

Service Delivery & Operational Effectiveness

CEO Business Model Development Forum

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1) INTRODUCTION

Credit Unions enjoy unrivalled levels of customer satisfaction having been awarded the No 1 position for customer experience for the sixth year running¹. How does this customer experience relate to service delivery and operational effectiveness, and how can we ensure that member satisfaction translates to a viable business model that satisfies members' needs in a rapidly evolving financial services environment?

The complexity and sophistication of Credit Unions continues to grow to keep pace with rapid changes in technology, regulation, and member's needs. To meet these demands the need for operational effectiveness intensifies. In this paper, we examine service delivery and operational effectiveness from a Credit Union perspective. We also discuss strategies which may help Credit Unions improve both service delivery and operational effectiveness.

Maintaining member satisfaction and engagement while the methods of member interaction changes is essential. The trust and sense of belonging that members have with branches and staff is not easy to replicate in a digital world, and the differentiation advantage Credit Unions enjoy can easily be lost.

The credit union sector in Ireland has created its "Brand" and in doing so has proved successful, evidenced by numerous surveys and awards where credit unions consistently rank top for trust and service. The challenge now facing the sector is how to use this brand recognition, in a world of increased competition, to build strength and viability.

Measuring operational effectiveness by looking at the cost-to-income ratio is simple. Measuring service delivery is much more difficult. Each Credit Union has its strategies reflecting the needs of its unique common bond. Collectively, Credit Unions have up to 69% membership penetration (although the real figure is lower due to people often having accounts in more than one Credit Union). What is clear is that Credit Unions have not translated high penetration

¹ <https://thecxcompany.com/wp-content/uploads/2020/10/2020-CX-Report.pdf>
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membership levels into meeting the financial needs of members. Credit Unions 14% share of savings and a 5.6% share of loans are significantly below the 69% penetration levels. Credit Unions therefore are not members' primary financial institution and Credit Unions must look to address this.

FIGURES AT SEP 2019	MEMBERSHIP	SAVINGS	CONSUMER CREDIT	TOTAL HOUSEHOLD CREDIT
CREDIT UNION SHARE	3.4 million	15.27 billion	5.1 billion	5.1 billion
NATIONAL FIGURES	4.9 million ²	109.351 billion ³	15.712 billion	91.752 billion
PERCENTAGE SHARE	69.4%	14.0%	32.5%	5.6%

2) STRUCTURE OF THE PAPER

The paper is set out as follows:

- **Chapter 2 – Service Delivery**

This chapter sets out the current service delivery model in the context of People, Processes, Place and Products. The chapter explores the important role which people play in delivering services, it looks at examples of good and poor processes within Credit Unions and suggests a simple model for Credit Unions to consider when looking at processes. The chapter explores what “place” will mean in the future and then lists some products that Credit Unions should consider.

- **Chapter 3 – Core Processors and innovation**

This chapter looks at the role of core processors and innovation in the sector and the benefits of digitisation. The chapter looks at understanding our members and the different methods that could allow Credit Unions take advantage of the high level of innovation which exists.

² <https://datacommons.org/place/country/IRL>

³ <https://www.centralbank.ie/statistics/data-and-analysis/credit-and-banking-statistics/bank-balance-sheets/bank-balance-sheets-data>

- **Chapter 4 – User Groups and CUSPs**

Looking at user-groups this chapter explores what benefits are being delivered, and what more could be done. It identifies that additional resourcing of user-groups could significantly improve their effectiveness and outlines successes of the very few CUSPs and the need for more CUSPs

- **Chapter 5 – Delivery methods**

In this chapter we export 3 approaches to services delivery and discuss the pros and cons of each and examine how technology is an enabler for both the Credit Union and members

- **Chapter 6 – Business Intelligence and Management Information**

This chapter looks at BI and MI at a high level, the challenges to implement BI and the areas to be careful of. For Credit Unions BI has the potential to deliver a superior member service by using data for the benefit for the member.

- **Chapter 7 – RegTech**

The chapter on RegTech explores the opportunities and challenges and the various RegTech models and how Credit Unions have adopted RegTech to date.

- **Chapter 8 – High-level efficiency savings**

This chapter looks at the efficiencies delivered by IT systems to date and the various stages of technology development. The chapter goes on to analyse and details efficiencies automated teller systems and full digital self-service can deliver along with some worked examples

- **Chapter 9 – Consumption of Financial Services in 2030**

In chapter nine we take a 10 year view on how financial services may be consumed in 2030. The purpose of this chapter is to challenge our current thoughts and ideas to allow us to consider the steps required to service our members and the steps that we need to get there

- **Chapter 10 – Recommendations**

This chapter provide a number of simple recommendations from the paper for Credit Unions to consider what may help improve operational effectiveness and service delivery.

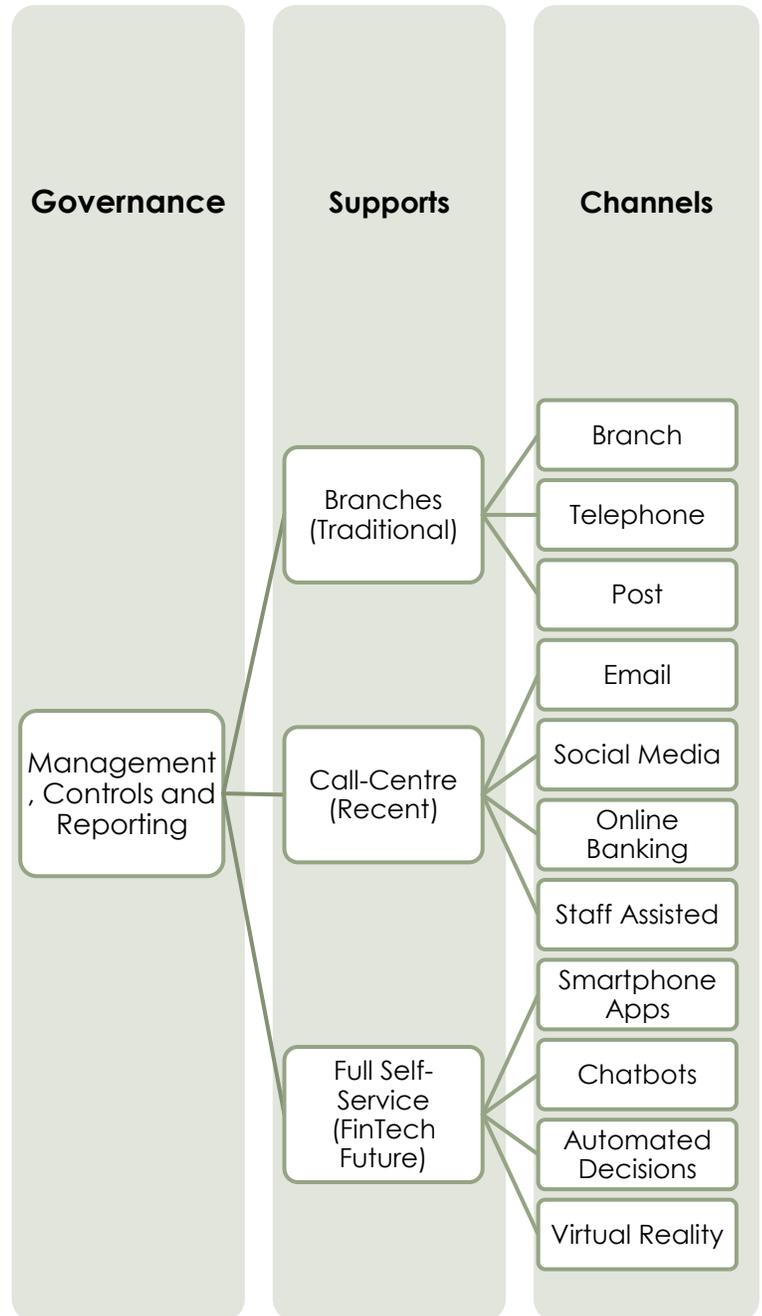
CHAPTER 2 – SERVICE DELIVERY

Banks and Credit Unions have experienced significant change and disruption in recent decades. Systemic weaknesses unveiled during the financial crisis has resulted in increased regulation; the emergence of FinTech supported by venture capital is significantly disrupting customer expectations. Matching service delivery with increased member expectation, while ensuring effective systems and controls are in place, significantly increases the resourcing and expertise to deliver the desired outcomes successfully.

