Filene i3

R.E.A.L
REALITY EXPERIENCE AND LEARNING

CONCEPT DOCUMENT

REAL
Reality **E**xperience **A**nd **L**earning

TEAM MEMBERS
Christine Cordell, Hiway Federal Credit Union
Jeremy Daggs, Red Crown Federal Credit Union
Justin Kautz, Public Service Credit Union
Melissa Vigil, Northwest Community Credit Union

PROBLEM DEFINITION

In 1885, a German psychologist named Herman Ebbinghaus illustrated the "forgetting curve" in an actual mathematical equation showing the exponential rate at which we lose a memory "if no attempt is made to retain it". He showed that nearly 70% of a memory is lost within the first 24 hours. Even though we have known about the "forgetting curve" for over one hundred years, we seem to continue to use the same antiquated practices and attempts at retaining information in many areas in life in which we learn including at all levels of school and at work for employee training. We couldn't help but wonder, how might we use virtual reality to improve credit union training by using real life situations?

The average credit union spends $400 annually per employee on training. This does not include conferences or conference travel. With that being said, some credit unions spend as much as $800 annually per employee. There are nearly 300,000 credit union employees so this equates to nearly $120M. Credit unions spend a lot of money training employees on the basic skills needed to accomplish daily tasks and be in compliance with regulations mandated by BSA and other industry specific requirements. If credit unions can figure out how to maximize their resources of money and time that they invest in employee training they will garner a competitive advantage over other financial institutions.

INNOVATIVE SOLUTION

Learning a skill while performing the skill is one of the most efficient and effective training methodologies. Because virtual reality is three-dimensional and interactive, it immerses a trainee in a learning experience. Most virtual reality training programs take the form of simulation, which is a highly effective form of training as it is a hands-on experience without the risks of actual performance. Flight simulators, for example, have been used successfully for years to train airline and military pilots in critical flying skills, as well as to prepare them for emergency situations in a safe and forgiving environment.

Our solution is to tap into virtual reality much like the airline industry has done in the past to simulate real life situations for credit union employees. By using immersive yet novel experiences that seem more like play than work, virtual reality can inject enthusiasm and engagement where they may be lacking, helping employees retain critical information. Scenarios reflective of the credit union industry such as robbery, workplace harassment, sales and service and BSA/compliance would be created using virtual reality technology and implemented in credit union training programs. Although this technology is increasingly becoming a part of many industry training programs in such fields as hospitals, coal mines and sports, we are also seeing it start to play a role in the restaurant industry, mail delivery and various retail service channels. Our solution, though not innovative outside our industry, has yet to be exploited to its potential within the financial industry.

PROTOTYPE

REAL uses alternative reality technology to provide the user with real life scenario training. To achieve an accurate prototype of our concept, we purchased a set of virtual reality goggles and proceeded to create three training videos on the following topics: 1) Harassment, 2) Sales and Service, and 3) Active Shooter/ Branch Robbery.

Scripts were prepared for each of the training topics and acted out in accordance using virtual reality video recording technology. This technology allows a user to feel as if they are present during the scenario. During the video, we added pop up questions to simulate a final product where users would be prompted to consider various learning objectives as well as questions along the way.

Below are screen shots of each of the three videos created using virtual reality technology. While wearing virtual reality googles, the user could move their head and look around providing a feeling of reality.

WORKPLACE HARASSMENT: This training will allow employees to see firsthand what harassment looks like in the workplace. After the video, employees would discuss with Human Resources what they would do in this situation.
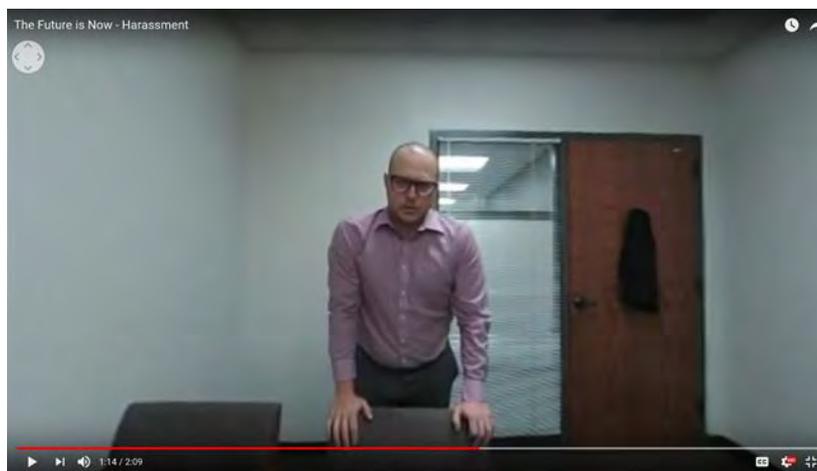
SALES AND SERVICE: Every organization has their own sales and service philosophy. This training could be customized to provide an opportunity for employees to interact with members per their credit union's sales and service methodology. Employees would be able to practice real-life-like interactions with members and garner feedback from a trainer or manager.

