

# Advanced Capture Management Solutions

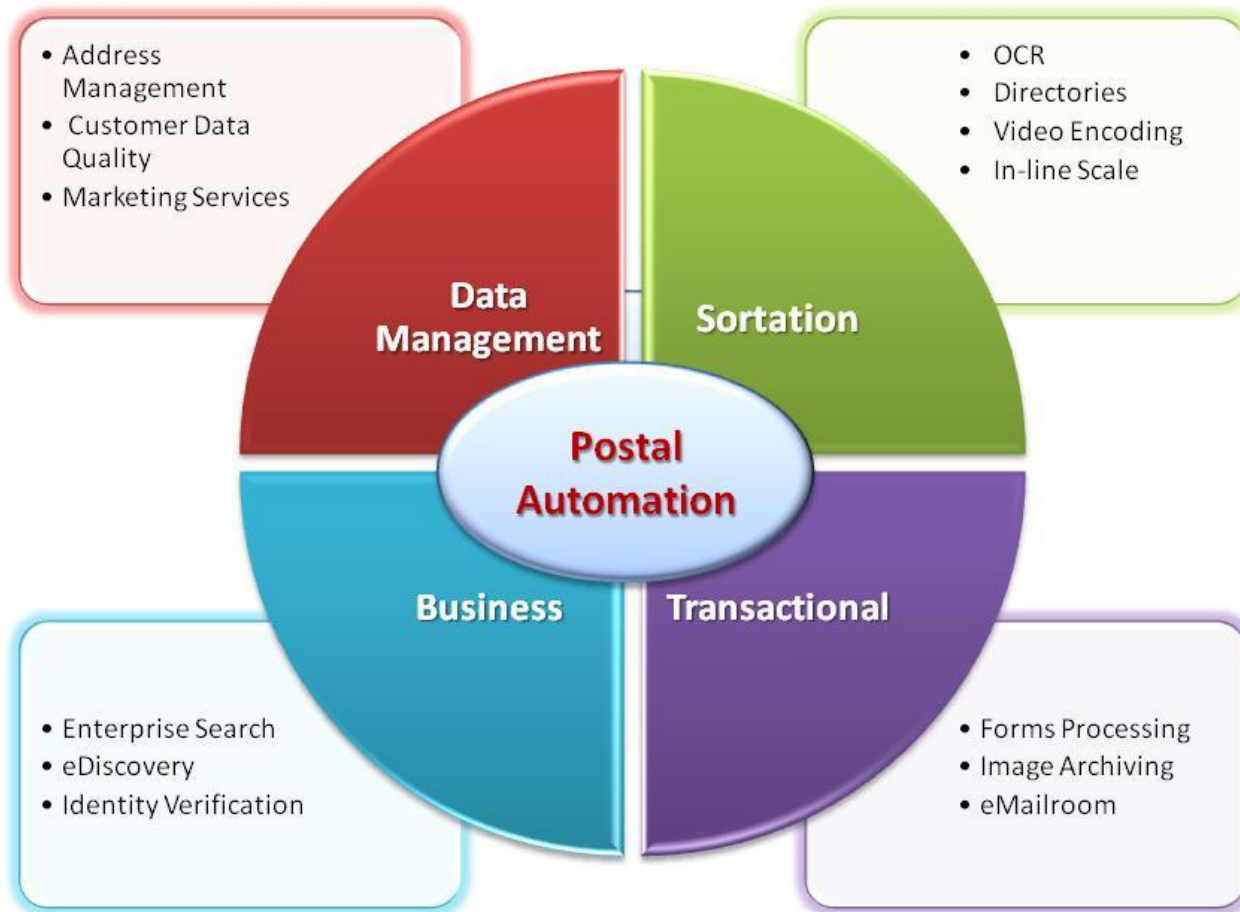


## Your OCR and Pattern Recognition Partner

worldwide leader in advanced image recognition  
and extraction solutions



# Postal Automation Perspective

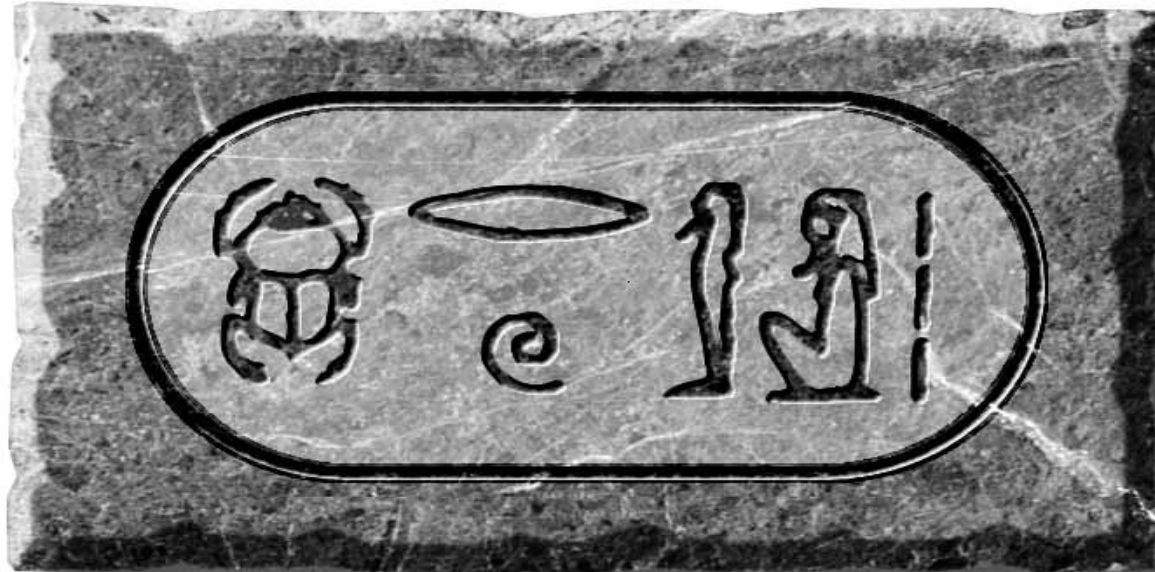


# Recognition Value Propositions (ROI 12 Months)



- Document Preparation
  - Paper to electronic conversion
  - Automate Indexing (OCR), meta tagging
  - Archiving and traceability
- Automation of Document Validation
  - Reduce manual process and department cost (40%)
  - Improve distribution efficiency by proper routing (20%)
  - Expedite delivery and minimize undeliverable as addressed
- Enable Creative Revenue Opportunities and Protection
  - Reduction in lost revenue( \$ thousands + )
  - Systematic analysis and processing of documents (\$ thousands + )
  - Expand direct marketing opportunities by leveraging customer data

