CAN VALUE ADDED STRATEGY ENHANCE THE COMPETITIVENESS OF PRODUCTS?

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GLOBALIZATION

- Globalization continues to strengthen competition in the market.
- The most important factors of competitiveness are quality and price.
- The functions essentially "cover" quality.

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SHARPENING MARKET COMPETITION IN HUNGARY p. 1

Challenges of light industry in Hungary:

- **appearance of extremely cheap products produced in countries with low wages.**
- **reduction of costs is not an option.**
- **added value can increase competitiveness of products**

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SHARPENING MARKET COMPETITION IN HUNGARY p. 2

- **Added value means:**

  *** use of better materials**

  *** producing smaller quantities**

  *** more comfortable footwear design**

- **Industry needs utilization of "soft sciences" at a higher level.**

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DIFFICULTIES IN RECOGNISING THE PROBLEM p. 1.

- Instead of recognizing the real problem, managementsees the results of it.
- The product can not be sold because of the price or the quality.
- Customer complaints about hidden deffect of product.

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DIFFICULTIES IN RECOGNISING THE PROBLEM p. 2

- **Manufacturing of the product takes too much of the manufacturing capacity compared to revenues.**

- **Product is technically competitive, but due to high costs the management wants to stop production - no new, innovative developments are available -- workers need to be laid off -smaller volume of production increases overhead costs, etc.**

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DIFFICULTIES IN RECOGNISING THE PROBLEM p. 3

- There is a lot of customer complaints, the customers want to return the product to the company because of hidden defects.
- The manufacturing of the product takes too much of the manufacturing capacity as compared to revenues.

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DIFFICULTIES IN RECOGNISING THE PROBLEM p. 4

- **The product is technically competitive, but the financial management of the company wants to stop producing it because of its high costs. There are no new, innovative developments, so workers need to be laid off, and the smaller volume of production increases specific overhead costs.**
- **etc.**

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PANIC IN THE MANAGEMENT p. 1

- **Sales problems often create general "panic„.**

- **Companies often do not have necessary intellectual and material resources for redesigning products.**

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PANIC IN THE MANAGEMENT p. 2

- **99% of companies in Hungary have less than 11 employees.**
- **Company managers can not define the specific defects of a product.**

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EXPERIENCE WITH VALUE METHODOLOGY IN THE HUNGARIAN FOOTWEAR INDUSTRY p. 1

- **In Hungarian footwear industry, added value requires R&D activity.**

- **In a VM project on footwear, professional marketing found important consumer problems.**

- **The outer part of the shoes that were made of ox hide got damaged rather fast and lost most of its design functions.**

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EXPERIENCE WITH VALUE METHODOLOGY IN THE HUNGARIAN FOOTWEAR INDUSTRY p. 2

- **The wear resistance of the sole was 24 months instead of 6 months.**

- **The team launched R&D activity in two directions:**

  *** initiated development in the leather section**

  ***started developing new technology for manufacturing shorter life-term sole.**

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THE PROBLEM OF TIRES

- A company produced tires for buses.
- The operators of the buses indicated that the tires lost their operating pressure rather fast.
- The FAST diagram of tires is shown in Figure 1.

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Figure 1. FAST diagram of tires p. 1

- Fo participates in the operation of tires
- F1 stores a medium
  - F11 has a valve
  - F12 ensures connection
  - F13 ensures air tightness

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Figure 1. FAST diagram of tires p. 2

- **F2 adjusts to a tire point system**
  - **F21 can be place in a tire**
  - **F22 can be placed on a clamp**
  - **F23 changes internal cubic content**
  - **F24 keeps size**

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Figure 1. FAST diagram of tires p. 3

- **F3 endures wear**
  - **F31 ensures quality**
  - **F32 excludes flat tire**
  - **F33 enables repair**
- **F4 satisfies ergonomics**
  - **F41 carries information**
  - **F42 ensures transportability**

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THE PROBLEM OF TIRES

- **Experts of the manufacturing company indicated that the problem was due to the poor quality of the elastic gum.**
- **The thickness of the tire wall has been increased several times.**

- **The VM team suggested examining which carriers of function participated in producing the function "stores a medium."**

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Figure 2. Product scheme of tires p. 1

- A0 Tire
- A1 Tire wall
  - A11 Isolating material
  - A12 Tire wall gum compound
- A2 valve base
  - A21 valve gun compound
  - A22 Metal valve case

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Figure 2. Product scheme of tires p. 2

- A3 Solution
  - A31 Solution compound
  - A32 Dissolvent
- A4 Edge fitting zone
- A5 Size and trademark

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Figure 2. Product scheme of tires p. 3.