To analyse service delivery from a Credit Union perspective, we look at four areas, People, Processes, Place and Products. Perspectives gained from these views allow us to explore further challenges and opportunities facing the sector

1) PEOPLE

Employees play a critical role in Credit Union service delivery. Job satisfaction has a direct impact on members' perception across all channels with

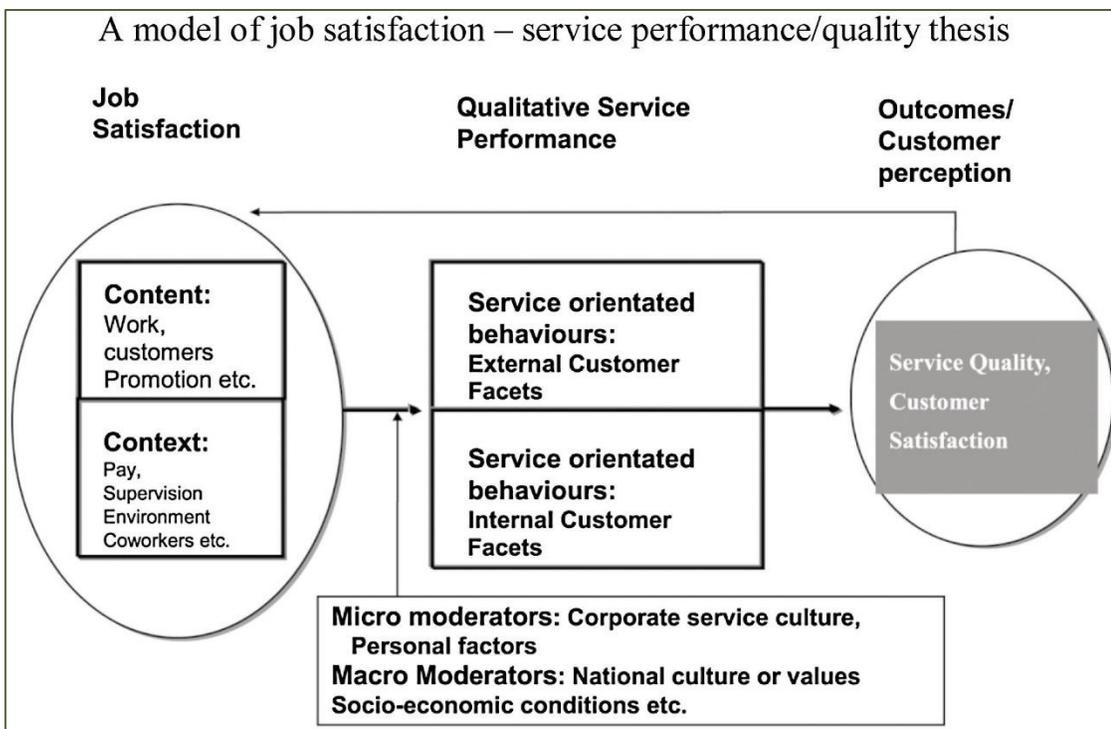


satisfied employees delivering higher quality services and improved performance.

“Some very important people figure into your profit equation – not the ones either side of the conference table, but the ones either side of the sales counter.”

As Credit Unions undergo seismic changes responding to internal and external forces, it is vital to ensure that employees are part of this journey. Credit Unions must recruit for both skill set and cultural fit.

Credit Unions culture is durable, based on a not-for-profit ethos and focus of serving members. With products design based on the member's needs rather than extracting profits, the work environment is very satisfying. This level of job satisfaction naturally leads to improved service performance which results in positive outcomes and member perception.



As our process, places and products change rapidly to meet member demand, these changes will place significant stresses on employees and may impact job satisfaction. To ensure excellent service delivery managing and measuring

employee job satisfaction is vital.

Bringing the staff along the change process is equally important; their input is valuable and being engaged in the journey rather than have the destination foisted upon them produces a more desirable outcome.

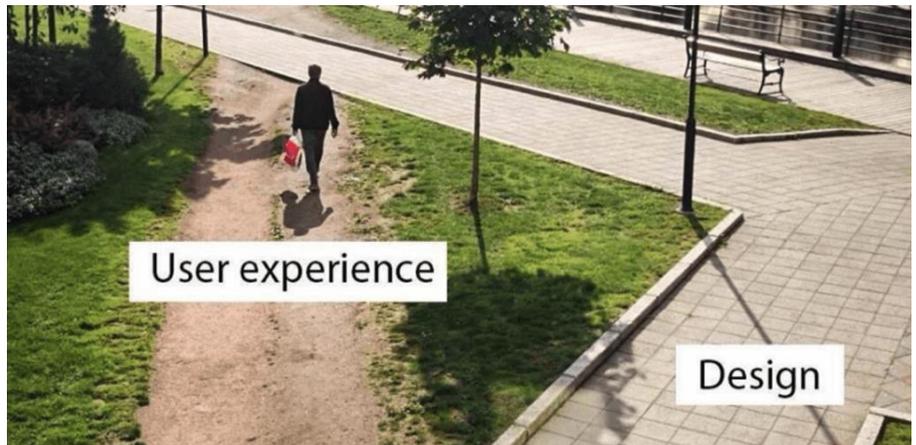
Upskilling and reskilling opportunities must be available and motivated experienced staff are a valuable resource to be supported and encouraged along this path.

2) PROCESSES

Design concepts such as six-sigma⁴ and lean-design⁵ are comprehensive frameworks established for quality improvement and often applied to service delivery. These frameworks are excellent, mapping out processes and identifying efficiencies which deliver significant productivity gains. However, the complexity of these frameworks often requires an expert to implement.

- **Building the path of least resistance**

All around us within the built environment, there are examples of 'desire paths'⁶. The picture to the right shows us what planners designed, which looks very well compared to the lived daily experience.



Designing financial processes with desire-paths in mind ensures we meet member needs and staff requirements and will both significantly enhance the member experience and lead to improved work quality and efficiency.

“Design for real life, launch to learn and stay responsive”

⁴ Six Sigma is a set of techniques and tools for process improvement - https://en.wikipedia.org/wiki/Six_Sigma

⁵ Lean is a managerial approach which inspects processes, services and products according to their value from the customer's perspective.

(https://www.tefen.com/insights/industries/Financial_Services/implementing_the_lean_approach_in_a_financial_organization)

⁶ https://www.youtube.com/watch?v=P9B8PmUR64U&feature=emb_logo

Good Versus Poor Process Design

Examples of good design in Credit Union processes		Examples of poor design in Credit Union processes	
Process	Outcome	Process	Outcome
Multi-Book Transactions	<ul style="list-style-type: none"> Quickly and efficiently process lodgements to multiple balances as part of one transaction. High level of member satisfaction 	Junior Account Opening	<ul style="list-style-type: none"> Forms require signatures in six separate places to comply with internal and regulatory requirements Member frustration wondering why one signature is not enough.
Balance Disbursements	<ul style="list-style-type: none"> Quickly split one lodgement (electronic and manual) across multiple member balances, e.g. Shares, Loans and Thrift Account Convenience for member and simple to understand 	Updating photo IDs for members already identified	<ul style="list-style-type: none"> Frustration from members who do not understand the AML requirements and feel the Credit Union is just too bureaucratic. Additional admin work increasing costs

There are many good examples of very efficient processes within Credit Unions; however, there are also many poor design examples where members experience frustration. The questions to ask at each step is "why are we doing this?" and "what is the purpose?", "is it necessary?" Do we need a multitude of signatures or can the form be simplified? Do we need to copy, scan, and create paper files or can we simply scan and file electronically? Perhaps basic examples but Credit Unions, both individually and collectively need to invest more time in simplifying complex processes, visit every action point, while also aiming to maintain high work standards. Very often efficient inherent design achieves both outcomes.

Indeed, scripting processes for reference and training guides often aids in identifying bottlenecks and in the long term significantly improves efficiency.

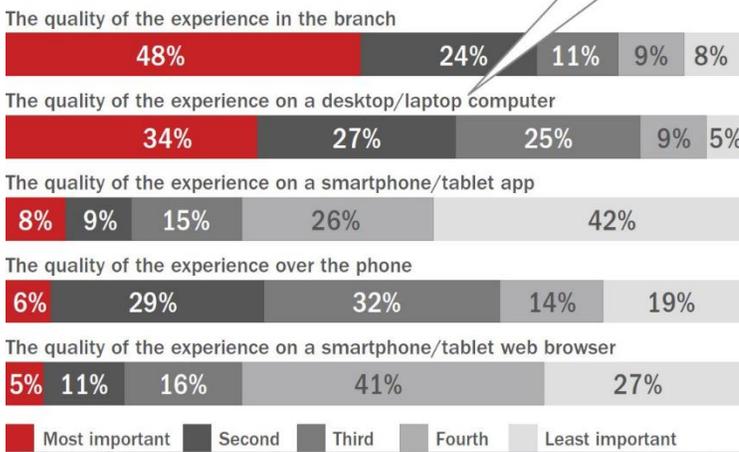
3) PLACE

A vital component of Credit Union service delivery heretofore has been the physical office in every town and many villages across the country. This physical presence makes Credit Unions accessible and visible. Each Credit Union



must ask themselves if this is still a suitable strategy going forward. Member expectation is changing rapidly. At one time people were happy to wait a few days or a week for a response to a loan application, now people expect an answer almost straight away. Can traditional places meet this requirement? We have seen banks who pushed hard towards a digital strategy but ultimately reversed some decisions due to the loss of cross-selling opportunities. What is the appropriate mix for Credit Unions?

How consumers rank the importance of the experience in each delivery channel



Source: Beyond © February 2016 The Financial Brand

A study conducted by the Financial Brand in 2016 found that the quality of the branch experience still ranked the highest, closely followed by the desktop/laptop experience.

It is safe to assume that the trend towards the smartphone has continued and an expectation of full banking on your phone is now a reality. Indeed, the recent pandemic may have moved this sentiment for digital and convenient engagement forward several years. Our future

borrowers and Generation Z expect that a mobile application and digital communication is available. Contactless tap is now the tool used most often for payments with a 40% increase in the past 6-months. It is doubtful that those who have discovered its freedom will revert to cash withdrawal queues regularly in the future.

