STRATEGIC ENROLLMENT MANAGEMENT PROCESSES AND CUSTOMER RELATIONSHIP MANAGEMENT UTILIZATION AT MICHIGAN AND INDIANA COMMUNITY COLLEGES

by

Stacey M. Stover

This dissertation is submitted in partial fulfillment of the requirements for the degree of

Doctor of Education

Ferris State University

September 2020

© 2020 Stacey M. Stover All Rights Reserved

STRATEGIC ENROLLMENT MANAGEMENT PROCESSESS AND CUSTOMER RELATIONSHIP MANAGEMENT UTILIZATION AT MICHIGAN AND INDIANA COMMUNITY COLLEGES

COMMUNITY COLLEGES	
by	
Stacey M. Stover	
Has been approved	
September 2020	
APPROVED:	
Deborah Vendittelli, DNP Committee Chair	
Andrew Bowne, EdD Committee Member	
Cheryl Hagen, EdD Committee Member	
Committee Member	Dissertation Committee
	Dissertation Committee
ACCEPTED:	
Roberta C. Teahen, PhD, Director Community College Leadership Pr	ogram

ABSTRACT

This dissertation examines the utilization of Strategic Enrollment Management and
Customer Relationship Management at Michigan and Indiana community colleges using
quantitative analysis. The purpose of the research was to investigate the correlation between both
Strategic Enrollment Management and enrollment as well as Customer Relationship Management
and enrollment. The scope of the study included Michigan and Indiana community colleges.
Research questions that guided the research include a review of the utilization of Strategic
Enrollment Management in Michigan and Indiana community colleges, the investigation of a
correlation between the utilization of Strategic Enrollment Management and enrollment at
Michigan and Indiana community colleges, the utilization of Customer Relationship Management
in Michigan and Indiana community colleges, and any correlation between the utilization of
Customer Relationship Management and enrollment at Michigan and Indiana community
colleges.

Research findings did not support a correlation between Strategic Enrollment

Management, Customer Relationship Management tools, and enrollment. This finding is in

conflict with literature related to Strategic Enrollment Management best practice literature. Future
research may want to continue to evaluate these relationships to determine if correlations exist
that were not present in this research study.

KEY WORDS: Admissions, Customer Relationship Management, Strategic Enrollment Management, Student Information Systems

DEDICATION

To my family, Keith, Grace, and Luke, for whom I do all things. You are the meaning to my every day. I love you!

In addition, special thanks to my Dissertation Committee Chair, Dr. Deborah Vendittelli, and my Dissertation Committee members, Dr. Andrew Bowne and Dr. Cheryl Hagen. Your support and guidance have been truly appreciated. Thank you for your mentorship and friendship.

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
LIST OF FIGURES	vi
CHAPTER ONE: INTRODUCTION	1
Introduction	1
Strategic Enrollment Management as a Solution	3
SEM Tool: Customer Relationship Management Software	
Purpose of the Research	
Significance of the Study	
Research Questions	
Hypothesis	
Assumptions and Biases	
Definition of Terms	
Conclusion	9
CHAPTER TWO: LITERATURE REVIEW	12
Introduction	
Strategic Enrollment Management History	
Strategic Enrollment Management Definition and Processes	
Strategic Enrollment Management Planning	
Strategic Enrollment Management Data	
Strategic Enrollment Management Goals	
History of Customer Relationship Management	
Customer Relationship Management Utilization	
Customer Relationship Management Purpose in Higher Education	
Customer Relationship Management Tools Used as Part of Strategic Enrollment	
Management	31
Conclusion	
Conordison	
CHAPTER THREE: METHODOLOGY	33
Introduction	33
Design	33
Sample	33
Instrument	34
Data Collection Procedures	35
Human Subjects Concerns	36
Data Analysis Methods	37
Conclusion	37

CHAPTER FOUR: RESULTS	38
Introduction	38
Demographics	38
Strategic Enrollment Management	39
Strategic Enrollment Management and Collaboration	
Strategic Enrollment Management Planning/Goals	43
Strategic Enrollment Management Data	44
Strategic Enrollment Management Effectiveness	
Customer Relationship Management Utilization	
Conclusion	48
CHAPTER FIVE: DISCUSSION	49
Introduction	49
Research Question #1 Discussion and Analysis	49
Research Question #2 DIscussion and Analysis	50
Research Question #3 Discussion and Analysis	50
Research Question #4 Discussion and Analysis	51
Overall Findings	
Study Delimitations and Recommendations for Future Research	
Research Conclusions and Recommendations	54
Develop a Strategic Approach to Strategic Enrollment Management	54
Identify and Address Potential Challenges to SEM / CRM Implimentation	56
Conclusion	
REFERENCES	60
APPENDIX A: SURVEY FORM	63
APPENDIX B: IRB APPROVAL LETTER	72

LIST OF TABLES

	Page
Table 1: Strategic Enrollment Management Data Sources	21
Table 2: Data Impediments that can impact Strategic Enrollment Management	23
Table 3: Research Timeline	36
Table 4: Number of Years Using Strategic Enrollment Management	39
Table 5: Strategic Enrollment Planning Goals	41
Table 6: Departments involved in Strategic Enrollment Management	42
Table 7: Strategic Enrollment Management Markets	43
Table 8: Number of Year(s) Utilizing a Customer Relationship Management	46

LIST OF FIGURES

	Page
Figure 1. Higher Education Growth and Decline Rates	2
Figure 2. Sustainable Enrollment Outcomes	17
Figure 3. Strategic Enrollment Management Process Framework	19

CHAPTER ONE: INTRODUCTION

INTRODUCTION

Ensuring adequate enrollment is a critical issue at colleges and universities. Colleges are reliant on student tuition dollars that result from enrollment, yet the number of students going to college continues to decline (Grawe, 2018). Many factors influence the challenges of college enrollment, such as decreasing student population numbers from lower birth rates, the out migration of individuals moving to other states, and the aging of the United States population (National Center for Education Statistics, 2019). In addition, the number of higher education institutions available continues to increase, which leads to students having more options for college, and thus, colleges having more competition for enrollment (Hossler & Bontrager, 2015). Data from the Western Interstate Commission on Higher Education (2012), as cited in Hossler & Bontrager (2015), indicates the competition for enrollment will continue to pose a challenge for all sectors of higher education in the future.

Nathan Grawe (2018) discussed enrollment from a national perspective stating, "the Great Recession caused birth rates to plummet almost 13% in just five years" (p. 1). Lower birth rates are just one of the issues related to enrollment that colleges should start reviewing in preparation for future enrollment. Nationally, college attendance is expected to hold steady through 2020, but after that, the entire nation is anticipated to have dramatic enrollment declines (Grawe, 2018).

While enrollment at four-year institutions has been an issue for decades, the challenge of ensuring adequate enrollment for community colleges did not begin until the early 2000s. Prior

to that time, community colleges experienced sufficient enrollment as a result of the open access model of community colleges. Ease of accessibility, along with affordable tuition rates, lead to community colleges being highly desirable (Bontrager & Clemetsen, 2009). However, the growth trend for community colleges is changing. Recent data shows that community colleges have been impacted by enrollment declines among first-time college students more than all other higher education sectors, except for the for-profit institutions (Fain, 2017). In addition, the number of students pursuing associate degrees has decreased 2.3% nationally (Fain, 2017).

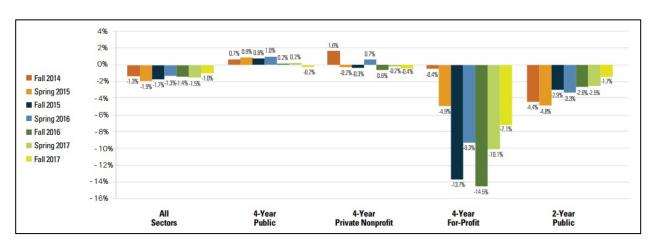


Figure 1. Higher Education Growth and Decline Rates

Source: Fain, 2017, Figure 2

Note. The highest percentage of decline is at 4-Year For-Profit institutions followed by 2-Year public institutions.

This study considers enrollment at a regional level, specifically in Michigan and Indiana. Public elementary and secondary enrollment for the Midwest is expected to decrease by 3% between 2013 and 2025 (Hussar & Bailey, 2019). National projections show that the situation is even more severe for Michigan and Indiana, with both expected to have a 5% or greater decline in enrollment in public elementary and secondary schools (Hussar & Bailey, 2019). The lower number of students in the pipeline means that colleges can anticipate smaller freshman classes

and more challenges with enrollment. Grawe (2018) discusses the upcoming enrollment decline for community colleges in Michigan indicating "by 2020, Michigan enrollments will be down for all institution types" (p. 138).

Declining enrollment at colleges will continue without strategic efforts (Lovik, 2014). The impact of having fewer students will result in major changes being implemented by colleges. The expected impact of diminishing enrollment may include decreased revenue, which may result in the elimination of academic programs; the termination of staff; and the deferral of campus projects (Lovik, 2014; Masterson, 2009). The challenges facing community college enrollment are numerous and "Community colleges now face a more competitive, sophisticated, technology-driven marketplace; demographic challenges that will affect the pool of available students; performance-based funding initiatives that will require achieving significant benchmarks; and issues of cost and access" (Bryant, 2013, p. 1).

STRATEGIC ENROLLMENT MANAGEMENT AS A SOLUTION

Thus, colleges across the nation are looking for solutions to help fill their classrooms. Strategic Enrollment Management (SEM) provides a guide to support higher education institutions with their enrollment issues. Strategic Enrollment Management provides a structure to guide enrollment efforts that is based on using goals, strategies, tactics, data, and collaborative relationships. Colleges are utilizing Strategic Enrollment Management because this focused approach helps higher education institutions to set and achieve goals, to improve students' opportunities for academic success, and to support institutional success (Bontrager & Green, 2012). Strategic Enrollment Management involves developing enrollment with a focused method, rather than relying on chance.

One of the Strategic Enrollment Management recommendations is to examine both external and internal technology (Bontrager & Clemetsen, 2009). A review of external technology includes evaluating web pages and social media to determine how students and the community are interacting with the college. Internal technology reviews focus on evaluating how the college is using technology to improve and support the student experience. Current technology has evolved to support all segments of the student continuum from admission through alumni engagement.

SEM Tool: Customer Relationship Management Software

One of the technology tools heavily utilized in Strategic Enrollment Management processes is Customer Relationship Management software. Customer Relationship Management tools allow colleges to utilize communication technology to build relationships with prospective students. Customer Relationship Management tools also provide an opportunity to track interactions with students in order to focus efforts effectively for the best return on investment.

Enrollment outreach is a major financial issue for higher education institutions. Colleges and universities are spending \$319 million on marketing to prospective students (Bedigian, 2006, p. 1). In addition to marketing, colleges are also spending resources on Customer Relationship Management tools. The effort to stay competitive and reach the student population via Customer Relationship Management technology is reported to be increasing, with 80% of colleges anticipating increased Customer Relationship Management costs (Bedigian, 2006, p.1).

It is important to note that Customer Relationship Management tools are an integral part of building a relationship with students. The relevance of this software solution is described as "Much more than just a technology orientation, CRM focuses on customer needs, not the

provider's need to push out new products. CRM champions recognize that the better they treat their customers, the higher their customer loyalty will be" (Bedigian, 2006, p. 2).

Customer Relationship Management tools on college campuses have been growing in popularity and the demand for this type of technology is expected to continue in the future with seventeen percent of institutions expected to implement a Customer Relationship Management within three years (Lang & Pirani, 2014). Customer Relationship Management tools provide the functionality to improve processes, connect with students, and tie multiple technology solutions together making various enrollment functions more effective and efficient (Lang & Pirani, 2014).