- **A6 Other valve fittings**

  A61 Valve lock
  A62 valve pin
  A63 Valve cap
  A64 Filler ring

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Figure 2 Product scheme of tires p. 4

- **A7 Packaging material**
  - **A71 Card-board box**
  - **A73 Adhesive tape**
  - **A73 Label**

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Figure 3. The relationship between functions and carriers of functions p. 1

- F11 has a valve — A1, A2, A6
- F12 ensures connection — A2, A6
- F13 ensures air tightness — A1, A2, A4, A6
- F21 can be place in a tire — A1, A2, A4, A6

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Figure 3. The relationship between functions and carriers of functions p. 2

- F22 can be placed on a clamp A1, A2, A4, A5, A6
- F23 changes internal cubic content A1, A4, A5
- F24 keeps size A1, A4, A6, A7
- F31 ensures quality A1, A2, A4, A6, A7

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Figure 3. The relationship between functions and carriers of functions p. 3

- F32 excludes flat tire A1, A4
- F33 enables repair A1, A4, A5
- F41 carries information A5
- F42 ensures transportability A1, A2, A4, A5, A6, A7

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Figure 4. Designating part for redesign p. 1

- **Feedback from customer** 

  Air escapes 

  Designating the affected function

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Figure 4. Designating part for redesign p. 2

Function **Carrier of Function**

A1 Tire wall

A2 valve base

F13 ensures air tightness → A4 Edge fitting zone

A6 Other valve fittings

On the basis of R&D experiments it has been established that the leakage of air is caused by the valve.

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Figure 4. Designating part for redesign p. 3

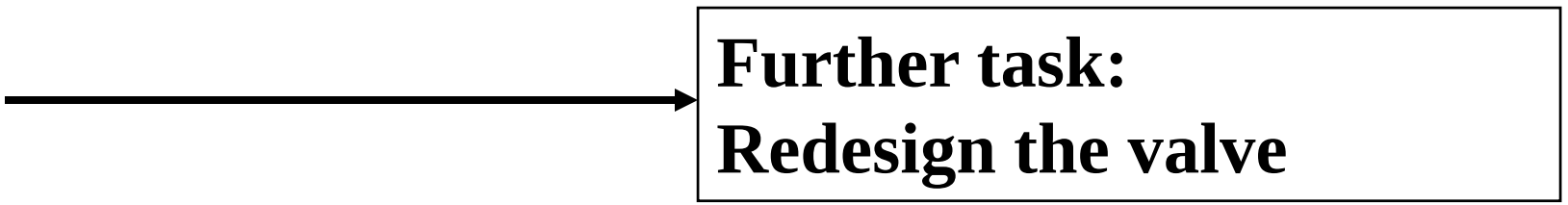

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Figure 4. Designating part for redesign p. 1

- Our experiments established that the reason for the leak was the poor quality of the valve (Figure 4. Designate parts for redesign)

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Figure 4. Designating part for redesign p. 2

- **This was an unusual process: a customer complaint triggered VM project, which launched other R&D projects.**
- **Value Methodology not only increased the competitiveness of a product but it made the development activity of the company more efficient as well.**

