O County. A Branch was later added in Brick in 2001, SLH in 2002 and then the bank built two more locations in PP in 2007 and WT (Headquarters) in 2008. There are two more branch locations that will be added in the fourth quarter of this year and first quarter of next year.

MB has continued growth in earning assets with the bulk of the growth related to the commercial loan portfolio. Even under a growth strategy, with the commensurate demands on capital, the bank continues as a mutual holding company and prides itself on being a community bank. The total assets of the bank at the end of 2000 total $318 million and have grown to $1.02 billion at March 31, 2016, representing over 200% organic growth in that time. Bearing the responsibility of a community bank, MB regularly gives back to the community through various programs and through the MB Charitable Foundation. The bank also encourages the involvement of the employees in its charitable endeavors.

Locations

The bank has five office locations in M County and three locations in O County at the Jersey Shore. MB's headquarters is located at its Wall Township, Landmark Place office. The two new office locations will be located in M County north of the existing offices.

Map of Locations[1]

[1] Google.Google Maps. https://www.google.com/?gws_rd=ssl#safe=strict&q=manasquan+bank&rflfq=1&rlha=0&rllag=40129671,-74069668,1900&tbm=lcl&tbs=lf:1,lf_ui:3 (accessed 9/1/2016).

Business Model

MB business is highly centered on being a customer centric organization that recognizes that there are market choices and that differentiation occurs through customer's products and service experience. This level of services is fostered at customer interactions through face-to-face meetings, technology platforms and fostering long term banking relationships. MB attracts deposits from individual and business customers and utilizes those deposits to originate loans to consumers and businesses throughout New Jersey and close bordering states of Pennsylvania and New York. Deposit products include checking, savings, money market, retirement accounts and certificates of deposits. MB is both a residential mortgage and small business lender, but the loan portfolio shows that the percentage of residential loans is slightly higher than commercial loans. Non-real estate secured consumer loans, including automobile, personal, and other unsecured loans account for less than one percent of bank lending. Bank investments include Securities of the United States and Agencies, and Federal Home Loan Bank (FHLB) and Atlantic Community Bankers Bank (ACBB) stock. While deposits have been the primary source of funds used in lending the bank over the past year has reached or exceeded the deposit amounts. The need for deposits has turned the bank's focus toward acquiring new accounts, both consumer and commercial. MB borrowing has been from FHLB Advances and FHLB Repos.

Overall Strategy

In 2015 MB changed its name from M Savings Bank and incorporated a logo in an effort to create a brand and bring the bank's product offerings in line with the name. This effort along with 140 plus years in the local communities and an image of high level customer service has helped to differentiate a legacy organization. MB has operated on a platform of being a customer centric organization, building banking relationships, committing to the community, and to its employees. The forefront of the bank's differentiation strategy is to maximize the overall customer experience and build brand loyalty.

In an industry that has largely become commoditized MB has distinguished itself from its large bank competition by having centralized decision making, being relationship driven, offering quick response time for loan applications, and remaining relevant in the technology landscape. Having local decisioning and employee empowerment has set MB apart from its competition by being able to offer solutions to customers' problems quickly. This is also relevant and enables fast decisioning on loan applications and allows the bank to be more agile and creative than its larger competitors. MB is also a largely relationship driven organization rather than transactional. Customers are known by employees and this in turn has aided the bank in growing through referrals from its current customer base. The organic growth that has been experienced since 2000 with the addition of commercial and small business lending has been accomplished mainly through current customer referrals. The bank has also incorporated a large budget to keep pace with technological services that are important and keep within the needs of our customer base.

Competition

MB's assessment area has a high level of competition that provides banking services. Large regional and national institutions including TD Bank, Wells Fargo Bank, Bank of America, Santander Bank, JP Morgan Chase Bank, and PNC Bank also service the area. The area is also served by large statewide banks and community banks. Approximately 453 branch bank offices are in M and O Counties as of June 30, 2015. The top deposit contenders in O County include TD Bank, Hudson City Savings Bank, Wells Fargo and Oceanfirst Bank. In M County the top deposit competitors are Wells Fargo, Bank of America, Santander Bank and TD Bank.[2]

Competition for deposits and financial services also includes competition with non-bank institutions. These include companies that have decided to diversify into banking to reduce borrowing costs. Some of these companies include Morgan Stanley, Goldman Sachs, Ally Bank, AMEX, E-Trade, Scottrade, Met Life, PayPal and Discover. In addition to these non-bank companies MB also competes with investment companies in regard to deposits. In offering different financial investment packages that provide a return greater than those realized in deposit accounts with the bank, these companies also compete with banks for deposit dollars. Examples of investment companies include Ameriprise Financial, Raymond James, Merrill Lynch, RBC, UBS, and Edward Jones.

The assessment area is a competitive market for small business loans and also has a high level of competition for home loans. The top small business lenders in the assessment area include American Express, Wells Fargo, and Chase Bank. Small business lending in the area is also competitive among smaller banks including Two River Community Bank, The Provident Bank, Kearny Bank, Oceanfirst Bank, Harmony Bank, and Colonial American Bank. Major national home mortgage lenders include Wells Fargo, JP Morgan Chase and Bank of America

[2] FDIC.www.fdic.gov
https://www5.fdic.gov/sod/sodInstBranchRpt.asp?sCounty=M&sCityType=USPS&submit1=Continue&barItem=1 (accessed 9/1/2016).

who accounted for approximately 30% of residential originations in the assessment area in 2012.[3] Smaller banks within the assessment area also compete for home mortgage loans.

Market Share

In M County MB is ranked 10th out of 28 institutions as of June 30, 2015. The bank holds $502 million in deposits accounting for 2.15% of the total deposits in the County. Institutions with larger deposits were mainly national and regional banks that are much larger in asset size with the exception of Two River Community Bank ranking 9th. Two River Community Bank as of September 30, 2015 had $842M in total assets making them slightly smaller than MB. They held $39M or 0.01% more in deposits.