“Yuebao, part of Ant Financial and built on the Alipay platform captures deposits from merchants and consumers paying a high interest rate. In the west these are known as money-markets. The product however is built on behaviour models for savings and has amassed \$180 billion in savings without branches or people selling a product. This refines the definition of place”

While the place of delivery is shifting from physical to virtual, a key challenge will be to retain personal relationships that define the Credit Union difference.

4) PRODUCTS

There are varying sized Credit Unions who have individual strategies unique to their common bond. Some Credit Unions are aiming to provide a wide range of products, while others are focused on the traditional savings and loans products. When looking at the product set, each Credit Union needs to select what is best for their own member needs and the resources, systems and controls they have in place.

As outlined in the introduction, Credit Unions have 69% penetration concerning membership but only 14% of household savings and 5.6% of household credit. These figures reflect the final report of the Commission on Credit Unions⁷ which indicated that Irish Credit Unions have not yet progressed beyond a transition stage of development.

• Potential New Product Lines

Products (some of which are offered by a minority of Credit Unions) that could be further developed are considered below:

Available in some Credit Unions but not all

- Current Accounts, Debit Cards and Overdrafts – providing a platform for new services and a higher level of member engagement and convenience.
- Agriculture Loans – unfulfilled credit gap in Irish farming – 60% long term investment and 21% mid-term loans – Collateral offering an issue and cash flow volatility may be an option for consideration but with maximum tolerances for a diversified loan portfolio, particularly in a more rural common bond. Improved system underwriting and monitoring tools may be required to reduce manual time consumed in the assessment.
- Housing / Mortgages – look to increase the availability of long term fixed-rate mortgages, and state-backed mortgages for first time buyers – opportunities possibly for Credit Unions. Currently, cost to provide appears to be an issue and pricing often attracts those wishing to improve their credit rating only to transfer to more favourable

⁷ <https://assets.gov.ie/6252/060219170706-1c5116c9c54d49ad9dfed3de66d32f0c.pdf>

offerings available in the broader market in year 2-3. A shared services option for some aspects of the process has the potential to reduce the cost pricing base.

Not available in Credit Unions or very limited availability

- Asset Finance - Are there opportunities for Credit Unions to engage with a third party in this sphere. A shared collaborative approach and standardisation would assist in this engagement.
- Provision of Financial Intermediation – Life Assurance; Pensions; Personal Insurances. Individual Irish Credit Unions have dipped into this area but usually as a tied agent of an established insurance company, in limited General Insurance areas, with little control over company use of data for cross-selling, and minimal commissions relative to income. In recent times, collaborative Credit Unions have sought to find a better solution with some success. Generally considered that more opportunity to diversify income streams exists in this area.
- Provision of Social Housing Finance – utilising Local & National Government engagement.
- Measures to help Irish Companies in accessing credit and capital/ overall plan.
- Engagement with and inclusion in Government support schemes through the Department of Trade & Enterprise may be another option.
- Expansion of products and service to meet Community Banking requirements⁸
- Revolving Credit - With average loans in Credit Unions being €5,000 and under, and a large proportion being of a top-up nature, much time and resources are absorbed simply by repeating the same process multiple times a year for members who will have excellent credit ratings and repayment loyalty. A revolving credit solution would provide optimum convenience for the member, and efficiencies for the Credit Union.
- Credit Cards. A high-interest income earner for American Credit Unions described as providing 'mobile wallet convenience' with 'transaction alerts and rewards systems.
- Pensions Savings Accounts – A basic pensions savings product which would allow members get tax-relief on the savings, have full view and trust in the balance in their pension without having to navigate complicated fee and commission structures. These long-term pensions saving would provide a natural maturity match with mortgage lending.

⁸ <https://assets.gov.ie/44765/2b866751ccc44d6bab07ab4d3e6edbd8.pdf>

- **Challenges to the provision of additional products**

As Credit Unions look to enter new markets, many challenges will have to be overcome:

- How to maintain competitive lending rates and tight margins against large competitor banks and challenger FinTechs?
- Development of skills, knowledge, and know-how of the new markets
- Obtaining the regulatory approvals to enter new markets

- **Collaboration**

For progression to a developed Credit Union sector, capacity must be built for a broader range of products and services. Development costs in investment, skills and resources may be restrictive for individual Credit Unions. Collaboration can deliver scale economies. Joined up thinking, sharing of ideas, testing of options, leverage of combined strength, engagement with process experts can enable the next phase of growth.

Of course, collaboration requires to give as well as take and an acceptance that 'the way we have always done it' may not be best. There is much common ground and agreed thinking from which to find a solid starting point.

Collaboration aimed at group solutions requires standardisation. Standardisation can open many doors and opportunities to partner with entities previously not interested in dealing with many small entities. New shared services entities such as Payac and Metamo demonstrate what is achievable.

CHAPTER 3 – CORE PROCESSORS AND INNOVATION

1) OVERVIEW OF THE MARKET

Technology is at the centre of service delivery, and with the advances in technology moving at an ever-increasing pace, the role of the core processors is under more scrutiny than ever.

Like Credit Unions, core processors have experienced consolidation in the market over the last ten years, with most of the market serviced by just two suppliers. With seven suppliers remaining it is likely that there will be more consolidation in the years ahead

In this environment, there is heightened pressure on cores to not only grow and do more but also to provide more specialised solutions without increasing costs. Cores are increasingly expected to take on the basics of transaction processing and record-keeping—whether deposits, lending, or payments—while providing smooth member-facing interfaces, support superior member service, and

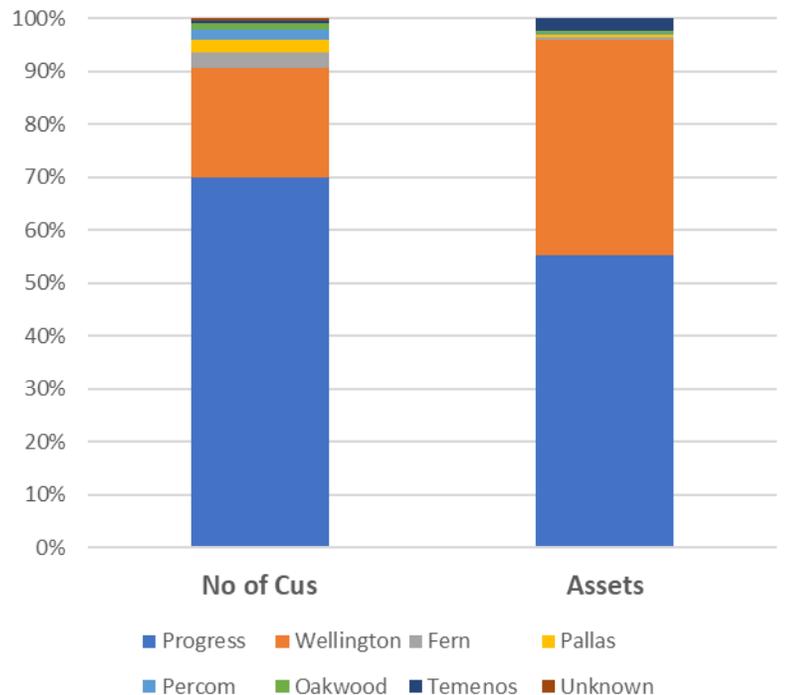
2010 CORE SUPPLIERS

1. FERN
2. ICE
3. OAKWOOD
4. OCTAGON
5. PALLAS
6. PERCOM
7. PROGRESS
8. SIT
9. TEMENOS
10. WELLINGTON

2020 CORE SUPPLIERS

1. FERN
2. OAKWOOD
3. PALLAS
4. PERCOM
5. PROGRESS
6. TEMENOS
7. WELLINGTON

Breakdown of Core Processors



offer market-competitive data security and analysis, disaster support and recovery, fraud, and risk management. How can core providers achieve this? Either by offering more and different internal solutions or by opening their systems via APIs (Application Programming Interfaces).

The addition of internal solutions requires the addition of suitably skilled staff and expertise and rising cost for suppliers. Are core systems capable of supporting the highly developed solutions required? The old analogy comes to mind 'every man to his trade'...should the core providers do the basics that their systems were initially built for to the best possible standard rather than trying to cover too many bases and perhaps not achieve excellence, reliability and flexibility in any one aspect?

Providing API access allows for the opportunity to select best in market solutions with specialisation in business areas which would provide automation, speed of processes, speed of response and cost efficiencies. API access allows the core supplier to hold their core market space rather than be at risk of customer loss because of a lack of agility to develop systems to meet the changing expectations and needs.