# Cartouche



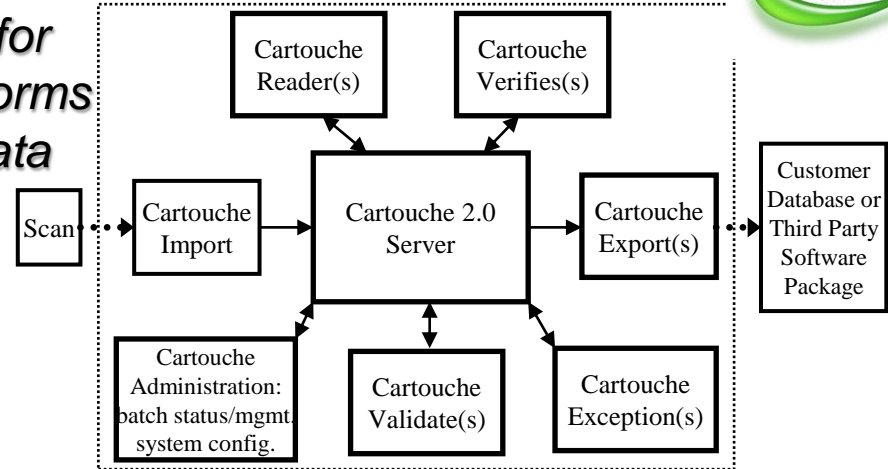
**Is the Ultimate Data Engine to Capture,  
Retain, Process and Validate Data**

# Cartouche Overview

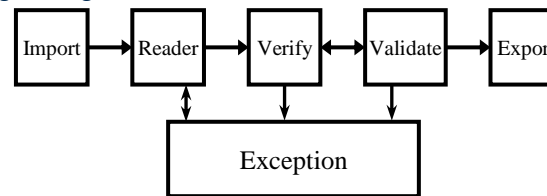


*Cartouche is a fully integrated system for reading, extracting, and validating all forms of data from a digitized page. These data forms include:*

- Form Identification
- Text and numeric characters
- Bar codes
- Mark sense fields (OMR)
- Special Fonts & Symbols
- Data Validation



## Single Page Flow



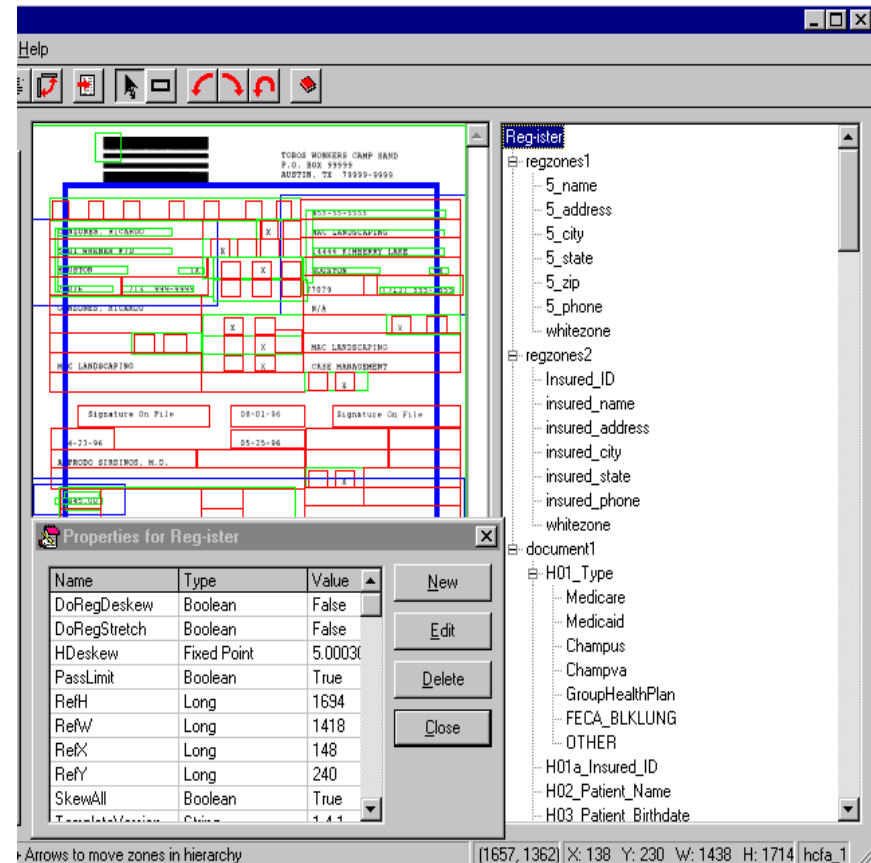
Cartouche performs all the steps required to convert a scanned image into an exportable format suitable for inclusion to a database.