M County, New Jersey									
Institution Name	**CERT**	**State**	**Bank Class**	**State/ Federal Charter**	**No. of Offices**	**Deposits $000 Outside**	**No. of Offices**	**Deposits $000**	**Market Share**
Wells Fargo Bank, National Association	3511	SD	N	Federal	6,201	1,081,305,768	31	4,986,232	21.30%
Bank of America, National Association	3510	NC	N	Federal	4,839	1,166,428,795	22	3,139,947	13.41%
Santander Bank, N.A.	29950	DE	N	Federal	652	54,674,196	28	2,435,213	10.40%
TD Bank, National Association	18409	DE	N	Federal	1,307	191,966,946	19	2,318,141	9.90%
Investors Bank	28892	NJ	SB	State	127	12,120,405	11	1,605,920	6.86%
PNC Bank, National Association	6384	DE	N	Federal	2,750	236,420,332	27	1,567,586	6.70%
Hudson City Savings Bank	13074	NJ	SB	Federal	128	16,940,385	7	1,369,203	5.85%
JPMorgan Chase Bank, National Association	628	OH	N	Federal	5,525	1,068,158,789	20	1,266,211	5.41%
Two River Community Bank	35426	NJ	NM	State	4	147,350	11	541,264	2.31%
MB	**30470**	**NJ**	**SB**	**State**	**3**	**277,691**	**5**	**502,448**	**2.15%**
The Provident Bank	12010	NJ	SB	State	80	5,352,765	9	501,971	2.14%
Valley National Bank	9396	NJ	N	Federal	214	13,933,163	12	483,309	2.06%
Kearny Bank	28765	NJ	SB	Federal	30	2,355,803	12	459,102	1.96%
Capital One, National Association	4297	VA	N	Federal	836	195,295,884	4	340,670	1.46%
Sun National Bank	26240	NJ	N	Federal	36	1,686,546	7	254,799	1.09%
OceanFirst Bank	28359	NJ	SB	Federal	20	1,532,213	5	241,879	1.03%
Amboy Bank	6423	NJ	SM	State	13	1,469,835	10	226,536	0.97%
Columbia Bank	28834	NJ	SB	Federal	41	3,362,540	3	198,968	0.85%
New York Community Bank	16022	NY	SB	State	243	25,900,306	6	175,614	0.75%
Freehold Savings Bank	30519	NJ	SB	Federal	0	0	2	154,603	0.66%
1st Constitution Bank	27552	NJ	NM	State	14	648,203	5	149,956	0.64%
Colonial American Bank	58412	NJ	NM	State	0	0	2	127,627	0.55%
Fulton Bank of New Jersey	27614	NJ	NM	State	65	2,843,573	3	126,171	0.54%
New Jersey Community Bank	58664	NJ	NM	State	1	10,467	2	106,748	0.46%
First Commerce Bank	58054	NJ	NM	State	5	457,024	2	69,971	0.30%
ConnectOne Bank	57919	NJ	NM	State	23	2,553,738	1	31,287	0.13%
Brunswick Bank and Trust Company	20220	NJ	NM	State	5	108,809	2	21,118	0.09%
Cornerstone Bank	35286	NJ	NM	State	7	212,177	1	4,275	0.02%
Number of Institutions in the Market: 28				**TOTALS**	**23,169**	**4,086,163,703**	**269**	**23,406,769**	**100%**

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[3] "Community Reinvestment Act Performance Evaluation, M Bank," FDIC, September 15, 2014: 9

In O County MB is ranked 11th out of 21 institutions as of June 30, 2015. The bank holds $278 million in deposits or 1.84% of the total deposits in the County. The institutions with larger deposits like M County were national and regional banks that are much larger in assets size. MB was ranked highest among community banks.

O County, New Jersey									
Institution Name	**CERT**	**State**	**Bank Class**	**State/ Federal Charter**	**No. of Offices**	**Deposits $000 Outside**	**No. of Offices**	**Deposits $000**	**Market Share**
TD Bank, National Association	18409	DE	N	Federal	1,304	191,737,781	22	2,547,306	16.84%
Hudson City Savings Bank	13074	NJ	SB	Federal	121	16,320,803	14	1,988,785	13.15%
Wells Fargo Bank, National Association	3511	SD	N	Federal	6,206	1,084,330,513	26	1,961,487	12.97%
OceanFirst Bank	28359	NJ	SB	Federal	6	292,038	19	1,482,054	9.80%
Santander Bank, N.A.	29950	DE	N	Federal	661	55,703,556	19	1,405,853	9.29%
Bank of America, National Association	3510	NC	N	Federal	4,844	1,168,187,143	17	1,381,599	9.13%
Investors Bank	28892	NJ	SB	State	129	12,805,564	9	920,761	6.09%
Capital One, National Association	4297	VA	N	Federal	838	194,994,878	2	641,676	4.24%
PNC Bank, National Association	6384	DE	N	Federal	2,764	237,408,235	13	579,683	3.83%
JPMorgan Chase Bank, National Association	628	OH	N	Federal	5,537	1,068,922,603	8	502,397	3.32%
MB	**30470**	**NJ**	**SB**	**State**	**5**	**502,448**	**3**	**277,691**	**1.84%**
Harmony Bank	58713	NJ	NM	State	0	0	3	235,604	1.56%
Shore Community Bank	34253	NJ	NM	State	0	0	5	198,828	1.31%
Kearny Bank	28765	NJ	SB	Federal	36	2,629,978	6	184,927	1.22%
First Commerce Bank	58054	NJ	NM	State	6	350,570	1	176,425	1.17%
Sun National Bank	26240	NJ	N	Federal	39	1,765,059	4	176,286	1.17%
The Provident Bank	12010	NJ	SB	State	85	5,711,613	4	143,123	0.95%
Fulton Bank of New Jersey	27614	NJ	NM	State	64	2,850,518	4	119,226	0.79%
New York Community Bank	16022	NY	SB	State	246	25,986,963	3	88,957	0.59%
Crown Bank	34259	NJ	NM	State	14	333,986	1	82,634	0.55%
National Penn Bank	7414	PA	N	Federal	127	6,901,656	1	31,298	0.21%
Number of Institutions in the Market: 21				**TOTALS**	**23,032**	**4,077,735,905**	**184**	**15,126,600**	**100%**

[5]

In analyzing the location of the bank's deposits the deposit market share was further broken down by zip codes. Currently MB has branch locations in five different zip codes. The deposit market share in theses zip codes is outlined in the following chart.