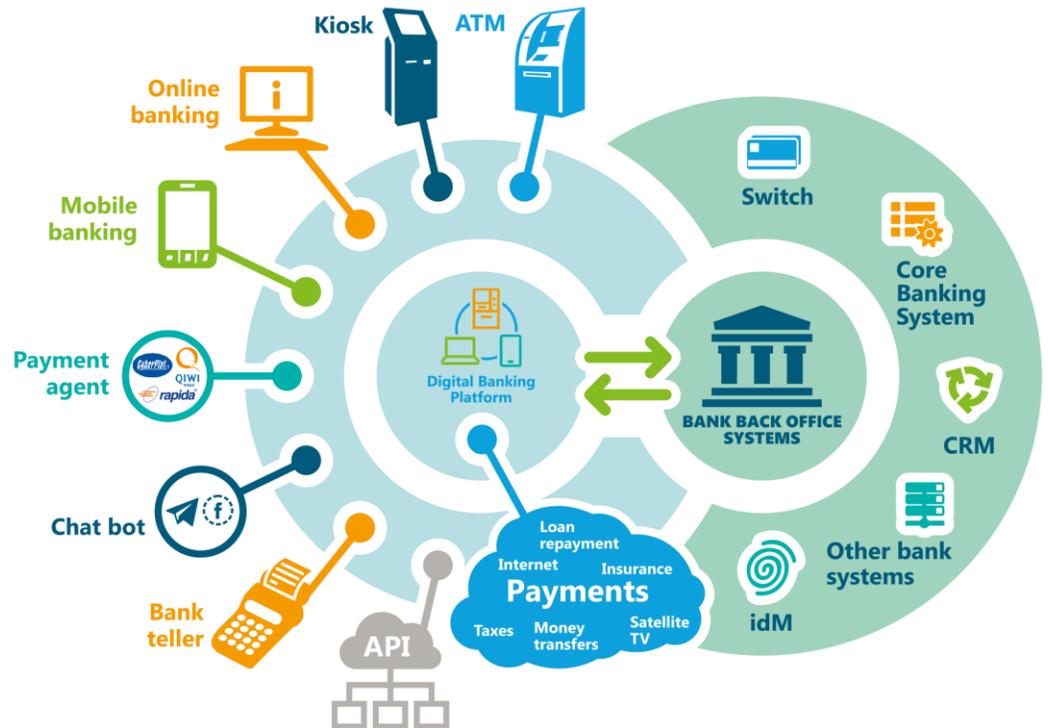
While Credit Unions often fear the dependency on one supplier for most of their business solutions, the question presents itself, how difficult would it be to monitor and engage with numerous suppliers in an API environment? Perhaps this requires more collaboration and joined-up thinking.

With just two leading suppliers in a market increasing in sophistication there is an opportunity for at least one or more entrants which, if it were to occur, would result in improved innovation.

IT capability is already at the centre of all operations, and, if Credit Unions effectiveness and efficiencies are to move forward, IT must be the enabler, not the restraint.

2) DIGITAL BANKING

Digitisation across all industries is progressing at pace. In contrast, digitisation in banking has been slower than other industries but is accelerating. FinTech's disruptive business models are pushing financial services firms to innovate.



Critical challenges for Credit Unions in this new environment are technology budgets and the ability/willingness of existing suppliers to innovate or partner with FinTech companies.

- **Back office Core Systems**

Back office core systems in Irish Credit Unions offer an extensive range of services such as nominal ledgers, payments processing, current accounts, credit checking in addition to savings and loans. Both leading suppliers also provide ATM integration, online banking and mobile banking.

- **Application Programming Interface (API) Integration**

Neither of the leading systems has published APIs where third party providers can easily integrate; however, both suppliers develop integration where enough Credit Unions request it. This is at odds with modern development expectations where published APIs and integration is an inherent part of systems and is likely slowing down the pace of innovation.

- **Digital Member Onboarding**

Digital Member Onboarding is available from at least one of the core providers but is not ubiquitous within Credit Unions. With RegTech software available, this technology should be more embedded. Statistics from one Credit Union using digital onboarding shows that 21% of new members joined online.

- **Automated Lending**

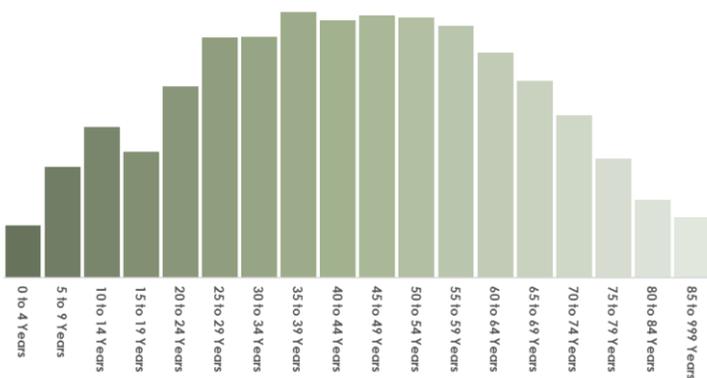
Automated lending is due to be launched before the end of 2020 by one core provider. Banks already providing this with almost instantaneous decisions through their apps, Credit Unions are currently at a distinct disadvantage. The core provider who is due to launch this service has integrated fully with a specialist in this area utilising APIs. This strategy is an indicator that core providers recognise they cannot continue to develop all solutions in house.

- **E-signatures**

At least two of the core providers have delivered e-signatures for Credit Unions. During Covid-19, the ability to facilitate members by electronically signed documents has allowed these Credit Unions to exceed member expectations.

3) UNDERSTANDING MEMBERS

- **Demographics of our members**



There is a perception that membership of Credit Unions is skewed toward older members. The chart to the left, based on a large community Credit Union clearly shows a spread of membership closely aligned with population statistics.

When considering service delivery and operational effectiveness, it is essential to fully appreciate our demographics and

build towards the future rather than to the past.

- **Attracting new members**

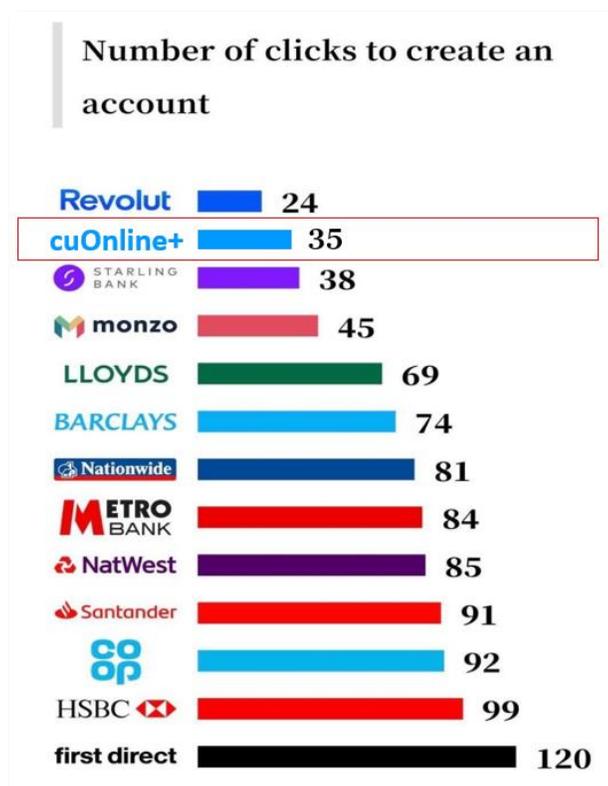
Key borrowing demographics tend to be between 25 and 45 years of age. These age-groups are digital natives and use technology daily. They do not ask if there is an app or an online platform, but instead, they expect it. Without these 'table-stakes' Credit Unions cannot complete.

- **Existing and new products & services**

Optimising service delivery and operational effectiveness is most beneficial when paired with a range of products and services that satisfy the needs of members. When designing service delivery for new products and services, technology must be optimised to reduce friction along the journey. Every Credit Union should:

- Review member account opening experience versus other experiences
- Review loan application process versus other experiences

Looking at the table of the number of clicks to open an account the cuOnline+ platform from Wellington incorporating digital ID validation provides a very efficient digital journey comparable to and better than many FinTechs



- **Members dictate the experience**

Members are well informed and will do business with companies that give them what they want. The not-for-profit social basis of the Credit Union business model is desirable, but the design experience of solutions must meet the personalised experiences expected by today's consumer.

Today's consumer expects a frictionless experience delivered by companies who have a deep understanding of their products and how these fulfil the consumer need. Instant gratification is not fast enough, and real-time is the expectation.

To meet these expectations, Credit Unions must look to:

- Developing systems that can personalise the experience for each member.
- Utilise 'big data' and be proactive in offering goods and services that will appeal.
- Develop decision support systems based on member insights, analytics, and expertise
- Aim to provide the answers to queries as soon as they click online as this may be a single opportunity and they may never return if not satisfied by the response.

4) OPEN BANKING

Open banking is both an opportunity and a challenge for Credit Unions. As a trusted provider, Credit Unions are uniquely positioned to offer open banking services to members both under the AISP and PISP registrations. Practical budgeting tools integrated to open banking could set Credit Unions apart. While some non-core suppliers are talking about services, no integrated solution is currently available.

5) ARTIFICIAL INTELLIGENCE ("AI") AND MACHINE LEARNING ("ML")

'Big Data' is a term often mentioned concerning targeted marketing by Facebook, Google, and other social media enterprises. Ethically developed AI and ML could help Credit Unions retain the 'personal touch' in an era where everything is becoming digital. Within our core systems, we have vast amounts of member data which could be utilised to personalise each member's journey with the Credit Union. This is undoubtedly an area that should be considered on a collaborative basis.

6) VIRTUAL REALITY ("VR) & CHAT BOTS

Significant enhancements in VR has the potential of making VR software the next new technology platform. With a far greater immersive feel than traditional computing VR has the potential to closely replicate an in-branch experience without the need for physical offices. Coupled with Chatbots and AI, significant operational effectiveness is achievable in the future. While the technology is still some way off a recent article from the Financial Brand (<https://thefinancialbrand.com/68593/banks-credit-unions-finances-virtual-reality/>) covers examples of how some Credit Unions in America and Canada have begun early-stage use of the software.

