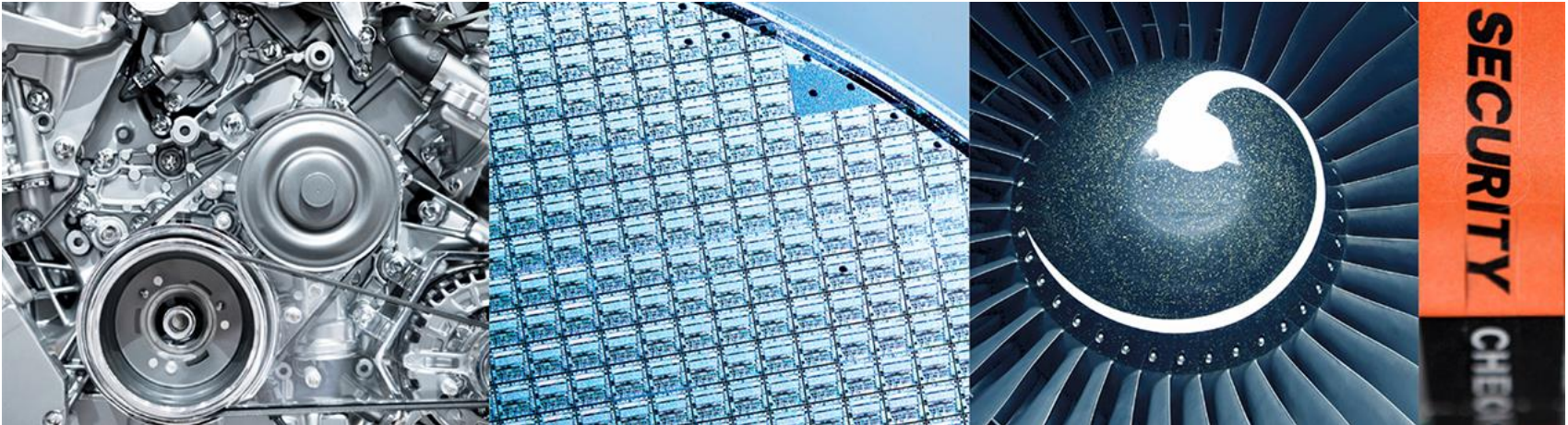


Industrial X-Ray & ebeam Technologies

Delivering profitable growth by leveraging the technology base, market access and business development



