



# A Conversation with Dain Ehring,

Those of you who regularly read MORTECH Musings know how bearish we have been on technology spending in the mortgage industry. Down 10 percent in 2008, possibly down another 10 percent in 2009. When the near future of the business is uncertain, managements have difficulty in committing significant amounts of capital to build out technology infrastructure.

If lenders are to invest in technology, that technology will enable efficient and collaborative transaction management. Collaborative transactions incorporate unique company skills and organize the constellation of internal and trading-partner knowledge.

Effective internal and trading-partner interactions can create competitive advantages that rivals will find hard to match. Effective interaction binds talented people, corporate experience and decision-maker judgments in unique combinations. Automating collaborative capabilities goes beyond the implementation of technology systems or re-engineered processes. Competitive advantage is born through the organization of the collective company knowledge and skills.

The ability to collaborate through technology is characterized by the concepts that define the current stage of the Internet's development, "Web 2.0." Applications of the principles of Web 2.0 function over the Internet and deliver services through interpersonal connections that grow in effectiveness as increasing numbers of people make use of them. Most popularly embodied in social networking and interaction sites such as LinkedIn® and YouTube™, Web 2.0 has emerged from the down mortgage technology market in products developed by companies such as Dorado Corporation, San Mateo, California.

## Dorado Corporation

Dorado Corporation describes itself as the only "enterprise lending automation company that gives banks a network to stream-

line the loan process from start to finish." Dorado has developed a Web-based technology and delivery system to be used by both large and emerging lenders.

Dorado's networked, on-demand lending automation system is designed to increase productivity and gain control over the service levels in a lender's customer distribution channels. Based on a Web 2.0 platform, the company's solution offers lenders full transactional and loan transparency along with the ability for multiple users across functions to collaborate for real-time decision-making.

Founded in 1998, Dorado is a private company run by Dain Ehring, chief executive officer and founder, and Rob Carpenter, chief technology officer.

They have developed a comprehensive lending platform, the Enterprise Lending System (ELS). ELS was built to integrate all loan channels, products, services, personnel, customers and all trading partners to lending transactions. The operating imperative in the design of ELS is to give lenders a single view of a transaction that extends enterprise-wide.

"We've built an on-demand network of applications and services to simplify and improve the lending process," says Ehring. He says, "[ELS] enhances collaboration between all participants in the lending process while serving every lender channel. By coordinating the activities of banks and their partners around the loan file, we deliver benefits to everyone involved."

So it seems that Dorado has anticipated the needs of lenders in a down market. For a better understanding of Dorado, I posed a series of questions to Ehring. His responses provide insights into the thinking and financial future of Dorado as an important vendor of mortgage technology.

**Q:** *The credit crisis, falling origination volume and cratering technology expenditures all make it difficult to expand a*

*business. Certainly Dorado has to be feeling the effects of the current difficult environment. What is your company's outlook for the next 12 months?*

**A:** Dorado's outlook is a lot better than most companies in this market. Some of that is due to luck. For example, one of our lead customers is run by Jamie Dimon [chairman and chief executive officer, JPMorgan Chase, New York] who has executed wonderfully during this crisis and has

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actually gained market share. Some of it is our execution—we closed twice as much business in 2008 with large companies, and our new products are really, really good.

But really, it's primarily because of our value proposition with the Internet and SaaS [software as a service]—our Web 2.0 solution provides lenders with the flexibility to adopt our entire system or to pick and choose which modules they want with minimal disruption to their current operations. We build technology and operations that take the upfront time and cost out of deploying mortgage technology. Lenders have no money and no time to deploy cost-saving technology.

**Q:** *What poses the greatest challenge to your company? In the same vein, what is your primary management focus over the next 12 months?*

**A:** Our biggest challenge this year is the same as Citibank's or JPMorgan Chase's—that is, managing our cash carefully while grabbing market share in a volatile market. We're focused on executing well on our existing opportunities in the top tier—i.e.,

# CEO of Dorado Corporation

doing good in our core business while also increasing our opportunities down-market and in Canada. In fact, we just closed a deal in Canada with one of the top-five banks there. I'm very excited about it.