PURPOSE OF THE RESEARCH

This quantitative research study analyzed Strategic Enrollment Management processes and the utilization of Customer Relationship Management tools at Michigan and Indiana community colleges. The study examined Strategic Enrollment Management implementation, planning, data availability and utilization, and effectiveness. Strategic Enrollment Management processes are important to understand, because Strategic Enrollment Management provides ways for colleges to plan and also provides a structured approach to build enrollment based on strategies, data, and collaborative relationships. The study also examined Customer Relationship Management utilization as these tools deliver a critical technological solution to address some of the enrollment efforts (Westman & Bouman, 2007).

Theoretical Foundation

The research is based on Strategic Enrollment Management as the theoretical foundation. There is a multitude of research texts and articles related to Strategic Enrollment Management as an approach for enrollment (Bontrager & Clemetsen, 2009; Bontrager & Green, 2012; Hossler & Kalsbeek, 2013; Hossler & Bontrager, 2015).

Prior to Strategic Enrollment Management, colleges had a less structured approach to enrollment management. Historically, college admissions offices focused as gatekeepers who admitted only the best and the brightest students (Sigler, 2017). After the number of students applying to college began to decline during the 1970s, at the end of the Baby Boom, colleges begin to consider other options to build enrollment. Strategic Enrollment Management began with the efforts of Frank Campanella and Jack Maguire who "incorporated outstanding people using the right information in the right organizational structure to create a synergy" (Sigler, 2017, p. 6). Since its inception, Strategic Enrollment Management has evolved to include the entire student life cycle from application to retention through alumni outreach (Sigler, 2017). Strategic Enrollment Management of today incorporates marketing, strategic planning, and a connection to the entire institutional structure (Sigler, 2017).

Strategic Enrollment Management can also be called Strategic Enrollment Planning, which is defined as "a complex and organized effort to connect mission, current state, and changing environment to long-term enrollment and fiscal health, resulting in a concrete, written plan of action" (Hundrieser, 2012, p. vii). Strategic Enrollment Management is a process that focuses on improving the current state of the college to achieve a desired result. Effective Strategic Enrollment Management should utilize data to help institutions determine how to move from one state to the next in a strategic and informed manner (Hundrieser, 2012; Bryant, 2013; Hossler & Kalsbeek, 2013).

As today's colleges compete for the same students, Strategic Enrollment Management is becoming more and more important. National community college enrollment declined 3.6% in the spring of 2013. In comparison, the enrollment from a combination of all higher education institutions declined 2.3% (Lipka, 2013). The declining enrollments have forced colleges who

had not previously embraced Strategic Enrollment Management to begin considering this, and other options, to build their student body class (Lipka, 2013).

Significance of the Study

This study seeks to add to strategic college enrollment and Customer Relationship

Management technology research. College enrollment is an important topic related to U.S.

higher education. Incorporating Strategic Enrollment Management and Customer Relationship

Management approaches may help institutions improve their enrollment management efforts and aid in the education of future students.

The data and analysis gathered from the study may be used to improve future enrollment management processes and evaluate positive or negative outcomes from Michigan and Indiana community colleges related to Strategic Enrollment Management and Customer Relationship Management processes. Michigan and Indiana are important states to evaluate as both states are expected to face continuing enrollment challenges into 2025 (Hussar & Bailey, 2019).

Research Questions

This research study focused on input from the Admissions department director, staff member, or a participant designee from Michigan and Indiana community colleges. The participant completed a Strategic Enrollment Management and Customer Relationship Management survey to assess utilization of the Strategic Enrollment Management processes and utilization of a Customer Relationship Management tool. The following research questions guided the study:

1. What is the utilization of Strategic Enrollment Management in Michigan and Indiana community colleges?

- 2. Is there a correlation between the utilization of Strategic Enrollment Management and enrollment at Michigan and Indiana community colleges?
- 3. What is the utilization of Customer Relationship Management in Michigan and Indiana community colleges?
- 4. Is there a correlation between the utilization of Customer Relationship Management and enrollment at Michigan and Indiana community colleges?

Hypothesis

The variables utilized in the research study are Strategic Enrollment Management and Customer Relationship Management tools. The population focused on Michigan and Indiana community colleges.

The study was conducted to determine the hypothesis of a correlation between Strategic Enrollment Management and Customer Relationship Management utilization at Michigan and Indiana community colleges.

Assumptions and Biases

As with all research, there were possible inherent assumptions and biases that may have impacted the research. Assumptions of the research were:

- 1. Interview participants shared the information in an honest and open manner.
- 2. The sample of Admissions department director, staff member, or a participant designee from Michigan and Indiana community colleges were the most relevant respondents for the survey.
- 3. Participants had an interest in participating in the research and were not coerced to share information.

Limitations or biases of the study included:

- 1. Every community college has its own environment and therefore individual campus and subject factors may bias how individuals respond to the survey questions.
- 2. The sample size is limited based on the number of individuals in the roles being surveyed. In addition, the sample was limited due to the focus on the specific geographic states selected.

- 3. The Survey Monkey tool measure used to collect the data may have led to a lower response rate.
- 4. The research is based on self-reported data and respondents may not have the knowledge of the tools and strategies utilized on their campuses.

DEFINITION OF TERMS

For the purpose of this research study and to provide clarification, the following terms were defined:

- American Association of Collegiate Registrars and Admissions Officers (AACRAO): a non-profit, voluntary, professional association of more than 11,000 higher education professionals.
- Customer Relationship Management (CRM): a software tool used to manage an organization's interaction with current and potential students.
- **Enrollment:** the method an organization utilizes to evaluate the count of their student body. Enrollment can be summarized differently at institutions. This research considers any revenue generating headcount as enrollment.
- Strategic Enrollment Management (SEM): a strategic focus related to enrollment at a college or university.

CONCLUSION

Increasing college attainment is a national objective. The United States has a goal to increase overall college attainment. Research on how to support enrollment efforts can aid in the effort. In 2010, the Obama Administration and the Lumina Foundation set a goal to have 60% of the American public with a postsecondary degree by 2025 (Hundrieser, 2012). This would mean that the United States would need to educate more than 23 million more students than those that are currently in the higher education pipeline (Hundrieser, 2012). Community colleges are an important goal of college attainment metrics set by the government (Bryant, 2013). Yet data indicate that through 2033, the college-aged population will change dramatically due to geography and race/ethnicity (Grawe, 2018). Non-Hispanic white students from the Midwest and

Northeast will decline even though these are currently the most highly enrolled population of students (Grawe, 2018). Every effort to connect more students with higher education will help to improve education throughout the country.

When looking at higher education through a lens that focuses on the primary purpose of educating students, the core divisions within a college are instruction and student services.

Within the student services division, one of the major components is the enrollment management efforts of admissions, retention, and graduation (Sigler, 2017). These areas encompass the offices and activities within a college that help to not only enroll but matriculate the students that are needed for the instruction to occur.

The research was organized into traditional dissertation chapter format. Chapter One provides an introduction of the study as well as a rationale for the study. The first chapter also includes an overview of current enrollment issues, the study's theoretical framework, the research questions, and a definition of terms. Chapter Two is a thorough literature review of Strategic Enrollment Management including the history, critical steps for planning, goal setting, and evaluation of Strategic Enrollment Management processes. Within Chapter Two, an analysis of data utilized for Strategic Enrollment Management and evaluation of Strategic Enrollment Management processes for effectiveness are addressed. Chapter Two also includes a review of Customer Relationship Management software, including the history of these tools and how Customer Relationship Management tools are utilized. Customer Relationship Management and its connection to Strategic Enrollment Management is also examined. Chapter Three includes a review of the design, sample, instrument, and data collection procedures for the study. Chapter Four discusses the results and outcomes of the study determined during the research process.

Chapter Five summarizes the findings of the research, limitations of the study, and provides recommendations for future research.

CHAPTER TWO: LITERATURE REVIEW

INTRODUCTION

Strategic Enrollment Management concepts provide a structured approach allowing colleges to influence class size and other demographic criteria of a student body. Customer Relationship Management tools provide a technical approach for how to communicate with students and leverage engagements to influence actions such as application for admission, registration for classes and more. This chapter includes a review of Strategic Enrollment Management history and the definition of Strategic Enrollment Management. The chapter also provides insight into the processes, planning, data, and goals of Strategic Enrollment Management. The history of Customer Relationship Management is explored in both business and education. Customer Relationship Management tools are also analyzed for utilization, purpose and the relationship to Strategic Enrollment Management.

STRATEGIC ENROLLMENT MANAGEMENT HISTORY

College enrollment became an issue for higher education institutions in the mid-1970s when World War II veterans and baby boomers began finishing college and institutions realized more student enrollment was needed to fill their classrooms. Enrollment declines led to the concept of enrollment management that began in 1973. Initial efforts at Strategic Enrollment Management occurred as a result of teamwork to build enrollment between a professor named Jack Maguire and a vice president at Boston College, Frank Campanella. Together, Maguire and Campanella determined that by using targeted strategies and collaboration among various

12

departments at the college, they could build their enrollment (Hossler & Bean, 1990; Bontrager & Green, 2012).

Maguire and Campanella's collaboration and planned approach is listed as one of the first documented attempts of enrollment management. Maguire discussed his philosophy regarding enrollment management by stating, "enrollment management was developed to bring about a synergy among functions such as admissions, financial aid, and retention, which too often were viewed as independent and working at cross purposes" (Britze, 1998, as cited in American Association of Collegiate Registrars and Admissions Officers [AACRAO], 2009, p. 4).

Another important leader in the history of enrollment management was Tom Huddleston from Bradley University. Huddleston focused on the marketing component in enrollment management. According to Huddleston, in order to impact enrollment, colleges need effective marketing that addresses both the academic quality and the reputation of an institution (AACRAO, 2009). Prior to Strategic Enrollment Management theories, colleges and universities looked at marketing with disdain. However, the new demand for enrollment changed this relationship and helped colleges and universities understand that they needed to maximize all of the resources at their institutions, including marketing, in order to attract students (Hossler & Bean, 1990). Strategic Enrollment Management also led to colleges realizing that they needed to retain the students already enrolled, which eventually became the retention component of Strategic Enrollment Management.

The next phase of Strategic Enrollment Management evolved in the 1980s when Don Hossler began contributing to enrollment management with research on student choice (Bontrager & Green, 2012; Sigler, 2017). He wrote about the importance of professionally trained enrollment management staff. Hossler has coauthored several books that are seminal

research for enrollment management including Enrollment Management: An Integrated Approach (1984), Creating Effective Enrollment Management Systems (1986), The Strategic Management of College Enrollments and Handbook of Strategic Enrollment Management (1990). Another important theoretical addition to Strategic Enrollment Management came in the 1990s when Michael Dolence added an emphasis on strategic planning (Sigler, 2017). Together, the combination of coordinated efforts, marketing, student choice research, and strategic planning led to the current approaches to Strategic Enrollment Management.

Strategic Enrollment Management serves an important purpose in managing college enrollment. Historically, Strategic Enrollment Management started at four-year colleges and universities (Hossler & Bean, 1990; Bontrager & Green, 2012). Most community colleges did not have a need for Strategic Enrollment Management due to stable enrollment. Most recently, the United States recession of the 2000s led to record high enrollments at community colleges (Lipka, 2011). However, as the economy improved, enrollment at community colleges began to decline. The declining enrollment, coupled with the trend of declining state financial support, challenged community colleges to find the student populations needed to meet their new financial shortfalls. Lipka explains the pressure for enrollment stating, "community colleges face a new stress: Keep the tuition coming in by managing enrollment like never before" (Lipka, 2011, p. A2). The challenge for enrollment is high due to competition for students due to the variety of institution types, increased options for online learning, and media pressure about not attending college at all and questioning the value of a college education (Lipka, 2011).

