The Power of Knowledge
Most contemporary software development practices have a high degree of paperwork and a manual, paper based workflow.
Is there a need to do something? Could we just consolidate what we have? The current state of play is a “Failure Record” according to Standish Group

In the United States, we spend more than $250 billion each year on IT application development of approximately 175,000 projects. The average cost of a development project for a large company is $2,322,000; for a medium company, it is $1,331,000; and for a small company, it is $434,000. A great many of these projects will fail. Software development projects are in chaos, and we can no longer imitate the three monkeys - hear no failures, see no failures, speak no failures.

The Standish Group research shows a staggering 31.1% of projects will be cancelled before they ever get completed. Further results indicate 52.7% of projects will cost 189% of their original estimates. The cost of these failures and overruns are just the tip of the proverbial iceberg. The lost opportunity costs are not measurable, but could easily be in the trillions of dollars.

Source http://www.standishgroup.com
Model Driven Architecture (MDA®) is the next stage in the software manufacturing evolution and MetaBoss® is the vehicle to get you there.

MDA is the collection of standards specified by the Object Management Group™ (OMG™) – the open membership, not-for-profit consortium that produces and maintains computer industry specifications for interoperable enterprise applications. Information on OMG can be found at www.omg.org

MetaBoss is an integrated suite of tools for design, development and management of enterprise software systems through modelling. It utilises Model Driven Architecture concepts. Information on MetaBoss can be found at www.metaboss.com
We take the abstraction to its ultimate level - the modelling language is at the same time the programming language.

- Models are used to capture the high level description of the business, which is basically a description of the business documents and the flow of information.
- A very large portion of the computer system is built by simply compiling models to produce executables.
- The encapsulated placeholders are created for the developers to put the remaining part of the code in.
- The test cases are model-driven and expressed in a formal executable language. The resulting system is tested against these test cases without any need to write custom built test harnesses.
- Model, test cases and the system itself are always aligned and up-to-date. This is because the high level documents are used to compile and test systems, so they are never left behind.
MetaBoss® software development process introduces a high level of automation.
The value proposition is: increase the ROI by directing most of the intellectual effort towards modelling the business domain in a technology neutral modelling language and use automation to produce real world systems.

1) The formal business model is an immensely valuable design artefact providing everlasting benefit:
   - It represents a true description of the running systems and is used by business analysts to model the changes to business requirements. Software can then be automatically regenerated at very low cost.
   - Since the model is technology independent, it can be used to rebuild a whole suite of systems for the different computing platforms at the low cost.
   - Model can be used as a formally binding design specification in an outsourcing contract. This would work well when modelling is done in-house and implementation is outsourced.
2) The formal test cases are also a very valuable design artefact providing continuous benefit:
   - They are expressed in the computing platform independent language and form a part of the business model.
   - The primary use for the test cases is the acceptance testing. They can be run “as is” (no programming effort required) and can be used to test systems on many platforms.
   - At the subsequent iterations the test cases are used to validate that no regression in functionality has occurred.
   - Test cases can also be used as formally binding software acceptance criteria in an outsourcing contract. Again, this would work well when modelling is done in-house and implementation is outsourced.
3) The business subject matter experts have a clearer visibility of software systems, because the systems are described in their language (i.e. business models). This breaks the ice and improves communication between IT staff and Business staff.

4) Development and maintenance costs are lower because:
   - Large portions of software are produced automatically. Automatically produced software usually has higher quality and requires no rework.
   - The required skill set and the depth of technical knowledge is reduced, which lowers labour costs.
   - The software development productivity is increased, which shortens the delivery time.
What sets us apart from competing products?

- MetaBoss is supplied with the source code, which gives you piece of mind and protects your investment from vendor lock-in.
- Unique target software architecture (the set of patterns we follow when generating code) ensures that hand coded pieces of software are independent of technology software model.
- Highly intelligent graphic design tool – MetaBoss Design Studio is much more than just a UML® editor – it is your partner who is always watching over your shoulder and is doing lots of auto completion and model validation work.
- Model driven testing approach helps to leverage design effort in more ways than is possible with other similar products.
Our partners.

In 2002 Softaris had commenced the development of MetaBoss and at the beginning of 2003 the MetaBoss working group was formed in a partnership with GrossBee Ltd. GrossBee is a successful software house based in Dnipropetrovsk, Ukraine. Many parts of MetaBoss have been developed entirely by GrossBee or with significant help from their designers and developers.

In June 2004 Softaris has become an iForce Partner. iForce™ is a Sun Microsystems Partner Program for its development partners. As a member of this program Softaris has access to special co-marketing opportunities, special discounts on Sun products and use of a number of facilities and events provided exclusively for iForce Partners.

In June 2004 MetaBoss started to support MySQL database. At the same time we have become a member of MySQL DevConnect and MySQL Partner Programs. These programs are run by MySQL AB (the Company behind MySQL database) for its development and consulting partners. The membership provides us access to special co-marketing opportunities and special discounts on MySQL products.
This is what our clients say about MetaBoss and our services

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**Subject:** Metaboss Guru Thanks

Hi,

Just a quick note from our team to thank you for your assistance during our project. The guys are very appreciative of your time and effort towards tailoring MetaBoss and in general assistance. I was scared of the 'MetaBoss factor' to begin with, but the guys have assured me we could not have delivered to our date with it out or with out your help. So from all of us to you, THANKS !!!!!

Regards,
Vicki
IT Project Manager

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**Subject:** Thanks

One person who was a significant contributor to our project tends to be rather quiet about it. That's Rost, who ensured that the tools we were using (most significantly MetaBoss) always gave us a significant advantage, and never held us up at all. I'm keen to spend a little bit of time at some time in the near future to try to quantify the major positive impact MetaBoss has in our middleware development, in terms of time, quality of code, and product adaptability. All I can say for the moment is that I seriously doubt that a "non-MetaBoss" quote for this project would have got the go ahead.

Thanks for your time and your tools,
John
Enterprise Architect
MetaBoss® Design Studio.
Business Domain Model.
MetaBoss®
Design Studio.
State Transition Model.
MetaBoss® Design Studio.
Dependency Study Tool.
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