	-	-	-	-	-	M	O
Deposit Market Share (June 30th)	44.80%	20.86%	14.87%	8.01%	8.57%	2.15%	1.84%
(in $000)	380,018	202,299	75,392	70,729	51,701	502,448	277,691
Offices	3	2	1	1	1	5	3
Rank	1	2	4	5	5	10	11

[4] FDIC.www.fdic.gov.
https://www5.fdic.gov/sod/sodInstBranchRpt.asp?sCounty=M&sCityType=USPS&submit1=Continue&barItem=1
(accessed 9/1/2016).
[5] FDIC.www.fdic.gov.
https://www5.fdic.gov/sod/sodInstBranchRpt.asp?sCounty=O&sCityType=USPS&submit1=Continue&barItem=1
(accessed 9/1/2016).

Financial Condition

MB Financial Fast Facts (Quarter Ended 6-30-2016)			
Balance Sheet (USD, in thousands)		**Income Statement** (USD, in thousands, ytd)	
Total Assets	**1,020,768**	Total Interest Income	**18,251**
Total Liabilities	**913,866**	Total NonInterest Income	**1,601**
Total Bank Equity Capital	**106,902**	Total Interest Expense	**2,859**
Total Deposits	**870,556**	Total NonInterest Expense	**10,399**
Net Loans & Leases	**839,192**	Net Income	**3,681**
Loan Loss Allowance	**9,094**	Net Charge Offs	**56**
Regulatory Capital		**Quarterly Averages** (USD, in thousands)	
Total capital	**115,451**	Total loans	**832,242**
Total assets for the leverage ratio	**1,007,273**	Loans secured by real estate:	**734,935**
Tier 1 Leverage Ratio	**10.56**	Commercial and industrial loans	**88,546**
Tier 1 Capital Ratio	**12.53**	Loans to individuals - Credit Cards	**0**
Total Capital Ratio	**13.6**	Loans to individuals - Other	**960**

[6]

MB has grown total earning assets by $81 million or 9.15% from fiscal year end 2015 to 2016. The majority of this growth was in loans with a small increase in investments. Deposits over the period grew by $90 million surpassing the loan growth and reducing the loan to deposit ratio from 97.79% to 96.40%. Growth in loans has brought a strong push from management to increase deposits so they can be used as a loan funding source. Total interest income for the bank increased $1,220 million or 7.15% from 2015 to 2016 with increases to loans and investments. Operating income was $17 million compared to $16 million over the same period with the net interest margin remaining stable at 3.23 during fiscal year 2016 and

[6] iBanknet.www.ibanknet.com. http://www.ibanknet.com/scripts/callreports/getbank.aspx?ibnid=usa_459671 (accessed 9/1/2016).

3.27 in 2015. Non-interest expense increased from $9,493 million in 2015 to $10,399 million in 2016 with net income being $3,375 million in 2015 and $3,681 million in 2016. The efficiency ratio increased from 60.49 to 61.08 from 2015 to 2016 with the increases to non-interest expenses. Performance measure of ROAA and ROAE showed improvements of 0.73 to 0.74 and 6.85 to 7.02 over the 2015/2016 period. Asset quality showed improvement with nonaccrual loans to total loans going from 0.44 to 0.29 and net loss to average loans going from 0.07 to 0.01.

<u>Strategy / Implementation</u>

Proposed Project

The proposed project investment is comprised of two commercial department changes in process including the implementation of a comprehensive data storage system commonly referred to as content management and the adoption of a commercial loan application system. The two investments commonly share the overall data management objective of the proposal. The storage system will give the department the ability to digitally capture, process, access, integrate, measure and store important loan information for commercial loans and applications. The storage will consist of working data shared drive storage already available to the department through existing bank servers and the adoption of a data storage program to store critical loan information such as loan documents and other necessary loan file documentation. Ideally the storage would allow for electronic loan files that mirror the physical files that are currently being utilized by the commercial loan department. The second part of the project, the loan application system would create a unified structure and process for the application course from beginning to end. A major built in benefit of the system would also allow the bank to monitor applications to ensure compliance with regulatory laws. Currently MB is using Encompass for application tracking, approvals, denials, withdrawn, HMDA/CRA reporting and limited pipeline reporting. The system is a residential system that has been manipulated for limited data entry, offers limited reports and does not communicate with the bank's core system Fiserv. The project is being limited to the commercial loan department and the management, development, motivation and implementation would be directed by Timothy Dempsey.

Content management is a collection of processes and technology that supports the collection, managing, and retrieval of information regardless of medium. Storage accessed through computers is often referred to as digital content and can take many forms. Digital content management can best be thought of through the following process.

Content Management Process

Capture	Process	Access	Integration	Measure	Store

The users of the system generally have different roles or responsibilities that can be defined as follows. Having these different roles allows for the security of the content.

Creator – responsible for creating and editing content

Editor – responsible for controlling the content message and style of delivery

Publisher – responsible for releasing the content

Administrator – responsible for managing access to folders and files

Viewer or guest – reads or takes content after it is shared[7]

Commercial loan application software offer a process driven system for the application of new loans, renewals and modifications. Generally these systems are built around a workflow and information management process that integrates the origination, approval and monitoring of loans. A variety of the application systems offer different proprietary software and application lay outs but they are geared toward a solution based program. The majority of the systems offer solutions for workflow, core integration, approval building, financial analysis, and a database for information retrieval. The products are further distinguished from competitors by the width of offerings, ease of use and data management and reporting. Examples of

[7] Fiserv.www.fiserv.com and Fiserv presentation

application system programs included Moody's Analytics, CreditQuest (D+H) and 1 Credit Suite (Suntell).