STRATEGIC ENROLLMENT MANAGEMENT DEFINITION AND PROCESSES

Strategic Enrollment Management (SEM) has multiple definitions, all focused on the efforts to impact enrollment in colleges and universities. For the purposes of this research, the

most applicable definition for Strategic Enrollment Management in a community college is "a concept and process that enables the fulfillment of institutional mission and students' educational goals" (Bontrager & Clemetsen, 2009, p. 3). It is important to note that Strategic Enrollment Management efforts are built upon the theory that college enrollment can be controlled through a combination of factors that include setting specific goals, improving processes that impact students' academic success, addressing institutional success by implementing strategic planning, making decisions based on data, building communications with stakeholders, and increasing college-wide collaboration (Bontrager and Clemetsen, 2009; Bontrager & Green, 2012; Bryant, 2013). Other researchers have added to the necessary requirements for Strategic Enrollment Management, stating that Strategic Enrollment Management should also include organizational structure, academic participation, and marketing emphasis (Barnes & Bourke, 2015).

It is also relevant to think about what Strategic Enrollment Management does not include. Strategic Enrollment Management is not a quick solution to fix enrollment problems (Bontrager & Clemetsen, 2009; Sigler, 2017). Strategic Enrollment Management is strategic, and efforts take time to implement and put into practice (Bontrager & Green, 2012; Lovik, 2014). Spending the time necessary to develop a Strategic Enrollment Management plan is important. Bryant (2013) maintains that "strategic enrollment planning enables you to build your enrollment by design, not by chance" (p. 2). Strategic Enrollment Management is not a replacement for admissions, recruitment, and marketing. Instead, Strategic Enrollment Management puts the emphasis on the entire college to support student success as a means to enhance and maintain enrollment. Strategic Enrollment Management is not a process that can be separated from the rest of the institution. Successful Strategic Enrollment Management must be integrated into the institution's strategic planning and should not be a financial hardship for the college. Effective Strategic

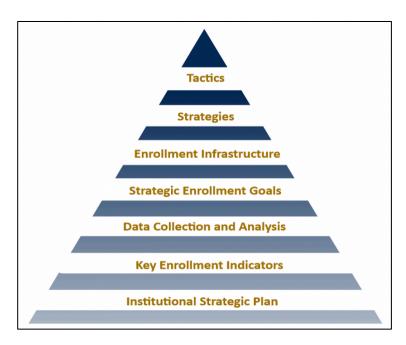
Enrollment Management should help colleges find ways to be more efficient and to enhance revenue through enrollment and retention. In addition, while this study did not delve into the retention components of Strategic Enrollment Management, the retention of current students is another critical component of Strategic Enrollment Management (Black, n.d.; Hossler & Bean, 1990; Hossler & Bontrager, 2015; Lipka, 2011).

STRATEGIC ENROLLMENT MANAGEMENT PLANNING

Strategic planning is a process developed to drive improvements and change an organization (Hundrieser, 2012; Lovik, 2014). Strategic Enrollment Management planning is said to be "among the most critical planning tasks for most institutions" (Hossler & Bontrager, 2015, p. 533). Effective Strategic Enrollment Management planning should include both traditional and strategic planning. Traditional planning is centered on enrollment work done to impact short-term goals, while strategic planning attempts to develop a long-term process.

Because of the short-range focus, traditional planning leads to limited results. Therefore, when developing a Strategic Enrollment Management plan, it is useful to think about the goals and the time needed to execute them. The Strategic Enrollment Management Planning Framework developed by Bontrager and Green (2012) highlights the process a college should follow when developing Strategic Enrollment Management. Colleges should start at the base of the pyramid and work upwards in order to address each of the steps necessary for the process as depicted in Figure 2.

Figure 2. Sustainable Enrollment Outcomes



Source: Sigler, 2017, p. 37

Note. Successful Strategic Enrollment Management starts at the bottom of the pyramid with the institution's strategic plan.

According to Bontrager and Clemetsen (2009), community college Strategic Enrollment Management plans should include strategies to address high school students, nontraditional students, workforce development outreach, and senior citizens. Addressing each of these market segments can be challenging because community colleges have limited resources to direct toward marketing and recruitment outreach. As such, community colleges often rely on building strong relationships with K-12 schools, students, and their families as a tool to impact enrollment instead of targeted large-scale marketing and recruiting efforts.

Strategic Enrollment Management begins with strategic planning but also needs to be focused on clear goals, supporting student's academic successes, incorporating strategic planning and financial planning, using data to make decisions, improving processes and efficiencies, building marketing, and college-wide collaboration (Bontrager & Green, 2012; Green, 2019).

Collaboration is one of the most important concepts behind Strategic Enrollment Management. The idea is that all parts of the institution are interconnected for the outcome of enhancing student enrollment and success. Various authors theorize that the different divisions of the college must all work together to achieve optimal enrollment (Hossler & Bontrager, 2015; Hundrieser, 2012). The common departments involved in Strategic Enrollment Management include admissions, financial aid, registration, and records (Hossler & Bontrager, 2015). In addition, many colleges incorporate other departments that have a heavy interface with enrollment, including orientation, academic advising, academic support, and career planning (Hossler & Bean, 1990).

The Strategic Enrollment Management Process Framework conceptualized by Bontrager and Green (2012) (see Figure 3) provides details on the various stages of Strategic Enrollment Management as well as the teams on campus that should be involved in the Strategic Enrollment Management process development (AACRAO, 2009). Following these recommended steps can help teams to be effective in Strategic Enrollment Management implementation and to assign the correct members to teams. Following the right steps with the correct individuals involved can save time and help to ensure a more successful Strategic Enrollment Management outcome.

Process Steps

Performed by

Align institutional strategic plan with broad enrollment targets and desired mix of students

Data gathering and assessment Internal culture/environment, student enrollment behaviors and scan of external environment.

Use data results to establish focused goals for recruitment, retention, services, etc. and enrollment projection models.

Approve strategic goals and enrollment projection models

Approve strategic goals and enrollment projection models

Develop action steps, accountability and metrics.

Figure 3. Strategic Enrollment Management Process Framework

Source: Bontrager and Green, 2012, p. 275

Implement action steps

Monitor Progress

Note. Allocating the Strategic Enrollment Management roles to specific committees is key to the success.

Appropriate staff and

SEM Steering Committee Chief Enrollment Officer

STRATEGIC ENROLLMENT MANAGEMENT DATA

Data and the analysis of the data are integral parts of Strategic Enrollment Management.

One of the keys to SEM is using a data-informed process that connects financial, academic, and instructional resources with the college's mission and goals (Bryant, 2013). A Strategic Enrollment Management plan must be based on consistent and comprehensive data because this information allows community colleges to adjust their student recruitment and marketing to

increase enrollment (Bryan, 2013; Hossler & Bontrager, 2015). The connection to data is a key component of Strategic Enrollment Management in that data allows enrollment managers to make decisions based on facts. For colleges that are ready to begin using data in their Strategic Enrollment Management plans, one of the first steps is to determine where the data is located, decide who is responsible for the data, and agree on how to gather the data (Bontrager & Clemetsen, 2009).

Colleges use metrics to predict both new enrollment and continuing enrollment (Bontrager, Ingersoll & Ingersoll, 2012). Some of the most common terms used when determining enrollment metrics include *yield*, which is the number of enrollment offers; *application rate*, which is the number of applications compared to the number of inquiries; the *offer rate*, which is the number of offers compared to the number of applications; and the *deposit rate*, which is the number of deposits or paid students compared to the number of offers of enrollment (Bontrager, Ingersoll & Ingersoll, 2012). While these terms are very common in Strategic Enrollment Management, community colleges most often use *yield* and *application rate*.

While data are critical to Strategic Enrollment Management, data issues can be a challenge in a community college setting (Bontrager & Clemetsen, 2009). Challenges include the presence of data that may not have been collected using a common language, the collection of data that proves not to be useful, and the need for data that is difficult to locate. When institutions do not utilize a systematic process for collecting and reporting data, the information may not be as useful to the college in various offices because different departments cannot align the data with their departmental data. The issues of data vocabulary and data collection are also complicated because community colleges collect data in multiple offices around campus, a

process that can add to the complexity. Data may be collected in instructional offices, student services offices, enrollment areas, institutional research departments, and others (Bontrager & Clemetsen, 2009). The best recommendation is to find the most complete data available as that will lead to the most accurate decision (Bontrager & Green, 2012).

Frequently utilized sources for data include environmental scans, factbooks, dashboards, key performance indicators, benchmarking, and special reports (Bontrager & Clemetsen, 2009) as shown in Table 1.

Table 1: Strategic Enrollment Management Data Sources

DATA SOURCE	DEFINITION	RECOMMENDED UPDATE CYCLE
Environmental Scann	A review of various external issues that are impacting the college such as demographics, high school enrollment, unemployment rates, state and national data trends, occupational outlooks and more.	1-2 years
Factbook	A compliation of internal data	Annually
Dashboard	Tables or graphs that include necessary information on a specific topic.	Regularly
Key Performance Indicators (KPIs)	Key data used to evaluate the overall institution and its goals.	Regularly
Benchmarking	Comparison of an institution to similar institutions.	Periodically
Special Reports	Reports compiled by a college's individual departments and offices.	Daily, weekly, or quarterly

Note: Effective Strategic Enrollment Management should utilize a variety of data sources.

Environmental scans are reviews of where the college is in relation to the community and the college's constituents and are beneficial because they help a college assess the connection to the external environment, including both challenges and opportunities. Environmental scans are used to assess the college's position in the marketplace and may sometimes consist of a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. The best practice

recommendation is to review external scans every one or two years to assess the college's position in the overall community (Bontrager & Clemetsen, 2009).

Factbooks are an introspective look at the institution and should be summarized annually. These resources summarize institutional data in a consolidated piece of literature. The factbook provides consistent data for the college to look at for full-time equivalency (FTE) data, enrollment data, and other consistent college information (Bontrager & Clemetsen, 2009).

Dashboards provide a more dynamic opportunity to view data. Dashboards are commonly presented using technology and can be sets of graphs or tables that are updated frequently.

Dashboards are helpful in looking at enrollment data in a comparative manner. The primary purpose of dashboards is to give a quick glance at data; the analysis may happen separately (Bontrager & Clemetsen, 2009).

Key Performance Indicators (KPIs) are often tied to a college's strategic plan. KPIs are a set of metrics that helps to address the college's status on large-scale initiatives. The KPIs a college develops should be updated on a routine basis since this data source allows for a quick update on the institution's status (Bontrager & Clemetsen, 2009).

Benchmarking is a comparison of a college's data to other similar colleges and is often done with similar institutions within a regional area. This type of data is often utilized for comparisons in areas such as enrollment, retention, and graduation rates. It is important to note, however, that benchmarking needs to be viewed critically because the data collected at other institutions may not be comparable (Bontrager & Clemetsen, 2009).

Special reports are documents organized by individual college departments needed to inform their work. These types of reports may include daily admission and registration reports, numbers of placement tests and financial aid awards, numbers of students who receive academic

advising, focus group results, and more. These are important reports because they help to decide what data is important for the college to review on a routine basis (Bontrager & Clemetsen, 2009).

It can be overwhelming deciding how to best move forward with data. Literature recommends two different approaches (Bontrager & Green, 2012). The first option is identifying a strategic decision that supports Strategic Enrollment Management efforts and then determine what data is needed to make the decision. The second suggestion is to locate existing data and analyze the data to identify trends and make decisions to improve.

It is important to remember that along with data collection, the data must be analyzed (Bontrager & Clemetsen, 2009; Bryant, 2013). "Strategic Enrollment Management efforts require collaboration among many across campus to provide experience and insight so that data truly become information" (Bontrager & Clemetsen, 2009, p. 61). Strategic Enrollment Management experts also state that while data is critical to Strategic Enrollment Management, enrollment mangers must be mindful of potential data issues. Frequent data impediments that colleges should consider when developing a data plan are portrayed in Table 2.

Table 2: Data Impediments that can impact Strategic Enrollment Management

DATA IMPEDIMENTS	DEFINITION
Data Cycle	An institutions denial, anger, bargaining, depression, and acceptance of the data at their college.
Analysis Paralysis	Too much data which leads to a delay in decision making.
Data Detachment	Forgetting that the data represents actual students.