**Q:** *Even in this market, you are expanding from the core of your business. Then, you must have a corresponding technology focus for the coming 12 months. In your blog, "Ehring On," [http://dorado.com/wordpress] you have said that the SaaS model of distributing technology applications "is clearly one of the most important disruptive technologies to ever hit the software industry." In light of your convictions, what is the most important technology development/objective for Dorado in the next year?*

**A:** Coming out of Apple, IBM and Sun Microsystems, I believe all software will eventually be delivered this way. More importantly now, in the next two years the *only* software that will be bought in financial services will be SaaS. All other money will be going to maintaining old systems. So if a lender wants to fix the problem or remove cost, they will avoid CAPEX [capital expenditures] at all costs and look for the quickest ROI [return on investment] via time to deploy—that's where Dorado becomes unrelentingly relevant.

In 2009, we are evolving our products to Web 3.0 in much the same way as other leading SaaS ISVs [independent software vendors] like Amazon or Salesforce.com. Web 3.0 is about SaaS as the platform. This means that the lender will have even more capability and tools to leverage our technology, and SaaS to customize and extend while leveraging the platform and the network. We are working with several top banks to provide applications on our Web 3.0 platform outside of traditional loan processing.

**Q:** *No software licensed that is not delivered as SaaS—that is quite a radical statement, I think. Certainly lenders want to increase project returns by containing the amount of capital they allocate to*

*information technology [IT]. On the other hand, I should think that lenders would be reluctant to abandon their legacy approach to implementing technology. Conversions are anything but costless or risk-free. Tell me, what do you think are the necessary conditions for the industry to widely adopt SaaS?*

**A:** Adoption in financial services has three stages: [Stage one is] ROI; [stage two is] competitive parity [meaning my competitor is using it, so I need to as well]; and [stage three is] it's just a cost of doing business [meaning it's just accepted]. I think we're moving into the second stage. Right now, some of the largest lenders in the world are using SaaS to their advantage.

Our technology is built to merge the value of SaaS—quick time to market and low capital outlay, with the needs of the lending enterprise: privacy and security, control and being customizable. Most lenders think to be customizable it needs to be [done] in-house. A lot of technology goes behind making SaaS customizable without losing the primary value proposition.

There are other benefits, including centralization of shared resources like Web services, better and more up-to-date compliance, cost of ownership and ongoing technology relevance.

In competitive bake-off after bake-off, internal lender evaluators and third party organizations recommend the Dorado approach. Dorado clearly wins the case for the SaaS-driven lending system. It is a solution that simply makes sense on all fronts—relative affordability, reliability, extensibility and scalability, etc.

**Q:** *You make a strong and logical argument in favor of SaaS. Let me ask you what Dorado has done to satisfy distinct technology requirements that lenders have revealed to us through our MORTECH surveys. In your application architecture, what specifically have you done to ensure increased borrower information accuracy, more flexible workflow, enhanced operational control and generally improve*

*worker productivity? I know that covers a lot of ground.*

**A:** We have a network of third-party services we access over the Web and integrate into our server-based validation engine. It's pretty slick.

Improving workflow engineering is a key value proposition. I'm really excited about this. We have a patent pending on our approach of Activities and Activity Plan technology. The unique approach pulls from a catalog of stand-alone process components [activities] to build a plan for every loan and person looking at that loan. Activities can talk to each other over the Web. This allows me to best execute on individual processes and have teams collaborating on a loan folder all at the same time, anywhere in the world.

**Q:** *Can you give me an idea how Activities and Activity Plan technology contributes to lenders enhanced control over their operations and adds to worker productivity?*

**A:** I heard a story from a top lender that had too much volume last year in Florida and not enough in Ohio. He could not move loans to Ohio easily. It was easier for him to fly everyone from Florida and put them in Ohio—just crazy. We're providing operational control with a sophisticated workflow system. It provides fine-grained control over the loan process. This is coupled with a state-of-the-art permissioning system [what an end-user can see and do]. With these capabilities, lenders can tune and control their operations exactly as required.

Typical systems work like this: Moving a manila folder around desks—i.e., individual work queues and people work on their stack very much like Henry Ford manufacturing. Our approach is that we put the loan file in the center of the room—metaphorically—and let everyone work on it at exactly the same time, managing permissions, work, data, etc. Intuitive and pretty cool.

**Q:** *Do these technology enhancements also help a lender comply with a*



stricter regulatory regime coming out of the credit crisis?