Project Objective

The project is being considered by the commercial loan department under pressures that are inherent in growth organizations. MB's commercial loan portfolio growth has led to a need for more physical space to store paper files and documents and has created a need for more efficient ways of retrieving data. The content management system objectives would include financial benefits such as reductions in the use of paper, shredding, physical space and printing. They would also include benefits to overall efficiency of the department, organization of information and documents, document processing and benefits to auditing procedures. The commercial application system objectives include loan application monitoring, compliance functions, a systematic loan process and a database for loan information.

The commercial loan department currently maintains loan documents and affiliated approval information in paper format, stored in files and maintained at the bank's headquarters. A large majority of these loans require financial updating, loan reviews and loan renewals creating an ongoing need for file maintenance and physical retrieval of files. Closed loans and withdrawn or denied loan applications are stored on an offsite facility and destroyed based on the need to retain documents. Loan applications as previously mentioned are documented through the use of a residential application system, Encompass, that was adopted several years ago and creates efficiency for the residential department but not the commercial department. During the implementation phase for Encompass system administrators created a limited use profile for commercial lending to track loan applications. The system allows for limited data entry, no approval building, no communication with the bank's core system, Fiserv, has no compliance measures other than HMDA/CRA reporting and has limitations for reporting due to the lack of inputs required. The adoption of a content management system would alleviate the need for paper, physical file retrieval and offsite storage. The adoption of the application system would create a comprehensive loan application database, approval building, communication with the core system, compliance monitoring and the ability to create a broad range of reports. Some application systems even offer the ability to maintain loan documents for files with the ability to generate letters requesting updated information as an added benefit and feature.

Content Management Requirements

1) Integration with existing business processes and software
2) Document management with content capture and indexing
3) Accessible and available
4) Security and protection
5) Retention and integrity
6) Lifecycle management
7) Customizable and adaptable
8) Easy to use

Commercial Application System Requirements

1) Integration with core system (Application Program Interface)
2) Workflow process
3) Document attachment capabilities
4) Approval/Loan worksheet program construction
5) Tickler system
6) Letter automation capabilities
7) Customizable and adaptable
8) Easy to use

Project Lead

The project leader will be responsible for reporting the benefits of implementing a content management program and referring a commercial application system to upper management for approval. The report will include the financial and nonfinancial impacts of choosing to utilize such systems in a clear and concise manner for a clear recommendation for choosing to go through with the project and the systems that represent the best options to the bank. The information required for such decisions will be accomplished through a team established by the lead. The team will consist of commercial lending management and employees that would be directly impacted by such systems. It is important that the staff be incorporated into the process as they will be using the systems and it will gain their buy in for the implementation of the programs. The main objectives of the project lead would be consultations with the IT department, researching products and systems, ensure integration with existing bank systems, compilation of research, communication with team, analysis of data and the implementation of the project. The most important objective the lead is to develop that adoption of the content and application systems by the employees of the commercial lending department.

Including the bank's IT department into the project will be imperative for its success. IT will be responsible for working with the chosen system vendor to install and ensure the integration of the program. They are also a great resource for understanding the technical aspects of implementing the systems and can lend important aspects as to requirements that should be included in the end contracts.

The project leader will need to research available and compatible content and application systems that can achieve requirements. It is important that this research be consolidated, analyzed and presented at team meetings in a manner that allows for decisions and time management at meetings. The analysis should clearly compare the content management systems and application systems on a basis of benefits, system issues, customization, ease of use and optimization of the overall objective of adopting data management programs.

The project leader's current role at the bank is as Credit Manager in the commercial loan department. The responsibilities of this position include the management of four credit analysts and two portfolio managers. The position also calls for the management of the credit underwriting process, communications with servicing and lenders, credit risk assessments, reporting and participation in loan committees. Analysis of current processes and data management systems has not historically been part of the Credit Managers responsibilities.

Organizational Project Fit

Implementation of the project would fit with the overall strategy of MB. The adoption of an application system and the content management system would allow the bank to maximize the customer experience. Increasing the value offered by the bank by creating efficiency in processing applications and better management of files would allow the commercial loan department to potentially be more responsive to application requests. The ability to make loan decisions quickly gives MB a competitive advantage and adds potential for building brand loyalty. The implementation also allows the commercial lending department to be more responsive to its internal customers such as other departments and auditors. The overall expectation from adopting the technology is that information will be readily available for better and faster decision making.

Implementation Schedule

Phase 1

- Consult with head of IT department
- Build project team inclusive of CLO, head of servicing, senior analyst, senior lender
- Hold informative meeting about content management imaging and application systems
- Group discussion of benefits and for buy-in

Phase 2

- Research available content management systems
- Contact companies for presentations
- Request trial period or online system demonstrations
- Group discussion on available systems, ease of use, functionality and integration with systems

Phase 3

- Research available commercial application systems
- Contact companies for presentations
- Request trial period or online system demonstrations

- Group discussion on available systems, ease of use, functionality and integration with systems

Phase 4

- Team meeting to discuss best application solutions for content management and applications
- Narrow down the field to two or three systems
- Request pricing and contract example from all attractive system providers
- Discuss the potential for alternatives to systems

Phase 5

- Team meeting to rank systems based on requirements, pricing and contract support
- Decision systems to pursue

Phase 6

- Finalize contracts and purchase content management system and application systems
- Team meeting to discuss roll out of new systems to commercial employees

Phase 7

- System implementation with providers
- Training

Phase 8

- Implementation of usage by commercial loan department
- Post implementation support from providers
- Measure success of expected outcomes through quantitative data and qualitative data from employees

Financial Impact

Investment

The proposed investment in a content management system and the implementation of a commercial loan application system is a large undertaking for the commercial loan department. It includes financial capital for the purchase of the technology and human capital for the implementation of setting up the systems for use. The first initial investment includes the purchase or amendment to the bank's current core system which would allow the storage of electronic files. The bank's current core server, Fiserv Solutions, offers content management packages through a separate branded name, Nautilus. The initial decision for the content management part of the investment would be to research the cost involved with updating or modifying the current system that the bank already utilizes or to purchase a separate system. The second part of the investment would include the research and acquisition of a commercial application system that would ideally offer integration with the bank's core system, allowing for efficiencies through system communications.

