Executive Conference

Hilton Chicago
March 29 to 31, 2004

The METRO Group
Future Store Initiative

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IT Buying and Development Services,
Metro MGI Information Technology
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1 The METRO Group Future Store Initiative
2 The Extra Future Store in Rheinberg
3 Results of the Boston Consulting Panel
4 Next Steps
## METRO Group - 2,340 Locations in 28 Countries

<table>
<thead>
<tr>
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As of September 30, 2003

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### METRO Group Future Store Initiative - Jointly Elaborating Visions

- Cooperation of METRO Group with SAP, Intel, IBM and others
- Platform for technical and process-related developments and innovations
- Efficient retailing through implementation of future technologies
- Developing visions on technologies
- Benefiting customers, retailer, supplier
Partner Companies - Strong Alliance

METRO GROUP  ▪  SAP  ▪  INTEL  ▪  IBM
CISCO SYSTEMS  ▪  COCA COLA  ▪  DHL SOLUTIONS  ▪  GILLETTE  ▪  HENKEL
HEWLETT PACKARD  ▪  JOHNSON & JOHNSON  ▪  KRAFT FOODS
MICROSOFT  ▪  NESTLÉ  ▪  ORACLE  ▪  PHILIPS  ▪  PIRONET NDH
PROCTER & GAMBLE  ▪  SYMBOL  ▪  VISA  ▪  WINCOR NIXDORF

ALGOTEC  ▪  ALPHA TONTRÄGER  ▪  AVERY DENNISON  ▪  BIZERBA
BOSTON CONSULTING GROUP  ▪  CHECKPOINT SYSTEMS  ▪  CHEP
CITTADINO  ▪  EYCKELER&MALT  ▪  FEIG ELECTRONIC  ▪  FUJITSU SIEMENS
COMPUTERS  ▪  HINTZPETER & PARTNER  ▪  INTERMEC  ▪  KURT SALMON
ASSOCIATES  ▪  LIEBHERR  ▪  LOYALTY PARTNER  ▪  METTLER TOLEDO
MULTIQ  ▪  NCR  ▪  OATSYSTEMS  ▪  ONLINE SOFTWARE  ▪  SONOPRESS
WANZL METALLWARENFABRIK  ▪  WMS

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1  The METRO Group Future Store Initiative
2  The Extra Future Store in Rheinberg
3  Results of the Boston Consulting Panel
4  Next Steps
The Extra Future Store – Testlab of the Initiative

- Extra Future Store in Rheinberg
- Central building block of the METRO Group Future Store Initiative
  - First Project
  - Application and combination of a wide range of technologies in retailing
  - Test under real-world conditions
  - Testing acceptance of customers
  - World-unique experiment

Innovative Technologies in the Joint Testing Laboratory

- Comfort Shopping
- In-Store Information
- Smart Check-out
- RFID Inventory Management
- WLAN Server
- Content Bus
Comfort Shopping: Convenient and Easy

- **Intelligent Scale**
- **Elec. Price Labels**
- **Info Terminal**
- **Pers. Shopping Assistant**

From Promise to Reality

Advice and Service Made to Measure - the Personal Shopping Assistant (PSA)

- Handy computer device on the shopping trolley
- Personalized customer loyalty card (“Extra Future Card”)
- Personalization of shopping
- Display of promotion campaigns and special offers
- Faster orientation in the store - “navigation system”
- Access to product information
Info Terminals fill Customers in

- Screens show interesting information on the corresponding product
- Scanning of products
- Display of detailed information
- Additional functions, e.g. recipes, with printout

Comfort Shopping with Intelligent Scales

- Intelligent fruit and vegetables scale facilitates the weighing process
- Automatic recognition of fruit and vegetables
- Weighing the products
- Printing out the bar-code label
In-Store Promotion through Electronic Advertising Displays

- Electronic displays directly point to current offers and promotions
- Highlighting special offers and promotions
- Showing short video sequences

Electronic Shelf Labels – Always the Right Price

- Shelves are equipped with electronic price labels and continuously supplied with updated information
- Direct networking with the check-out system; differing price indications are thus avoided
- Central control via radio signals
In-Store Information: Enhancing Employees' Productivity

- Comfort Shopping
- Infrastructure
- WLAN Server
- Content Bus
- RFID Inventory Management
- Smart Check-out
- Mobile Assistant

Personal Digital Assistant (PDA) - Mobility for Employees

- Optimum transparency regarding backstore and frontstore inventories

- Barcode reader with access to the warehouse management system of METRO AG
- Mail function
- Mobile access to e-mails, diary and contact data
- Linking the product with the advertising display via the PDA
Smart Check-out: Facilitating the Check-out Process

- Comfort Shopping
- In-Store Information
- RFID Inventory Management
- WLAN Server
- Content Bus

Self-Check-out: Managing Check-out by Yourself

- New, fully automated check-out system accelerates the payment process
- Customers manage the check-out process themselves
- Payment at the machine (in cash or with a card)
Comfort Check-out – Payment with the Personal Shopping Assistant

- Total price of the products scanned with the Personal Shopping Assistant is transmitted to the check-out system via radio signals

- Customers scan products themselves while shopping in the Store
- Check-out system takes over the total price
- Customer pays, assisted by a cashier

RFID Inventory Management

- Comfort Shopping
- In-Store Information
- Smart Check-out
- Logistics
RFID-Technology – Improving Supply Chain Efficiency

Radio frequency-based product labels provide real-time inventory data, new level of product information and potential for tailored marketing.