7) FINTECHS

FinTechs are technology start-ups whose purpose is to disrupt traditional financial methods in the delivery of financial services without having legacy considerations.

FinTechs typically have a very narrow initial focus based on streamlining a particular aspect of an inefficient process.

Risks presented by FinTech companies to Credit Unions is that they are onboarding customers with a simple value proposition and in time they will expand services into revenue-generating credit services.

Opportunities presented by FinTechs involve partnerships and integration of their services via APIs with our core systems. Successful integration with FinTechs will require a high level of expertise, project management and governance in areas such as:

- Technical specifications and change management
- Prioritisation of key deliverables
- Project cost and development control
- Conduct and oversight
- Data Protection and AML



1) MEETINGS

Meetings were held with user groups and Credit Union service providers to gain an understanding of their roles in working with the core suppliers to ensure Credit Unions requirements are being met.

Some of the discussion points from each of the groups are listed below:

- **Progress user group – "CUDS" – key points:**
 - A more proactive approach to service delivery required, rather than the current reactive one
 - Compliance matters & governance seem to be continuously prioritised
 - Lack of real consultation
 - No real focus on operational effectiveness
 - Develop CUSOs along the same trajectory as in other jurisdictions
 - CUs will still want to use different systems, so need to accommodate this in structure
 - Payac, Metamo, Solutions Centre trying to develop business model changes
 - Vehicle for delivery needed
 - Alignment of CUs with priority initiatives and key developments
 - A consultation process with key stakeholders
 - Capacity issues with current infrastructure
- **Wellington user group – key points:**
 - Involved with agreeing with critical points on the annual development road map
 - Contracting for work centrally through the User Group rather than each Credit Union doing their own thing delivers significant savings, e.g. penetration testing, compliance reviews and outsourcing reviews

- Using the user group to escalate issues for Credit Unions or share information between Credit Unions is very effective
- Recognise the need for a more professional approach and dedicated resources to move essential requirements forward rather than relying on the voluntary time of Credit Union management to ensure a more focused and cost-effective delivery of system enhancements.

- **Temenos – key points**

Three Credit Unions are currently in the process of migrating to Temenos. The rationale behind the change is:

- Better platform
- Best in class offerings
- Can leverage of standards
- A platform for community banking
- Operational effectiveness at core
- Fast track pre-packaged products on cloud technology

- **Metamo – key points: (<https://metamo.ie>)**

- Learning from collaboration
- Joint venture with an experienced commercial partner with formal agreements in place
- Setting up an entity, a core support hub
- A project team with experienced management and staff
- Investment by initial 16 Credit Unions, all Credit Unions can choose to use services as required
- Standardisation central to solutions – key for Credit Unions, given our market share
- Fragmentation a challenge, quality and appropriateness of solution determine take-up
- Stakeholder engagement –structured approach
- Change management – shared view, and roll-out of business development changes
- The transformational change required – over time
- Scale, partnerships, opportunity to leverage Credit Union strength and market presence

2) SHARED SERVICES (CREDIT UNIONS SERVICE PROVIDERS (“CUSPs”))

In the CFCFE paper “The Irish Credit Union Business Model: Is it still fit for purpose?”⁹ speaks to the scale of Irish Credit Unions versus banks and the difficulty even for the very largest Credit Unions to implement new business models on their own.

The benefit of modern technology is that it evens the playing field and if implemented strategically can give smaller players an advantage of their larger counterparts

Payac Services CLG (“Payac”) (www.payac.ie / www.currentaccount.ie) is an example of a successful shared services organization. Payac, created by Credit Unions to fill a specific market need developed a standardised Credit Union current account and EFT service bringing European scale players to the Irish market allowing Credit Unions to provide current account services more competitively than the traditional Irish Banks

Cultivate Credit Union Farm Finance (“Cultivate”) (<https://cultivate-cu.ie/>) is another example of effective collaboration. Initially set up by four Credit Unions it has now grown to cover 26 Credit Unions with over 70 branches. Since set up it has processed over €30 million of farm lending allowing Credit Unions grow their loan books using shared resources to increase lending expertise and risk management.

In the United States the **National Association of Credit Union Service Organisations** (www.nacuso.org) was formed in 1984 to help Credit Unions explore the use of CUSOs and the delivery of non-traditional products and services. Over the years, NACUSO's focus has evolved to helping Credit Unions form multi-owned CUSOs and participate in collaboration and the cooperative business model. Payac, Cultivate and Metamo are examples of how this can be achieved in the Irish context and much more can be achieved by building on these successful examples.

3) OUTCOMES

From the meetings with each of the groups, it was clear that each group understood the benefits of collaboration and operational standardisation to ensure effective service delivery along with experienced and focussed resources.

⁹ <http://cufa.ie/wp-content/uploads/2018/01/CFCFE-Irish-CU-Business-Models-Nov-2017.pdf>

4) CONCLUSION

Investment to build the resource capacity of user-groups would allow user-groups better control of development road maps for Credit Unions which would then lead to more effective solutions for business needs. User-groups should consider setting up a Project Management Office either on a part-time or full-time basis to co-ordinate input and oversee follow-up.

Collaboration and standardisation are key to leveraging current Credit Union strengths and to achieve the delivery of efficient solutions.

CHAPTER 5 – DELIVERY METHODS



Credit Unions have evolved along with society. For the first 30 years, manual records were maintained. Systems have evolved since from being simple transactional recording systems to full banking and management information systems.

1) PROS AND CONS OF EACH DELIVERY METHOD

No	Description	Pros	Cons
1	Staff Assisted	<ul style="list-style-type: none"> • Develops a strong relationship with members • Excellent knowledge of member and opportunity to cross-sell services • Easy to resolve issues quickly 	<ul style="list-style-type: none"> • Labour and overhead intensive with high costs per transaction • Slow transaction time and member inconvenience • Limited access to the Credit Union based on office opening hours

No	Description	Pros	Cons
			<ul style="list-style-type: none"> • Significant levels of paperwork generated which requires storage • More steps required for storage and retrieval operations
	Technology-Assisted	<ul style="list-style-type: none"> • Technology such as ATMs replaces the need for tellers • Service times can be increased and possible for 24-hour service based on locations • Reduces cost to serve • Some opportunity for direct upload • Fulfilment time can be reduced 	<ul style="list-style-type: none"> • High capital and maintenance cost for the equipment • More disruptions due to lodging unfit notes or putting in cards into the work card readers • Staff still required to assist member when they become stuck • Reduced personal interaction
	Full Self Service	<ul style="list-style-type: none"> • Members can perform all CU services from their own device 24/7 • Significantly improve member experience • As members are performing all the work, labour requirements are significantly reduced • Documentation and paperwork are uploaded by the member reducing associated filing and storage costs 	<ul style="list-style-type: none"> • Loss of personal contact with members • Harder to differentiate CU compared to bank • Loss of direct opportunities to cross-sell services to members

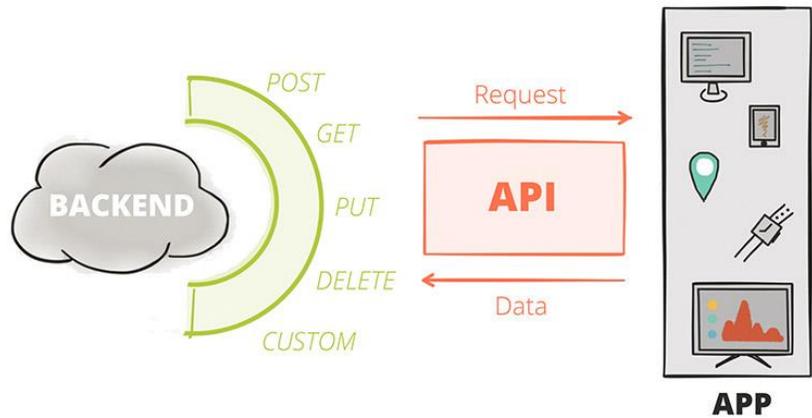
2) TECHNOLOGY AS AN ENABLER

To achieve full self-service requires continuous development of consumer-facing apps and websites utilising the latest design methodologies. The return on this investment can be exponential and only limited by common bond constraints.

3) ACCESS TO TECHNOLOGICAL SOLUTIONS

Significant reliance is placed on incumbent core providers to deliver all solutions, and indeed there is evidence of a reluctance with some suppliers to open their systems to third-party systems via APIs.

3rd party integrations must be considered carefully, the added complexity needs to be considered against the benefits and long term optimisation of a technology stack should not be sacrificed for quick wins.



4) ASSESSMENT

While staff-assisted transactions are the most expensive, the value of the branch should not be underestimated. Full self-services offer the highest level of efficiency, scalability, and overall member satisfaction. Appropriate branch, telephone and messaging services combined with a full self-service are a win-win.

Management information requirements have increased significantly over the last decade. As channels for member interaction evolves the ability to make informed business decisions becomes more complicated.

1) WHAT IS BUSINESS INTELLIGENCE?

In its most straightforward form business intelligence ("BI") allows managers to make strategic, actionable decisions based on reliable and timely data. As the complexity of the Credit Union business model increases, so does the challenge of BI.

BI can be as basic as local knowledge of members and what is happening in the local community to being as complex as predictive analytics from internal and external data sources.

