



MentorMate



**Mobile Learning Management Systems (LMS) &
Mobile Learning Content Management Systems (LCMS)
Guidebook for Education & Training Executives**



Introduction

“Business needs first, from a user perspective.”

Individuals and organizations are rapidly moving from antiquated, inefficient *stationary* LMS/LCMS systems and processes to intuitive, user-friendly, cost-effective, real time Mobile LMS/LCMS (M-LMS/LCMS). Since 2001, MentorMate, LLC has been leading the way in developing and delivering sophisticated, intuitive Mobile LMS/LCMS solutions that put learning and improved retention within reach, within seconds... *ultimately increasing productivity, improving learning efficiency, reducing costs, and enhancing the user (customer) experience.*

While making the transition from antiquated systems and processes to real time mobile learning solutions is, in most cases, the prudent decision, it takes time, resources and a champion to make it happen. In many cases, it also requires partnering with technical resources that can help you achieve your vision. That stated, implementing technology changes *and* changes in the way you process information can sometimes result in major paradigm shifts for individuals and organizations.

We're here to help!

MentorMate continues to assist change agents that want to implement change to improve the customer experience - ultimately increasing productivity, efficiency and profits. Over the years we have assisted companies with **Defining Needs, Designing Learning Processes, and Delivering Business Driven Solutions from a User Perspective** rather than Technology focused solutions to help individuals and organizations successfully initiate and implement their MA ideas and IT change strategies.

Our goal is to help you get the right content, the right way, to the right learners at the right time, for the right business need, to drive positive change that solves a problem, improves a process, or enhances your competitive position.

With 230+ client projects, successfully implementing change with both large and small organizations is a marquee of MentorMate. We have witnessed both large and small organizations and government agencies try their hand at mobile learning since 2000 with varying degrees of success. The result of our learning is a Mobile LMS/LCMS Guidebook that provides a blueprint to help you successfully navigate an M-LMS/LCMS project and including selecting Software as a Service (SaaS) solutions and partners to ensure your efforts achieve the results you desire.

The Mobile LMS/LCMS Guidebook is our way of helping you achieve your vision and lead successful change.

Good Luck!



About the LMS/LCMS Guidebook

The purpose of this document is to provide relevant information for any individual or organization who is evaluating developing a Mobile LMS/LCMS and its execution. It identifies the specific requirements unique to M-LMS/LCMS and what you may want to consider when determining your strategy - including potential partners to help you execute your M-LMS/LCMS strategy for the long term.

There are many firms that provide Mobile LMS/LCMS software development programming, ideas, services, products, frameworks, technologies, etc. The number of vendors and programmers that claim to provide this is endless. To further compound this issue, there is not a single standard definition of M-LMS/LCMS software development or a “best way”.

M-LMS/LCMS mean different things to different people based on their role within their organization and the problems that need to be solved. The hype around M-LMS/LCMS, the lack of a formalized definition, and the limitless options in terms of technologies, vendors, and products makes it difficult for individuals and organizations to find qualified assistance and feel confident they are taking the right steps to effective and efficient M-LMS/LCMS implementation.

There is no M-LMS/LCMS silver bullet. M-LMS/LCMS implementation is complex, requires commitment, sound planning and management, definition of standards, new processes, technology, and most importantly flexibility and adaptability to mobile devices’ constantly changing technology. It should be driven by experienced resources with proven track records that have the backing of training, business and IT. It can be a multi-year journey that has the potential to deliver great benefits or if done wrong, end in disaster. It requires dedication, the right skills and experiences, access to resources and in most cases a shift in the mindset of individuals and organizations.

M-LMS/LCMSs are becoming the lifeblood of a business and this shift can be like a lifestyle change. Like all lifestyle changes, it cannot be realized by technologies’ latest fad diet or drinking some vendor Kool-aid. A sustainable M-LMS/LCMS strategy requires skills, experiences and a serious commitment and adoption of change.

Partners have to be carefully selected and caution needs to be applied when vendors suggest they can deliver immediate results or do not openly communicate risks. Look for resources and partners that understand the critical nature of M-LMS/LCMS strategy and development to the business, the complexity these programs and strategies have on HR and IT, and can bring the appropriate level of experience and skill to ensure your M-LMS/LCMS strategy and development programs are successful.

Here’s what M-LMS/LCMS is, what it isn’t, and some dos and don’ts that you may want to consider when executing an M-LMS/LCMS project and evaluating potential M-LMS/LCMS strategic partners that will help you successfully integrate your M-LMS/LCMS. These lessons are based on 230+ client projects, many involving mobile application development for clients ranging from venture-capital backed start-ups to Fortune 100 clients.