ACTIVE SHOOTER/ BRANCH ROBBERY: There are certain situations that we hope employees never face in real life however we must prepare them should such a situation occur. This video simulates a robbery in a branch and allows employees to practice staying calm, making observations and deciding what to do after the robber has left the building.

TESTING AND RESULTS

To test this concept, we surveyed credit union tellers on up through senior managers representing various credit union departments. Testers were asked a series of questions and given the ability to watch the robbery video prototype.

We had thirty responses to the ten question survey. A large proportion of respondents stated that their current training challenges were that of retention of materials however over 60% stated that they felt their training was long lasting and effective. Those results are in alignment with our research regarding the ineffectiveness of modern day training. Surveyors also stated that they felt the following training would be effective if done using virtual reality: Robbery, active shooter, diversity and inclusion, and sales and service. When asked how would virtual reality help to train employees, respondents stated it would improve engagement and make it easier to retain the information by providing real life experiences.

The completed survey and results are attached in **Addendum A** at the end of this document.

BUSINESS MODEL AND 3-YEAR FINANCIAL PROFORMA

We suggest the best business model for this idea is the use of a CUSO. The CUSO would provide a learning management system focused on the training needs of credit unions using various realty technology. Credit Unions would be able to purchase prepared training videos on various topics including sales and service, workplace harassment, active shooter/ robbery training, fraud, BSA and other compliance topics as well as employee relations topics such as giving performance reviews, providing disciplinary action, giving and receiving feedback. Credit Unions would also have the ability to customize training to their specific needs and philosophy for additional costs.

We noticed that of the 5,690 credit unions in the United States, 5000+ of them have less than 100 employees. This accounts for over 80,000 total employees. Of the 5,690 credit unions, 5,500 of them have 300 or less employees, making up 162,000 credit union jobs. Because of the vast difference in size, we choose to base the cost on an FTE (full time equivalent) tiered model to allow reasonable access for credit unions of all asset sizes.

The CUSO would be funded by a one-time set up fee based upon asset size plus an annual fee of $70 per FTE. Custom videos would assessed an additional fee. The setup fee would include predetermined sets of virtual reality goggles and a one time/on site set up.

In our Performa Statement (see below), we estimate revenue in the first year to be just over a quarter of a million dollars and by the end of year three, total revenue would be almost $1.5M. We estimate that approximately 1/5 of credit unions will want to customize some of their training. Participation assumptions were established conservatively where twenty credit unions would sign up in year one, fifty by year two and seventy five in year three. Expenses would increase after the first year as the CUSO invests in travel and hardware, however by year three the costs would even out. We estimate profitability would be obtained by the end of year two.

REAL Learning Management System
The Future is Now
Financial Performa

"360 Training" LMS CUSO	Year 1	Year 2	Year 3	Total	Comment			
No. of CU'S	20	50	75					
Programming Revenue	72,865	182,161	273,242	528,268	projected cus x avg ee xper ee exp			
One Time Set Up Fee Assumption	150,000	225,000	187,500	562,500	see below based upon assets/fte			
Custom Elite Programming	30,000	75,000	112,500	217,500	1/5 choose customization			
Total Revenue	252,865	482,161	573,242	1,308,268				
Expenses								
Employee Expense	175,000	183,750	192,938	551,688	3 ftes			
Travel	50,000	75,000	62,500	187,500	1 fte per cu x 2,500 hotel and airfare			
Application Development	30,000	45,000	45,000	120,000	300 hours @ $300 over 3 years + custom			
Hardware	50,000	75,000	62,500	187,500	sweet vr goggles (ave 140 per cu @ $250 each)			
Cloud Storage	5,000	12,500	18,750	36,250	stay current			
Website Development	8,333	8,333	8,333	25,000	62.5 hours over 3 years - Includes sharing ability			
Updates Maintenance	-	3,333	6,667	10,000	$10,000 dep over 3 years			
Marketing/Postage	50,000	52,500	55,125	157,625	trade show banners, cu publications travel etc			
Total	368,333	455,417	451,813	1,275,563				
CUSO Net Income (Loss)	(115,469)	26,745	121,430	32,706				