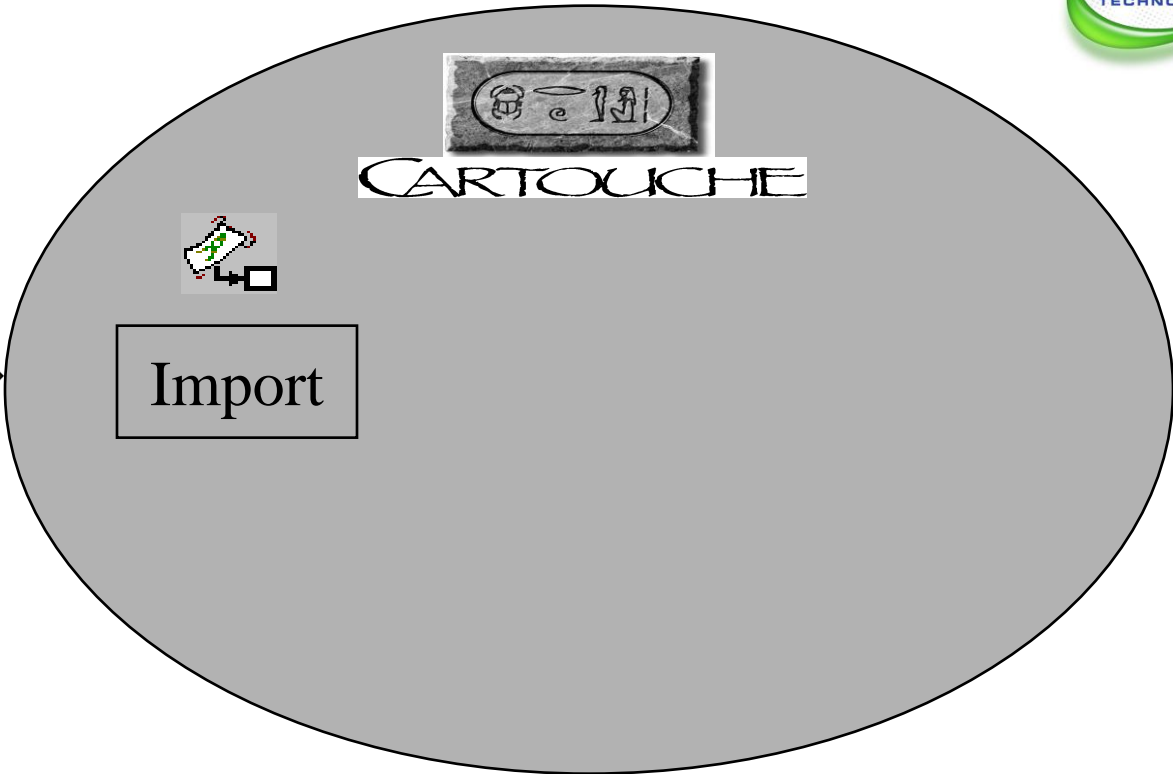
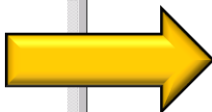
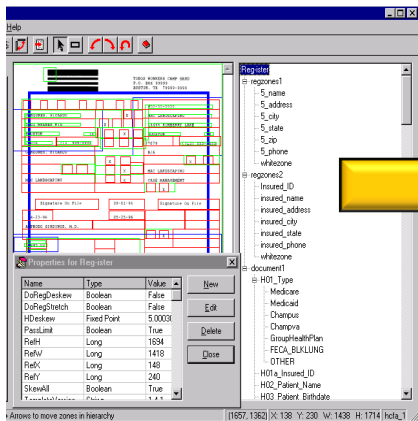
The product integrates workflow management to control and schedule batches of tasks to be processed, have errors manually corrected, validation performed and export completed.

## Scanner and Software

Critical to the OCR Process!!!!!!!!!!!!

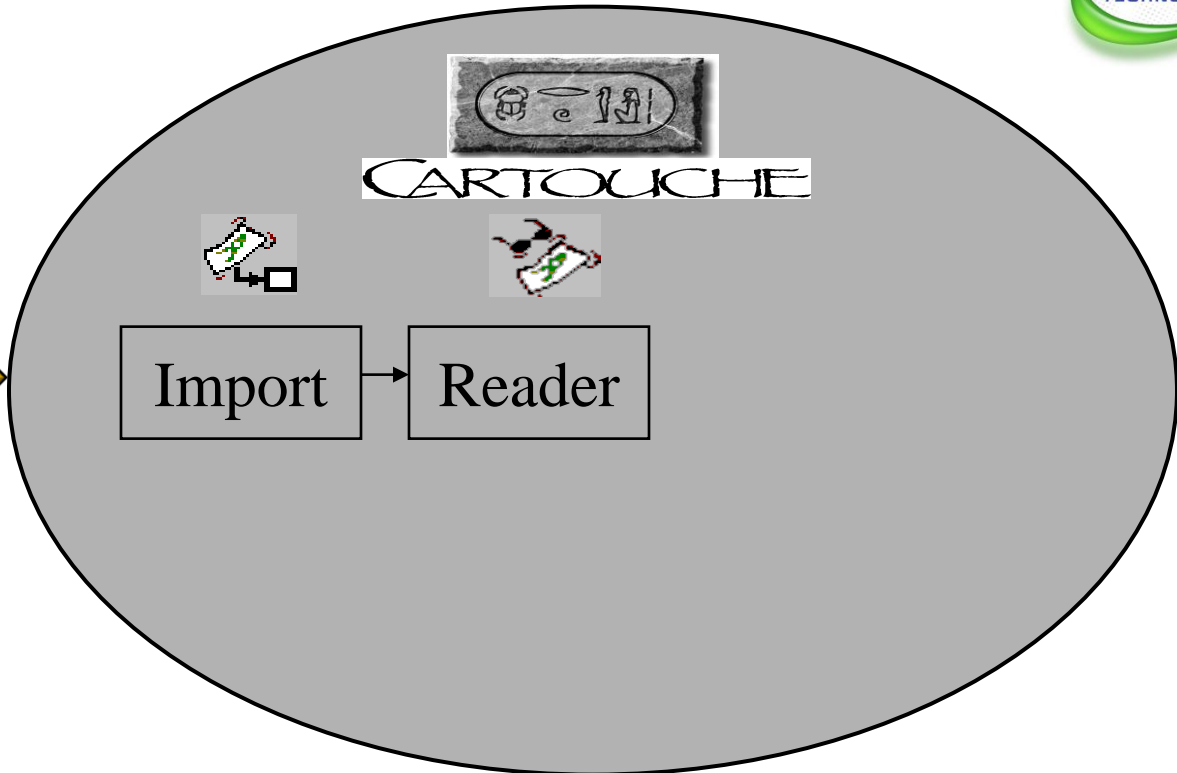
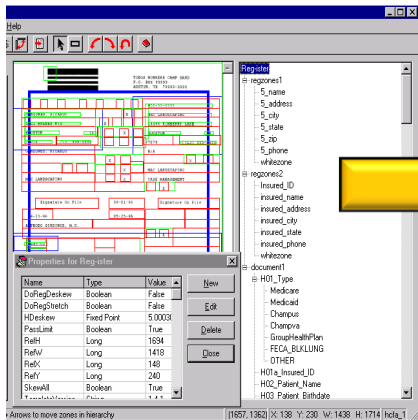
- 1) 200 or **300** dpi.
- 2) Tiffs - Group 4 compression.
- 3) If you can't read it we can't read it.
- 4) Noise (extra pixels).





