10th Global Health Insurance Conference, Berlin September 20-21, 2018

Implementing Robotic Process Automation and Artificial Intelligence for operational efficiency

AP Companies
Since 1997
ISO 9001 Certified
ISO 27001 Certified
Medically licensed
AEB member
ARC Europe member
IMHA member

AP
COMPANIES

AP Companies facts:

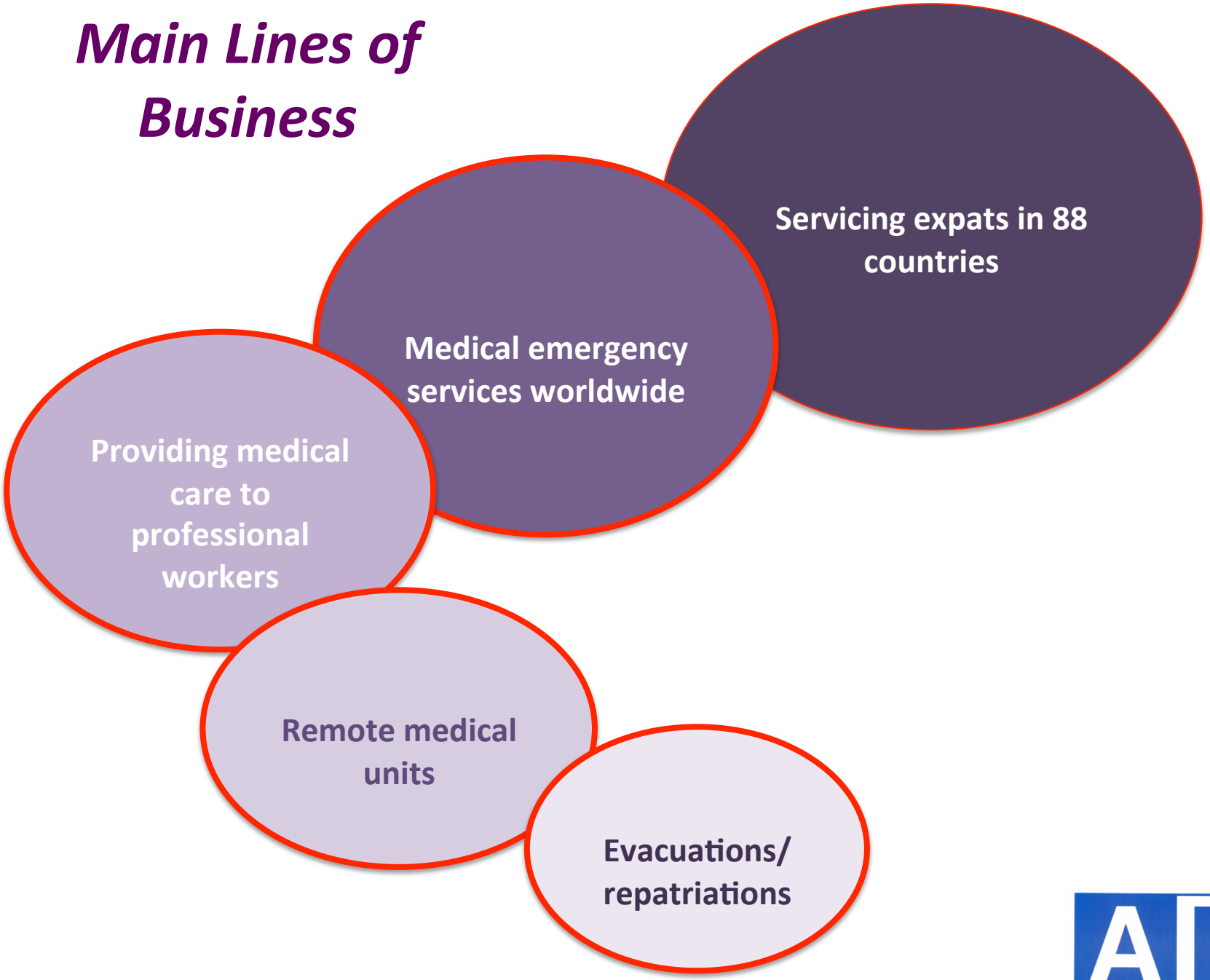
- ✓ Founded in **1997**
- ✓ Offices in **8 countries**
- ✓ 4 independent **24/7** call-centers
- ✓ 3 in-house developed software
- ✓ **24** different languages spoken
- ✓ **47** own medical units
- ✓ Worldwide medical network of more than **37 500** providers

