onesixsigma.com



"It is very much a mindset change"

Matthew Moore interviews Pierre Bayle from Whirlpool Europe

At the 9th Annual Process Excellence Awards in London earlier this year, Whirlpool Europe were the most represented company, with six entries selected across the five categories, adding to their success in 2007 when they won the award for "Best defect elimination in manufacturing project".

Whirlpool Europe has 14,000 employees, a sales presence in over 30 European countries and manufacturing sites in seven countries, Whirlpool Europe is a wholly owned subsidiary of Whirlpool

Corporation. The world's leading manufacturer and marketer of major home appliances Whirlpool Corporation has annual sales of approximately \$19 billion, around 73,000 employees, and 72 manufacturing and technology research centers around the world.

Their Operational Excellence (OpEx) programme has been going for over 13 years, and Pierre Bayle has been the programme manager since 2006.

onesixsigma.com: What does OpEx means to Whirlpool?

Pierre Bayle: Operational Excellence means that, on the one hand, we really need to understand the customer's needs, and on the other hand to be make sure that the product meets the customers needs in a robust way. It's really to meet the customer's needs, on target and with minimum variance basically. In short, OpEx = Customer Focus + Innovation + Rigorous Design + Lean Manufacturing.

In addition to our Lean & Innovation initiatives, "OpEx" is made of two programmes, basically. One is the customer-centered OpEx, which deals with more the transactional business applications, so HR, Marketing, Finance etc. The other side is the OpEx for the design & manufacturing community. So that's the programme I manage myself

OSS: How did it begin at Whirlpool?

PB: The OpEx programme started in 96 in the USA with the first 📃 Latest Articles thirteen Black Belt classes delivered by our consultants and partners "6 Sigma Associates". With their support, we then were able to internalize the program. The programme has grown ever since: in the USA BB class 50+ is currently going on. It's totally embedded. It's a great programme that makes good engineers better and we end up doing better products with higher quality and better customer satisfaction. The programme has been so successful that in 2003 the goal was for the convergence for all the "6 Sigma" programmes in the different regions to make



Pierre Bayle

For more information on this Interview, please fill out the form below

```
Name: *
Company Name: *
Email: *
Phone Number:
I would like to
receive more
information on: *
This Page
User Group
Meetings
Training
Conferences
Jobs
Software
Books
*=Required
Your
comment/query: *
```

Please include as much detail as possible

them the same and so that was the real start of "OpEx" here in Europe. We've been moving along well ever since.



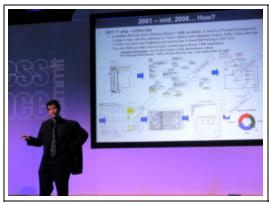
OSS: When did you get involved?

PB: My story is somehow one of the right guy in the right place at the right time. I had had a one day instruction during my master's degree on Design of Experiments in France. I thought that was so cool and I wanted to know more, so I bought myself a book and applied for an internship at Whirlpool in the USA to apply DoE (Design of Experiments) in product development. That was in '94 for six months but I came back seven years later!

I got a chance to get involved in the 10th class of BBs (Black Belts) in 97 and I worked using BB methods ever since. I was certified in 98 and I was dedicated to provide support to many different projects and at the end of this in 2000 I was selected to enter the MBB (Master Black Belt) training. The MBB training at Whirlpool is a 2 year long development programme. In 2001 I relocated to Italy to be a site MBB in a product development centre that was the pilot site for Europe. We had many successes and in 2003 I was joined by an MBB from the US, our 1st the program manager, and the two of us started to do all the BB training for all the sites in Europe. I'm now in this position as the programme manager, BB and MBB trainer for Whirlpool Europe since the beginning of 2006.

OSS: Tell me about your role as the programme manager?

PB: There are different aspects in my role: strategy, organisation, instruction, and still some project mentoring. As the programme manager I get involved in the strategy of the deployment. For example, one of the first things I did with the European MBBs in 2006 was develop an introduction to OpEx training programme which addressed those people who are working with the engineers and the BBs but who are not engineers themselves: the equivalent of what other companies call Green Belts. I'm also working for example with HR to make sure we are dealing well with the BBs and MBBs from a HR perspective.



Pierre presenting at the Process Excellence Summit in London

OSS: Are management belt certified?

eye on the BB certification criteria we're continuously improving our policy - as well as organising all the BB reviews that we do twice a year. I'm also working with upper management in terms of reporting the progress we are making. On the instruction side, after having taught 10 BB classes, I am now mostly focusing on the instruction of our one week OpEx Workshops for Managers & Directors, and on the MBB training. I am still involved as well in some project mentoring, supporting the BBs from our site in France.