Charles Flükiger
President Industrial X-Ray & ebeam Technologies

Agenda

Growth
Outlook
2020

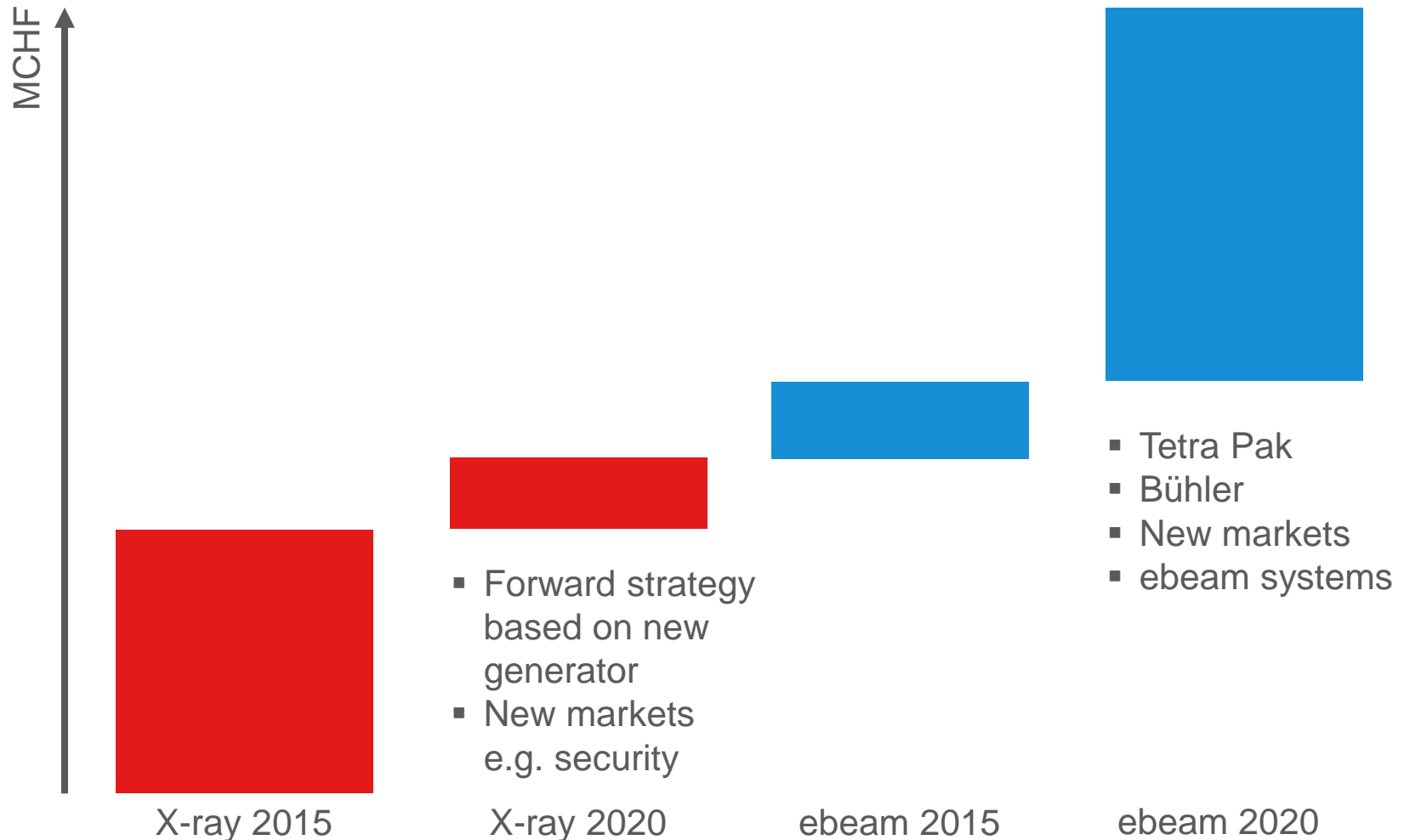
Update
Tetra Pak

Market
Access

The
ebeam
Powerhouse

ebeam
Applications

Growth is manly driven by ebeam applications



ebeam equipped Tetra Pak E3 Filling

Official launch at Fispal Technologia in Brazil

“The new platform also reduces energy costs, cuts waste and makes water recycling easier”

- Ashutosh Manohar, Vice President Carton Value and Economy, Tetra Pak

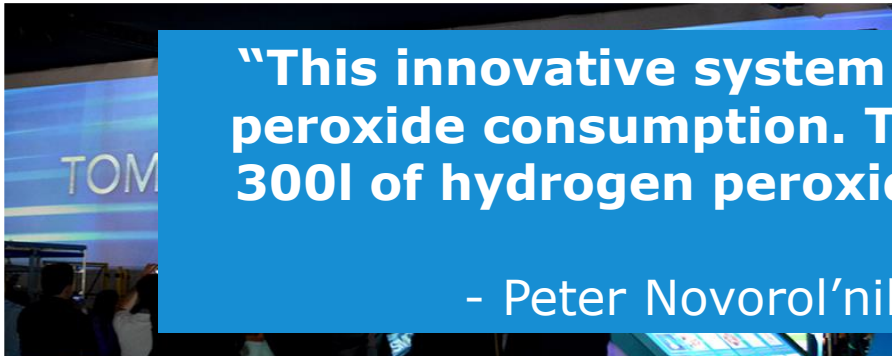
“This innovative system offers clear savings on hydrogen peroxide consumption. To sterilize 1m packages you need 300l of hydrogen peroxide, so the saving is considerable”

- Peter Novorol'nik, Production Manager, Rajo

“The efficiency and effectiveness of filling equipment has just taken a major step forward”