Main figures 2017:

- ✓ Number of employees - 292
- ✓ Number of cases - 120 033
- ✓ Number of claims – 338 001
- ✓ Number phone calls per day - 3308
- ✓ Number of evacuations on ground ambulances - 387
- ✓ Number of evacuations on air ambulances and commercial flights - 204

AP COMPANIES

Main Lines of Business

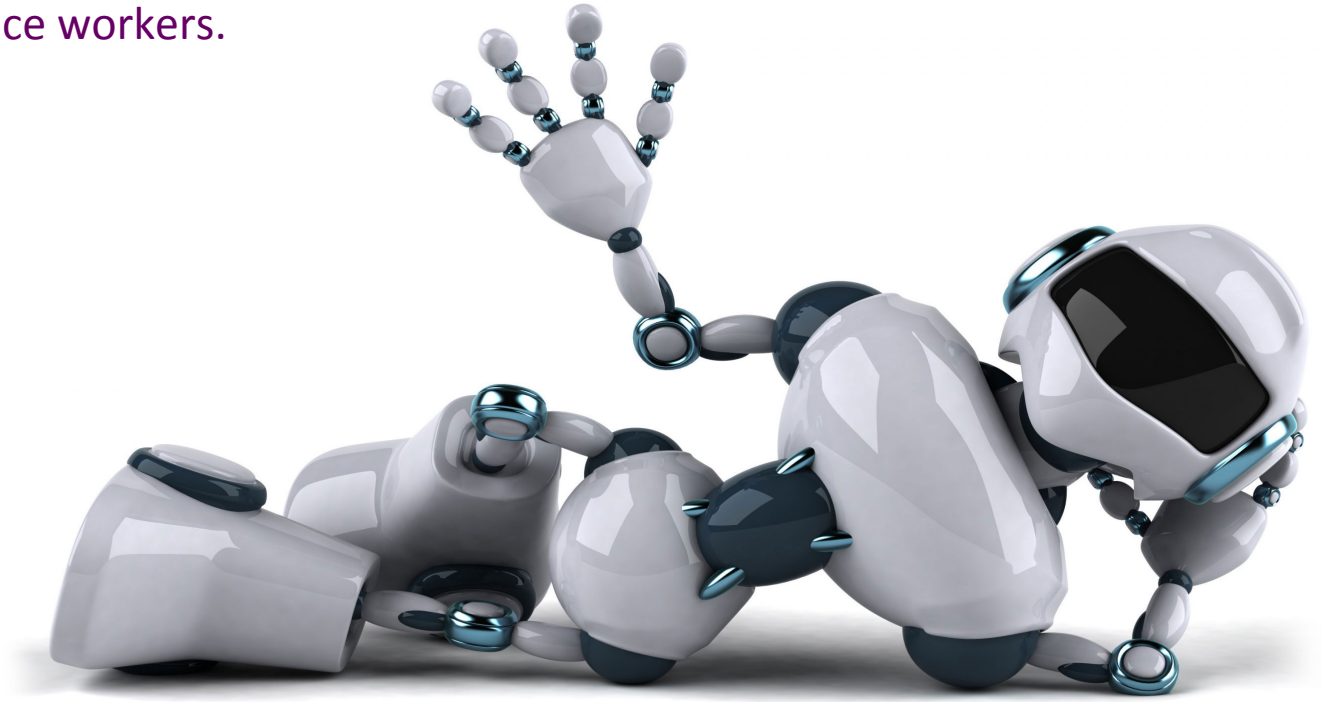


AP COMPANIES

Definitions

- **Artificial Intelligence (AI)** is the intelligence demonstrated by machines and software. AI is able to apply what it learns to new situations.

- **Robotic Process Automation (RPA)** is an emerging form of business process automation technology based on the notion of software robots or artificial intelligence workers.



Artificial Intelligence in Healthcare
https://youtu.be/l_gh5n5c4Sg

AP COMPANIES

New investment? What for?