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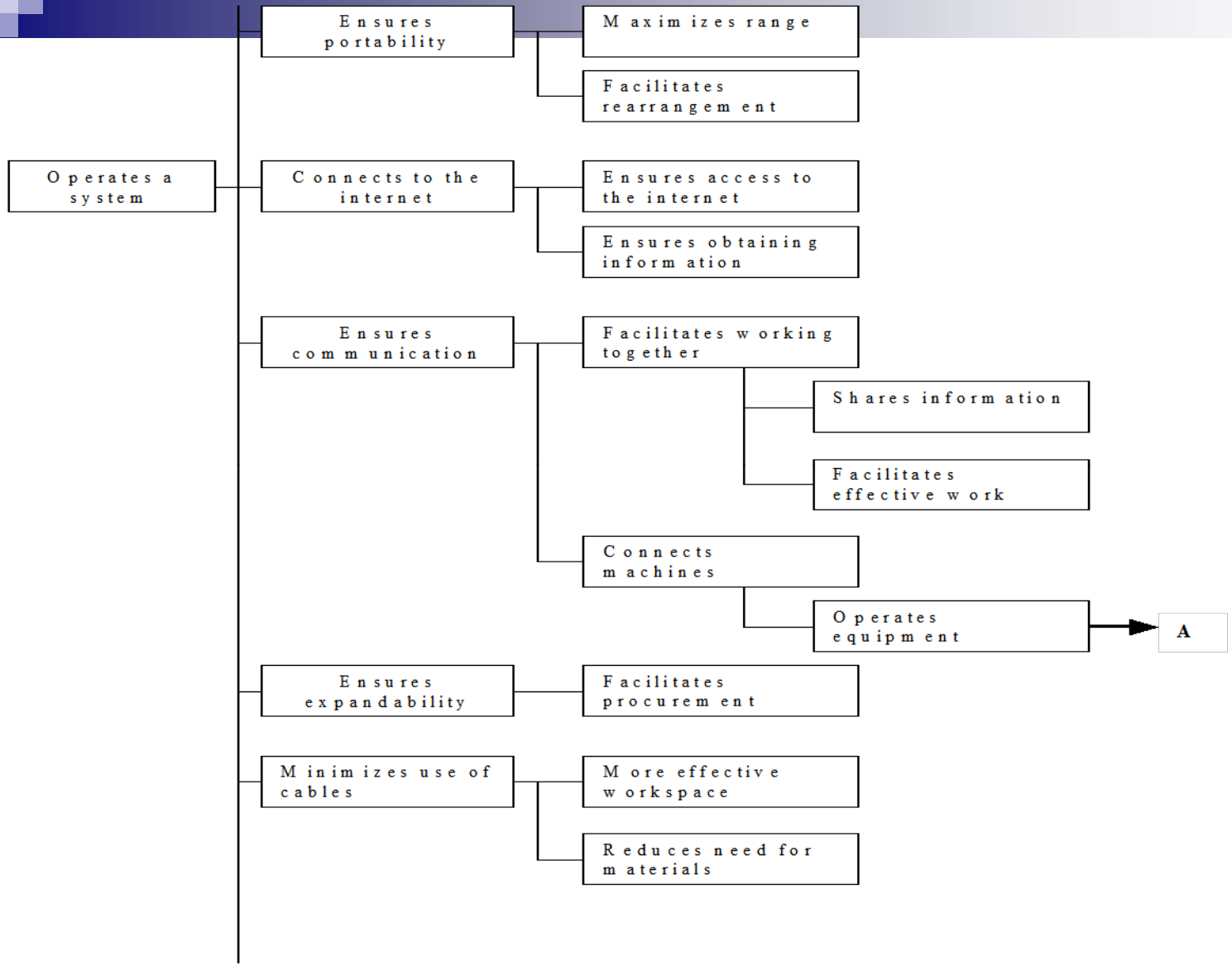

