

Use Case
Participating in the Digital Marketplace
As a
Retailer and Content Provider

Scenario	DM Features
<p>Gerri Hanson, CEO of Math Models, Inc., had heard a lot about the new Digital Marketplace. The DM, as it is known, might be a great way to get her new set of Wronskian models into the hands of math professors throughout higher education. For several years, Math Models had promoted its math software to higher education professors via its website and a few direct sales reps. Recently, Gerri had begun to experiment with search ads as an additional way to attract professors to her site. But, for the money she was spending there was not a lot more return in terms of increased sales. It seemed like Math Models was going to have to look for additional help, maybe even partner with a stronger textbook publisher in order to get the visibility and presence in the distribution channel that they needed. Gerri was reluctant to take that step although a major textbook publisher had approached her with that very idea. She wasn't ready to give up the control over Math Models that she felt she needed to have to be able to continue to develop innovative math software. And, she was increasingly concerned about cost of her software to the student. She wanted to be seen as a leader in offering quality math software and an affordable price. Would that be possible with a partnership with a big textbook publisher? Maybe the Digital Marketplace was the answer.</p> <p>As Gerri understood it, the DM was an open exchange established between buyers and providers of higher education learning content. Faculty used its robust federated search engine to seek out materials as they built resource lists for their courses. They could visit her site to learn more about Math Models software and then select the software that met their learning objectives for inclusion in the course resource list. Once on the resource list, the students could buy her software with their credit card and have it shipped directly to their desktop. Further, she had heard that she could put different conditions of use on the software with different prices and that these conditions would be enforced. No Napster for her! Finally, she had also heard that she would be able to get some feedback on exactly how Math Model software was being used in class.</p>	<p>Federated search</p> <p>Resource List Student purchase from Resource List</p> <p>Usage Conditions Enforcement</p> <p>Student Usage of</p>