AP COMPANIES

Benefits of RPA in health insurance claims:

- 50% reduction of health insurance claims processing costs
- Increased claims processing speed by up to 70%
- RPA insurance processes can run 24/7/365
- Reduction of error rates by 60%
- Decreased policy issuance time
- Health insurance RPA maintains regulatory compliance up to 100%

AP COMPANIES

AI +RPA implementation in insurance claims management

Exhibit 1

The current process for hospital claims management is cumbersome and inefficient

SOURCE: McKinsey

AP COMPANIES

RPA use in health insurance claims management

Pre RPA

- Receive pdf claim from customer
- Manually check member in the system
- Manually attach the claim to claim processing system and enter claims details into the system
- Manually copy and paste data into the claims system
- Manually notify customer through outlook that their claims is being processed

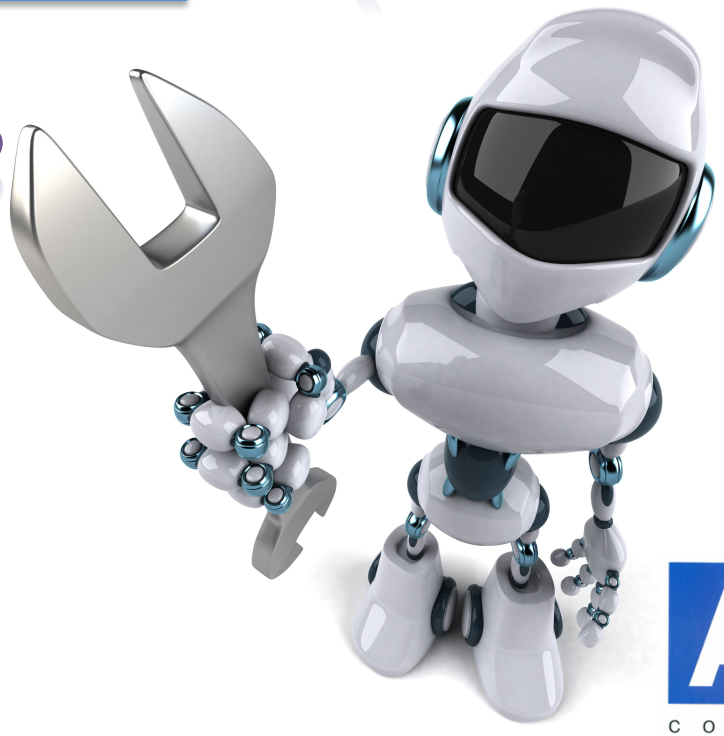
After RPA

- RPA opens email application and .pdf file
- RPA validates claims submitter as a customer
- RPA attaches the actual .pdf claim automatically
- RPA copies the .pdf fields from the form and pastes them into the web-based system
- RPA sends the claim to the back office for approval while sending automated notification to the customer

AP
COMPANIES

Developing cognitive systems:

1. Compiling and processing suitable data
2. Analyzing data on patients, diagnoses and claims via statistical models
3. Test data is used to train the cognitive system
4. Cognitive systems are programmed and benchmarked – best is selected
5. Final piloting phase – on live cases and further refining



AP COMPANIES

Minimum requirements:

- ✓ Digitized original claims
- ✓ An established claims management process
- ✓ Structured, digitized documentation on results