Note: Colleges must be mindful of problems related to Strategic Enrollment Management that can impact success.

STRATEGIC ENROLLMENT MANAGEMENT GOALS

In order to begin addressing the various possibilities available through Strategic Enrollment Management, colleges must begin by setting clear goals. However, developing these focused goals can be difficult at a community college because community college students enter with many different personal goals. Student goals can include taking a single class, working on improving academically, completing a certificate for immediate employment, accumulating credits to transfer to another institution, and more. The varied goals of community college students add an extra layer to community college Strategic Enrollment Management that does not exist at four-year universities, where the goal is most frequently graduation (Bontrager & Clemetsen, 2009).

The most common Strategic Enrollment Management goals are related to the number of new students, the demographic makeup of the student body, and the academic profile of the student body (Sigler, 2017). However, colleges utilize enrollment planning to target a myriad of different goals. While the goals vary by institution there are often some commonalities. Frequent Strategic Enrollment Management objectives often include setting goals for the institution based on the student enrollment needed to meet institutional mission, supporting students in their academic successes, promoting the institution's success by allowing for strategies and planning, developing a data-driven environment, building communications and marketing about the institution, and increasing collaboration across the campus (Bontrager & Clemetsen, 2009). Other Strategic Enrollment Management goals include addressing student access and completion, accounting for changing student demographics, focusing on increasing competition for student recruitment, and adjusting for the fluctuations in demand for various academic programs (Black, n.d.; Sigler, 2017). Some higher education institutions have utilized Strategic Enrollment Management to develop goals that focus on expanding campus cultures to be more

inclusive, addressing declining high school graduate populations and decreasing state funding, preparing for increased accountability for higher education, increasing career services, dealing with increased tuition and fees (Sigler, 2017), and completion and retention (Black, n.d.).

It is important to note that Strategic Enrollment Management provides opportunities for colleges to adapt to changes in higher education and to respond to specific college needs. As enrollment issues continue to plague colleges and universities, the need to respond to changes and to incorporate technology continues to grow. The critical emphasis on technology is addressed by Violino (2014) when he states, "technology has evolved from a complementary tack-on tool for educators to a fully integrated part of the student experience" (p. 18). One of the areas on college campuses where technology is providing a critical edge is in enrollment management. One specific software that is utilized frequently in enrollment management is Customer Relationship Management.

HISTORY OF CUSTOMER RELATIONSHIP MANAGEMENT

The importance of technology in Strategic Enrollment Management is discussed by Hossler and Bean (1990), who identify the necessity for colleges and universities to have a management information system that support enrollment management. One approach applied in Strategic Enrollment Management is the utilization of Customer Relationship Management software. Customer Relationship Management software is usually a tool colleges purchase to help them automate processes, build relationships with students, and send out communications. Customer Relationship Management has been explained as "a systematic approach using information and an ongoing dialogue to build long lasting and mutually beneficial customer relationships" (Bedigian, 2006, p. 2).

Customer Relationship Management systems evolved from the competition that arose in the business sector in the mid-1980s. The competition forced many companies to start looking at how their individual company could stand out (Wentz, 1999). Industry saw a need to find something other than specific products to differentiate among competitors, which led to a realization of the importance of building relationships with customers. In the business realm, Customer Relationship Management is defined as, "A business approach that integrates people, process, and technology to maximize relationships with all customers, providing seamless collaboration between all customer facing functions" (Goldenberg, 2015, p. 3). Customer Relationship Management provides an opportunity for companies to build relationships with customers (Nguyen, Sherif & Newby, 2007; Peppers & Rogers, 2011). Customer Relationship Management can be seen in everyday life in emails that companies send to customers promoting a product and encouraging the individual to visit their web site or purchase an item. Data from a May 2013 study suggested Customer Relationship Management tools used to maximize relationships on the internet and in social media would grow into a nine-billion-dollar industry by 2018 (Goldenberg, 2015). This study helps to demonstrate how enormous the utilization of Customer Relationship Management has become throughout industry.

While Customer Relationship Management has been in the business sector for years, this is not the case in higher education. Fayerman (2002) stated that prior to 2000, colleges put their technological resources toward building business process re-engineering and implementing overall student information systems (SIS) also known as enterprise resource planning (ERP). Enterprise resource planning systems allow for an organization's entire computer system to be integrated. The focus was on building more robust technology needs for the entire campus and

not on specific products that served a special purpose, such as Customer Relationship Management.

Customer Relationship Management systems integrate many software packages that drive process improvements. In enrollment management, Customer Relationship Management is often used to provide a technical and automated mechanism to admit students, assign students to staff caseloads, and most importantly to communicate with students. The importance of Customer Relationship Managements was expressed as "CRM technology is a potential game-changer for higher education" (Violino, 2014, p. 20). In addition, a July 2014 EDUCAUSE Center for Analysis and Research (ECAR) report asserted that "CRM systems are the second most rapidly changing core system area in higher education" (Lang & Pirani, 2014, p. 2). According to leading experts from Oracle, a multinational computer technology company, companies that do not learn to adapt and change to new technology may lose their competitive advantage (Lancione & Police, 2002; Kylie, 2013; Roopchund & Alsaid, 2017).

Ideally, Customer Relationship Management should provide a single point of contact for a college or university's customers. In the example of a student, not only will that individual have access to his or her admissions, financial, or academic status, but also the student will have multiple ways to access this varied information. Customer Relationship Management provides students (and their parents) with the means to control the service received. Customers can choose the mode or channel of interaction (Web, email, in-person, fax, and so forth) at any time. These channels are integrated so that customers can move freely through and between channels. For example, a student may make a service request via the internet in the morning, fax back-up documentation an hour later, email a correction after lunch, and call to check on the request's status later in the afternoon. If the student chooses to stop by the administrative office in person

to check on the request's status, the college staff member will have electronic access not only to those contacts the student had made earlier in the day but also to the information the student had requested. Both student and staff representative will benefit from the high-quality, efficient system of information transfer and retrieval the Customer Relationship Management software can provide.

CUSTOMER RELATIONSHIP MANAGEMENT UTILIZATION

In recent years, Customer Relationship Management systems have begun to play a larger role on college campuses. According to Bedigian (2010), there are 4,100 community colleges and universities in America. This leads to incredible competition for students among higher education institutions. Data from the American Association of Collegiate Registrars and Admissions Officers shows that more than 43% of American colleges and universities are implementing customer relationship management systems to help manage enrollment (Roopchund & Alsaid, 2017).

In addition, the utilization of Customer Relationship Management in higher education is also rapidly expanding. According to a 2014–15 report by the American Association of Collegiate Registrars and Admissions Officers (AACRAO), 100% of educational institutions surveyed were either using a Customer Relationship Management tool or considering a Customer Relationship Management tools for future utilization. Of the institutions replying to the survey, 64% were already using a Customer Relationship Management on their campus. Further evidence of the growth of Customer Relationship Management on college campuses is provided by Lang & Pirani (2014) who found that Customer Relationship Management tools are now the second most frequent technology to change in higher education, the first being web content management.

Lang & Pirani (2014) found that the average time span for existing Customer

Relationship Management systems on colleges is six years. Furthermore, of the colleges who are using a Customer Relationship Management, 22% state plans are in place to replace existing systems within three years. The rationale for moving to a new Customer Relationship Management system includes desire for new and updated technology as well as upgraded functionality and enhancements. Research from Lang & Pirani (2014) indicates the most current CRM products being utilized include Hobsons (EMT) Connect CRM – 14%, Ellucian (SunGard/SCT) Banner Relationship Management – 13%, Campus Management Talisma CRM – 8%, Ellucian (Datatel) Recruiter – 8%, Hobsons (Intelliworks) CRM – 7%, Salesforce – 7%, Jenzabar Internet Campus Solution – 7%, Education Systems EMAS Pro – 6%, Oracle PeopleSoft Enterprise CRM – 6%, Homegrown Solutions – 6%, and other products – 18%. This data provides evidence that no one product controls the Customer Relationship Management market in enrollment management, and there is a wide diversity in Customer Relationship Management products.

CUSTOMER RELATIONSHIP MANAGEMENT PURPOSE IN HIGHER EDUCATION

Within higher education, Customer Relationship Management software is primarily used to improve the college's process efficiencies and to communicate with students (Kilgore, 2010). Kilgore (2010) determined that two thirds of colleges own a Customer Relationship Management tool and the colleges are using the Customer Relationship Management software primarily to support admissions and enrollment. Kilgore's research also concluded that colleges are using Customer Relationship Management to address the entire student life cycle at the institution, including alumni affairs. When considering the effectiveness of Customer Relationship Management, Kilgore found that colleges were not importing all of the data needed to make

informed decisions into Customer Relationship Management. Yet, even without all of the data, 59% of users reported that their college was "moderately successful" in the overall use of the Customer Relationship Management (Kilgore, 2010). The participants in Kilgore's research reported that the use of a Customer Relationship Management tool made their processes more effective, but also required the need for more staff.

According to research by Nguyen, Sherif, and Newby (2007), there are three main advantages that companies gain through the use of a Customer Relationship Management. One of the advantages is increased loyalty from the customers, because of the superior information available from Customer Relationship Management. Secondly, the additional information gleaned about the customer leads to improved services. Finally, the Customer Relationship Management allows companies to gather more frequent and detailed information on their customers by tracking all interactions. Looking at these advantages through a higher education lens, Customer Relationship Management allows colleges and universities to have a complete picture of each individual student the college is trying to recruit. In addition, Customer Relationship Management provides avenues for automation of the messages being sent to students.

The ability to set communications to occur based on where a student is in the enrollment pipeline is another important function provided by Customer Relationship Management (Fayerman, 2002). While Customer Relationship Management does permit companies to adjust their communications and send separate messages to different customers, successful companies understand that the technology associated with Customer Relationship Management is dependent upon strategies that address the value to the customer (Westman & Bouman, 2007). Colleges need to make sure that the messages the colleges are sending out are seen as relevant to the

student and not just information the institution wants to communicate. Furthermore, to be successful, companies must also have a commitment from leadership to put customers and customer relationships before all else in the organization (Peppers & Rogers, 2011). Putting customer's first means that colleges need to also think of how the college communicates that students are their number one priority in their messaging.

CUSTOMER RELATIONSHIP MANAGEMENT TOOLS USED AS PART OF STRATEGIC ENROLLMENT MANAGEMENT

Staying current with technology is an important advantage for colleges in Strategic Enrollment Management related efforts. In fact, according to Allison (2008), information technology leaders say that enterprise resource planning systems are the number two reason for a college's strategic success (as cited in Bontrager & Clemetsen, 2009). Other support for technology in higher education is reported by Klie (2013) whose research from DemandEngine found that colleges are primarily using Customer Relationship Management to impact enrollment (67%), manage and automate communications to prospective students (65%), and reduce costs for enrollment related marketing (27%).

Interestingly, the use of Customer Relationship Management does not match the goals colleges reported when purchasing Customer Relationship Management. The goals colleges state for Customer Relationship Management implementation are more often connected to retention and include impacting the student experience (48%) and the preservation of currently enrolled students (19%) (Klie, 2013).

CONCLUSION

It is important to understand that today's college students have high expectations for communication and technology. Understanding the history of Strategic Enrollment Management

and Customer Relationship Management as well as the key components of Strategic Enrollment Management processes and Customer Relationship Management utilization can help colleges with enrollment. To be successful, Strategic Enrollment Management strategies need to incorporate a multitude of approaches, including using Customer Relationship Management. The demand for current technology is explained by Westman and Bouman (2007) as "today's college-bound target market, the Millennial generation, is accustomed to the intensity of change, making it imperative for recruiting strategies and methods to meet the ever-changing needs of this audience" (p. 155). Furthermore, colleges that focus on using only one method of communication may not be successful. Colleges need to use Customer Relationship Management and other technology tools to be competitive. Evidence of the critical role of technology is shared by Hossler and Bontrager (2015) in stating "Strategic Enrollment Management planning must account for the campus infrastructure required to support successful recruitment and retention operations and initiatives, of which technology availability and utilization are primary components" (p. 443).