- Accurate inventories
- Out-of-stock warnings system
- RFID-based replenishment processes for warehouse and store
- Personalized advertising

RFID in Retailing

1. All cardboard boxes for the store and pallets are provided with tags

2. An RFID gate at the ramp reads each pallet and each box that passes by the gate

3. An RFID gate at the ramp reads each pallet and each box transported into the storage area of the supermarket; reconciliation with the order; registration in the store system
Tests on Pallet and Case Level

RFID-Portals

RFID-Chips on cartons and pallets

Preparation of RFID-Chips

RFID Data Management

Goods Flow

Writing the Tags  Exit and Entrance Portal  In-Store Portal

I  II  III

Future Store Network  SAP Application System  Delivery Monitor
RFID in the Store

I. All boxes are read as soon as they are taken to the sales room; registration of the change in storage location

II. Products on the shelf are equipped with tags; a shelf reader registers the location on the shelf; posts removal; advises of misplaced products

III. RFID readers at the Information Terminals provide the customers with additional information on the product

IV. Exit readers ensure theft protection
The Smart Shelf - Never Empty

- Reading devices in the shelves recognize the RFID label on the products and automatically register when a product is taken off the shelf or placed in the wrong space.

- The shelves indicate when they need to be refilled.
- This way, all products are always available.

Smart Shelf

The shelves indicate when they need to be refilled.

This way, all products are always available.
RFID supports the Optimal Shelf Availability Process

- RFID supports ...
  - measurement of Out Of Stocks,
  - replenishment processes
  - accurate inventories,
  - shelf refilling concepts through early warning systems.

Projects Yield Experiences and Challenges

- Individual settings
- Technical know-how
- Standardization
- Acceptance for benefits
- Acceptance at employee-level
- Process-changes
- Privacy concerns

- Pilots, tests, QA
- Strong partner
- EPCglobal, GCI
- Internal promoter
- Training
- New opportunities
- Open communication
RFID - Customer Information has
High Priority

From Promise to Reality

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As Many as 77% have used FSI Applications Already

At least 25% of the customers have tested all applications

<table>
<thead>
<tr>
<th>Use of a single FSI application</th>
<th>At least one-time use</th>
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<td>77%</td>
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Source: BCG Market Research

Results of the Boston Consulting Panel

- Customers of the Future Store in Rheinberg show great interest in FSI applications
- As many as 77% have used FSI applications already
- 50% of the non-users are planning a future use
- The benefit of the applications is evaluated positively
- Even elderly and technology-averse customers are using the applications
- The percentage of use of the different applications ranges from 24% (PSA) to 62% (Intelligent Scale)

Source: BCG Market Research
Customers of the Extra Future Store in Rheinberg are More Satisfied!

The percentage of satisfied customers has increased from 34% to 52%.

Source: BCG Market Research

Growth in Sales and Number of Customers

- Strong growth in sales compared to the previous year
- Growth in sales especially driven by higher frequency
  - More than 30% new customers acquired
  - Frequency also skimmed from important competitors
- FSI as a competitive edge
  - FSI technology can act as a valuable customer retention tool for customers with an affinity for technology
- Users of FSI applications are the more valuable customers
  - Higher sales/customer
  - Higher share of wallet

Source: BCG Market Research
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Importance for the METRO Group

• The Initiative underscores the role of the Group as a pacesetter and driving-force for innovation in the retail sector.
• Benefits:
  - Modern technologies support the METRO Group in the systematic optimization of its sales & marketing concepts
  - The Group benefits from globally unified technical standards in the retail sector
  - The focus on benefit-oriented solutions is ideal for the customers of the METRO Group and strongly supports the Group's collaboration with its partner companies
  - The METRO Group adopts the position of a key protagonist in the development of visions and prospects for the future of the retail sector
Successful Presentation at the NRF Retail’s Big Show in New York

10,000 visitors at the booth of the METRO Group Future Store Initiative
Very positive Feedback

Next Steps

• Roll-out of FSI-technologies
  - Self-Check-out
  - Intelligent Scale
• Additional test of technologies
  - Extra Future Store in Rheinberg
  - Additional Future Store
• Expansion of RFID Supply Chain Pilots
  - Pilot with CPG supplier
  - METRO Group RFID Innovation Center
• RFID Roll-out
  - Supplier Briefing May 14, 2004
**METRO Group RFID Innovation Center**

- METRO Group will build professional, world leading RFID test lab
- Test lab will be used by existing and new RFID partners to test new technologies before rollout
- Test lab will be a common platform for compliance and standards tests
- The lab will provide an open project environment: All sales lines of the METRO Group are invited to participate in testing activities

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**From Promise to Reality**

- Experience the innovative technologies in the Extra Future Store in Rheinberg...
  - Extra Future Store
    Moerser Straße 28
    47495 Rheinberg
    Germany
    Phone +49 (0) 28 43 - 90 16 82
    Fax +49 (0) 28 43 - 90 76 87 8
- Or visit our websites!
  - www.future-store.org
  - www.metrogroup.de
METRO Group
Future Store Initiative –
Experiencing the Future of Retailing Live