- Charles Brand, Executive Vice President, Tetra Pak

ebeam

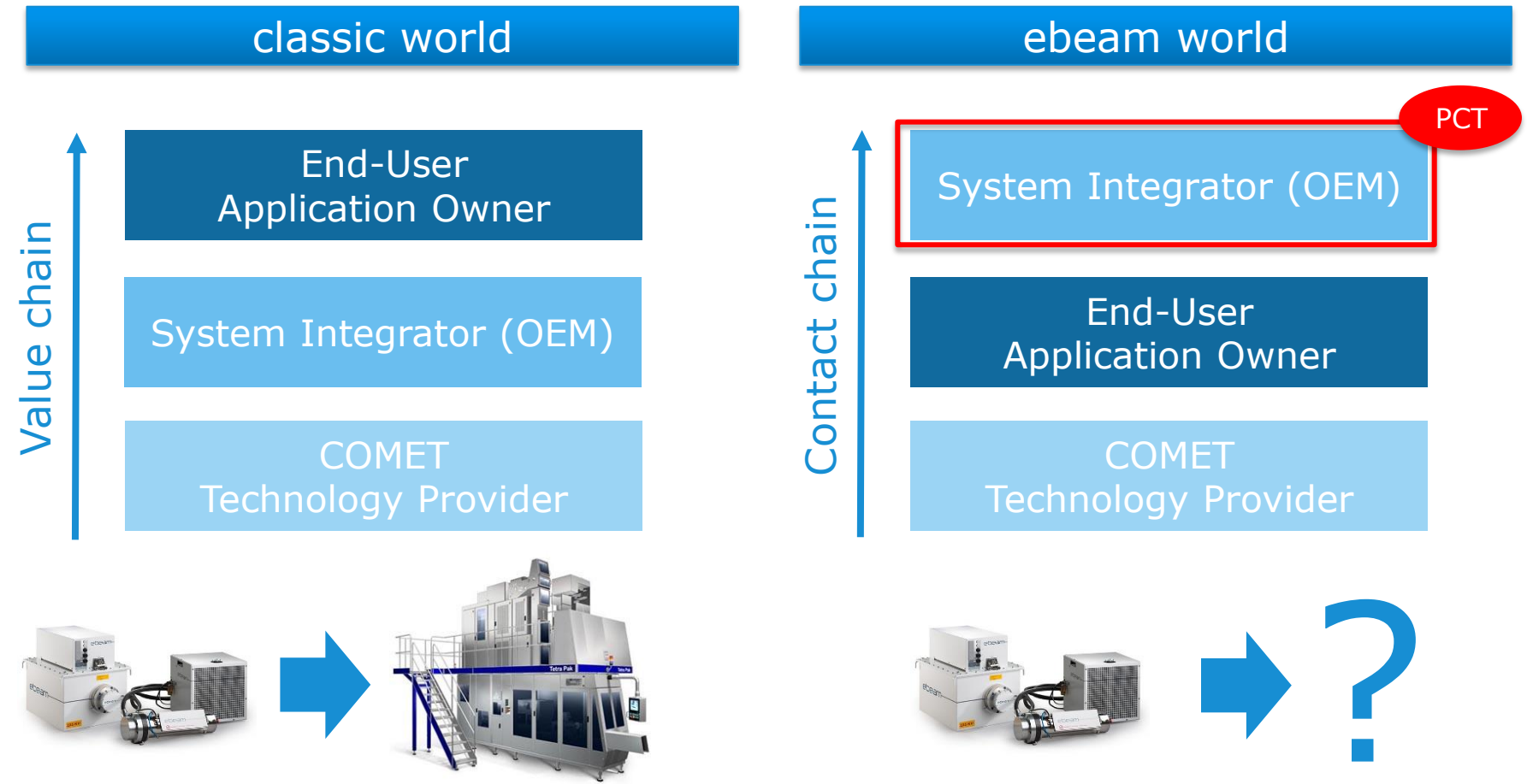


ebeam equipped Tetra Pak E3 Filling

Official launch at Fispal Tecnologia in Brazil

Market access

Value chain ≠ contact chain; there is a missing layer



COMET acquired PCT Engineered Systems, LLC

We are now in B2B and B2C business

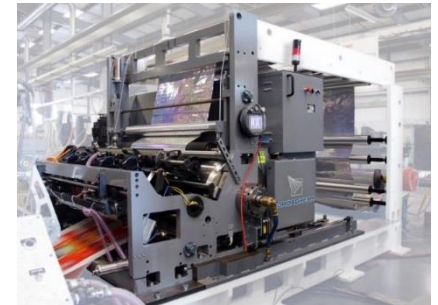


PCT Engineered Systems, LLC

Founded in 1986 by 3 engineers working at Alcoa in Davenport

ebeam End-user Solutions (Systems & Service)