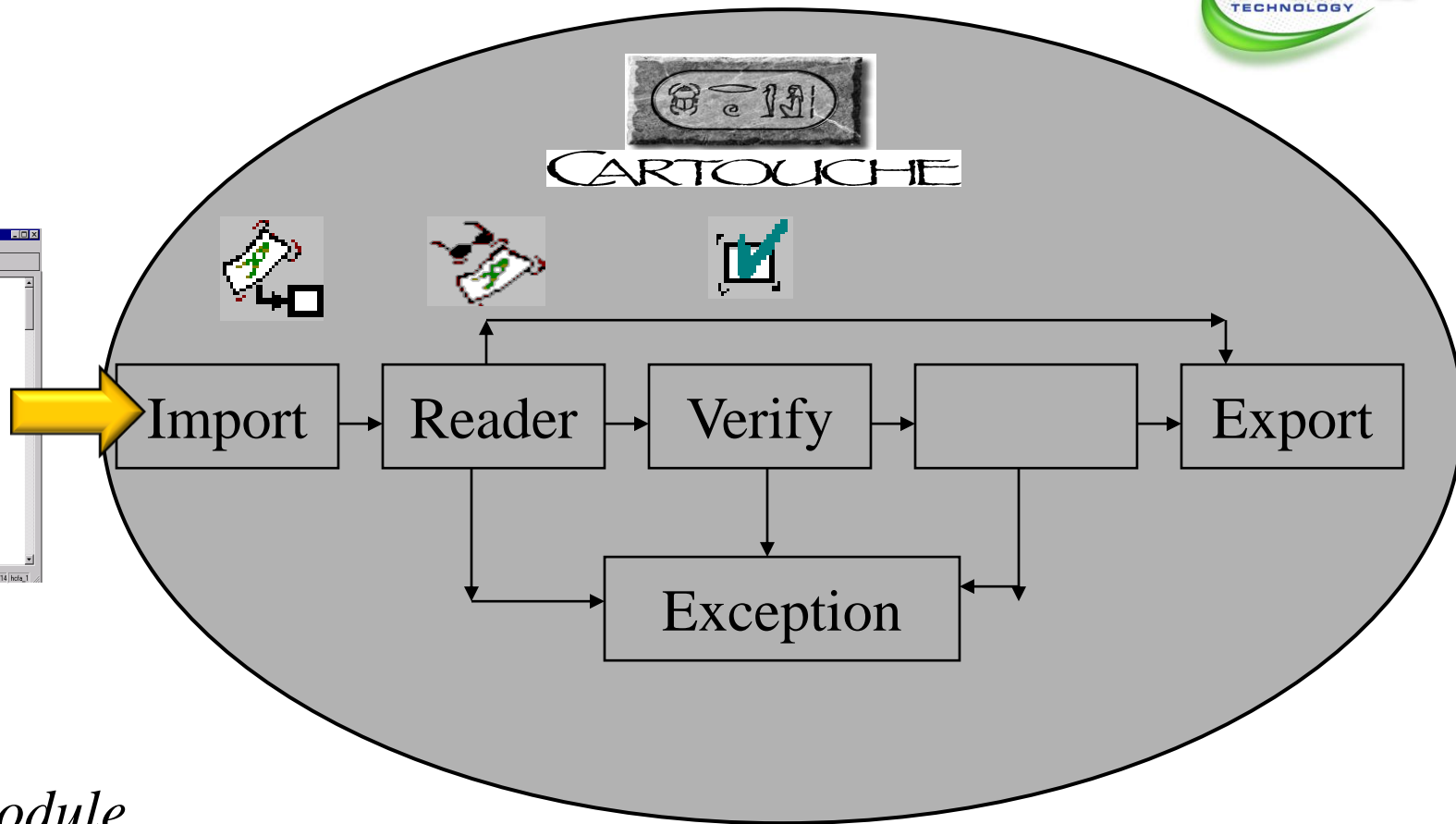
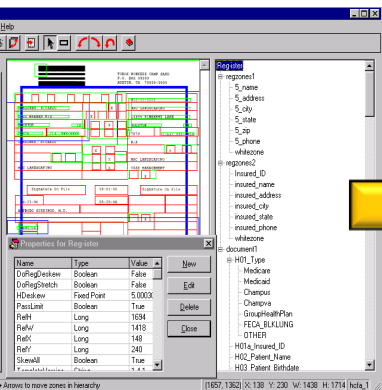
## Import Module

- 1) Create a batch from the published blueprints.
  - 2) Import the tiffs for the batch.
  - 3) Close the batch when all tiffs are imported .
- (export will not export if the batch is open for import)