Part of my strategy is also to keep an

PB: It depends on the function of the managers. The Quality Managers, Lab Managers for example are attending the four week Black Belt training, they are thus eligible for BB Certification. The Site Directors, Production Managers, Platform Managers for example are attending the one-week training. We do not have a Certification process for these workshops. This workshop is an intense week where we really get them to understand the concepts, the methods, do some hands-on applications. In these five days we really get them to develop an understanding of the programme, the skills their BBs are developing and we help them realise the type of questions they should be asking in order to drive the data-based work their BBs have been trained to do.

OSS: Have you always had a high level of buy-in?

PB: Yes, in a sense it was easier because of all the good history of the programme in the USA since 96. There was some apprehension about Six Sigma because some

people still tended to think it's all about statistics and remote from the engineering reality. So we had to start to convince the skeptical of our good intentions and the main things we did to get this was great project applications and great project successes. This started to change the mindset of the first line management. We have always had great sponsorship from the top line management, starting with our VP of Operations, but initially we still had to convince the director and first line management level.

OSS: Do you use 'traditional' Six Sigma?

PB: We have tailored the methodology. It is strongly based on the concepts we had initially and we have been very lucky to get some great practitioners of Six Sigma.It is strongly influenced by the ideas of Box & Moen (why road maps often do not fit the iterative and unique nature of scientific investigations), Deming (why enumerative statistics are not the most needed "statistics" for engineers), Wheeler (why it is more important to emphasise data acquisition skills rather than data analysis skills), Box again (why focus on experimentation skills rather than correlations studies to improve a product or process) etc...

It's very practical training: we don't do DMAIC, we use the "Plan Do Study Act" Shewart Cycle. It's fairly different. We don't have "6 Sigma projects". I hate that expression 'Six Sigma project'. We use OpEx inside the engineering projects that already exist. We integrate it. Some of the projects may take 6 month, a year, a year and a half depending on its scope and complexity ; OpEx is inside to make sure we make the right engineering decision based on the right data. It's all about using the appropriate tool at



Pierre with other Master Black Belts from Whirlpool

the right time to answer the right engineering questions. This is also the reason why we stress as soon as the first week of BB training the importance of "Critical Thinking": the ability to let the work be lead by the questions to be answered. The "tools" are only ways to answer these questions.

OSS: It sounds as if you've not rolled out the programme as a cultural change, but as a support for the main engineering functions? Is that correct?

PB: It is a change in the way the engineers think and work in product development and in process development, so it is a change in the way we work. But it's not like we have two realities: the real-life project and the SS project. This would not work well with engineers.



The Whirlpool Europe headquarters in Comerio, Italy

We've got to develop great products for our customers and the OpEx mindset is a way to achieve that operational excellence. It is very much a mindset change: in fact the training is as much about mindset as it is about tools. If you just teach the tools, you don't change the mindset and so the people don't use the tools.

OSS: Has there been a significant Return On Investment?

PB: Yes. The benefits estimated related to OpEx in 07 & 08 demonstrate a more than 10 to 1 return on

investment. For example, the Cooking Project that came second in the "Best DFSS" category at the IQPC awards this year lead to doubling Whirlpool's market share in this segment. In addition, the programme is self sustained now, delivered internally with no more consulting resources

OSS: What do you think has been the biggest factor for success?

PB: The training content. You can have the best deployment strategy, the best management support: if your training content doesn't talk to the engineer, if it's not practical enough, it's not efficient enough, the programme won't fly. We've got great training content, but we do need to translate it into project results and so what we have that is key also is a great network of site MBBs: the mentoring by the MBBs to the BBs leads to project results. In doing so, then you also win management support and understanding. This creates a virtuous cycle.

All of this together, with the lead of our VP of Operations, provides the consistency to enable the embedding of the programme.

Finally, we also make sure we train the best. We said to the managers: "send to us the people who you really can't afford to send for four weeks". You get a great engineer to the class, you teach him great things, and he becomes an even better engineer and then you get better products and better quality.

© onesixsigma.com 2003-2008. All rights reserved.

Recent Articles

- "It is very much a mindset change"
- Next generation operational excellence toolkit
- > Strong leadership: the key to change and survival
- > BMGI to Host Lean Six Sigma Black Belt Course in Prague.
- » i&i Members Community Networking Meeting: Lean Transactional Environments