<p>She had been trying for years to get that kind of information but with no luck. Was this all possible? And, if so, would she be able to grow Math Models the way she hoped to without having to take on a channel partner? To get these benefits what would she have to give up?</p> <p>It was time to check out the Digital Marketplace.</p> <p>Geri went to the Digital Marketplace website, www.21st-digitalmarketplace.com</p> <p>Participating in the Digital Marketplace</p> <p>Searching the website, Geri learned that using the Digital Marketplace to distribute her software would be easy but it required her to declare what kind of participation Math Models wanted to have. She was offered five choices: content provider, retailer, content hosting, content consumer (either faculty or student), and something called a clearing house. As she read about what each type of participant did, she realized that she wanted Math Models to be a content provider and a retailer. That was what Math Models was anyway; they created learning content and sold it. Of necessity, the company also hosted its own software but that was proving to be expensive and required more technical staff than she wanted to carry. Maybe there would be an opportunity to outsource the content hosting to a company in that role. She didn't want to be a content consumer...she wanted to sell to them! And, she was not sure she wanted to be a clearing house, someone responsible for distributing the student's money to everyone who in the distribution chain who gets a share per agreement. She just wanted to make sure she was well-served by one.</p> <p>Having decided to participate in the DM as a content provider and retailer, she took a closer look at what that would require.</p> <p>Content Provider</p> <p>As a content provider, there were no limitations on the type of content she could distribute through the DM but certain procedures had to be followed. First, she learned that Math Models needed to separate their product, the software, which is the content being sold, from the collateral, the</p>	<p>content feedback</p> <p>Single site for information</p> <p>DM Roles: Retailer, Content Provider, Content Hosting, Clearing House, Content Consumer</p> <p>Media includes text, Image, rich media, software Standards based Distinguishes between collateral</p>
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<p>materials used to promote and sell the software.</p> <p>Collateral had to include specific information common to all content sold in the DM. This includes description of the software and the terms of the offer for the software. Geri was free to create an offer that she thought would sell. She could also make more than one offer for her software. As Geri studied the DM material, she saw that she could offer the choice between purchasing the software and “renting” it for the term of the class. She had always wondered if renting the software would be a profitable model so she would ask her marketing team to construct two prices for the software, one for its purchase and another for its rent. She also saw that she could send this collateral to any other retailer participating in the DM. For now, she wouldn’t do that but she made a note to seek out MERLOT, a faculty-run repository, and see if they had an interest in selling her software. Next, she turned her attention to the requirements for distributing the software itself.</p> <p>Content distributed through the DM requires that specific information about it be assembled and attached to it. There was a lot of information to consider. The name of the software, its Digital Identifier, the offer in terms of price, timeframe, and geography, as well as its accessibility compliance, and print and copy limitations. Wow! Someone sure had thought all of this through. She made a note to get the marketing department working on Section 508 compliance and include that in the collateral for the software. Maybe she should even ask the marketing team about an offer around the accessibility features they had programmed into their math model software. This was looking more and more promising. Geri could see, though, that it would require that she create a position in the company to make sure that all of this was done according to the specifications of the DM, which were posted on their website. But, she believed that this work, done as the last step in the process to release the material into the DM, could be done as needed by one or two trained administrative personnel. What concerned her, however, was the cost to actually embed the descriptive information with the content and release it into the DM per their specifications. What would that cost?</p> <p>Searching further on the DM website, Geri saw that there</p>	<p>and content</p> <p>Multiple business offers and models</p> <p>Sell through multiple retailers</p> <p>Associates content and metadata in one package</p> <p>Accessibility enabled</p> <p>Open source web services available to link into the DM</p>
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<p>were tools available to Math Models to do the work of getting collateral and content ready for distribution. A set of web services, licensed as open-source software, was available for her use. All she needed to do was agree to the terms and conditions of their use and have her IT department download these services and figure out how to integrate them into her existing content preparation system. She still wasn't sure how much this was going to cost but so far it seemed reasonable and straight-forward.</p>	
<p>The final question Geri addressed was how to best store the software in the DM. She was intrigued by the idea of seeking out a firm that would store her content for her. She had been increasingly asked by her institutional buyers for higher and higher levels of availability and speed of delivery. For Math Models, however, these demands raised the cost of the software without adding much value. Maybe there was a firm in the DM that offered the level of speed and availability that her customers wanted and she could store her content with them. A quick look at the DM website showed her that, indeed, there were several companies offering content hosting services and a couple seemed to offer a package of speed and availability that might be in the ball-park and available at a price that seemed reasonable. She would ask her business development executive to follow-up and work out the best deal he could. That taken care of, Geri decided to see what would be required to be a retailer in the Digital Marketplace.</p>	<p>Allows for outsourcing content hosting</p> <p>Central directory of DM participants in all roles</p>
<p>Retailer</p>	
<p>The responsibilities of a retailer in the Digital Marketplace seemed straightforward. A robust search capability, available to any consumer of learning content, would include a reference to Math Models' software. Anyone looking for Wronskian models, for example, would have the Math Models site included in the search results. Math Models would have to promote the software, which they do already. They would have also state the offer. This raised a question for Geri. Over the last three years, Math Models had struck unique volume purchase deals with some major state university systems. Would she be able to keep those agreements in force or have to change them? Looking further on the DM website, Geri found that provision had been made for purchase agreements by institutions. But, it required Math Models as a retailer to do something they</p>	<p>Federated search</p> <p>Supports volume purchase agreements With institutions</p> <p>Identity Management</p>

had never done before. To keep those purchase agreements in force, Math Models would have to verify that the purchaser of their software was indeed a member of the institution and, therefore, due to receive the discounted price. Math Models had never done anything like that before and Geri thought, "Okay, this is where the DM sticks it to us." We will have to write all of this code in order to keep the agreements we already have in place. But, so many of the concerns she had about being a content provider had been already addressed by the DM, she decided to see what help might be available. On the DM website, Geri found that, again, there were a set of web services offered as open-source software that performed much of the work of verifying a student's or faculty's membership in a particular institution. She would have to have her IT team figure out where and how to insert those services into her existing sales workflow but felt sure they could do that. With that exception taken care of, it seemed that being a retailer in the DM was no different than before. And, if she could really differentiate sales transactions by institution and manage it on the fly, she might invest in additional sales personnel to seek out even more volume buys. The incremental cost would be very low.