Key Considerations When Selecting a Mobile LMS/LCMS

Key Consideration	Your mobile app implementation should incorporate:
1. Business Need	✓ Mobile-LMS/LCMS are fun, cool, etc, but the starting point should always be the true business need rather than vanity or other less relevant reasons. Always start by validating/refining/clarifying the business need first. This includes, in the planning stage, the considerations unique to your business for M-LMS/LCMS to work within your internal policies, guidelines and corporate culture. Moreover, regulations such as OSHA, HIPAA, FDA, PCI and many others are pervasive; hence a regulatory impact review should always be included as part of the business needs analysis so that any constraints due to regulations are identified upfront.
2. User Perspective	✓ Once you know the destination (for the business), proceed to the user perspective. M-LMS/LCMS can be a significant investment and is wasted if the audience is not defined and involved throughout the development process; always seek user input early and often.
3. Security Considerations	✓ Security is paramount. Pay attention to this every step of the way starting with the application itself and extending to the hardware platforms chosen, system integration, user behavior, lost/stolen devices, policies, etc. In architecting the solution, spend ample time analyzing how to minimize or remove information which is not needed to thwart any decryption attempts. This can be a salient feature of M-LMS/LCMS projects that includes sensitive private health care data. (e.g. government and healthcare organizations). Partner with leading international mobile VPN partners that provide U.S. military-grade security (FIPS 140-2 from NIST).
4. Architectural Strategy and Platform Choice	✓ M-LMS/LCMSs present a landscape of architectural choices which vary according to platform and time. The primary application architectures include on-line or off-line or both. Each offers distinct pros and cons including, but not limited to, response times, look and feel, security, ability to use built-in hardware, cost, etc. Hybrid variants add further complexity. Selecting the right architectural path will have a long-term impact. Pay attention to thought leaders in this area via the media and educational institutions.
5. Technology Advancement	✓ M-LMS/LCMS is evolving rapidly. Staying on top of m-learning trends to ensure you implement the best strategies to achieve your business goals is imperative to staying ahead.
6. iPad simple	✓ What use is an M-LMS/LCMS if it's too complex to use? The whole reason mobile-learning is exploding is because it is a simple purpose built for specific uses rather than a 1,000+ feature overload. Make sure that the M-LMS/LCMS gets the specific job done well and doesn't overload your organization with obscure features that detract value and increase complexity.
7. Focused on you	✓ Is your vendor focused on the hardware your organization is using? Or are they trying to cover every device out there thus losing depth and agility in the platforms that matter to you? Platform fragmentation is real and by trying to cover them all, any company will quickly be everything to nobody, or nobody to everyone.
8. Superior knowledge retention	✓ Make your M-LMS/LCMS solution has a specific and effective methodology to enhance user learning and knowledge retention? Make sure they have proven, efficient methodologies protected with patented learning approaches that deliver results cost effectively.
9. Directed to your business needs	✓ Make sure your M-LMS/LCMS integrates objective development and support? If this is not supported or thought through, your content authors are not receiving the best support they



could be getting to develop the courses that meet your business need; and then more often than not, the result will be courses that don't hit the mark.

- 10. Right questions produced? ✓ Make your M-LMS/LCMS support a Bloom Taxonomy coverage view for all questions authored to ensure that you're covering all the objectives you set out to achieve? Without this critical connection, there is a high degree of risk that lofty objectives are lost at a high level, and where the "content" rubber meets the road, the objectives are not incorporated and therefore lost failing to deliver learner's that meet your organization's needs.
- 11. Thorough meaningful metrics ✓ Ensure each and every learning object, nugget, question etc. is tagged with the Bloom Taxonomy to enable powerful metrics? You can't manage what you don't measure, and if you don't tag critical thinking skills down to the individual questions, how will you know how your learners are doing, or how effective your chosen content is?
- 12. Learning follows optimal path ✓ It is imperative that your content follow the natural progression of human thought on how the mind works versus assigning content arbitrarily? Include a well-researched framework supporting the gradual accumulation of knowledge, understanding and retention?
- 13. Students maximize their learning effectiveness ✓ It is important that your M-LMS/LCMS provides learners with incisive personalized feedback identifying for them which thinking skills they excel in, and which they struggle with, so that they can better themselves and better understand their own strengths and weaknesses. A true self-awareness is a powerful directional tool.
- 14. Continuous content improvement integration ✓ Make sure your M-LMS/LCMS aggregates the feedback from multiple students on a thinking level. This allows you to ascertain where your content can be improved in a way that ties into objectives and thinking skills? If not, your continuous content improvement will suffer.
- 15. Knowledge Transfer ✓ Seek M-LMS/LCMS partners that will teach you how to fish (become independent) rather than simply giving you fish. Make sure your partner is committed to knowledge transfer ensuring your autonomy.