The investment in both the content management and commercial application technology are large financial cash outflows for the bank costing thousands of dollars for the initial cost of the set up and ongoing fees associated with the use of the products. Benefits from the addition of the technology tools to the commercial loan department are financial savings and reductions to existing cash outflows for the bank including savings on paper, printing, file storage, shredding and the costs associated with the loss of using physical space. Implementation of the systems offers financial benefits that are more difficult to quantify including commercial department efficiencies gained and the potential increase to the customer service experience.

MB's information technology department has been actively researching the technology systems that are available for content management. The exploration of content management systems began almost one year ago to eventually have electronic storage options for all departments in the bank. Data storage needs vary among the different departments and the IT department was looking for a comprehensive data storage system that would be customizable for the departments and differing requirements. After examining all of the product options available and heavily weighing the decision on the cost of the product and the implementation time and challenge that the system would cause, IT decided to amend the bank's existing contract with Fiserv Solutions. Fees and costs associated with this amendment include licensing fees, professional service fees and maintenance fees. Since the cost of the Nautilus content management system is being shared among all departments of bank the cost of the system in the analysis is split among the ten departments. The calculated cost in the analysis uses an annual cost of $13,188.16 ($131,881.62 / 10)[8] with annual cost increases of 3%.

The investment in the commercial application system has been an ongoing decision among the Chief Lending Officer, the Director of Commercial Lending and the Credit Manager. The continued growth of the commercial lending portfolio and the continual maintenance of the portfolio have prompted the exploration of such systems. The research has led to three vendors that each offer all or a great portion of the system requirements outlined in the

[8] Amendment to Agreement. Nautilus Software Schedule to the Software Products Exhibit. Fiserve Solutions LLC and M Bank.

strategy section. The commercial application vendors include Moody's Lending Cloud, D + H's Credit Quest and Suntell. Loan system pricing has been obtained and is outlined as follows. After the review of the cost and requirements of the system Moody's Lending Cloud seems the logical choice.

	MOODY'S	D+H	D+H w/ RMA	SUNTELL Year to Year	SUNTELL Contract
Initial Outlay	5,000.00	26,006.00	26,006.00	119,317.00	72,180.00
Year 1	27,800.00	31,063.00	32,338.00	18,421.00	54,180.00
Year 2	29,486.00	31,063.00	32,338.00	18,421.00	54,180.00
Year 3	31,236.00	31,063.00	32,338.00	18,421.00	19,000.00
Year 4	33,110.24	31,063.00	32,338.00	18,421.00	19,000.00
Year 5	35,096.86	31,063.00	32,338.00	18,421.00	19,000.00
Total	**161,729.10**	**181,321.00**	**187,696.00**	**211,422.00**	**237,540.00**

[9]

Expense Analysis

Analysis of the financial benefits offered from investing in the content management system and the commercial application system it was important to consider the measurable, ongoing costs under the current physical paper arrangement. The areas in which it was appropriate to measure cost savings included paper expenses, printing expenses, file storage, shredding expenses and the cost of physical space. The measurable items were broken down into five categories for each expense.

The first area that was researched was the cost associated with purchasing paper for printing hard copies of materials. The bank has an existing relationship with Staples for purchasing paper with a per box costs of $29.99. The commercial loan and servicing department in a month uses 14

[9] Moody's Lending Cloud, D + H Credit Quest and Suntell vendor contract offers to M Bank.

boxes of paper on average. The total cost of this consumption in one month equates to $449.25 on average including 7% for state sales taxes ($29.99 x 14 boxes x 1.07). Since eliminating the use of paper completely would not be an option especially given the documentation of the loans, two boxes have been eliminated from the computation resulting in an estimated monthly cost of $385.07 ($29.99 x 12 boxes x 1.07).[10]

The next potential cost savings area that was researched was the printing costs associated with the commercial loan department. Based on an IT department analysis of printing charges charge per printer, it was determined that is costs $0.0125 per page and that there were 29,000 ® pages printed in a typical month. The total cost for printing in one month equates to $387.88 including 7% for state sales tax ($0.0125 x 29,000 x 1.07). Since eliminating printing completely would not be realistic, therefor 2,000 pages have been removed resulting in a new monthly cost of $337.50.[11]

The next area of potential costs savings is associated with the physical files. The bank stores physical file boxes with Iron Mountain located in close proximity to the bank's footprint. The total cost associated with the retrieval and storage of a file box is $3.90. After discussion with the servicing department is has been determined that approximately seven file boxes are created on average for the department in a month. The total monthly cost associated with the file storage is determined to be $29.21 ($3.90 x 7 x 1.07).[12]

Paper destruction or shredding was the next area of interest in determining potential savings from the investment. The bank has an existing contract with a vendor that charges $25.00 per

[10] Staples Order Receipt dated December 5, 2016.
[11] Harland Technology Services Invoice#13966298 11/3/2016 for M Bank.
[12] Ironmountain Pricing for Core Services 2016 Pricing Guide.

container for the destruction of paper materials. It has been determined that approximately 4 containers are replaced every two weeks for the commercial loan department. The total monthly costs associated with the destruction of unwanted paper material amounts to $216.67 ($25.00 x 8.67).[13]

The final measurable cost that was researched was the cost associated with the physical space that is occupied by loan files and document files at the bank's headquarters. This was analyzed financially by looking at the space in two different ways of costs. The opportunity cost associated with renting the space or the cost that the bank would incur by renting additional space near the headquarters. In a recent appraisal conducted for the bank on a property with frontage on the same road the appraiser determined that office rents range from a low of $15.00 to a high of $25.00 per square foot. The appraisal was conducted as of May 23, 2016. In reviewing the similarities between the locations and the age of the improvements $21.00 per square foot has been determined to be a fair rent per square foot for the space. The total monthly cost then associated with the potential rent or cost of the square footage is $1,750.00 ($21.00 x 1,000 / 12).[14]