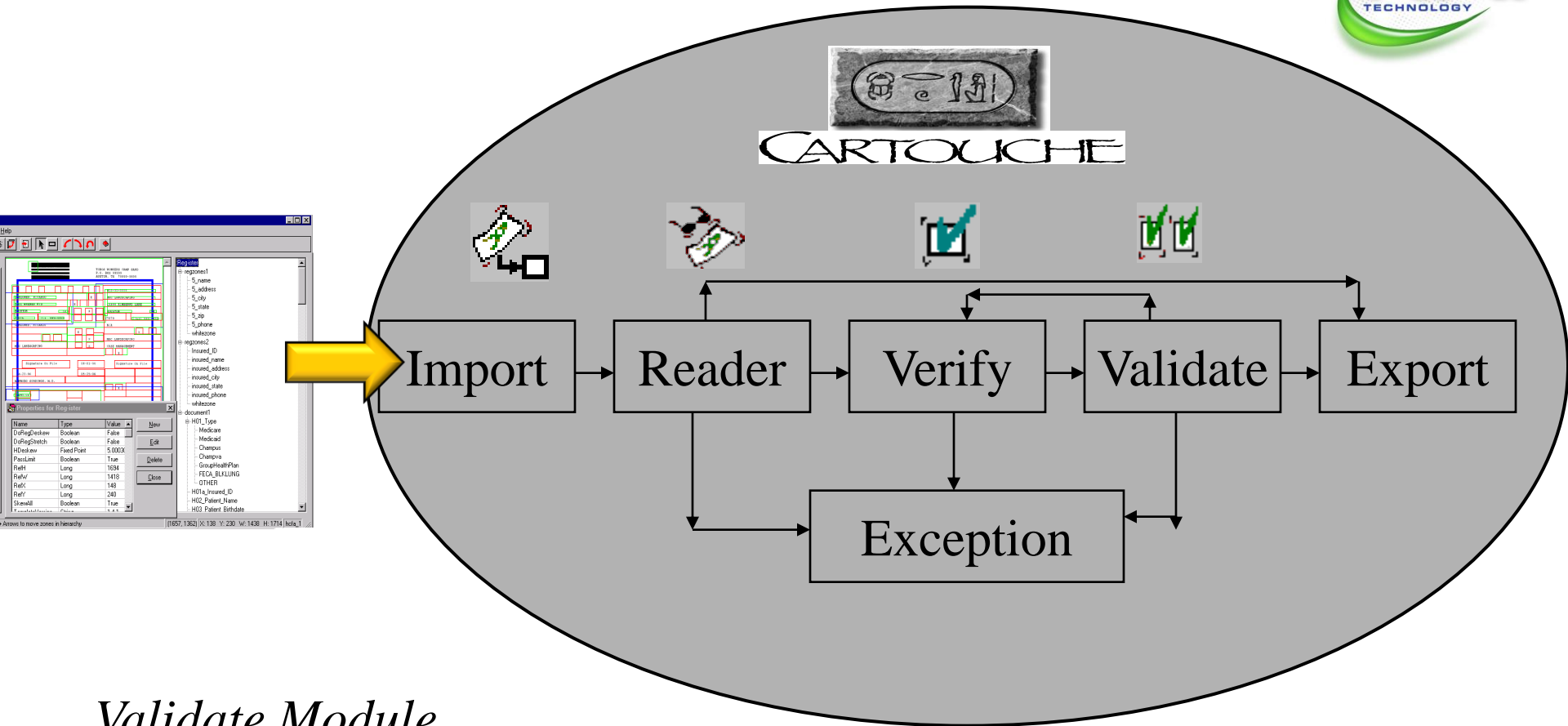
## Reader Module

- 1) Identification (which form is it ?).
- 2) Registration a) deskew b) stretch c) offset (translation).
- 3) Recognition. a) Data Extraction b) Contextual Arguments