85 Employees



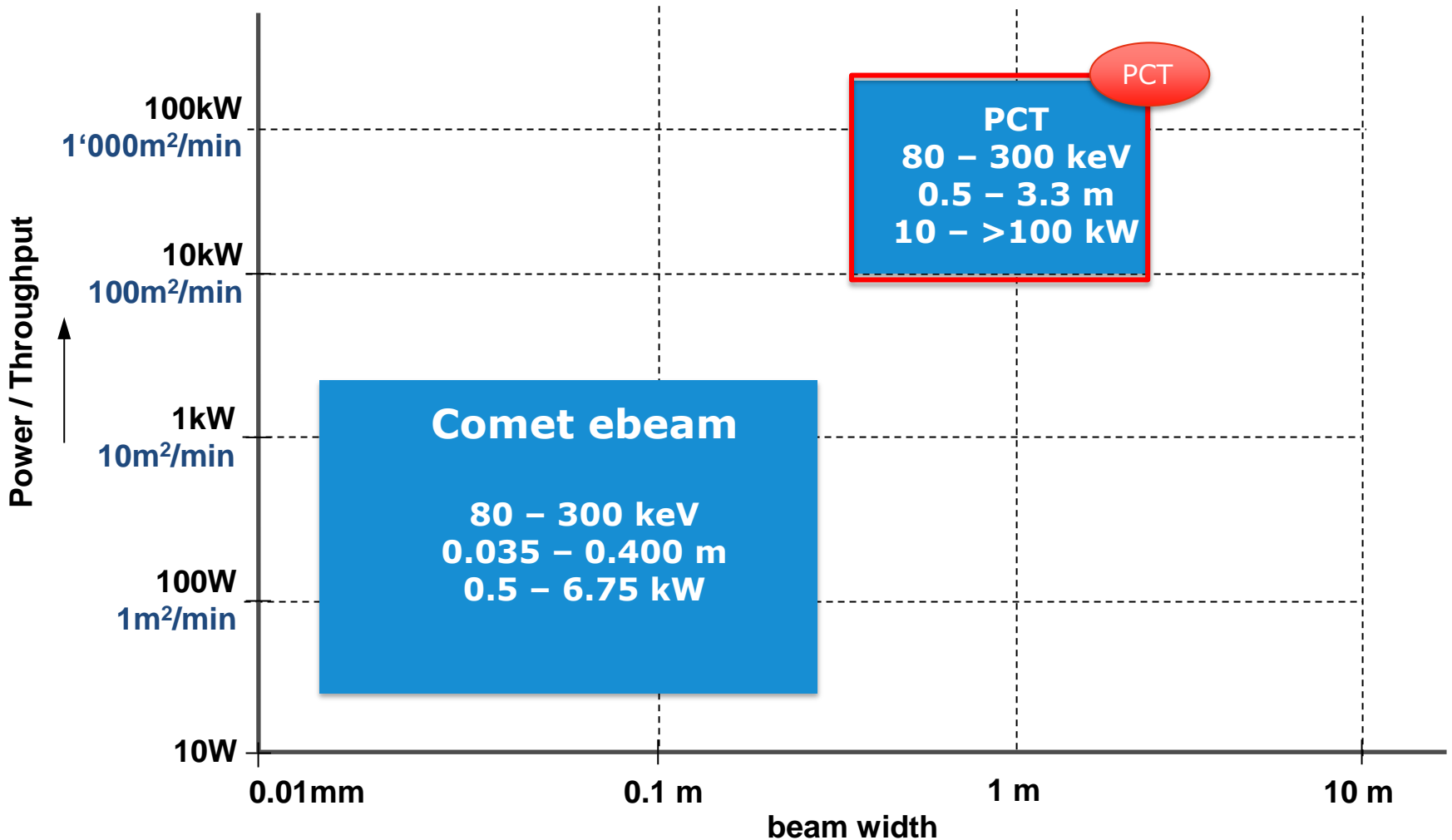
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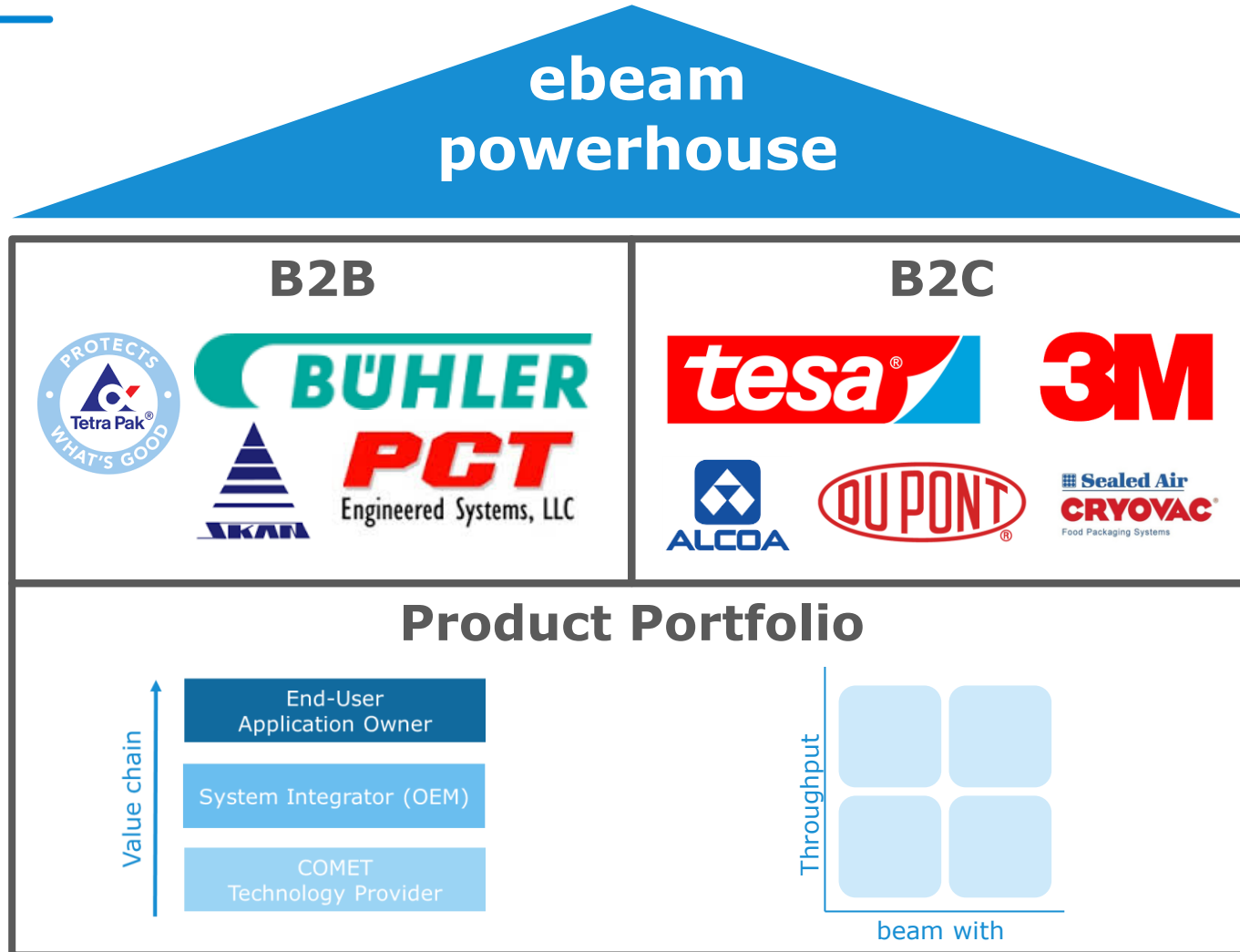