CHAPTER THREE: METHODOLOGY

INTRODUCTION

This section discusses the study's research design, setting, sample, sampling plan, instrument, data collection, and data analysis procedures. Other topics addressed include human subject concerns, study limitations, and the dissemination of results.

DESIGN

A pilot research study was conducted using a descriptive quantitative design to answer the following questions:

- 1. What is the utilization of Strategic Enrollment Management in Michigan and Indiana community colleges?
- 2. Is there a relationship between the utilization of Strategic Enrollment Management and enrollment at Michigan and Indiana community colleges?
- 3. What is the utilization of Customer Relationship Management in Michigan and Indiana community colleges?
- 4. Is there a relationship between the utilization of Customer Relationship Management and enrollment at Michigan and Indiana community colleges?

Sample

The study included a purposive sample of representatives at community colleges in Michigan and Indiana who work in admissions or enrollment management and who may or may not utilize Customer Relationship Management (CRM) tools. A purposive sample is a sample that is chosen for a specific purpose but is not random (Vogt, 2007). Purposive samples are said

33

to be a viable sample to utilize for workplace surveys because this type of sample helps to identify members of various groups in a work environment (Vogt, 2007). The staff who utilize Strategic Enrollment Management and Customer Relationship Management tools at community colleges vary; thus, the survey was sent to the Directors of Admission to complete or delegate to the appropriate individuals on their college campuses in an attempt to reduce external validity threats (Spiegelhalter, 2019).

Instrument

A computer-based survey utilizing Survey Monkey software was developed by the researcher (Appendix A). Items for the survey were formulated based on a literature review of best practices for Strategic Enrollment Management and Customer Relationship Management tools. The survey included items to address Strategic Enrollment Management planning, implementation, data utilization, effectiveness, and Customer Relationship Management utilization.

Prior to distribution, the survey instrument was reviewed by higher education staff to enhance content validity and appropriateness of the survey items. Content validity is a type of validity "which gauges the degree to which the content of a test or survey matches the content it is intended to measure" (Vogt, 2007, p. 118). A pilot survey was conducted utilizing several admissions staff members who work with Strategic Enrollment Management and Customer Relationship Management software to evaluate instructions, content, question formatting and sequence, and ease of use. The pilot survey was sent to individuals working within higher education who utilize Customer Relationship Management software. The individuals who participated in the pilot survey were asked to provide feedback on the clarity of the survey as well as the ease of use. Attempts were also made to ensure instrument validity and reliability by

testing the survey monkey software with these participants prior to sending out the finalizing the survey. Any necessary revisions to the survey were made prior to sending the survey to the study participants.

The study was conducted utilizing a quantitative, descriptive design and provided quantitative, descriptive, and inferential data. Quantitative statistics are calculations based on a numerical analysis of data. The study includes a focus on the design, measurement, and analysis of data which are key components of quantitative research (Vogt, 2007). Descriptive statistics are focused on collecting, summarizing, and communicating data (Levine & Stephan, 2015). Inferential statistics "analyzes sample data to reach conclusions about a population" (Levine & Stephan, 2015, p. 5).

Data Collection Procedures

The research survey was sent to participants via email utilizing Survey Monkey software after all appropriate IRB approvals were obtained. A second request for participation was also sent to participants via individual email addresses. Participants for the study included individuals working with Strategic Enrollment Management and Customer Relationship Management at community colleges in the states of Michigan and Indiana. The Michigan email addresses were obtained from public community college web sites. Staff identified were Admissions Directors or their designees. The Indiana email addresses for relevant staff were provided by the community college's executive offices for inclusion in the study.

The researcher emailed the research instrument to a total of 46 community college admission departments including 28 community colleges in Michigan and 18 community college campuses in Indiana. The email included an introduction of the researcher, the purpose of the study, a request for participation in the study, a deadline for completion of the survey, and a

commitment that data would be collected and stored in a confidential manner. Consent for participation in the study was incorporated into the survey. Questions were asked to be directed to the researcher via email or phone. Participants were informed a copy of the results would be provided if desired by informing the researcher. Participants were also informed results from the study would be utilized to provide strategic information to impact enrollment management for other community colleges. The survey instructions stated the results may be disseminated via professional presentations or articles. The invitation to complete the research was sent according to the timeline as shown in Table 3.

Table 3: Research Timeline

DATE	PROCESS STEP
July 12, 2019	IRB Approval from Ferris State University's IRB
August 14, 2019	First email invitation sent via SurveyMonkey
September 13, 2019	Email with weblink to survey sent via Outlook
October 1, 2019	Second email invitation, including weblink to survey, sent

The surveys for the study were sent to participants electronically in August 2019. Survey data collection was completed by late fall 2019. The survey had a total of 31 community college respondents. The average completion rate of the survey was 84% and the typical time spent to complete the survey was six minutes and nine seconds.

HUMAN SUBJECTS CONCERNS

The rights of the participants were protected to the extent possible. Upon submitting a request and receiving approval to conduct research from the Institutional Review Board of Ferris State University (Appendix A), the researcher sent an electronic survey request to the study population. The email included the survey via a Survey Monkey software link. The survey invitation included information related to informed consent and an opportunity to decline the

survey. Participants were instructed that the data would be kept in a confidential electronic file for two years. The researcher purchased a separate license for Survey Monkey to ensure sole access to the data. Upon receiving responses, the survey data was analyzed utilizing the Survey Monkey software.

DATA ANALYSIS METHODS

The study data analysis was completed utilizing Survey Monkey software, which provided statistical data and response summaries for each survey item. The survey was quantitative allowing for mathematical and statistical examination. Some survey responses provided optional qualitative data and when provided, that information was incorporated into the review.

CONCLUSION

The purposive study sent via Survey Monkey software evaluated Strategic Enrollment Management and Customer Relationship Management tool utilization in Michigan and Indiana community colleges. The survey was sent to a total of 46 community college admission departments including 28 community colleges in Michigan and 18 community college campuses in Indiana. Research was conducted during summer and fall 2019. Human subjects' concerns were addressed and the study was analyzed using a quantitative approach.

CHAPTER FOUR: RESULTS

INTRODUCTION

The survey results were grouped by sections including demographics and Strategic Enrollment Management collaboration, which addressed the areas of colleges that participate in Strategic Enrollment Management. Other sections encompassed Strategic Enrollment Management planning, data, and effectiveness. Customer Relationship Management utilization was also included in the results.

DEMOGRAPHICS

The survey tool was sent to a total of 28 community colleges in Michigan and 18 community college campuses in Indiana. A total of 31 responses were obtained for an overall response rate of 67% response rate. According to Vogt (2007), the average response rate for dissertation studies is 40% making this an above average response rate for this type of research. When considering the responses by state, Michigan had a 54% response rate and Indiana had a 24% response rate.

The demographic size of the colleges in Michigan varied with eight colleges classified as small size with total enrollment of less than 3,000 students. There were eight colleges in the mid-size range with enrollments from 3,001 to 10,000 students. The large colleges had enrollment of 10,001 or above students for a total of three large colleges in Michigan responding. The representation of the colleges replying for Indiana was diverse with one response from the

38

systems office, classified as a large institution, five from the mid-size campuses, and two small campuses.

The study data obtained from the participant input indicated colleges had varying total enrollment numbers with 58% having 5,000 or fewer total students. There were, however, six colleges with more than 20,000 students. These differences highlight the unique perspectives and challenges in enrollment because the colleges vary so greatly in their enrollment size and goals.

STRATEGIC ENROLLMENT MANAGEMENT

Of the 31 respondents, 45% are using Strategic Enrollment Management and 25% of the colleges were unsure if the college was utilizing Strategic Enrollment Management. The number of years the participants reported using Strategic Enrollment Management (SEM) varied greatly with a range of zero to ten plus years. The majority of respondents have used Strategic Enrollment Management for one year or less. The average mean of the reporting colleges is nine.

One participant listed using Strategic Enrollment Management for 10 years and another for eight years. Otherwise, most respondents were using Strategic Enrollment Management for six or fewer years, or the participants were unaware of the history of Strategic Enrollment Management at their institutions. The following table provides the number of colleges utilizing SEM for specific number of years.

Table 4: Number of Years Using Strategic Enrollment Management

NUMBER OF YEARS	NUMBER OF COLLEGES
1	4
2	2
3	2
4	2
5	1

NUMBER OF YEARS	NUMBER OF COLLEGES
6	1
7	0
8	1
9	1
10	1
Unsure	3

Note: The highest frequency was for one year.

Strategic Enrollment Management strategies are included in 52% of the responding college's strategic plans. There were 23 participants that did not incorporate Strategic Enrollment Management into their strategic plan, and 23% who were unsure as to whether Strategic Enrollment Management was addressed in the college's strategic plan.

The absence of Strategic Enrollment Management in the strategic plans is concerning because Strategic Enrollment Management literature speaks of the importance of an alignment between the two for successful Strategic Enrollment Management: "In its purest form, the strategic plan should establish mission, vision, and ways to ensure institutional effectiveness. The strategic enrollment plan should determine key performance indicators (KPI) related to enrollment, key strategies, and enrollment totals to be reached through implementation of the plan" (Hundriser, 2012, p. 31).

The Strategic Enrollment Management goals were very diverse. Based on frequency of response, the participates listed increasing enrollment (100%) as the most frequent objective of their Strategic Enrollment Management efforts, followed by targeting student populations (76%). Targeting specific market segments allows colleges to be more strategic in building their incoming class and diversifying their campus. The other top goals were promoting academic programs (70%) and connecting with stop-out students to encourage reengagement at the college

(70%). Open ended items allowed for colleges to add other responses for their individual Strategic Enrollment Management plans. The additional goals included improving orientation activities and onboarding for new students, aligning various departments in enrollment goals, connecting with business and industry, and identifying student barriers.

Table 5: Strategic Enrollment Planning Goals

INSTITUTIONAL STRATEGIC ENROLLMENT PLANNING GOAL	% OF INSTITUTIONS REPORTING
Increasing enrollment	100%
Targeting student populations	76
Connecting with stop out students	71
Promoting academic programs	71
Addressing financial challenges	59
Expanding into new/different geographic areas	41
Changing campus culture	35
Distinguishing your college from other colleges/universities	35
Other	24

STRATEGIC ENROLLMENT MANAGEMENT AND COLLABORATION

The survey results indicated the primary departments involved in Strategic Enrollment Management were Admissions (100%), Marketing and Academic Advising (88%), Academic/Student Support and Financial Aid (82%), and Registration (76%). These departments state Student Services are well represented in Strategic Enrollment Management work. There was a lack of involvement from academic departments, with only 70% of the respondents listing Academic Administration, and 58% listing faculty as being involved in strategic enrollment processes.

The lower percentage for instructional involvement leads to concerns about each college's ability to evaluate academic program participation, new academic programs to consider, and other instructional data. Best practice for Strategic Enrollment Management includes high levels of participation from all facets of the college.

Table 6: Departments involved in Strategic Enrollment Management

DEPARTMENT	NUMBER OF INSTITUTIONS REPORTING	PERCENT OF INSTITUTIONS RPORTING
Admissions	17	100%
Academic Advising	15	88
Marketing	15	88
Academic/Student Support	14	82
Financial Aid	14	82
Registration	13	76
Academic Administration	12	71
Orientation	11	65
Faculty	10	59
Information Technology	10	59
Records	10	59
Career Planning	8	47
Financial/Business Services	8	47
President's Office	6	35
Foundation/Development	4	24
Other	3	18
Students	2	12
Human Resources	1	5
Instruction	0	0

The technical and financial divisions of the colleges were also less involved in strategic enrollment management processes. The respondents listed 58% participation for Information Technology and 47% for the Financial or Business Services Division. The lower participation

from these departments indicates there may be challenges addressing the important role of technology in Strategic Enrollment Management efforts and the ability to consider the role enrollment plays in the overall financial health of the organization.

