

Irina Tershak
T.V. Borshch, research supervisor
L.A. Zaika, language adviser
SHEI «National Mining University», Dnipropetrovsk

Innovation Engineering

Innovation Engineering, as a movement, is only a few years old. However, the learning behind it and the experiments that are its foundation have been developed over the past 30 years. The original idea for Innovation Engineering was sparked in Doug Hall, a Chemical Engineer by education, when he first learned about Dr. Deming's work at Nashua Corporation in the early 1980s.

Doug applied the system approach of Deming to innovation at Procter & Gamble where he and his team set a record creating and shipping into live market tests nine innovations in twelve months. After ten years, Doug retired from P&G and founded the Eureka! Ranch. The Ranch's primary business has always focused on helping thought leading multi-national companies such as Nike, Walt Disney, Pepsi, Hewlett Packard, and American Express increase innovation speed and decrease risk. One thing that separates the Ranch from other innovation experts is a relentless focus on measurement, statistical analysis, and development of reproducible systems of innovation. To that end, over the past 26 years the Ranch team has conducted quantitative research on over 26,000 innovation concepts.

The Innovation Engineering mindset generates quantitative results: Companies using the Innovation Engineering system have created and defined, on paper, over \$4.1 Billion worth of ideas for their Innovation Pipelines. Innovation Engineering companies are realizing a 250% improvement in the success of ideas that they put into development, saving them significant time, energy, and money. Innovation Engineering Black Belt training dramatically increases confidence and capability.

With Innovation Engineering "innovation" is defined as ideas that are **MEANINGFULLY UNIQUE** to the customer. It means ideas that excite and motivate customers - because they address a meaningful problem they face for which they currently have no good solution. Innovations are ideas that customers outside of your organization are willing to pay more money for - or system improvements that customers inside your organization are willing to commit to adopting, ideas for more profitable customers and markets, include adapting existing offerings and marketing messages for domestic or export customers, include leading existing customers/markets with ideas that make a meaningful difference for the m, include ideas for improving systems such as R&D, research, production, marketing, sales or customer service. The most advanced innovation involves new Business Models. These involve changing how your customer pays for your offering and usually require simultaneous changes to all dimensions - customer, market, product, service and systems.