2) DATA CHALLENGES

Credit Union systems are rich with member data from ICB scores to sensitive personal data based on borrowing and spending patterns. Financial data is structured and relatively easy to manage, but data from social media platforms, web history, phone, email, and messaging systems are rich but unstructured.

Techniques such as sentiment analysis¹⁰ applied to messaging platforms can pre-empt complaints from arising, and allow pro-active intervention to improve the member experience. Link-analysis¹¹ is a data-analysis technique used to evaluate relationships between nodes (e.g. people on email servers) and can be used to detect fraud. Aggregating and analysing data from all these sources can provide a competitive advantage.

In a recent webinar by The Financial Brand, Glen Sewell of Datawatch Angoss identified the following five barriers that financial institutions face in making better use of data:

¹⁰ https://en.wikipedia.org/wiki/Sentiment_analysis

¹¹ https://en.wikipedia.org/wiki/Link_analysis

1. HYPE AND MISINFORMATION

In this new world, there are many choices and sources of information available, which can lead to confusion and feeling overwhelmed. Analytic processes need to be easy to use in every department of a Credit Union.

2. INSUFFICIENT DATA GOVERNANCE

"We have this Wild West approach to data right now, with different individuals taking their approaches to extract value," Sewell stated. The need exists to improve in this area across the board.

3. LAGGING EFFICIENCY

Preparing data still takes over 80% of a data analyst's time.

4. NEED FOR INCREASED FOCUS ON DATA PROTECTION

Regulations such as the GDPR (General Data Protection Regulation) have highlighted the need to protect the data that institutions possess – treating it as an asset is essential.

5. COPING WITH DATA EXPLOSION

Financial institutions are experiencing a dramatic increase in the volume and types of data they are working with but are failing to absorb it at the same rate.

3) IMPLEMENTING BI

Successful elements of a data strategy are:

1. Fast access to data
2. The ability to make better decisions
3. Putting data at the centre of everything you do

Implementing a BI tool is not enough. A defined BI strategy is required and should define how insights from BI are going to be actioned. Having the ability to integrate BI actions into automation and real-time decision making can allow for a high degree on process automation

4) BIAS IN BI

Where BI is being used to automate and action, careful consideration should be afforded to the inherent bias which may exist. Every data set is based on past actions or membership

segments, and therefore bias is intrinsic. Being aware of and understanding this bias is key to ensuring decision outcomes are aligned with business strategy.

5) CONCLUSION

We should not fear the use of sensitive personal data to give each member a more personalised and targeted experience. People are now accustomed to use of data. What we must ensure is the ethical use of this data to provide solutions for members in their best interests.

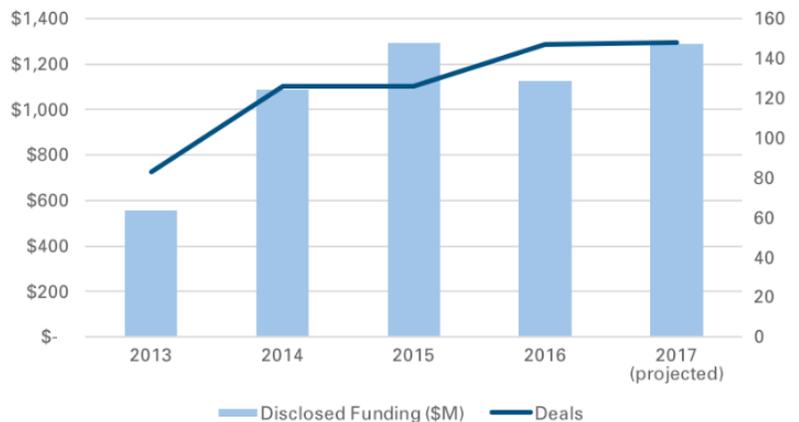
CHAPTER 7 – REGTECH

COMPLIANCE

REGULATIONS

STANDARDS

Regulatory Technology ("RegTech") is a growing area of technology and provides opportunities for more efficient and effective regulatory supervision, compliance, and fraud prevention. Often considered as part of FinTech, RegTech has experienced steady growth recently, and this growth is expected to continue.



Source: Davis 2017.

1) ADOPTION OF REGTECH BY CREDIT UNIONS

Credit Unions have been quick to adopt RegTech solutions so far covering areas such as AML/CFT, Fraud and governance. Examples of RegTech currently in place are:

- Realtime and batch checking of new members against AML/CFT databases
- ID Validation and liveness checking
- Robotic Process Automation
- AML transaction testing
- Risk and compliance software
- Biometrics
- GDPR data anonymisation

2) REGTECH MODELS

There are many RegTech Models which provide various levels of solutions.

• Point Solutions

Point solutions typically solve a specific problem for an organisation. Wellington I.T. addressed a specific pain-point faced by Credit Unions by using optical character recognition, machine learning and biometrics to digitally verify identities which helps Credit Unions comply with their

Know-Your-Customer (KYC) regulatory requirements by using facial recognition to securely verify that a user's photo identification document is, in fact, their own and also simultaneously screening these new members details against the Dow Jones database.

- **Enterprise Solutions**

The second RegTech solution is to offer more flexible enterprise solutions. IBM, for example, offers a host of RegTech solutions through Watson Financial Services. In 2016, the firm bolstered its technological strength in AI by acquiring Promontory, a consulting firm specialising in risk management and regulatory compliance. This acquisition allows IBM to offer its clients an enterprise-wide, "360-degree view" of risk and compliance.

- **Emerging Technologies**

AI, Big Data, Cloud Computing and Blockchain are leading to significant breakthroughs that should not be underestimated. Blockchain, for instance, offers the potential for a verifiable and distributed ledger that can be used to replace signed contracts. As well as significant efficiency, all transactions on a purpose-built Blockchain would be traceable, therefore eliminating the risk for money laundering.

3) CONCLUSION

There have been several successful deployments of RegTech point solutions in Credit Unions. More complex enterprise-based solutions could deliver high levels of regulatory compliance and reduced business risk if undertaken on a collaborative basis.

CHAPTER 8 – HIGH-LEVEL EFFICIENCY SAVINGS

Why invest in technology? At its core, all investments in technology are about delivering efficiencies. Credit Union IT needs and investments have evolved significantly with the pace of change ever increasing. IT changes can be grouped into five phases:

Phase 1

Basic paper-based record-keeping systems with member ledger cards and manual based accounting records

Phase 2

Electronic recording of member transactions and production of statements and balance listings

Phase 3

Windows-based packages become commonplace with increased but still basic management reporting

Phase 4

Data exchange between systems, EFT, ICB. Members can access online with basic functionality

Phase 5

Full member self-service, automation, Artificial Intelligence, and advanced analytics

1) EXISTING IT SYSTEMS

With the volume of transactions today staff numbers required to run a paper-based system would not be feasible or financially viable. Therefore, current technology is already delivering very high levels of efficiency. Without empirical evidence, an estimate that wage costs would be a minimum of 3 times current levels is realistic. With existing wages, approximately 30% of income, and IT expenditure approximately 6% of income, the current return on investment ("ROI") could be calculated as:

$$\frac{\text{Expected wages}(90\%) - \text{Current Wages (30\%)}}{\text{Current IT Expenditure (6\%)}} = 1000\% = 10x$$

2) MACHINE ASSISTED SELF-SERVICE

Automated Teller Machines have been used in banking for decades.

A town based Credit Union undertook a feasibility study into introducing this technology. Key findings of this review were:

- The self-service option works out 56% less cost per transaction than a teller on €19/hour and 39% less cost than a €13.80/hour teller
 - The calculations exclude other costs of staff such as.
 - holidays/rostering/monitoring/compliance/sick leave
 - Appraisals, CPD costs etc.
 - The analysis is carried out on non-income generating transactions within the Credit Union
 - The analysis excludes the ability to have the Kiosk external facing for 24-hour access to reduce the cost of the machine further
 - Overall, the costing shows that IT can work as an enabler from a cost perspective and for non-income generating areas
 - This is only one small aspect of self-service IT as an enabler. IT can also be used for membership onboarding, loan processing, compliance etc.
-
- **Calculating the labour cost:**
 - Labour transaction costs worked on averages over three months for two employees
 - Both employees work part-time
 - The table calculates the average transaction processed per month/week
 - This is then used to calculate the average cost of each transaction using labour
 - The costings ignore the additional factors that arise with staff such as holidays/bonuses/sick leave etc.
 - The transactions used are for lodgements and withdrawals, which is the majority of the two staffs workday
 - These are non-income generating transactions and therefore a pure cost to the organisation with little opportunity to recoup the cost

- **Some overall cost examples**

Labour Cost	@ €19.00 / hour	@ €13.80 / hour	@ €8.43 / hour
	2 Tellers Part-Time	2 Tellers Lower Wage	2 Machines
Transactions Per Week	754	754	754
Transaction Per Hour	43.08	43.08	43.08
Labour Cost Per Hour	€38	€27.60	€16.86
Cost Per Transaction	€0.88	€0.64	€0.39
Annual Transactions	9,048	9,048	9,048
Annual Cost	€7,962.24	€5,790.72	€3,528.72
Increase Transactions	20,000	20,000	20,000
Annual Cost	€17,600	€12,800	€7,800
Saving	(€9,800)	(€5,000)	0

3) FULL DIGITAL SELF-SERVICE (MOBILE)

Saleability is one of the keys to ROI on full digital self-service. Where members can initiate and complete transactions without staff interaction, the possibilities are limitless. The ROI on full self-service or mobile banking has many other benefits also.