Exhibit: Revised Bloom's Taxonomy

Knowledge Dimension	Cognitive Process Dimension (there are 19 sub-categories)					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual	List	Summarize	Classify	Order	Rank	Combine
Conceptual	Describe	Interpret	Experiment	Explain	Assess	Plan
Procedural	Tabulate	Predict	Calculate	Differentiate	Conclude	Compose
Meta-cognitive	Appropriate Use	Execute	Construct	Achieve	Action	Actualize



Top Ten Characteristics to Evaluate When Considering a LMS/LCMS Provider

Key Characteristic	Your mobile app development partner should offer these characteristics:
1. Agility & Attention	✓ Look for “right-sized” M-LMS/LCMS partners to help you develop your M-LMS/LCMS program; meaning big enough to provide depth and stability, but small enough to deliver customized services with proven experience.
2. Relevant Reputable Validation	✓ Make sure the M-LMS/LCMS partner you choose has worked with credible organizations like: AST, IBM, PLATO Learning, Palm Inc., the University of St .Thomas and Experian. Look for affiliations that represent specific M-LMS/LCMS validation of mobile learning expertise.
3. Skilled Resources; Technology Agnostic	✓ Make sure your M-LMS/LCMS partner has a minimum of 10 years experience developing M-LMS/LCMS solutions with all platforms. Complete an in-depth technical interview of the technical talent and ask for independent technical references.
4. Business Consulting Capabilities	✓ Increasingly, technology relies on getting the business side of the equation figured out right first. Make sure you incorporate the “Business Needs first” approach to ensure you focus on what will make your business work as opposed to just training.
5. Proven Track Record	✓ Look for M-LMS/LCMS partners that have refined their ideas and approach countless times on all major mobile platforms. You don’t want to be experimented on. Look for a proven track record of firsts with battle-tested process and planning methodologies.
6. Global & Competitive Offshore Mastery	✓ Make sure your M-LMS/LCMS partner is global with proven competitive offshore software development resources that have been battle tested numerous times on multiple engagements.
7. History & Financial Stability	✓ M-LMS/LCMS software companies come and go... Make sure your M-LMS/LCMS partner has been around for at least 10 years and will be around for the next 10 years. Make sure they are financially stable to weather the new global economy.
8. M-LMS/LCMS Thought Leadership	✓ Is your partner leading or following? Look for industry achievements and recognitions such as U.S. patents, Governor awards, strategic partnerships with industry leaders, national event placements, radio shows, curriculum development, and more.
9. Competitively Priced	✓ In many cases, it often comes down to price. Make sure your partner offers both local and global resources so they can provide competitive pricing. But don’t always choose the least expensive M-LMS/LCMS, but the best value for the dollars spent. As the saying goes, “you get what you pay for.”
10. Satisfied Clients	✓ Make sure your M-LMS/LCMS partner provides you with a long list of satisfied clients to contact to validate client satisfaction. Determine if your M-LMS/LCMS partner is committed to 100% client satisfaction, doing whatever it takes to get you’re your M-LMS/LCMS implemented successfully. In other words, “they won’t let you fail.”



Compare iQpakk™ - When evaluating M-LMS/LCMS Software Solutions

Top Consideration	ipakk™		
1. Business needs driven	✓		
2. User perspective	✓		
3. Security Considerations	✓		
4. Architectural Strategy and Platform Choice	✓		
5. Technology Advancement	✓		
6. iPad® Simple	✓		
7. Focused on you	✓		
8. Superior knowledge retention	✓		
9. Directed to your business needs	✓		
10. Right questions produced?	✓		
11. Thorough meaningful metrics	✓		
12. Learning follows optimal path	✓		
13. Students maximize their learning effectiveness	✓		
14. Continuous content improvement integration	✓		
15. Knowledge Transfer	✓		

Compare MentorMate™ - When Considering an M-LMS/LCMS Strategic Partner

Top Consideration	ipakk™		
1. Agility & Attention			
2. Relevant reputable validation			
3. Skilled resources; technology agnostic			
4. Business consulting capabilities			
5. Proven Track Record			
6. Global & Offshore Mastery			
7. History & Financial stability			
8. Thought Leadership			
9. Competitively Priced			
10. Satisfied Clients			