A: First, all the loan information is digital. I don't mean document images, I mean data, secure and validated. Second, we use a multitude of Web service providers on-demand to help provide the required analysis in real-time. Lastly, all information and decisions are online in perpetuity for every loan, available securely over the Internet, for any investor or government office. Further, the workflow system has compliance designed in and automated. Tests, for example, just happen. Use of third parties inline in the workflow allows for innovation in this and in other areas to be consumed by lenders rapidly without expensive projects or clumsy workarounds.

Q: So it seems you have reduced much of the lending process to the molecular level. Then through the network of activi-

ties or processes, lenders can reconstitute work to meet the exigencies of each loan, each worker or each borrower. Is this the spirit of your technology design—the activity-based network?

A: Yes.

Q: I also would like to know how Dorado views and incorporates other new processing concepts and gives your clients an edge. To exemplify how Dorado leads lenders to contemporary technology structures, let's explore Web 2.0. How do you define Web 2.0? How will lenders' use of Web 2.0 techniques change the way they relate to their markets?

A: If you don't mind, I'd like to answer you though material that I previously released on an internal blog:

"By Mortgage 2.0, I don't mean checking mortgage rates online or finding brokers on a social network like Facebook®. Like Web 2.0, Mortgage 2.0 is a complete new paradigm for mortgage lending. Mortgage 2.0 will be a business revolution where the Internet becomes an enabler—not the reason for the revolution, but a platform for it. 2009 will be the first year of the industry rebuilding itself after its collapse. It is the year that a new paradigm shift in mortgage lending emerges. The first reason is obvious—the market has collapsed and needs to be rebuilt. The second reason should be equally obvious—the old paradigm is no longer valid. Here is why:

First, let's assume that pushing around manila folders of loan information, checking a few representative folders for accuracy and then storing them in boxes in the basement is a dead idea. No one wants to lose a half-trillion dollars anymore. The process will be digitized and accurate, or it's not going to exist. In 2009, the expectation will be that loan information will be protected and assured digital data.

Second, the government can't be the sole insurer and secondary market for mortgage-backed securities [MBS] for much longer. There's going to have to be a viable and rational market for pools of loans. For that to happen, there needs to be transparency of loan and decision information. The old paradigm where the rating agencies themselves were simply trusted (with a few checks on sample loan files) is

gone. The global market for collateralized debt doesn't believe a word the mortgage origination market says. If a retirement fund is going to buy these mortgage securities, the managers of that fund are going to need to see with their own two eyes exactly what's in those loans.

The third assumption is that entrepreneurship will not die in the United States, nor will globalization cease to exist. The old paradigm of everything being done

**"The government can't be the sole insurer and secondary market for MBS for much longer." —Ehring**

inside the bricks-and-mortar walls of the lending enterprise is gone. Mortgage lending will be a global integration of banking, business and government.

These assumptions become basic tenants or building blocks for what the market is to become in Mortgage 2.0—digitization and automation, data transparency and the network. These make up the Internet platform. In 2009, Dorado has moved into the realm of Web 3.0. In response to the requirements of our current and prospective customers, we are using the principles of Web 3.0 to build more application development flexibility into our systems. Customers will be able to create their own applications within our platform. Metaphorically, we are transforming a pure service into a utility for lenders to create their ideal systems."

Q: When you speak in terms of paradigm shifts, I can see that Dorado's technology planning extends beyond lender operations into the realm of changing industry structures. I appreciate you taking us through your thinking and how you see Dorado interacting with its customers.

A: I think this is an exciting time, and I'm very proud to be a part of it. Decisions made now will affect our kids for years to come.

**Dorado Corporation Snapshot**

- Founded in 1998
- Headquartered in San Mateo, California
- Sales and support offices across the United States and in Canada
- Development operations in Bangalore, India
- 60 employees worldwide
- Top-tier customers: JPMorgan Chase & Co., GMAC Mortgage, First Horizon Home Loan Corporation, PHH Mortgage Corporation, PNC Bank, Union Bank of California, Fifth Third Bank, Aurora Loan Services (Lehman Brothers Bank)
- Investors include First American Corporation, Crosspoint Venture Partners, Palomar Ventures
- In fiscal year 2007, became cash-flow-positive and has a more than \$85 million backlog
- New multimillion-dollar Canadian customer won in first year of new value-added reseller (VAR) relationship (to be announced in February 2009)
- A greater than 50 percent year-over-year growth of recurring billings/revenues

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