- **Member Journey**

Apple released the first iPhone in 2007, which has had a profound effect on people's expectations. The iPhone and android smartphone technology with a simple user interface have democratized computing with over 97%¹² of the Irish population having a smartphone, all of whom expect solutions to be a matter of a few swipes.

- **Increased product and services**

Where members are using mobile and full self-service, there is a much higher probability that they will use more of the products and services on offer. This deepens the relationship with the

¹² https://www.rte.ie/news/2018/1120/1012041-smartphone_survey/

member. Research carried out by Fiserv in America indicates that branch only customers have an average of 1.3 product holdings versus mobile customers who have an average of 2.3 product holdings



- **Increased transaction frequency**

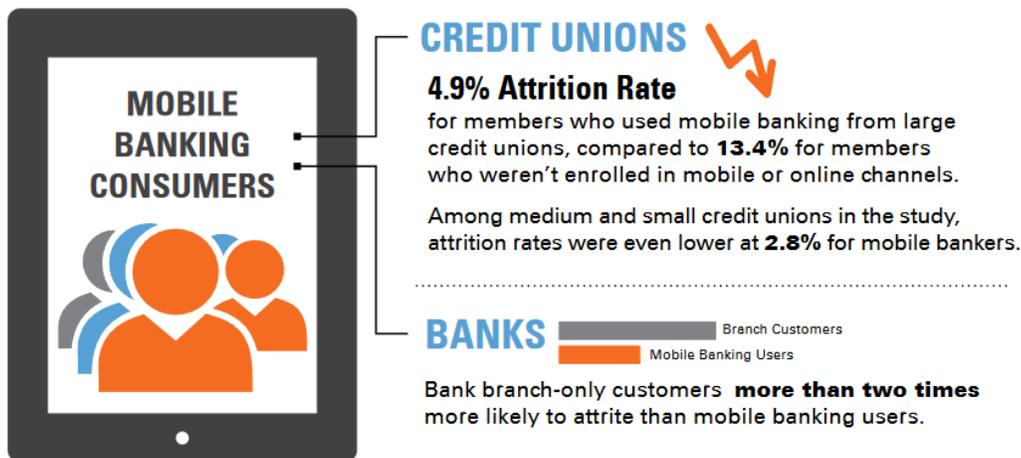
Members who use full online self-service abilities are more inclined to use mobile banking with increased debit card usage. In the months after the adoption of mobile banking, members spend significantly increased both in terms of number and value of their transactions.

- **Decreased branch transactions drive potential cost savings**

Due to the self-service nature of the mobile channel, a drop in the volume of branch transactions after the adoption of mobile banking is not surprising. Because of COVID-19 branch transactions in credit unions fell by circa 20% in the subsequent months. Online transactions increased by the equivalent drop and continue to grow. It is unlikely that the branches will see these transactions returning.

- **Attrition Rate**

In most cases, consumers with mobile banking are less likely to leave their financial institutions. Attrition rates are lowest for mobile banking users when compared to online and branch only users, according to Fiserv¹³.



¹³ <https://www.fiserv.com/en/about-fiserv/resource-center/white-papers/mobile-banking-impact-quantifying-the-roi-and-customer-engagement-benefits.html>

- **Higher Average Revenue**

Mobile banking users will, on average, generate higher revenue for the following reasons:

- increased probability that they will use the Credit Union for loans
- increased fees and charges from current accounts
- Income generated from overdrafts
- increased probability of using fee-generating insurance services

The below case study is extracted from the Fiserv report quoted and serves as an indicator of the potential for ROI for mobile CU.

1

CASE STUDY

Mobile ROI: A Study of Collins Community Credit Union

Collins Community Credit Union participated in an individual, deep-dive analysis of mobile banking ROI. The credit union is headquartered in Cedar Rapids, Iowa. Mobile banking users are 13.5 percent of its total member base and more than 40 percent of its online banking users.

Collins Community Credit Union realized several benefits from mobile banking adoption:



11% increase in member product holdings



4.5% Increase in debit card transactions



38% Increase in ATM transactions



8.5% higher average revenue from mobile banking users vs. online-only users, as evaluated by mobile bankers who made an ACH transaction through mobile



Digital Banking Users — Mobile and Online are **2.3 times less likely** to attrite than branch-only members



An increase in mobile banking adoption to 30% of the Collins Community Credit Union member base could drive:

- ✓ Up to \$6.5 million in incremental annual revenue
- ✓ Up to \$8 million in annual incremental point of sale
- ✓ Up to 24% reduction in overall member attrition



Household Relationships Strengthened the longer members use mobile banking among households that have used mobile banking four or more years

65% have one or more loans with Collins Community CU

Source: <https://www.fiserv.com/en/about-fiserv/resource-center/white-papers/mobile-banking-impact-quantifying-the-roi-and-customer-engagement-benefits.html>

4) EXAMPLES OF EFFICIENT USE OF TECHNOLOGY

- **Efficient Digital onboarding and account opening**

Though Credit Unions are lagging behind FinTechs and some banks concerning digital journeys and effective use of technology, there are many outstanding examples of how Credit Unions are delivering the Credit Union of the future today.

To illustrate what can be achieved, we have outlined the digital journey of a member of Core Credit Union using the Wellington Software system and compared this digital journey to the traditional branch journey. An important aspect to consider in such a journey is to also factor in the member's time.

As we can see from the summary table, the digital journey versus branch journey for account opening is **72% more efficient** and importantly removes significant friction for the member.

Table 1

Total Time Summary	Digital Journey	Branch Journey
CU Time	0:14:40	0:35:00
Member Time	0:13:00	1:03:00
Total Time	0:27:40	1:38:00

The two tables below outline in detail the journey and time it takes.

Example: Digital Journey - Member joining, opening a current account, and requesting a debit card

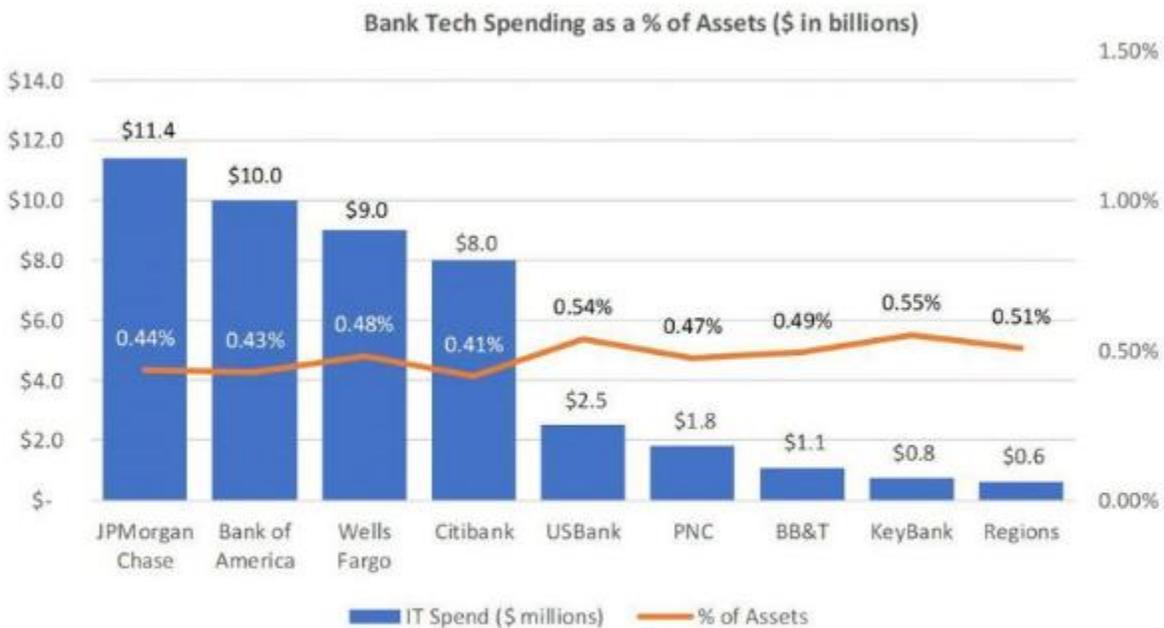
Day #	Time	Event Type	Event Description	CU Time	Member Time Est.
0	18:32:54	Self-service	Digital onboard by member outside CU business hours	0:00:00	0:08:00
1	09:51:29	Operator Queue	CU employee retrieves application, reviews ID scan report, and checks documents to details	0:03:00	0:00:00
1	09:56:29	Auto-routine	Member (Tenant) created from verified web application data	0:00:00	0:00:00
1	09:56:30	Auto-routine	Financial sanctions check auto executed and verified on the system (if issues a new review task would be created)	0:00:00	0:00:00
1	09:56:30	Auto-routine	Balance created – Member Shares	0:00:00	0:00:00
1	09:56:30	Auto-routine	Cost type created – Membership fee	0:00:00	0:00:00
1	09:56:31	Auto-routine	Documents loaded; Photo ID; Utility Bill; PPS Verification; Selfie; ID Validation report	0:00:00	0:00:00
1	09:57:44	Operator Action	Account enquiry to check data loaded to core system correctly	0:01:00	0:00:00
1	09:56:30	Operator Action	Courtesy call to the member to inform welcoming them to the Credit Union	0:05:00	0:00:00
1	11:35:42	Self-Service	Member logs in to the online portal and applies to open a current account and requests a debit card	0:00:00	0:05:00
1	11:40:42	Auto-routine	Financial sanctions check auto executed to verify	0:00:00	0:00:00
1	16:43:00	Operator Action	CU employee retrieves current account request from operator queue	0:01:00	0:00:00
1	16:44:40	Operator Action	Current account application details verified and accepted	0:02:00	0:00:00
1	16:44:41	Auto-routine	Current account balance activated	0:00:10	0:00:00
1	16:47:00	Operator Action	Debit Card applications details verified and accepted	0:02:00	0:00:00
1	16:50:00	Operator Action	Welcome Text message sent	0:00:30	0:00:00
1	17:03:00	Auto-routine	Debit Card details sent for printing	0:00:00	0:00:00
2	05:00:00	Auto-routine	Debit Card issued	0:00:00	0:00:00
3	03:29:00	Auto-routine	EFT lodgment received	0:00:00	0:00:00
			Total Time Input	0:14:40	0:13:00