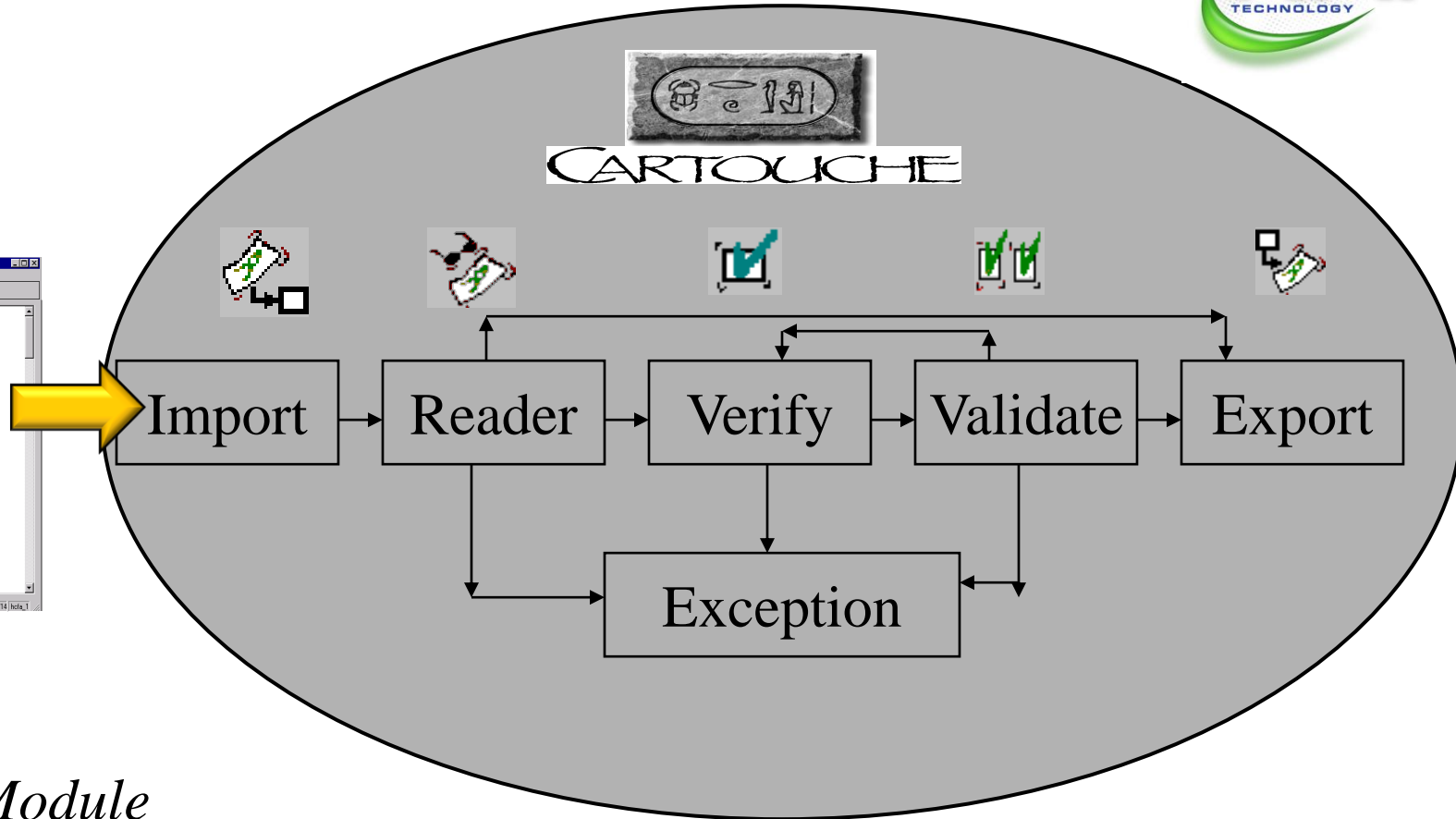
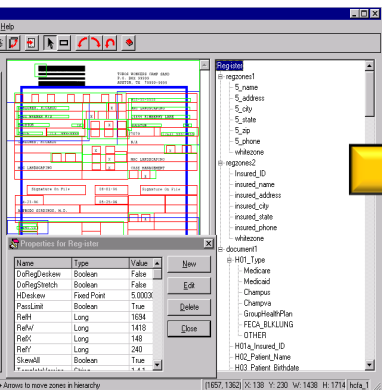
## Verify Module

- 1) Appropriately named.
- 2) Clean-up.



## Validate Module

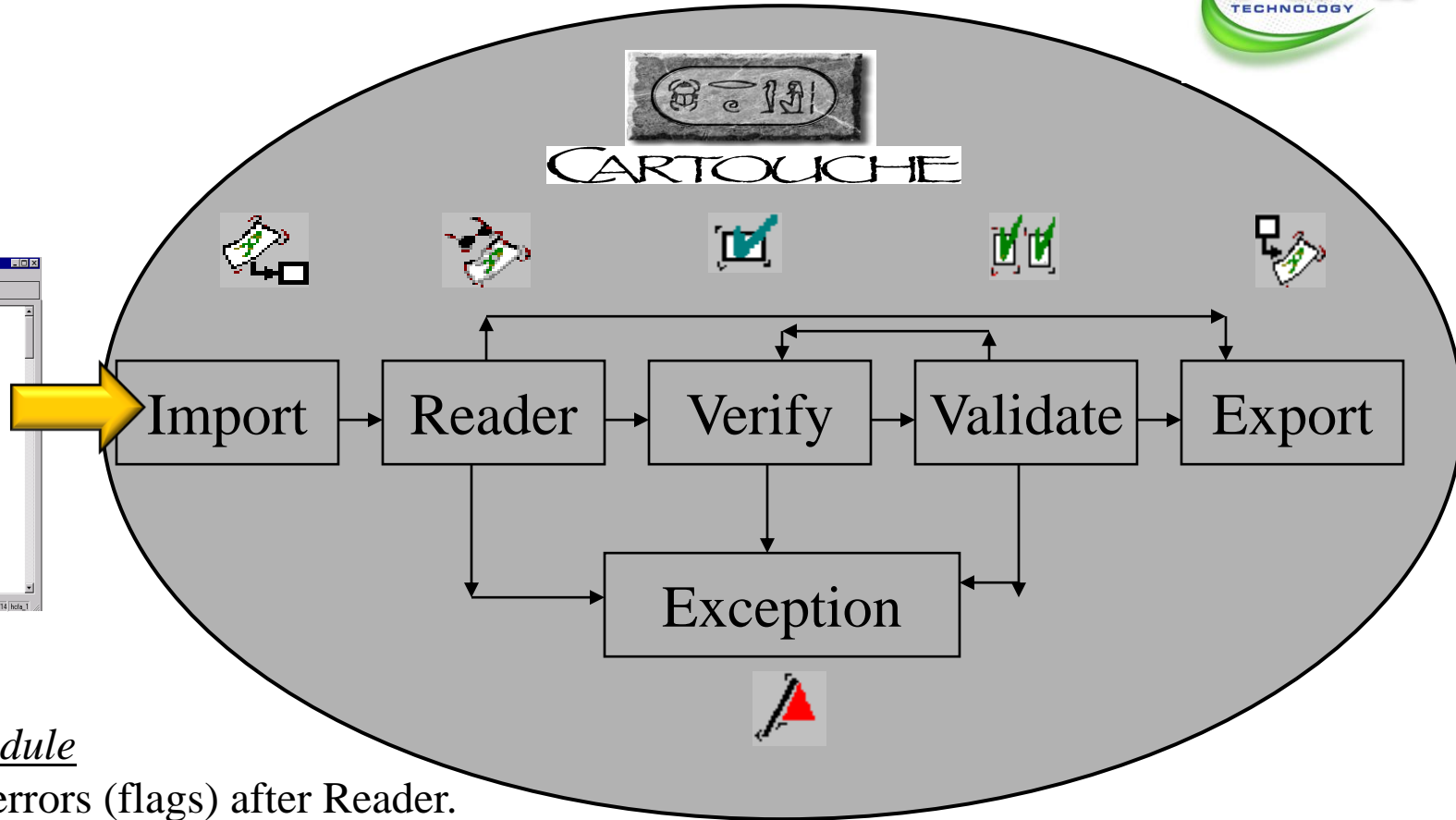
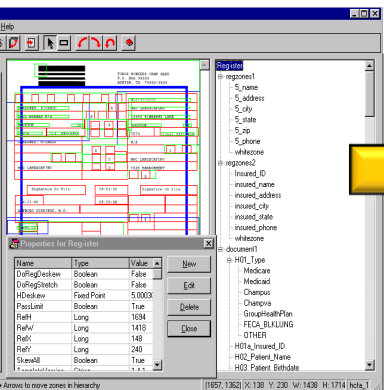
- 1) The person working the Verify can make mistakes.
- 2) The Validate checks the Verify operator with the rules given it.