AP
COMPANIES

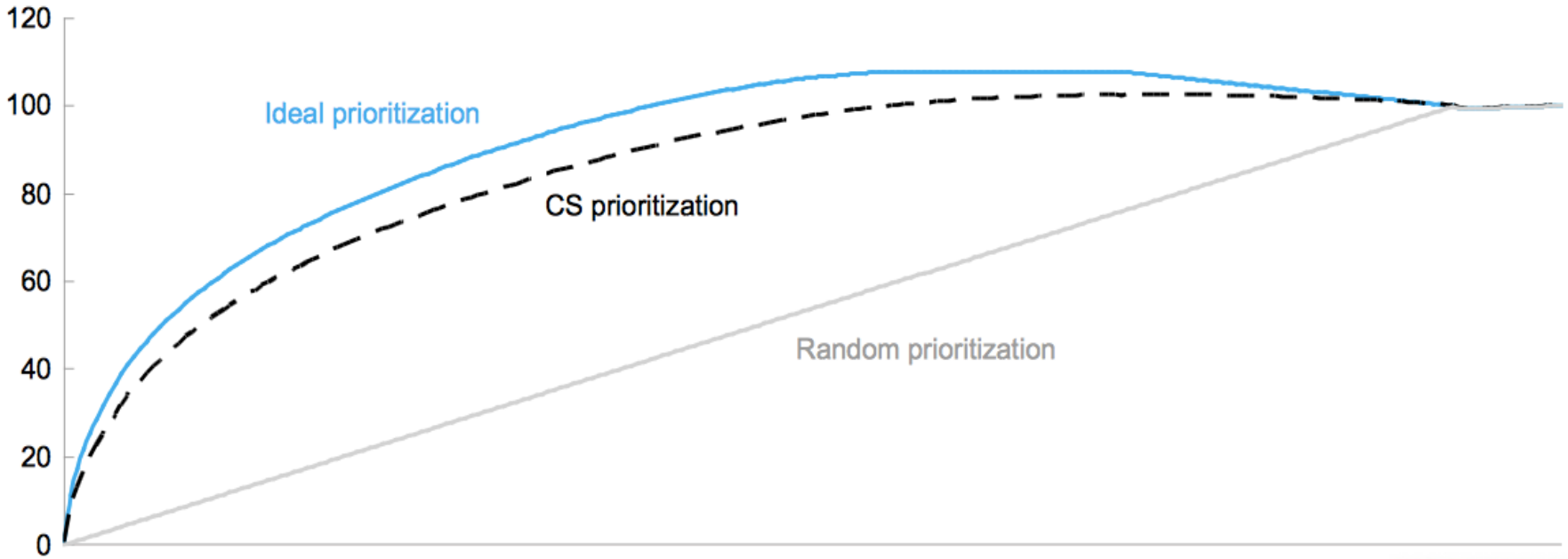
AI – driven prediction models

Exhibit 2

AI-driven prediction models for identifying reduction potential nearly reach the ideal hit rate

Cases prioritized by cognitive system based on potential
(Test data)