When looking at the areas that are the least involved in Strategic Enrollment Management, the data indicate that 12% of participants included students, and only 5% of respondents included Human Resources in their Strategic Enrollment Management plans.

These departments should be more fully incorporated for the success of college enrollment goals. Departments that were listed as "other" choices included Housing/Residence Life, Student Services, and Institutional Research.

STRATEGIC ENROLLMENT MANAGEMENT PLANNING/GOALS

Study results indicate colleges are using their Strategic Enrollment Management plans to target many different market segments with the most common being adults/nontraditional students (94%) and current students (94%). The next largest area being addressed is high school students (76%), followed by the workforce development (64%) outreach. Strategic Enrollment Management efforts are also being utilized to address continuing education students (47%), guest students (35%), race/ethnicity demographics (35%), senior citizen students (5%), and veterans and their families (5%).

Table 7: Strategic Enrollment Management Markets

MARKET GROUP	PERCENT OF INSTITUTIONS REPORTING
Adults/Nontraditional Students	94%
Current Students	94
High School Students	76
Workforce Development Students	65
Continuing Education Students	47
Guest Students	35

MARKET GROUP	PERCENT OF INSTITUTIONS REPORTING
Race/Ethnicity	35
Other	6
Senior Citizen Students	6

STRATEGIC ENROLLMENT MANAGEMENT DATA

When responding about access to Strategic Enrollment Management (SEM) data, 52% of the higher education participants state data access was available to make enrollment related decisions. Of the respondents who stated access to SEM data was not available (29%), the most prevalent reason was that the data were not summarized in an easily utilized manner. Specifically, one of the respondents said, "The data exists, but for me being new, it takes time for me to access the data necessary to make informed decisions." Another respondent commented that "We have some data, but it is not summarized in a way that is easy to utilize."

The most prevalent data source for Strategic Enrollment Management decisions at Michigan and Indiana community colleges is the utilization of Key Performance Indicators (75%). Key Performance Indicators (KPIs) are measurements that demonstrate how effective an institution is at accomplishing goals. The goals used for KPIs in Strategic Enrollment Management can be either specific Strategic Enrollment Management goals or the college's institutional strategic plan (Hossler & Bontrager, 2015).

Higher education staff are also using environmental scans (62%), and special reports developed by their individual campus or departments (62%) as part of their Strategic Enrollment Management efforts. Environmental scans are a summary of external factors affecting the college that are in existence today and in the future (Hossler & Bontrager, 2015). Special reports are institution specific reports developed to address specific data needs. Customer Relationship

Management reports are utilized 56% of the time for making Strategic Enrollment Management related decisions.

STRATEGIC ENROLLMENT MANAGEMENT EFFECTIVENESS

Community colleges are using data related to increased enrollment (93%) and increased retention (93%) as the primary measure of Strategic Enrollment Management effectiveness.

More than half of the respondents (62%) stated conversion percentages are utilized as an analysis tool or the number of students that move between enrollment stages, such as inquiries to applicants or applicants to enrolled students are utilized.

The focus of Strategic Enrollment Management efforts in Michigan and Indiana is diverse, with little consensus on the motivating factors. Many community colleges are using Strategic Enrollment Management to improve processes that impact students' academic success (37%). A quarter (25%) of the participants are using Strategic Enrollment Management data to make decisions, and a few of institutions are using the strategy to set specific goals (12%).

All but one of the respondents (97%) indicated the use of Strategic Enrollment Management had a positive impact on enrollment, but the level of effect varied. The respondents expressed that Strategic Enrollment Management had a moderate (33%) or little impact (33%) on their overall enrollment. There were 26% of staff who denoted a lot of impact from Strategic Enrollment Management.

CUSTOMER RELATIONSHIP MANAGEMENT UTILIZATION

Currently, 73% of the responding colleges in Michigan and Indiana are using Customer Relationship Management tools. The number of years these colleges have been using Customer Relationship Management tools varies from one year to 35+ years, with the largest percentage of

the respondents indicating use of a Customer Relationship Management for at least three or four years (35%). It is also relevant that 31% of the survey participants did not answer this question, which may indicate that lack of awareness of the length of time the college may or may not have been using a Customer Relationship Management tool. The following table indicates the number of colleges and the number of years of use of a customer relationship management process.

Table 8: Number of Year(s) Utilizing a Customer Relationship Management

NUMBER OF YEAR(S)	NUMBER OF COLLEGES
1	1
2	1
3	5
4	4
5	0
6	2
7	0
8	0
9	0
10	0
13	1
35+	1
Unsure	3

Note: The highest response for utilization of Customer Relationship Management was three years

Survey responses indicate the most common Customer Relationship Management software in Michigan and Indiana is Ellucian's Customer Relationship Management Recruit software, with 38% of participants using this product. The other Customer Relationship Management products utilized include Hobsons Radius by Campus Management (20%), Hobsons Customer Relationship Management (11%) and Jenzabar Internet Campus Solution (11%). One college utilized Target X (5%) and one college was using Insightly (5%).

Participant responses indicate the main challenges impacting a college's ability to fully utilize Customer Relationship Management tools included staff skill sets (47%) and staff training (47%). Other highly-rated challenges included available support from Information Technology (42%), staffing resources (36%), and financial resources (31%). Only one respondent stated no obstacles with the full utilization of their Customer Relationship Management (5%).

More than half of the respondents (60%) are using Customer Relationship Management tools to house and process admissions applications. In addition, the majority of the participants (80%) are using the communications plans embedded in Customer Relationship Management software. The most important result responding colleges are observing with use of Customer Relationship Management software is the improvement of automated processes (57%). In addition, 31% of the educational providers noted increased student communication and relationship building aspects.

The number of participating colleges that incorporate Customer Relationship

Management strategies into their Strategic Enrollment Management plan were split with seven

participants (35%) stating inclusion of Customer Relationship Management and eight

respondents (40%) indicating no use of Customer Relationship Management. There were five

participating colleges (25%) indicating unsure as to whether the Strategic Enrollment

Management plan included Customer Relationship Management approaches.

The responses related to the value of Customer Relationship Management software on enrollment varied. The largest response indicated a moderate amount (38%) of positive impact on the responding colleges. There were three participants (16%) that stated a lot of influence, three participants (16%) that indicated little impact, and three respondents (16%) stated no effect. Only two responding colleges (11%) reported a great deal of impact on enrollment.

Of the six respondents who answered whether their college was considering a Customer Relationship Management tool for the future, 50% specified that "they were thinking about a Customer Relationship Management" and 33% declared "they were not going to pursue a Customer Relationship Management." One college was unsure (16%).

There were nine participants who responded their college had not pursued a Customer Relationship Management, with the primary reason being lack of financial resources (77%). Other reasons listed were lack of campus support (22%), lack of information technology support (11%), lack of training (11%), a concern about the return on investment (11%) and the size of the campus being too small (11%). The responding colleges that do not have Customer Relationship Management that responded whether they thought the purchase of the software would help to increase their enrollment said that they thought it would benefit them (87%) or were unsure (13%).

CONCLUSION

Analyzing the results of the study provides important statistical information related to each of the research questions. The research questions evaluated were:

- 1. What is the utilization of Strategic Enrollment Management in Michigan and Indiana community colleges?
- 2. Is there a correlation between the utilization of Strategic Enrollment Management and enrollment at Michigan and Indiana community colleges?
- 3. What is the utilization of Customer Relationship Management in Michigan and Indiana community colleges?
- 4. Is there a correlation between the utilization of Customer Relationship Management and enrollment at Michigan and Indiana community colleges?

Key outcomes of the research are further explored within the discussion section of the study.

CHAPTER FIVE: DISCUSSION

INTRODUCTION

This study evaluated Strategic Enrollment Management strategies and Customer Relationship Management tools, utilization, and the effects on Michigan and Indiana community college enrollment.

RESEARCH QUESTION #1 DISCUSSION AND ANALYSIS

The first research question, "What is the utilization of Strategic Enrollment Management processes at Michigan and Indiana community colleges?" provided data indicating that, across both states, 45% of the respondents are using Strategic Enrollment Management processes. Surprisingly, 25% of college participants were unsure if Strategic Enrollment Management strategies were utilized by their college. This finding conflicts with Strategic Enrollment Management principles of ensuring Strategic Enrollment Management is included in college communications to all staff and faculty.

Michigan respondents who indicated that they utilized Strategic Enrollment Management showed an average enrollment from Fall 2017 to Fall 2019 of -10% credit hours (mccssa.org enrollment reports, personal communication, n.d.). Respondents who replied that the colleges were either not utilizing Strategic Enrollment Management or that the colleges were unsure if they were utilizing Strategic Enrollment Management had an average enrollment change from the Fall 2017 to Fall 2019 semesters of -3.1% change in credit hours.

49

RESEARCH QUESTION #2 DISCUSSION AND ANALYSIS

Responses to the second research question "Is there a correlation between the utilization of Strategic Enrollment Management and enrollment at Michigan and Indiana community colleges?" indicated 52% of participating colleges in Michigan and 30% of campuses in Indiana are using Strategic Enrollment Management. The data indicate that there is potential for many other colleges in Michigan and Indiana to begin using these approaches to better align efforts to enroll more students. It is also relevant to note that 19% of Michigan respondents and 40% of Indiana respondents were unsure if their college was even utilizing Strategic Enrollment Management.

Higher education institutions need to communicate Strategic Enrollment Management approaches to stakeholders in order to maximize overall effectiveness. Michigan respondents that indicated that they utilized Strategic Enrollment Management showed an average enrollment from the Fall 2017 to Fall 2019 semesters of -10% credit hours (mccssa.org enrollment reports, personal communication, n.d.). Colleges that replied that the colleges were either not utilizing Strategic Enrollment Management, or that the colleges were unsure if they were utilizing Strategic Enrollment Management, had an average enrollment change from Fall 2017 to Fall 2019 of -3.1% change in credit hours.

RESEARCH QUESTION #3 DISCUSSION AND ANALYSIS

The third research question, "What is the frequency of Customer Relationship Management in Michigan and Indiana community colleges?" responses indicated 13 participants (62%) in Michigan reported having a Customer Relationship Management system. In Indiana, five campuses (63%) use a Customer Relationship Management. Of the survey respondents who reported not having a Customer Relationship Management, 50% were considering a Customer

Relationship Management for the future, and 33% were not looking at Customer Relationship Management systems. Of the colleges that indicated no current Customer Relationship Management tool, 17% were unsure if a Customer Relationship Management tool would be considered in the future.

RESEARCH QUESTION #4 DISCUSSION AND ANALYSIS

The fourth and final research question, "Is there a correlation between the utilization of a Customer Relationship Management tool and enrollment at Michigan and Indiana community colleges?" found that 40% of Michigan colleges that follow a Strategic Enrollment Management plan are also using Customer Relationship Management software. There is some correlation between institution size, Strategic Enrollment Management, and Customer Relationship Management software. Community colleges listed as small, with enrollment below 3,000, utilize Strategic Enrollment Management 38% of the time. In addition, 25% of these respondents utilize Customer Relationship Management software. The mid-size institutions, with enrollment over 3,000 but fewer than 10,000 students, are using Strategic Enrollment Management 75% of the time, and 63% of these participants utilize Customer Relationship Management software. The large institutions, with enrollment above 10,000, are following Strategic Enrollment Management strategies 25% of the time, with 100% utilization of Customer Relationship Management software.

The data indicated that only one Indiana campus follows a Strategic Enrollment

Management plan and is also using Customer Relationship Management software. Only three of
the 10 responding Indiana campuses indicated use of Strategic Enrollment Management (30%).