## Export Module

There are two forms of export.

- 1) Tab delineated.
- 2) Fixed length



## Exception Module

- 1) Too many errors (flags) after Reader.
- 2) Could not identify.
- 3) Could not register.
- 4) Rejected by the Verify Operator.
- 5) Errors occurred.

# Case Study – Olympics Ticket Form



- 93% Single key entry
- 95% ICR without context
- 98.54% *RAF's Cartouche* using context inside recognition
- 99.42% *Cartouche* after edit of flagged characters

Atlanta 1996  
TICKET REQUEST FORM

**MARKING INSTRUCTIONS**  
 • Use a BLUE or BLACK INK PEN only. Do not use a ballpoint pen.  
 • Please PRINT LEGIBLY. Use one character per block in the indicated areas. Keep all printing.  
 • Make a copy for your records, submit original only.

**MARKING EXAMPLES**  
 Correct  Incorrect  X   
 Use CAPITAL letters for HANDPRINT areas.

**1 CUSTOMER INFORMATION**  
 Type of alternative seating you are requesting  
 OR MENGE JACK H

1921 WILLIAM PENN WAY  
 LANCASTER PA 17601 717 295 1796  
 MEHAFFEY 0605 717 295 1796

**2 TERMS AND CONDITIONS**  
 I have read and understand the policies, terms and conditions stated in the Ticket Request Form brochure. I agree to the policies, terms and conditions including, but not limited to, the following: No refunds after ticket confirmation is issued, except for any remaining credit balance (if applicable). No additional notes, requests or attachments will be accepted.  
 The \$1.00 processing fee is non-refundable upon submission of the Ticket Request Form. All sports and Olympic Arts Festival schedules are subject to change. All Ticket Request Forms must include the signature in ink of the person submitting the form. A.C.C. reserves the right to reject any ticket request that does not meet all conditions of sale. If you use a credit card to pay for your ticket, your authorizing signature grants A.C.C. the right to make subsequent adjustments to your total payment due, if errors are found in your calculation.

**5 PAYMENT TOTAL**  
 Enter at right the Total Ticket Price as calculated on the reverse side.  
 Please enclose this

**6 Total Ticket Price** 1600 0 0  
**7 Ticket Fulfillment Fee** 36 0 0  
**8 Non-Refundable Processing Fee** 15 0 0

A stylized orange starburst icon with multiple points, positioned to the left of the main title.

# Radiant Asset Management

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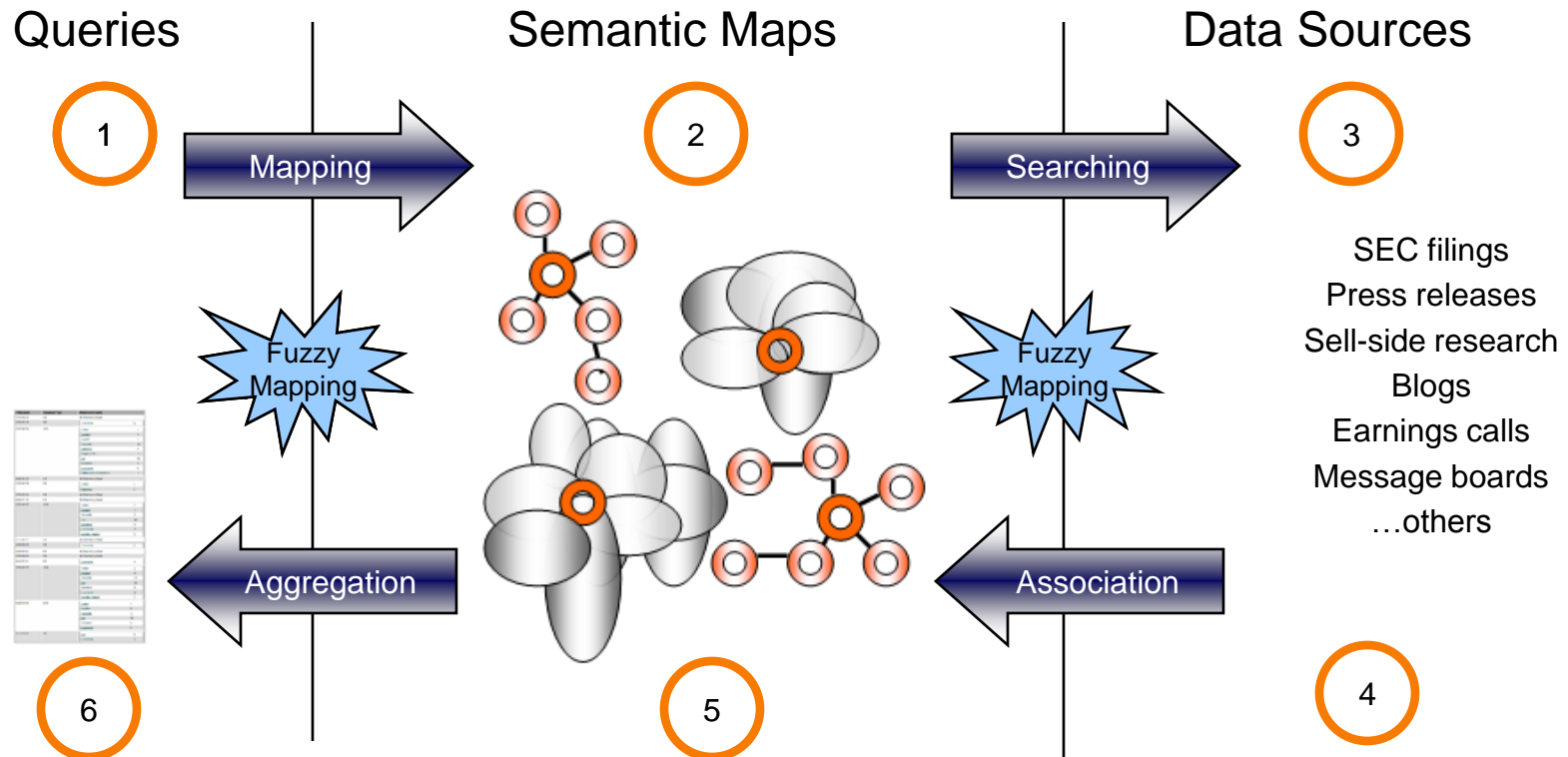
## Semantic Search