Easily Quantified Potential Savings				
	Units	**Price**	**Monthly Cost**	**Annual Cost**
Paper Costs	12	$29.99	$359.88	$4,318.56
Printing Costs	27,000	$0.0125	$337.50	$4,050.00
File Storage	5	$3.90	$19.50	$234.00
Shredding	9	$25.00	$216.75	$2,601.00
Bank Storage	1,000	$21.00	$1,750.00	$21,000.00
Total			**$2,683.63**	**$32,203.56**

[13] Y, Steve. (2016, December). Personal interview with M Bank Facilities Manager.
[14] Daria R. D'Agostino, MAI, SCGREA. Stuart Appraisal Company. Appraisal of Atlantic Ridge Professional Center, Highway 34, Wall Township, NJ 07719. Page 65.

In analyzing the potential cost savings from the investment in the commercial application system and the content management system additional savings have been considered that are not as easily quantified. Although the savings are real, the process in developing the analysis is more subjective in nature than the five categories above. These potential areas of savings include a reduction in staff that may be developed from efficiencies gained in the implementation of the systems and the effects of efficiencies on customer service improvements and costs associated with poor service. In measuring potential savings for this paper the only category that was used in the analysis is the reduction or reduced staffing that would be allowed with the implementation of the two systems. In the estimated savings from the reduction of staff, one, lower level position is analyzed at a cost of $35,000.00 in annual salary. After speaking with the CFO[15] of the bank the salary is increased by 25% to include all benefits that are available to employees. The resulting annual potential savings from this reduction is $43,750.00 in the first year with another position savings in year four under the second analysis. The second analysis assumes that a total of two positions or salary plus benefits are saved over the five year period

Cash Flow Analysis from Investment 1

-	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Outlay Application System	**32,800.00**	**29,486.00**	**31,236.00**	**33,110.24**	**35,096.86**
Cash Outlay Content Management	**13,188.16**	**13,583.80**	**13,991.32**	**14,411.06**	**14,843.39**
Paper	4,318.56	4,448.12	4,581.56	4,719.01	4,860.58
Printing	4,050.00	4,171.50	4,296.65	4,425.54	4,558.31
Storage	234.00	241.02	248.25	255.70	263.37
Shredding	2,601.00	2,679.03	2,759.40	2,842.18	2,927.45
Bank Space	21,000.00	21,630.00	22,278.90	22,947.27	23,635.69
Staffing	43,750.00	45,062.50	46,414.38	47,806.81	49,241.01
Cash Inflow	**75,953.56**	**78,232.17**	**80,579.13**	**82,996.51**	**85,486.40**
Net Cash Flow	**29,965.40**	**35,162.36**	**35,351.81**	**35,475.21**	**35,546.15**

[15] Catherine F. (2016, December). Personal interview with M Bank EVP, CFO.

Key Assumptions in the Cash Flow Analysis:

1. Moody's Lending Cloud is chosen commercial loan application vendor.
2. Reduction in one low level staffing position.
3. Periods are increased year over year at 3%.

Cash Flow Analysis from Investment 2

-	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Outlay Application System	**32,800.00**	**29,486.00**	**31,236.00**	**33,110.24**	**35,096.86**
Cash Outlay Content Management	**13,188.16**	**13,583.80**	**13,991.32**	**14,411.06**	**14,843.39**
Paper	4,318.56	4,448.12	4,581.56	4,719.01	4,860.58
Printing	4,050.00	4,171.50	4,296.65	4,425.54	4,558.31
Storage	234.00	241.02	248.25	255.70	263.37
Shredding	2,601.00	2,679.03	2,759.40	2,842.18	2,927.45
Bank Space	21,000.00	21,630.00	22,278.90	22,947.27	23,635.69
Staffing	43,750.00	45,062.50	46,414.38	95,613.61	98,482.02
Cash Inflow	**75,953.56**	**78,232.17**	**80,579.13**	**130,803.31**	**134,727.41**
Net Cash Flow	**29,965.40**	**35,162.36**	**35,351.81**	**83,282.01**	**84,787.16**

Key Assumptions in the Cash Flow Analysis:

1. Moody's Lending Cloud is chosen commercial loan application vendor.
2. Reduction in two low level staffing positions.
3. Periods are increased year over year at 3%.

Evaluation of Financial Risk

In addition to the financial cost of the implementation of the content management and application system project for the commercial loan department there are other risks that need to be identified and considered. These risks carry a potential financial loss to the bank. The areas of risk for the investment in the project include information security, commitment to the vendors, and access to the information or the potential loss of the information after implementation. All areas open the bank to risk and a potential financial loss resulting from the associated risk.

Information Security

Adopting the use of both the content management and commercial applications systems creates electronic applications and the storage of customers' private information. The use of the systems creates a potential risk for the loss of the information through cyber hacking or other malicious attempt to obtain the material that could cause harm to the individuals and leave the bank responsible. In order to secure the information it is imperative that the bank's IT department be included in all aspects of the implementation and ongoing maintenance of both systems.

Commitment to Vendors

Commitment to vendors for the applications systems also creates a dependency on the bank's part to those vendors. Important information regarding loans underwriting, approvals and loan documentation will be stored in both systems creating a need by the bank to access the information in the future. The bank in this regard becomes dependent on the vendors for their systems as they will become a data base of lending information. The potential loss in the control could open up the potential for financial increases for system usage where the bank is in a poor position to negotiate. It is important the bank maintains good vendor management in regard to the system vendors and ensures access to the data in the event that the vendor relationship is severed.

Access to Stored Information

The final risk associated with the use of the content management and commercial application system is the loss of access to the stored information. The loss of the information would mean the loss of credit file, copies of loan documents and associated items. It is essential that the IT department develop or include the two systems in the bank’s existing automated backup, creating an ongoing storage of the information.