Credit Union Assumption Table	cus	employees	ave ee	avg assets	annual assum	ave per ees	Set Up	Annual CU Exp
1-100 employees	5,050	82,511	16	172,978,923	2,500	153.01	2,500	3,725
101-300 employees	449	78,879	176	909,575,941	10,000	56.92	5,000	18,176
301-500 employees	112	42,560	380	2,022,204,608	25,000	65.79	7,500	36,000
501-800 employees	53	34,015	642	3,482,358,463	35,000	54.54	10,000	58,134
801+ employees	26	54,875	2,111	6,442,667,128	50,000	23.69	12,500	170,792
	5,690	292,839	51.47			70.79	7,500.00	

COMMENTS, NEXT STEPS, AND CALL TO ACTION

Our prototype is simple, but our concept is powerful. Credit unions must keep up with the trends in technology that can drastically impact the effective use of resources aimed at increasing employee talent. One of the greatest competitive advantages of credit unions is the dedication and passion of the employees that work there. By finding a way to train complex or rare subject matter efficiently, this competitive advantage becomes even more powerful. The opportunity is perfect for credit unions to jump on the virtual reality bandwagon by using relevant technology to improve the effectiveness of training. We implore you to take action and make virtual reality a reality in credit unions.

ABOUT FILENE

Filene Research Institute is an independent, consumer finance think and do tank. We are dedicated to scientific and thoughtful analysis about issues affecting the future of credit unions, retail banking, and cooperative finance.

Deeply embedded in the credit union tradition is an ongoing search for better ways to understand and serve credit union members. Open inquiry, the free flow of ideas, and debate are essential parts of the true democratic process. Since 1989, through Filene, leading scholars and thinkers have analyzed managerial problems, public policy questions, and consumer needs for the benefit of the credit union system. We support research, innovation, and impact that enhance the well-being of consumers and assist credit unions and other financial cooperatives in adapting to rapidly changing economic, legal, and social environments.

We're governed by an administrative board made up of credit union CEOs, the CEOs of CUNA & Affiliates and CUNA Mutual Group, and the chairman of the American Association of Credit Union Leagues (AACUL). Our research priorities are determined by a national Research Council comprised of credit union CEOs and the president/CEO of the Credit Union Executives Society.

We live by the famous words of our namesake, credit union and retail pioneer Edward A. Filene: "Progress is the constant replacing of the best there is with something still better." Together, Filene and our thousands of supporters seek progress for credit unions by challenging the status quo, thinking differently, looking outside, asking and answering tough questions, and collaborating with like-minded organizations.

Filene is a 501(c)(3) nonprofit organization. Nearly 1,000 members make our research, innovation, and impact programs possible. Learn more at filene.org.