# Semantic Engine Process



## Innovative Approach: Process for Finding, Scrubbing and Quantifying Relevant Data

***Our semantic search engine finds relevant data in text and quantifies it for later use.***



# Example...finding "Rising Margins"



## Radiant Metrics

Import | Watchlists | Companies | Models | Reports

Sources | Concepts | Logout

### Result 1 of 5 from RJF: 8-K on 01/04/2004

Concept:

Company:

From:

To:

Pinpointing "Rising Margins" concept for Raymond James Financial within SEC filing, 8-k document

Jump To:    Only Examine Unvalidated:

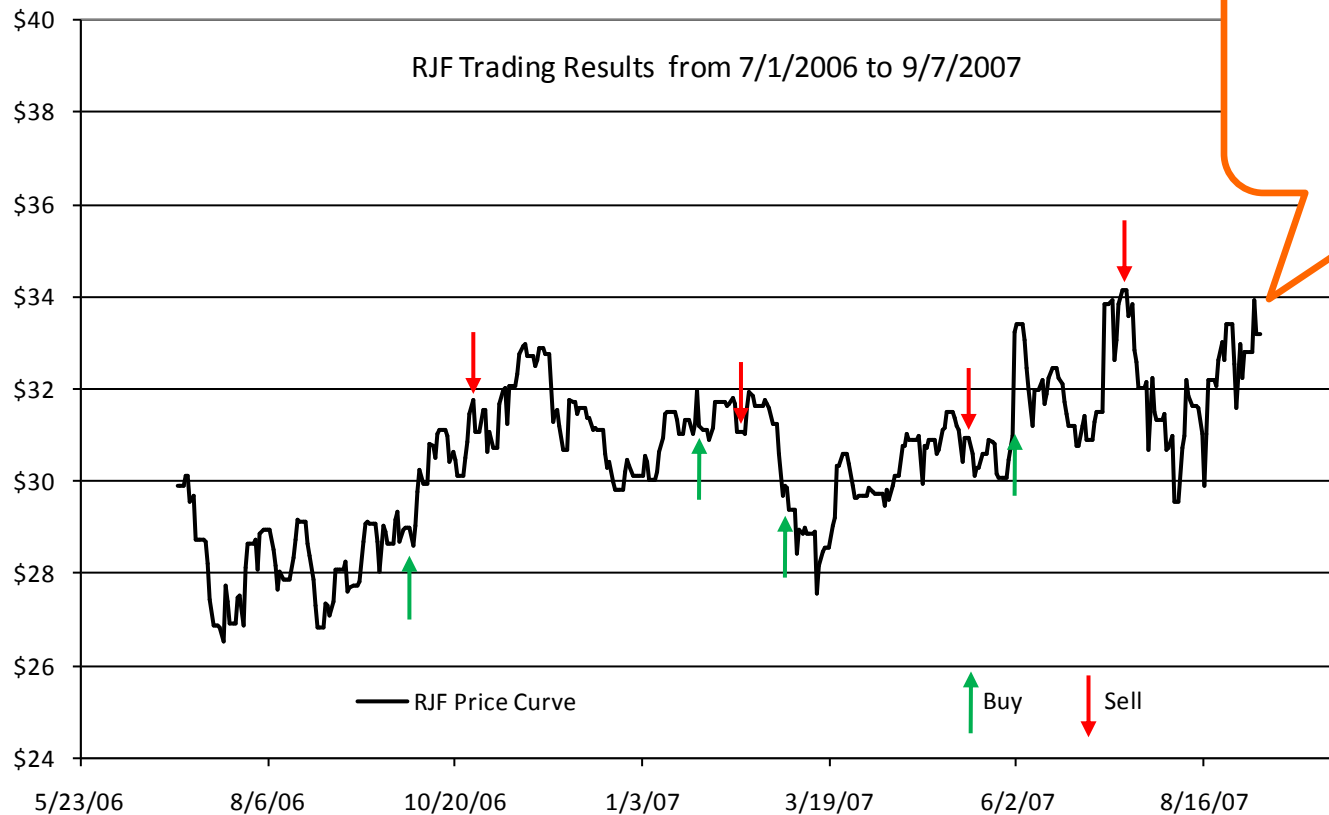
remains strong and corporate earnings are rising rapidly. Later this year, interest rates will probably begin to increase, dampening the robust growth in the economy, but the intermediate-term outlook is still benign as the rate of increase probably will be gradual," he concluded.

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# It Works, Proven Results



## o Trading Example: Raymond James Financial (RJF)



11% Stock Return  
-----  
26% Radiant Return

**For More  
Information Please  
call us at  
1 (425) 867-0700**