One final question had to be answered, though. How would Math Models get paid? Geri liked the idea of a student simply purchasing Math Models software from the class resource list. But, the student paid once for all of the content he or she bought off of the resource list. How would the portion of the money that was due Math Models find its way back to them and could she trust what the process was? Turning again to the DM website, Geri reviewed how a purchase transaction occurred. There she saw the importance of the clearing house. Once Math Models validated the sale transaction, it was the clearing house that actually took the money from the student and paid those who had a stake in the transaction. Geri saw that the clearing house was sort of like a banker and would automatically pay, for example, the content hosting company she chose to work with. There was even a provision to pay the institution some of the transaction. Geri realized that feature was there to help institutions deal with the loss of revenue to their book stores but, since she didn't sell through book stores, that didn't matter to her. The real question was how to pick a clearing house to work with. Again, Geri went to the DM website and looked at a

IM web services available

Transactions cleared through trusted third party, the Clearing House

Directory of DM service providers

<p>couple of clearing houses offering their services. One, in particular, specialized in web companies like Math Models and Geri liked the outline of their services. She would have her business development executive contact them as well.</p> <p>Was there anything else?</p> <p>Looking further, she noted a couple of important items. First, Math Models would have to understand and agree to the terms and conditions of the DM and would have to adhere to strict technology standards to ensure smooth interoperability among all of the participants of the DM. Geri saw that as long as she took advantage of the open-source software available from the DM website, she should be okay.</p> <p>Finally, she noted that the Digital Marketplace was administered by a Foundation. Geri saw that the Foundation controlled the standards in place in the DM and licensed the open-source software that enabled her to participate in the DM in a seamless, inter-operable fashion. The Foundation even offered consulting services and some lab-like environments to help companies like Math Models try new business models or technologies. The Foundation would be able to help her access and analyze student usage data for her software. This was pretty exciting. She had had some recent conversations with the California State University about including more rich media in her math software. Maybe, if her participation in the DM proved successful, she would engage the Foundation in exploring some of these new learning ideas with the CSU using student usage data. Looking further, though, Geri saw that the Foundation also extracted a small fee for every transaction that passed through the DM. The money allowed the Foundation to continue to invest in and develop the Digital Marketplace. Never much of a friend of taxes, Geri paused to think about this. She would make sure the pricing models that the marketing team came up with included this fee. But, doing some quick mental calculations, she felt that Math Models would be able to absorb that fee and still offer their software at very attractive prices.</p> <p>As Geri thought about it, the Digital Marketplace seemed like a good bet. The entry costs were minimal as was the disruption to her existing business processes. The</p>	<p>Adhere to common technology standards</p> <p>enabling software available as open-source</p> <p>The DM Foundation controls standards and licenses software</p> <p>Offers DM consulting services for development of business models new technologies new learning approaches</p> <p>Foundation sustained from DM operation</p>
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requirement to conform to certain standards and responsibilities, while requiring some adjustments, seemed reasonable. Finally, considering that her alternative was probably a reluctant partnership with a big player, participating in the Digital Marketplace made a lot of sense.

The next step for Geri was to call her staff together, go over all of this, and move ahead.

Some Notes:

1. Scenario alludes to content that is required on the DM 'portal'. A huge amount of content is going to be required. Each time a scenario is developed DM should capture the nature of the portal content that is required. A portal content team may be required.
2. Scenario alludes to the differences between internal DM functionality and external functionality. These need to be recorded. Functions and data required to drive the overall system requirements need to be identified for requirements definition. Options need to be understood in terms of whether they impact the internal data required for short, medium and long term data analysis functions.
3. DM needs to start working with an agreed glossary (to be published for common understanding) so that terms like 'standards', federated search, clearinghouse, etc can be used differently by different groups.