Financial Impact Conclusion

Based on the analysis above analysis above, it is expected that the financial risks are mitigated by the gains. The net cash flow in both scenarios produces a positive outcome even with the exclusion of other potential cost savings that are not measurable. The proposed savings and potential efficiencies that the systems can produce would yield a positive return on the investment and should increase the potential output of the staff.

<u>Non-Financial Impact</u>

Logistical and Organizational Challenges

Common Project Management Challenges:

1. Deadlines – Unrealistic or impossible deadlines can kill a project's development and ultimately destroy the goals of the project. Implementation of both the application and content management systems can be an overwhelming endeavor for the project team in addition to already existing job functions. Time is not an abundant resource for anyone and project deadlines must consider the ability of the team to effectively meet those goals.
2. Communication – Poor communication during the development of the project could hinder employee buy-in and the success of the project. A real challenge during the project is the inclusion and communication with the project team and more importantly the system users. Communication could include developments during setup, available training, and milestones that would be inclusive of the system rollout and usage.
3. Scope Changes or Scope Creep – Allowing the scope of a project to extend beyond the intended original objective can be a detriment to a project. Over complicating the ultimate goal of the application system and content management systems would be detrimental in ensuring simplicity and usage by the commercial loan department.
4. Competition for Resources – Projects are always competing for people, money and time. The management of the systems development must allocate appropriate talent, time for those employees to implement the systems properly and the capital investments to acquire and maintain the systems.

5. Uncertain Dependencies – Projects are ultimately linked to other dependent factors that ensure their success or failure. Managing the start-up and implementation period for the two systems would be dependent on other departments, normal responsibilities of project team members and potentially other unforeseen dependent factors that could affect the project management.
6. Failure to Manage Risk – Assessing the potential risks of a project during the initial adoption is important to gauge the potential future risks and hurdles that need to be overcome.
7. Team Skills – Since projects are never a one man show it is important that cohesive teams are assembled to ensure a project's success. In order for the application system and content management system to be a success for the commercial lending department it is critical that a quality project team be assembled with the ability to work well together.
8. Accountability – Project leaders and teams must be held accountable for their results. The lack of at least one accountable member of the project team would ensure the failure of implementing the systems.
9. Stakeholder Engagement – Project teams can get involved in the progress of a project and forget to include the end-users. Incorporating the whole commercial lending department in the progress of the projects or offering training along the way can create a buy-in for the project roll out.

10. Undefined Goals – Clearly defining the goals and objective of a project at the onset avoids ambiguities during the development.[16]

In addition to the above common challenges, internally a large task in effectively utilizing the commercial application system and the content management system will be the adoption of the procedures by the department loan officers. Historically the commercial loan department has operated under a paper hard copy loan file system that was originated by a small group of older loan officers in early 2000. Computer proficiency has limited the loan officers to staying with the paper system and the adoption of Windows loan files has been met with challenges of approval by this group. The credit analysts and portfolio managers in the department are younger than their loan officer counterparts and have adopted the use of Windows loan files without task. In order for the two new systems to operate effectively and create desired outcomes of department efficiency all department members must participate in its use and the age and computer proficiency hurdle must be overcome.

In order to overcome the anticipated loan officer resistance to the adoption of the proposed new technology and seek continuous improvement, the use of the content management system will be led by the credit analysts and portfolio managers. Since the use of the systems will be better received by this group and they will have more interactions with the technology they will act as the cheerleaders for its use. In gaining the buy in of this group they will be expected to convey an awareness and expectation of the technology, ease of use, and

[16] Top 10 Project Management Challenges www.villanovau.com/resources/**project-management**/top-10-**challenges/** *(accessed (1/9/2017).*

how essential the system is for their use. The group's ability to deliver on these three areas will help to gain the excitement of other department members.

The other large hurdle for the implementation of the content management system will be the allocation of key management people to structure, design and oversee the building of the existing Nautilus system and implementation of the application system. Nautilus is an adaptable package for content management and will need to be designed to allow for the effective storage and retrieval of necessary loan file information. The structure and design of the system should not be taken lightly as it will affect the outcomes of the system. The implementation of the Moody's Lending Cloud application system is a potential three month process involving the project team from MB and a team from Moody's. This will require key personal involvement, which will take away from other normal operating activities in the commercial loan department.

Project Challenge Solutions

Addressing the Common Project Management Challenges:

1. Deadlines – In creating deadlines a more flexible approach should be used. Instead of having hard targets for achieving a milestone or benchmark the schedule should allow some leeway and allow additional time depending on schedules and the amount of work to be achieved. The team should also avoid creating extra work that is not necessary in moving the project forward as well as meetings need to have agendas that are followed for the success of the project.

2. Communication – It will be important to be inclusive of all stakeholders in the progress of the commercial application and content management systems. Communication will be timely and in a format that highlights the important issues and benefits of adopting the systems to gain buy-in and include all necessary employees that will be the end users of the systems.[17]
3. Scope Change or Scope Creep – The project will be held to task by keeping strict team meeting agendas and keeping with the original intent of the systems. Defining the goals of the project for the application system and content management systems early on in the adoption can keep the projects on track.
4. Competition for Resources – In order to obtain the necessary money, time, and employees for the implementation of the systems it is important to strongly push the benefits and potential cost savings of the adoption. Concrete saving for the bank along with the potential increases to efficiency and customer satisfaction are strong arguments for allocating resources for the systems project.
5. Uncertain Dependencies – Conducting the project and implementation of the application and content management systems in an organized and regimented manner will help to ensure that items that the project is dependent on can allow for the forward progress of the project.
6. Failure to Manage Risk – It is important to clearly outline the risk that is involved with undertaking the adoption of the application and content management systems in the commercial loan department. These items should be identified by the project team

[17] Morgan, Jessica. "How to Overcome the Challenges of Project Management." September 22, 2016. (accessed 1/13/2017) https://dzone.com/articles/how-to-overcome-the-challenges-of-project-management

along with the IT department to ensure that all risk associated with the project is properly mitigated.