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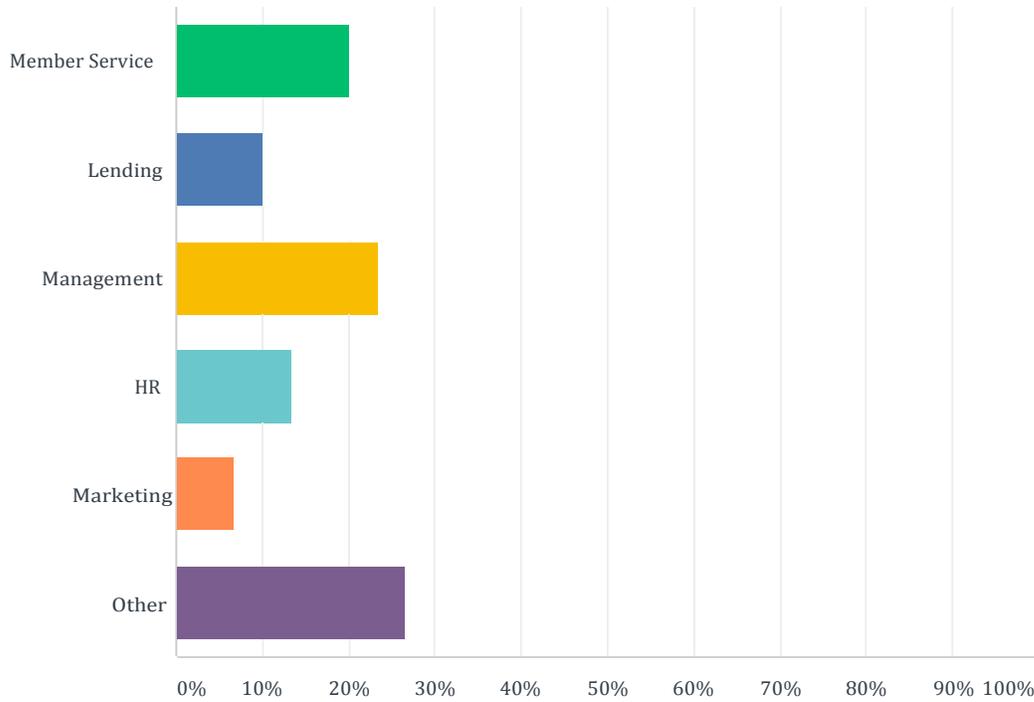
—Edward A. Filene

ADDENDUM A – Survey Results
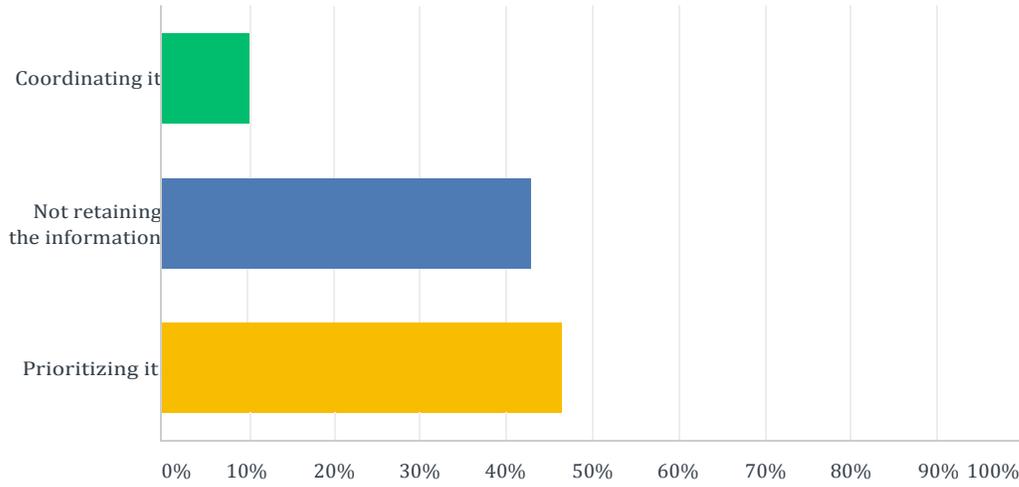
Q1 What is your role in the credit union?

Answered: 30   Skipped: 0

ANSWER CHOICES	RESPONSES	
Member Service	20.00%	6
Lending	10.00%	3
Management	23.33%	7
HR	13.33%	4
Marketing	6.67%	2
Other	26.67%	8
TOTAL		30

Q2 Define your current training challenges

Answered: 28   Skipped: 2

ANSWER CHOICES	RESPONSES	
Coordinating it	10.71%	3
Not retaining the information	42.86%	12
Prioritizing it	46.43%	13
TOTAL		28

Answered: 28   Skipped: 2

Q3 What would increase the impact of your organizational training?

Real
Life   Situations Think Role Training Visuals
Employees

Q4 Do you feel your training is effective and long lasting? Please share insights in the box below pertaining to your response.