Figue 5. FAST diagram of a WiFi office

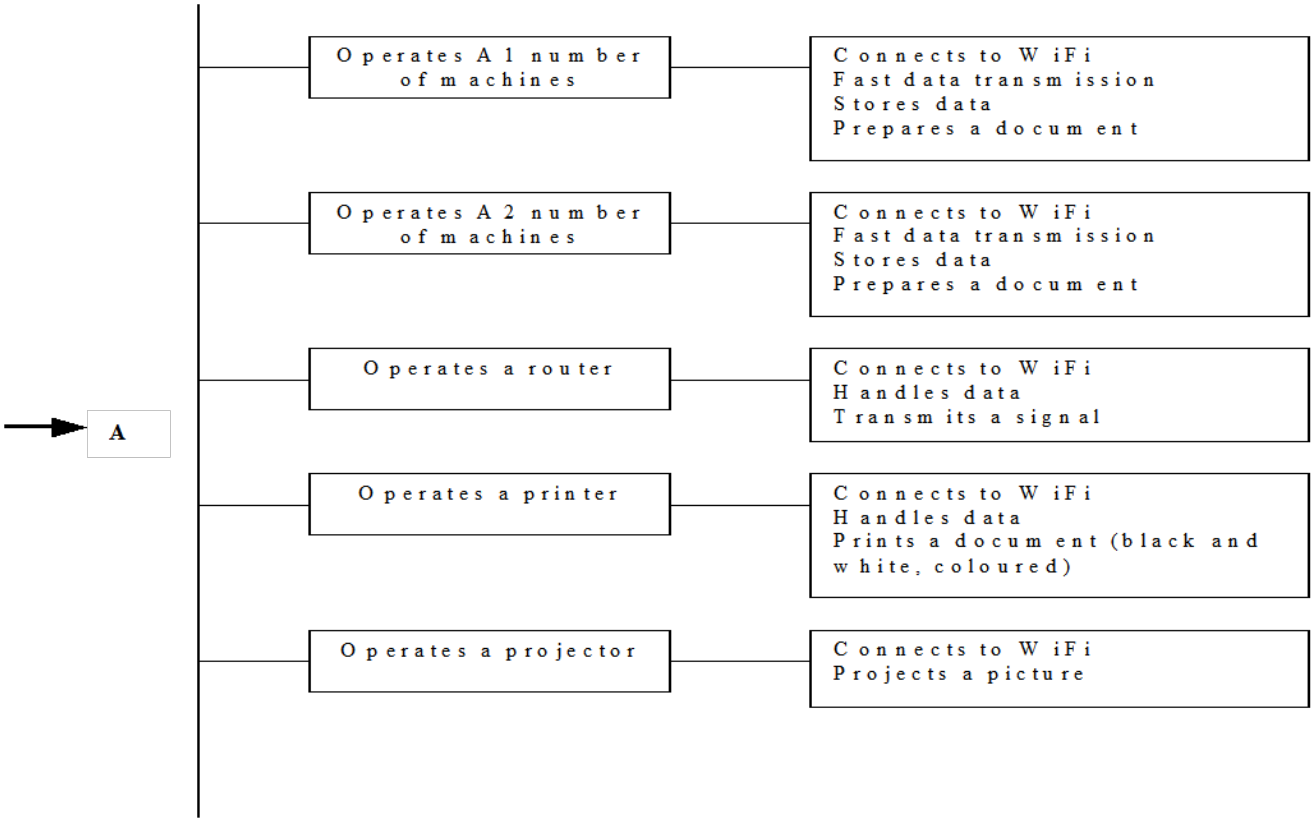

Figure 5 (continued)

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A VALUE METHODOLOGY: AN EXCELLENT TOOL FOR INCREASING VALUE
p. 1

- **Added value may effectively enhance the competitiveness of products; -it often requires R&D activities as well.**

- **According to international data 50% of R&D projects eventually fail.**

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A VALUE METHODOLOGY: AN EXCELLENT TOOL FOR INCREASING VALUE
p. 2

- V. M. can reveal potential problems that may result in the failure of the future project,

- The ratio of successful projects may be raised to 85 to 90% by means of Value Methodology.

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SUMMERY p. 1

- On the basis of several hundred projects we have established that added value in most cases increased the competitiveness of products.
- On the basis of marketing research, an "ideal product" can be created which can be compared to the "base product."

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SUMMERY p. 2

- **The development of a "base product" into an "ideal product" usually requires R&D activities.**

- **The strategies that can be used include Function ↑/Cost →, possibly Function ↑↑/Cost ↑, or Function ↑/Cost ↓. Suitable solutions were selected through interactive cooperation with the customer.**

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