7. Team Skills – Choosing and identifying the proper talent for the implementation is extremely important to ensure the success of the project. A team will be built around people that have the necessary experience and ability to work well in a team.
8. Accountability – It will be imperative for the team project leader to have total accountability for the projects development and success. The team project leader will be responsible for presenting all potential contracts, keeping to the agenda of the meetings, ensuring timely completion of flexible deadlines, communications, and project roll out.
9. Stakeholder Engagement – As important as the communication of the project will be to the system users it will also be important to engage and include where it is appropriate the system users in the roll out of its use and training. The engagement of the end users and their buy-in will help promote the success of the project.
10. Undefined Goals - In defining the desired outcome of the system project it is important to distinguish the difference between the project goals and objectives. The goal will be defined by the project team as the destination desired after implementation and the objectives will be defined as the road map to lead the project there. Clearly defining both the goals of the project and the objectives along the way will help ensure the success of the application and content management systems project.[18]

[18] Jones, Nicole. "Why Projects Fail: Unclear Objectives and Goals." Kintone. January 12, 2016. (accessed 1/13/2017) https://blog.kintone.com/blog/why-projects-fail-unclear-objectives-and-goals/

Addressing the challenge that will arise from the complete adoption for the use of both the application and content management systems by the loan officers will be a difficult undertaking. The use of the systems is likely to be met with resistance by this group in the commercial loan department and countering this will take a large amount of systems training. The implementation of the Moody's Lending Cloud will include training provided by Moody's that will be mandated by upper management. Training for the use of the Nautilus content management system would be mostly provided by the IT department but the use of this system by the loan officers is unlikely and will mostly fall on the servicing department and loan origination department. While the training offered by Moody's will help with loan officers using the system the final measure that will ensure that they utilize the systems is if they have to begin origination through Moody's. This feature in the program ensures their usage and that they participate in the training and the program.

Allocating key employees during the implementation of the application and content management systems will have to be a "bite the bullet" time period. In order for the programs to succeed and be beneficial to the bank's bottom line and ability to meet customer servicing needs with a growing portfolio key employees must be utilized in the process. This might mean that in the short run during the information stage and implementation stage that these employees focus is away from other common department tasks but it is for the betterment of the commercial lending department and bank as a whole.

Measure to Evaluate the Non-Financial Impact

The two most important non-financial impact items are the increases to employee efficiency and the ability to meet or exceed customers' expectations increasing overall customer satisfaction. These two items largely relate to a better customer service experience largely relied on in the commoditized banking industry. This is evident in one of the bank's adopted core beliefs stating "MB ("MB") believes in always being a customer centric organization, recognizing that there is market choices and differentiation that occurs through product and service delivery."[19] In adopting the application and content management systems the department is keeping in line with the systems of beliefs adopted by the bank. The measure to evaluate the level of experience a customer receives would be difficult but could be conducted through e-mails or by mail after a transaction with the bank. This could be accomplished with a questionnaire that could provide very valuable feedback as to how the bank is transacting and meeting the needs of its customer base. The suggestion for measuring the increased commercial lending efficiency and customer satisfaction would be to circulate a questionnaire to obtain feedback.

The expected outcome from the proposed adoption of a commercial application and content management system is the increase to employee morale and production along with the customer service outlined above. The adoption of the technology and its use by the commercial lending department creates opportunities in the competitive banking landscape for improvements in decisioning loans. The current underwriting methods force analysts to use multiples systems creating multiple locations for data and information that creates slowness

[19] "Statement of Beliefs."

developing approvals. The adoption of the application and content management systems would alleviate the hunt and search method of obtaining information. The new systems would be well accepted by the commercial loan employees as the systems would put much needed information at their fingertips. The adoption would also be helpful in achieving the bank's belief that differentiation occurs through product and service delivery.

An additional feature of using the two systems would be the ability of the bank to better meet our auditors' needs for information. The creation and use of the two systems establishes a data base for our loan files and associated information that would allow the commercial loan department to efficiently provide audit information. The information would also be more secure than having paper documents transferred into a room for the auditors to view. The systems would give the auditors view access only to the documents that they request and should free up the time of bank employees that would otherwise be supply the paper documents to them.

Long-term Profitability for MB

It is expected that due to employee efficiencies gained from using a commercial application system and a content management system the bank will be more likely of achieving customer satisfactions on commercial loan transactions. Since the bank relies largely on its current customer referrals for the growth of the commercial loan department the use of the systems will continue the trend and continue to grow the portfolio, creating more interest income and fee income for the bank. The measurement of increases directly relating to the systems will prove difficult but a customer satisfaction survey should provide some feedback. It is important to note that non-financial performance measures have advantages and disadvantages.

Advantages

1. Closer link to long-term strategies.
2. Drivers of success tend to be intangible assets.
3. Non-financial measures can be better indicators of future financial performance.
4. Success of actions versus changes that are beyond the control of the project

Disadvantages

1. Time and costs associated with tracking non-financial performance.
2. Non-financial performance measures can be measured in many ways.
3. Causal links or relationship of intangibles to performance. Hard to measure items or may factors can be contributing to performance outcomes.
4. Lack of statistical reliability.
5. Implementing an evaluation system with too many measures can dilute the measurement process.[20]

Conclusion

[20] "Non-financial Performance Measures: What Works and What Doesn't." http://knowledge.wharton.upenn.edu/article/non-financial-performance-measures-what-works-and-what-doesnt/ December 6, 2000. (accessed 1/18/2016)

The commercial lending department at MB is facing the pains that come with the growth of the portfolio and the ability to effectively manage the associated information. The availability of technology to aid with the continued growth, create efficiencies, and cost savings is an essential project for the department. The adoption of the two systems has the ability to improve the current paper dependent process and move the department into a functional and efficient medium allowing improvements to the current customer service experience. The content management system and application system would make information for loan decisions readily available creating the ability to give answers to customers in a timely manner. In consideration of the net positive cash flow and bank's stated Statement of Beliefs and Pillar Core Values the adoption of the systems is in line with the objective of the organization. The recommendation is to begin with the implementation of the project by the end of the first quarter 2017.

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