Example: Branch Journey - Member joining, opening a current account, and requesting a debit card

Event Type	Event Description	CU Time	Member Time Est.
Branch Visit	Member travels to branch and queues	0:00:00	0:20:00
Branch Visit	CU employee meets and member reviews documentation and takes copies of all documents	0:05:00	0:05:00
Branch Visit	CU employee processes membership application on system verifying details with a member as they go	0:10:00	0:10:00
Auto-routine	Financial sanctions check auto executed and verified on the system (if issues a new review task would be created)	0:00:00	0:00:00
Auto-routine	Balance created – Member Shares	0:00:00	0:00:00
Auto-routine	Cost type created – Membership fee	0:00:00	0:00:00
Branch Visit	Membership Application form printed and signed by the member	0:02:00	0:02:00
Branch Visit	Account lodgment processed	0:01:00	0:01:00
Branch Visit	Current Account and debit card Manual Application processed	0:07:00	0:07:00
Branch Visit	Current Account and debit card paperwork printed and signed	0:02:00	0:02:00
Branch Visit	Members paper file created	0:01:00	0:01:00
Branch Visit	Copied documents scanned; Photo ID; Utility Bill; PPS Verification; Selfie; ID Validation report; membership application; current account and debit card application	0:04:00	0:00:00
Branch Visit	Members documentation filed in safe	0:03:00	0:00:00
Branch Visit	Financial sanctions check auto executed to verify	0:00:00	0:00:00
Auto-routine	Debit Card details sent for printing	0:00:00	0:00:00
Auto-routine	Debit Card issued	0:00:00	0:00:00
Auto-routine	EFT lodgment received	0:00:00	0:00:00
	Member returns home	0:00:00	0:15:00
	Total Time Input	0:35:00	1:03:00

5) HOW MUCH DO CREDIT UNIONS SPEND ON TECHNOLOGY

Available research is limited in Ireland about tech spending but looking at the IT spend of one large community Credit Union in Ireland, offering the full range of services currently available their IT spend is 0.25% of assets. This is considerably lower than the 0.50% of assets that American banks spend, as per table below.



Source: UBS, Business Insider, Bankrate.com

Bank IT Spending SOURCE: UBS, BUSINESS INSIDER, BANKRATE.COM

6) CORE SYSTEM STRATEGIES

There are various technology strategies which can be adopted, such as:

- Continue with legacy systems
- CU single standardised system
- Move to new mobile-first platforms
- AI Credit Union

• Continue with legacy systems

Legacy systems in the Irish market provide for current requirements. These systems have grown in complexity over the years and as such, provide their unique constraints. Partnering with **Service-Delivery-and-Operational-Effectiveness-v8**

FinTech solutions offers a quick way to market, delivering new services to members with the legacy system being the system of record.

This approach can help with Credit Unions remaining relevant while reducing the risk of an entirely new system that may present challenges and unforeseen problems. There are examples of this approach working successfully within the Irish market such as touchtech for biometrics, CRIF partnership for decision-as-a-service and ID validation for member onboarding and AML checking.

- **Credit Union single standardised system**

A single standardised system among all Credit Unions is frequently discussed and offers an ideological position where members could transact between Credit Unions quickly and efficiently. The disadvantage of this approach is that it eliminates competition which can lead to a lack of innovation. Advantages of a single system are significantly lower today due to the real-time payments infrastructure that is becoming available throughout Europe with SEPA-instant and the possibilities of blockchain.

- **Move to new mobile-first platforms**

Technology has advanced significantly in the past decade. Moving to a new system which has been developed as a digitally native mobile platform has the potential to deliver efficiencies beyond the evolution of existing platforms capabilities. This would also require moving members to today's new digital platform. Difficult decisions are required as to whether legacy processes are kept in areas such as dealing with cash, counter and branch transactions which have been central to the Credit Unions USPs to date.

- **AI Credit Union**

Start from first principals of what the needs of our members are. Use artificial intelligence tools to learn and tailor individualised lending and savings products for members based on AI-generated risk profile of the member. Nudge the member to save based on a smart current-account and invest member funds to ensure financial wellness

7) CONCLUSION

Technology has delivered significant levels of efficiency in the past, and future spend should continue to deliver. Credit Unions in Ireland invest significantly lower amounts on technology than financial institutions internationally. Taking a position of being fast followers of technology rather than innovators can if appropriately directed, keep a business competitive and relative.

With the pace of technology change increasing, it is incumbent on Credit Unions to continue to invest and maintain the change and development process even if it is as fast followers. Credit Unions must be prepared for higher technology investments to achieve this.

CHAPTER 9 – CONSUMPTION OF FINANCIAL SERVICES IN 2030

Consumer Support

- Artificial intelligent Bots
- Virtual Reality Rooms
- Branch ‘consultants’
 - ☑ Today’s branch design outdated



Opportunities

- CU platform-as-a-service connecting retailers and consumers
- CU trusted party to become identity brokers, KYC, and fraud prevention



How we will pay

- QR Codes scanned from phones
- Voice Recognition
- Facial Recognition
- Wearables
 - ☑ Debit cards & case will be gone



Fraud prevention

- Real Time AML by authorities, e.g. Central Bank
- Centralised identity register that systems authenticate against
 - ☑ No KYC docs needed



Smart Money Accounts

- Prompt you to save at optimal times
- Tell you if you can afford the purchase
- Pre-approve loan when you walk into a car showroom
- Manage investments and goals for life events



Skills required

- Data scientists
- Machine Learning
- Behavioural analysts
- UX designers
 - ☑ Traditional roles will reduce



Wearables



- Transactions viewable in glasses field of vision
- Bone conduction audio telling you available balance before transaction
- Virtual, Augmented and Mixed Reality
- Personal Smart Assistants



Barriers

- Failures to put consumers in control of their personal data
- Regulators will struggle to trust AI systems
- Data Protection / Civil liberties will not grasp that more data does not equate to less privacy



Regulation

- Real time
- Automation
- AI



Authentication

- Voice recognition
- Face detection
- Fingerprints
- Gait analysis





CHAPTER 10 – RECOMMENDATIONS

1) SERVICE DELIVERY

Service delivery should be a member-centric design based on 'desire-paths' which remove friction. Table 1 example (see Table 1) demonstrates that an efficiency improvement of 72% is possible. Targeted leveraging of technology across other high friction processes can build on these savings. The goal should be 100% digital self-service by members with manual processes reserved for accessibility reasons. Credit Unions should prepare a gap analysis between what is available in-branch against what is available online and develop an action plan to align both delivery streams.

2) COLLABORATION

Collaboration, via supplier user-groups, CUSPs, Credit Union groupings and core system providers should be used to invest in the people and processes required to deliver standardisation and scale economies

3) CORE PROCESSORS

Core processors must publish APIs to allow efficient and secure third-party API integration and core processors must embrace APIs to ensure speed to market. Detailed assessments of integrations should be undertaken first, and a business case should be prepared to ensure integration is a better option than enhancing the existing core.

4) OPEN BANKING

Open banking offers significant opportunities for Credit Unions. Financial Wellness programmes leveraging open banking data, machine learning and real-time insights to encourage the type of ongoing financial behaviour that, over time, leads to financial wellbeing should be explored.

5) INVESTMENT IN TECHNOLOGY

Credit Unions should increase their investment in technology. Systems have delivered significant efficiency to date and future investment, given the speed of developmental advancements, has the capability of repeating or bettering this cost-benefit.

6) DIGITAL ON-BOARDING AND LENDING

All Credit Unions must embrace digital onboarding and automated lending which are now a basic expectation among members.

7) ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Personalising products and service will soon become a basic requirement. Credit Unions must invest in data science, machine learning and behavioural science expertise. This investment would give the highest ROI if done through collaboration

8) SYSTEMS OF THE FUTURE

Credit Unions should engage with user-groups on strategic thinking around the future of their IT systems and consider if current platforms can evolve and are agile enough to meet future requirements.

The image shows a presentation slide. The background is a solid, muted green color. In the center, there is a white rectangular box with a thin orange border. Inside this white box, the words "The end" are written in a simple, sans-serif font, colored in a light green that matches the background. The text is centered both horizontally and vertically within the white box. There are also some orange geometric shapes in the corners of the slide, suggesting it's part of a larger set of slides.

The end