All of the respondents utilizing Strategic Enrollment Management were mid-sized. Survey

responses indicated that 50% of the campuses were using Customer Relationship Management software.

OVERALL FINDINGS

The highest correlation between Customer Relationship Management utilization and enrollment in Michigan was a response that Customer Relationship Management led to a moderate (29%) impact on enrollment. The next highest choice was a little impact (14%). Together, the moderate and little responses lead to a 43% correlation between Customer Relationship Management utilization and enrollment in Michigan. In Indiana, over 50% of the respondents did not answer the question. Of the four participants who provided a choice, there were four different responses and, thus, no strong correlation between Customer Relationship Management and enrollment in Indiana.

STUDY DELIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

This research study had a few design delimitations. The sample was developed from a convenience list of admissions staff at Michigan and Indiana community colleges. The sample may not have included the staff most prepared to answer the survey items. In addition, the study relied on the participants understanding of Strategic Enrollment Management and Customer Relationship Management on their campus that may have influenced the data obtained. The response rate to the survey was low, especially in Indiana. A higher percentage of responses would have added more validity to the study.

The study was distributed via Survey Monkey software and many of the participants' college's web security blocked the survey and marked it as spam. This required repeated emails to send the survey multiple times, which may have also impacted the overall sample size of

respondents. An increased number of respondents would have decreased the sampling error and lead to greater statistical power (Vogt, 2007). Replicating the study with a larger sample size is recommended.

Future studies may want to add variables that include survey items related to specific enrollment numbers to better evaluate the impact of Strategic Enrollment Management on enrollment. Additional research could be conducted to evaluate Strategic Enrollment Management at four-year universities compared to Strategic Enrollment Management utilization and effectiveness at community colleges.

Further exploration could also be done to determine if Strategic Enrollment Management is more effective at colleges based on the institution type, student population and number, or the institution's geographic area and external competition for students.

Finally, it would also be useful to look at the Strategic Enrollment Management topic from a qualitative lens and evaluate feedback from individuals who have worked specifically with Strategic Enrollment Management. External validity or assessing the survey population in regard to actual populations could be increased (Vogt, 2007).

Additional research might evaluate the methods other community colleges are using to communicate Strategic Enrollment Management on their campus. It is recommended that further studies add more specific and targeted questions related to Customer Relationship Management utilization and the change management approaches colleges have utilized when implementing Customer Relationship Management software.

Future research should be conducted on the specific approaches that colleges are using related to Strategic Enrollment Management and Customer Relationship Management software.

For example, a California study on Strategic Enrollment Management found that the strategic use

of technology to involve faculty and staff in supporting students was a critical support (Bontrager & Clemetsen, 2009).

It would also be helpful to explore the connection colleges have between Strategic Enrollment Management and strategic planning. Best practice is for campus leadership to lead Strategic Enrollment Management communication and collaboration with a focus on the college's vision and goals. Successful Strategic Enrollment Management reinforces the college mission and supports to colleges overall strategic plan (Bontrager & Clemetsen, 2009).

RESEARCH CONCLUSIONS AND RECOMMENDATIONS

Develop a Strategic Approach to Strategic Enrollment Management

While the concept of strategic enrollment planning is not new, application to higher education enrollment is still evolving. According to a survey of enrollment management managers, "less than half of respondents said their institutions had a multi-year strategic enrollment plan they would consider of good or excellent quality. One-third said they didn't have any such plan at all" (as cited by Noel-Levitz, 2011 in Hundrieser, 2012, p. 31). Survey respondents from the research study followed the Noel-Levitz data. The participants surveyed reported that the colleges were also not using Strategic Enrollment Management at a rate of 55%.

Ideally, colleges should be communicating Strategic Enrollment Management efforts more widely. When discussing Strategic Enrollment Management metrics and communication, Hundrieser states that "these metrics are discussed at board meetings, presidential cabinet meetings, dean's meetings, faculty meetings, and with the media. In fact, these enrollment metrics define each institution — its reputation, its learning environment, its culture, and its fiscal health" (Strategic Enrollment Planning, p. 31).

The respondents surveyed may want to consider involving a broader spectrum of employees and faculty in Strategic Enrollment Management efforts. The relationship between Strategic Enrollment Management and academics is especially important as Strategic Enrollment Management can provide a framework that is critical to the success of the overall enrollment plan. Of the responding colleges, 70% included academic units in Strategic Enrollment Management plans. The relationship between these two divisions should be strengthened, because Strategic Enrollment Management can provide help to the academic branch of the college by putting a focus on academic quality, building connections between faculty and students, evaluating program demand, and analyzing job market demands: "Community colleges that have successfully embraced Strategic Enrollment Management beyond enrollment services have found ways to integrate Strategic Enrollment Management concepts into the creation and nurturing of faculty relationships" (Bontrager & Clemetsen, 2009, p. 37).

In addition, the colleges surveyed had less than 50% participation with the finance/business division, career services, and the president's office. These departments should also be more engaged in Strategic Enrollment Management efforts. The finance/business division provides important insight into net revenue and tuition needed for Strategic Enrollment Management (Hossler & Bontrager, 2015) and career services is necessary for career options and market demand data (Bontrager & Clemetsen, 2009).

With regard to leadership, research shows that many community colleges operate with Strategic Enrollment Management focused committees that may have the leadership of a divisional vice president (Bontrager & Clemetsen, 2009). Incorporating staff at the executive level from the president's office would provide high level governance. Hossler and Kalsbeek (2013) state that "it is in the process of helping senior campus administrators and boards of

trustees to define, prioritize, and balance these institutional goals that we locate the heart and soul of enrollment management" (p. 4). In addition, the survey respondents had less than 25% participation in Strategic Enrollment Management with students, foundation/development, and human resources. Ideally, Strategic Enrollment Management should engage every member of the campus community (Bontrager & Clemetsen, 2009).

Strategic Enrollment Management should also be reviewed in a systematic manner based on Bontrager and Clemetsen's (2009) stages of Strategic Enrollment Management leadership which include implementation, assessment and revitalization. Strategic Enrollment Management development is focused on building support for the concept of Strategic Enrollment Management and establishing the teams that will do the Strategic Enrollment Management work. The development stage includes collecting data, reviewing processes, and assessing technology.

During implementation, the college should begin to set goals and tactics as well as continuing to provide support for Strategic Enrollment Management efforts across the institution. Campus communication is critical during this stage. Finally, during revitalization, the college evaluate the Strategic Enrollment Management efforts that have been occurring and makes adjustments needed. This assessment period can be significant for the institution because it allows the college to continue to apply resources and efforts towards Strategic Enrollment Management related work (Bontrager & Clemetsen, 2009).

Identify and Address Potential Challenges to SEM / CRM Implimentation

When using technology for Strategic Enrollment Management, there are multiple issues to consider. Some of the challenges include staff training, staff comfort level, ongoing staff support, outdated technology, and unwillingness to utilize technology. It is also relevant to reflect on these same topics when making a decision about implementing or changing Customer

Relationship Management systems. New technology can look impressive with increased functionality that will solve campus issues. However, the challenges of new technology related to training and resource allocation may make the decision to change more complicated. Many Customer Relationship Management tools are built with a four-year university model in mind. When community colleges try to implement the software, the community colleges often find that they need to make major modifications (Bontrager & Clemetsen, 2009). Problems with the "out of the box" Customer Relationship Management tools can include the need to redefine data fields, develop work around for the admissions application, build specific workflows, modify fields, and more. AACRAO data showed that other major concerns also include the time to learn and utilize the new software (Kilgore, 2010). The survey respondents' concerns were similar to those mentioned in the literature, especially in relationship to a lack of financial resources (78%) and a concern about available training (11%).

It is also important to consider the interactions students have with the college via technology. Research data from a 2007 study found that 38% of college applicants had their first interaction with a college via the online application for admission (Westman & Bouman, 2007). The respondents to this study reported that 60% are using an admissions application managed through their Customer Relationship Management, suggesting that colleges should be concerned about the user experience students have with the application, as this experience is often the first impression students have of the college. User experience is an important aspect of technology that higher education needs to monitor. As community college have become more technical, students "expect shopping cart simplicity in the applications they access and around the clock availability with no system down-time" (Bontrager & Clemetsen, 2009, p. 113). Contrary to the student expectation is the staffing, support, and technology available at community colleges.

Often, community colleges have not kept up with students' regular interactions, leading to a discrepancy in student experiences. Recommendations state that colleges should conduct routine reviews of their processes to try to meet student demand for services and encounters (Bontrager & Clemetsen, 2009).

CONCLUSION

As the number of students in the college-going pipeline continues to decrease, it is becoming more and more critical that colleges are flexible and able to adapt quickly. Finding ways for colleges to adjust more effectively in order to address changing student demographics, new academic programs, and evolving trends with technology will help higher education institutions to enroll more students: "The current context of Strategic Enrollment Management practice calls for a new approach to planning that is more nimble, process-orientated, and actionable" (Hossler & Bontrager, 2015, p. 531). In addition, Strategic Enrollment Management is reliant on the ability to leverage technology to support institutional practices and the student experience (Hossler & Bontrager, 2015). As with many other industries, higher education needs to look to technology to provide support for addressing critical business needs (Bontrager & Clemetsen, 2009).

The utilization of Strategic Enrollment Management and Customer Relationship

Management tools provide an opportunity for Michigan and Indiana community colleges to

potentially expand their enrollment. While the research from this study did not support this

claim, possibly due to low sample size and other study limitations, the application of the

Strategic Enrollment Management approach and Customer Relationship Management tools are

generally successful in increasing enrollment. Strategic Enrollment Management at the

community college is supported by many examples cited by Bontrager and Clemetsen (2009).

Evidence of the benefits from Customer Relationship Management tools have been seen on numerous college campuses (Fayerman, 2002). The Strategic Enrollment Management approach and Customer Relationship Management tools should be viewed as viable and necessary components of community college enrollment planning and technology outreach.

REFERENCES

- American Association of Collegiate Registrars and Admissions Officers. (2009). Strategic enrollment management at community colleges. In B. Bontrager & B. Clemetsen (Eds.), *Applying SEM at the community college* (pp. 1–9). American Association of Collegiate Registrars and Admissions Officers.
- Barnes, B., & Bourke, B. (2014). SEM: A Cultural Change Agent. College & University, 90(2), 2–9.
- Bedigian, B. Alumni Matter: Unleashing a Lifetime of Value. The Benefit of CRM Principals in the Postsecondary Environment, 2006 (ERIC): https://files.eric.ed.gov/fulltext/ED493448.pdf
- Black, J. (n.d.). *The community college environmental context* [White paper]. http://www.semworks.net/white-papers-books/papers/Environmental-Context-White-Paper.pdf
- Bontrager, B., & Clemetsen, B. (2009). *Applying SEM at the community college*. American Association of Collegiate Registrars and Admissions Officers.
- Bontrager, B., and Green, T. (2012). A structure for SEM planning. In B. Bontrager, D. Ingersoll, and R. Ingersoll (Eds.), *Strategic enrollment management: Transforming higher education* (pp. 273 284). American Association of Collegiate Registrars and Admissions Officers.
- Bryant, P. (2013, July 23). Three keys to strategic enrollment planning for community colleges [Blog post]. https://www.ruffalonl.com/keys-strategic-enrollment-planning-community-colleges/
- Fain, P. (2017, December 20). Enrollment slide continues, at slower rate. *Inside Higher Ed*. https://www.insidehighered.com/news/2017/12/20/national-enrollments-decline-sixth-straight-year-slower-rate
- Fayerman, M. (2002, Spring). Customer relationship management. *New Directions for Institutional Research*, 113, 57–67. https://onlinelibrary.wiley.com/doi/abs/10.1002/ir.37
- Givens, M. A. (2010). *The impact of new information technology on bureaucratic organizational culture* [Doctoral dissertation] Nova Southeastern University. https://nsuworks.nova.edu/gscis_etd/164/