Expanded product range and market access

Always the right solution for our customers



ebeam powerhouse
No disappointed customer



Application (1/3)

Decor paper

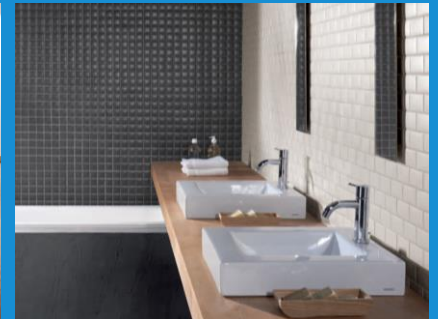
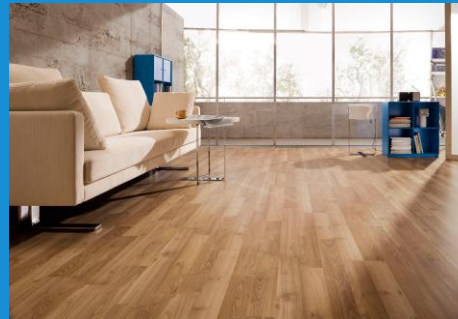
Added value

- Upcycling (less value to higher value)
- Look and feel (haptic)
- Additional surface features

Customers

- Schattdecor
- Trespa
- BauschLinneman
- DTS
- Suddekor
- U.S. Coatings

ebeam treated products



Application (2/3)

Pressure sensitive adhesives (PSA)

Added value

- Controllable adhesive bond
- Cold & fast instead warm & slow
- Smaller footprint
- Less energy consumption

Customers

- 3M
- tesa
- GPI Adhesives

ebeam treated products



Application (3/3)

Crosslinking plastic film

Added value

- Less raw materials needed to produce same amount of packages
- End-product more appealing for the customer

Customers

- Sealed Air / Cryovac
- Bemis
- Clysar
- Flexopack
- Clondalkin
- Lietpak

ebeam treated products



ebeam powerhouse
No disappointed customer