Share of total reduction amount, percent

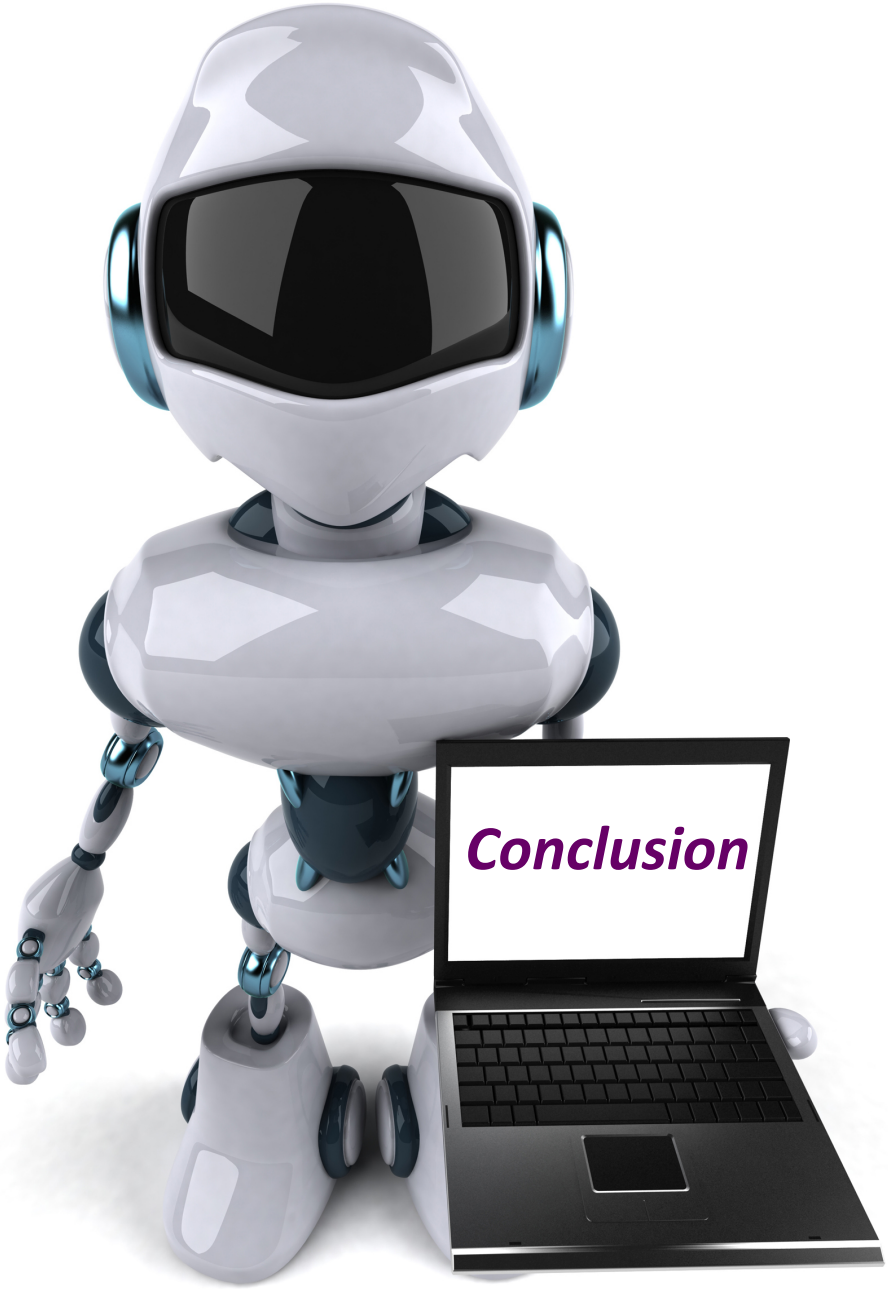


AP COMPANIES

Implementing AI & RPA at AP Companies:

- ✓ Automated cost containment system
- ✓ Claims management

AP COMPANIES



The shift away from claims management based on rigid rule books in favor of smart algorithms leads to greater efficiency and valid decisions – thus relieving the burden on all stakeholders and delivering savings.

So it pays to start investing in suitable IT architecture now and create the agile framework needed to fully exploit the opportunities afforded by the new technologies.

AP
COMPANIES

References:

1. .McCorduck 2004, pp. 17–25
2. "Stephen Hawking believes AI could be mankind's last accomplishment". BetaNews. 21 October 2016. Archived from the original on 28 August 2017.
3. «Artificial Intelligence." Encyclopedia of Emerging Industries, edited by Lynn M. Pearce, 6th ed., Gale, 2011, pp. 73–80. Gale Virtual Reference
4. AI interns:Software already taking jobs from humans, New Scientist
5. Artificial Intelligence in health insurance. Smart Claims Management with self-learning software. McKinsey &Company, September 2017
6. Berlinski, David (2000). The Advent of the Algorithm. Harcourt Books. ISBN 0-15-601391-6. OCLC 46890682.
7. Brusk, Chris. "Five Robotic Process Automation Risks to Avoid". MIT Sloan Management Review. MIT Sloan Management Review. Retrieved 28 June 2018.
8. Definition of AI as the study of intelligent agents:
9. Ford, Martin; Colvin, Geoff (6 September 2015). "Will robots create more jobs than they destroy?". The Guardian. Retrieved 13 January 2018.
10. Gartner Predicts 2014: Business and IT Services Are Facing the End of Outsourcing as We Know It, Gartner
    1. Legg & Hutter 2007.
    2. Nilsson 1998
11. Nine likely scenarios arising from the growing use of software robots (PDF), London School of Economics
    1. Poole, Mackworth & Goebel 1998, p. 1
12. Robotic Automation Emerges as a Threat to Traditional Low Cost Outsourcing, HfS Research, archived from the original on 2015-09-21
13. Robotic Process Automation at Xchanging (PDF), London School of Economics
    1. Russell & Norvig (2003)
14. Samuel, A. L. (July 1959). "Some Studies in Machine Learning Using the Game of Checkers". IBM Journal of Research and Development. 3 (3): 210–229. doi:10.1147/rd.33.0210.
15. Schaeffer J. (2009) Didn't Samuel Solve That Game?. In: One Jump Ahead. Springer, Boston, MA
16. Technology is not about to steal your job, www.techworld.com
17. What knowledge workers stand to gain from automation, Harvard Business Review
18. White Collar Robots: The Virtual Workforce, TEDx Talks

AP COMPANIES

Natalya Butakova
Business Development Manager
natalya@ap-companies.com
+ 34 93 7370455
www.ap-companies.com

AP COMPANIES