- Goldenberg, B. J. (2015). *The definitive guide to social Customer Relationship Management*. Pearson Education LTD.
- Grawe, N. D. (2018). *Demographics and the demand for higher education*. Johns Hopkins University Press.
- Green, T. (2019, March 15). *Core Concepts of Strategic Enrollment Management*. [Workshop presentation]. AACRAO on the Road, Miami, FL, United States.
- Hossler, D., & Bean, J. P. (1990). *The strategic management of college enrollments* (1st Ed.). Jossey-Bass.
- Hossler, D., & Bontrager, B. (2015). *Handbook of strategic enrollment management*. Jossey-Bass.
- Hossler, D. and Kalsbeek, D. (2013), Enrollment management and managing enrollments: revisiting the context for institutional strategy. *Strategic Enrollment Management Quarterly*, 1: 5-25. https://doi.org/10.1002/sem3.20002
- Hundrieser, J. (Ed.). (2012). *Strategic enrollment planning: a dynamic collaboration* (1st Ed.). Coralville, IA: Noel-Levitz.
- Hussar, W. J., & Bailey, T. M. (2019, February). *Projections of Education Statistics to 2027*. National Center for Education Statistics.
- Kilgore, W. (2014). 2014-2015 State of CRM Use in Higher Education Report. https://www.aacrao.org/docs/default-source/research-docs/state-of-crm-use-in-higher-education-report final2.pdf?Status=Temp&sfvrsn=baaacbf4 4
- Klie, L. (2013, September 1). Schools need to rethink their CRM approaches. *Destination CRM*, 1-3. www.destinationcrm.com/Articles/ReadArticle.aspx?ArticleID=91513
- Lancione, F., & Police, R. (2002). Change or Be Changed: Best Tech Practices. *Community College Week*, 14(15), 22
- Lang, L., & Pirani, J. A. (2014). *Maximize institutional relationships with CRMs*. https://library.educause.edu/~/media/files/library/2014/7/erb1409-pdf.pdf
- Levine, D. M. & Stephan, D. F. (2015). Even you can learn statistics and analytics (3rd Ed.). Pearson Education, Inc.
- Lipka, S. (2011, November 11). 2-Year colleges get strategic about enrollment. *Chronicle of Higher Education*, 60(11), A2–A4. https://www.chronicle.com/article/2-year-colleges-get-strategic-about-enrollment/
- Lovik, E. G. (2014). Revitalizing Strategic Planning at Community Colleges. *Planning for Higher Education*, 42(2), 62-70.

- Masterson, K. (2009, July 10). How 5 colleges plan to keep growing in hard times? *Chronical of Higher Education*, 55(41), A15. www.chronicle.com
- National Center for Education Statistics. (2019). *School choice in the United States*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/pubs2019/2019106.pdf
- Nguyen, T. H., Sherif, J. S., & Newby, M. (2007). Strategies for successful CRM implementation. *Information Management & Computer Security*, 15(2), 102–115. https://doi.org/10.1108/09685220710748001
- Peppers, D., & Rogers, M. (2011). *Managing customer relationships: A strategic framework* (2nd Ed.). Wiley.
- Pinar, M., Trapp, P., Girard, T., & Boyt, T. E. (2011). Utilizing the brand ecosystem framework in designing brand strategies for higher education. *International Journal of Educational Management*, 25(7), 724–739. https://doi.org/10.1108/09513541111172126
- Poley, J.K. (2001), Leadership. *New Directions for Higher Education*, 2001: 83-93. https://doi.org/10.1002/he.29
- Roopchund, R., & Alsaid, L. (2017, December). CRM framework for higher education in Mauritius. *Pertanika Journal of Social Science and Humanities*, *25*(4), 1515–1528. www.researchgate.net/publication/321757487
- Sigler, W. (2017). SEM core concepts: Building blocks for institutional success. American Association of Collegiate Registrars and Admissions Officers.
- Spiegelhalter, D. (2019). The art of statistics: how to learn from data (1st Ed.). Hachette Book Group.
- Violino, B. (2014). The future ... is now? *Community College Journal*, 85(1), 18–22.
- Vogt, W. P. (2007). Quantitative Research Methods for Professionals. Pearson Education, Inc.
- Wentz, T. K. (1999). Transformational change: how to transform mass production thinking to meet the challenge of mass customization. Corporate Performance Systems.
- Westman, C., & Bouman, P. (2007). *The SEM imperative: Taking enrollment management online*. American Association of Collegiate Registrars and Admissions Officers.

APPENDIX A: SURVEY FORM

Vhat is your college	name?		
2. What is your total	overall enrollment (includin	ng on campus and onlin	e)?
1 - 3,000			
3,001 - 5,000			
5,001 - 10,000			
10,001 - 15,000			
15,001 - 20,000			
More than 20,000			
Yes			
go to question #14. Yes No Unsure			
Yes No			

Strategic Enrollment Management (SEM)
Strategic Enrollment Management (SEM) is defined as "a concept and process that enables the
fulfillment of institutional mission and students' educational goals" (Bontrager & Clemetsen, 2009, p.
3).
4. How many years has your college been using Strategic Enrollment Management (SEM)?
5. Is Strategic Enrollment Management (SEM) included in your institutions strategic plan?
Yes
○ No
Unsure
6. What does your college hope to achieve through Strategic Enrollment Management (SEM)? Please check all that apply.
Addressing financial challenges
Changing campus culture
Connecting with stop out students
Distinguishing your college from other colleges/universities
Expanding into new/different geographic areas
Increasing enrollment
Promoting academic programs
Promoting specific departments/offices
Targeting student populations
Other (please specify)

7. What departments/areas of campus are involved in your Strategic Enrollment Management (SEM) efforts?
Please check all that apply. Academic Administration
Academic Advising
Academic/Student Support
Admissions
Career Planning
Faculty
Financial Aid
Financial/Business Services
Foundation/Development
Human Resources
Information Technology
Marketing
Orientation
President's Office
Records
Registration
Students
Other (please specify)

	hat markets are you targeting with your Strategic Enrollment Management (SEM) plan? Please check all
	apply.
	Adults/Non-traditional Students
	Continuing Education Students
.0	Current Students
	Guest Students
	Grade Point Average
	High School Students
	Race/Ethnicity
8	Senior Citizen Students
	Workforce Development Students
	Other (please specify)
	o you have adequate access to the data you need to make Strategic Enrollment Management (SEM)
	ted decisions on your campus?
\circ	Yes
\bigcirc	No
\bigcirc	Comments
	What types of data do you utilize as part of your Strategic Enrollment Management (SEM) efforts? Please
	ck all that apply. Benchmarking - Comparison of an institution to similar institutions
_	Customer Relationship Management Reports - Data compiled from a Customer Relationship Management (CRM) tool Deschberges. Tables or graphs that provide real time information on a specific tonic.
	Dashboards - Tables or graphs that provide real-time information on a specific topic
	Environmental Scans - A review of various external issues that are impacting the college such as demographics, high school enrollment, unemployment rates, state and national data trends, occupational outlooks and more
	Factbooks - A compilation of internal data.
	Key Performance Indicators (KPIs) - Key data used to evaluate the overall institution and its goals
	Special Reports - Reports compiled by a college's individual departments and offices
	Other (please specify)
	Other (please specify)
	Other (please specify)

(SE	wnat benchmarks do you use M) plan? Please check all tha	e to measure the effectiveness of your Strategic Enrollment Managemen at apply.
	Conversion Percentage	
	Implementing a New Strategy	
	Increased Enrollment	
	Increased Retention	
	Other (please specify)	
	Cinci (produce operation)	
12.	What is the most important co	omponent in your Strategic Enrollment Management (SEM) plan?
\bigcirc	Addressing institutional success by	
\bigcirc	Building communications with stake	eholders
	Improving processes that impact sto	udents' academic success
	Increasing college-wide collaboration	on
	Making decisions based on data	
	Setting specific goals	
	doming opposite goods	
\bigcirc	Other (please specify)	
0	Other (please specify)	
0	Other (please specify)	
		c Enrollment Management (SEM) at your college had a positive impact o
	Has the utilization of Strategion renrollment?	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	
	Has the utilization of Strategion of Strateg	
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little
	Has the utilization of Strategic or enrollment? Agreat deal Alot	○ A little

ustomer Relationship Management (CRM) Istomer Relationship Management (CRMs) is defined as "a s	vyctomatic approach using information
d an ongoing dialogue to build long lasting and mutually be	
2).	
14. Does your college currently use Customer Relationship Mar management? If no or unsure, please go to question #23.	nagement (CRM) software for enrollment
Yes	
○ No	
Unsure	
. How many years has your college been using a CRM?	
16. What Customer Relationship Management (CRM) software	are you currently using?
Campus Management Talisma CRM	
Education Systems EMAS Pro	
Ellucian (Datatel) Banner Relationship Management	
Ellucian (SunGard/SCT) CRM Recruit	
Hobsons Connect CRM	
Hobsons (Intelliworks) CRM	
Institutional (in-house) CRM Software	
Jenzabar Internet Campus Solution	
Oracle PeopleSoft Enterprise CRM	
Salesforce	
Slate	
Target X	
Other (please specify)	
Office (piease specify)	

17. Which of the following obstacles (if any) have impacted your ability to fully utilize your Customer
Relationship Management (CRM)? Please check all that apply.
Financial resources
Information Technology support
Staffing resources
Staff skill set
Training
No obstacles
Other (please specify)
18. Is your admissions application managed through your Customer Relationship Management (CRM)
software?
Yes
○ No
Unsure
19. Do you use communication plans as part of your Customer Relationship Management (CRM) software
Yes
○ No
Unsure
20. What is the most important result your college has seen as a result of using Customer Relationship
Management (CRM) software?
Improved and automated processes
Increased enrollment
Increased reporting options
Increased student communication and relationship building
Other (please specify)
Office (picase specify)

Customer Relationship Management (CRM) Customer Relationship Management (CRMs) is defined as "a systematic approach using information and an ongoing dialogue to build long lasting and mutually beneficial customer relationships" (Bedigian, 2006, p. 2).	
23. Is your institution considering Customer Relationship Management (CRM) software for the future?	
Yes	
○ No	
Unsure	
Not Applicable	
24. What has prevented your college from utilizing Customer Relationship Management (CRM) software? Please check all that apply.	
Lack of Financial Resources Lack of Training Available	
Lack of Information Technology Support Not enough Return on Investment (ROI)	
Lack of Support On Campus Not Applicable	
Other (please specify)	
25. Do you think you could increase your enrollment by using a CRM? Yes No Not Applicable	

APPENDIX B: IRB APPROVAL LETTER

Date: July 12, 2019

To: Sandra Balkema, Stacey Stover

From: Gregory Wellman, R.Ph, Ph.D, IRB Chair

Re: IRB Application for Review

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, " *Strategic Enrollment Management and Customer Relationship Management*" and determined that it does not meet the Federal Definition of research on human subjects, as defined by the Department of Health and Human Services or the Food and Drug Administration. This project does not meet the federal definition of research on human subjects because it is a quality improvement activity designed to evaluate institutional programs. As such, approval by the Ferris IRB is not required for the proposed project. Note, mention of the Ferris IRB should be removed from any communications in this project.

This determination applies only to the activities described in the submission; it does not apply should changes be made. If changes are made and there are questions about whether these activities are research involving human subjects, submit a new request to the IRB for determination. This letter only applies to Ferris IRB Review; it is your responsibility to ensure all necessary institutional permissions are obtained and policies are met prior to beginning the project, such as documentation of institutional or department support. Note that quality improvement project findings may be published, but any findings presented or published should be clearly identified as part of a quality improvement initiative and not as research.

Your project will remain on file with the Ferris IRB for purposes of tracking research efforts at Ferris. Should you have any questions regarding the determination of this letter, please contact the IRB.

Regards,

Gregory Wellman, R.Ph, Ph.D, IRB Chair Ferris State University Institutional Review Board