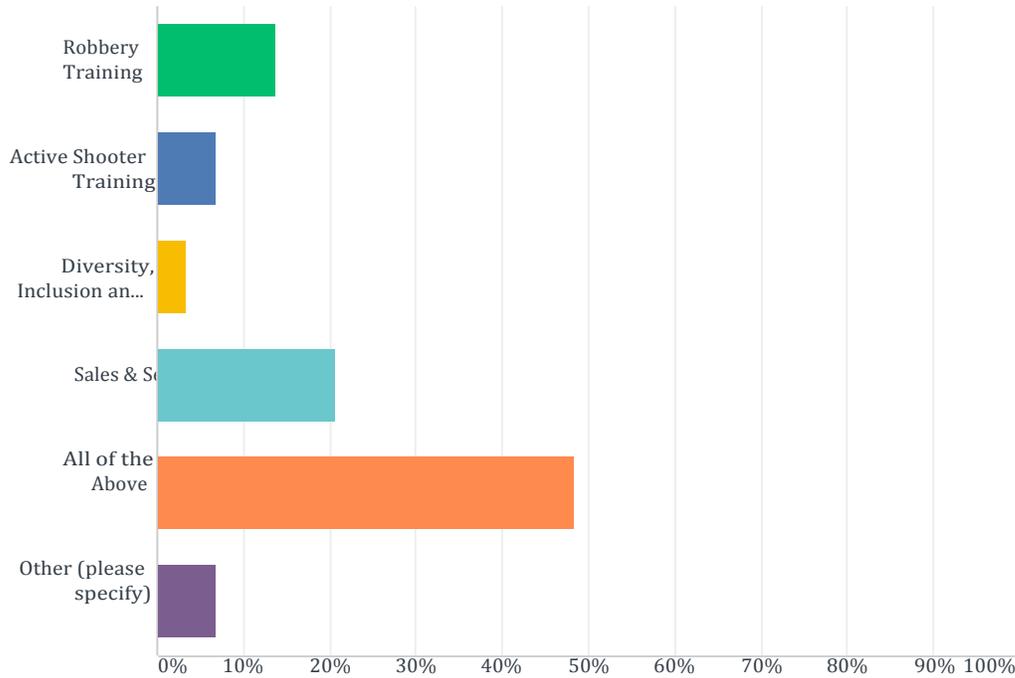Answered: 28   Skipped: 2
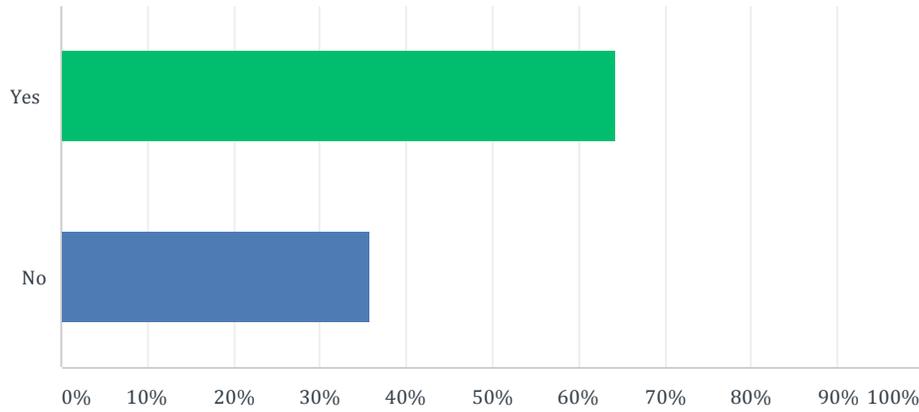
ANSWER CHOICES	RESPONSES	
Yes	64.29%	18
No	35.71%	10
TOTAL		28

Answered: 23   Skipped: 7

Q5 What type of training are you not offering that you would like to perform?

Role
Hands Situations   Playing   Leadership
Training Unsure Cross

Q6 What type of training would increase retention with real life simulation?

Answered: 29   Skipped: 1

ANSWER CHOICES	RESPONSES	
Robbery Training	13.79%	4
Active Shooter Training	6.90%	2
Diversity, Inclusion and Harassment Training	3.45%	1
Sales & Service Standards Training	20.69%	6
All of the Above	48.28%	14
Other (please specify)	6.90%	2
TOTAL		29

Q7 Based on the videos you watched, would this style of training benefit you and/or your employees?

Video Definitely **Think** Real Life

Answered: 23   Skipped: 7

Q8 Define the priority this type of training would be for your credit union.

Think Gives Training High Priority

Answered: 24   Skipped: 6

Q9 How would virtual reality help you when training all employees?

Engagement Retain Scenario Instead
Employee Easier Real Life Experience
Environment

Answered: 21   Skipped: 9

Q10 What topics would be beneficial to your organization within this type of platform?

Sales Interactions Active Shooter Member Service
Training Think Employees