

*INTELLECTUAL CAPITAL
ROI*

*MEASURING HR
AND ITS IMPACT*

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HR MEASUREMENT AND TEENAGE SEX

1. The reality is that when you finally do it, you are never satisfied.
2. The few who are doing it, are probably not doing it well.
3. Those who say they are doing it, are probably lying.
4. No one is sure what it is, but they hear that it is great.
5. Everyone thinks everyone else is doing it.

Harvard Business Review

www.hbr.org



November 2003



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Coming Up Short

nonfinancial indicators usually reflect realms of intangible value, such as R&D productivity, that accounting rules refuse to recognize as assets.

that most companies have made little attempt to identify areas of nonfinancial performance that might advance their chosen strategy. Nor have they demonstrated a

receive better information on the specific actions needed to achieve strategic objectives. And investors can have a better sense of the company's overall performance, since nonfinancial indicators usually reflect realms of intangible value, such as R&D productivity, that accounting rules refuse to recognize as assets.

But the reality is that only a few companies realize these benefits. Why? Because they fail to identify, analyze, and act on the right nonfinancial measures. We conducted field research in more than 60 manufacturing and service companies and supplemented it with survey responses from 297 senior executives. To our surprise, we discovered that most companies have made little attempt to identify areas of nonfinancial performance that might advance their chosen strategy. Nor have they demonstrated a

Develop a causal model. The first step is to develop a causal model based on the hypotheses in the strategic plan. Unfortunately, however, many companies' strategic

promise of nonfinancial performance measures.

Develop a causal model. The first step is to develop a causal model based on the hypotheses in the strategic plan. Unfortunately, however, many companies' strategic plans are more like mission or vision statements than road maps. In the absence of strategic clarity and concrete detail, managers are prone to disagree about which performance areas are critical to success, and that can make consensus about the causal model difficult to reach. If that's the case, it's best to test a couple of different causal models. Once its merits have been proven, the model finally chosen will be hard to argue with and will be the source of broad-based agreement about strategy.

Pull together the data. Most companies already track large numbers of nonfinancial measures in their day-to-day operations. So to avoid going to the trouble of collecting data that already exist, companies should take careful inventory of all their databases. This inventory should not limit itself to performance measurement systems but should extend to

regressions in their market research and quality improvement efforts. A good example of such statistical techniques is an approach used at Sears, which sought to develop a causal model and scorecard focused on three domains: employee relations ("compelling place to work"), customer satisfaction and loyalty ("compelling place to shop"), and results for shareholders ("compelling place to invest"). Like many companies, the retailer had already tracked hundreds of suspected drivers of performance within these domains. Because the data on them came from a large cross section of stores, the company was able

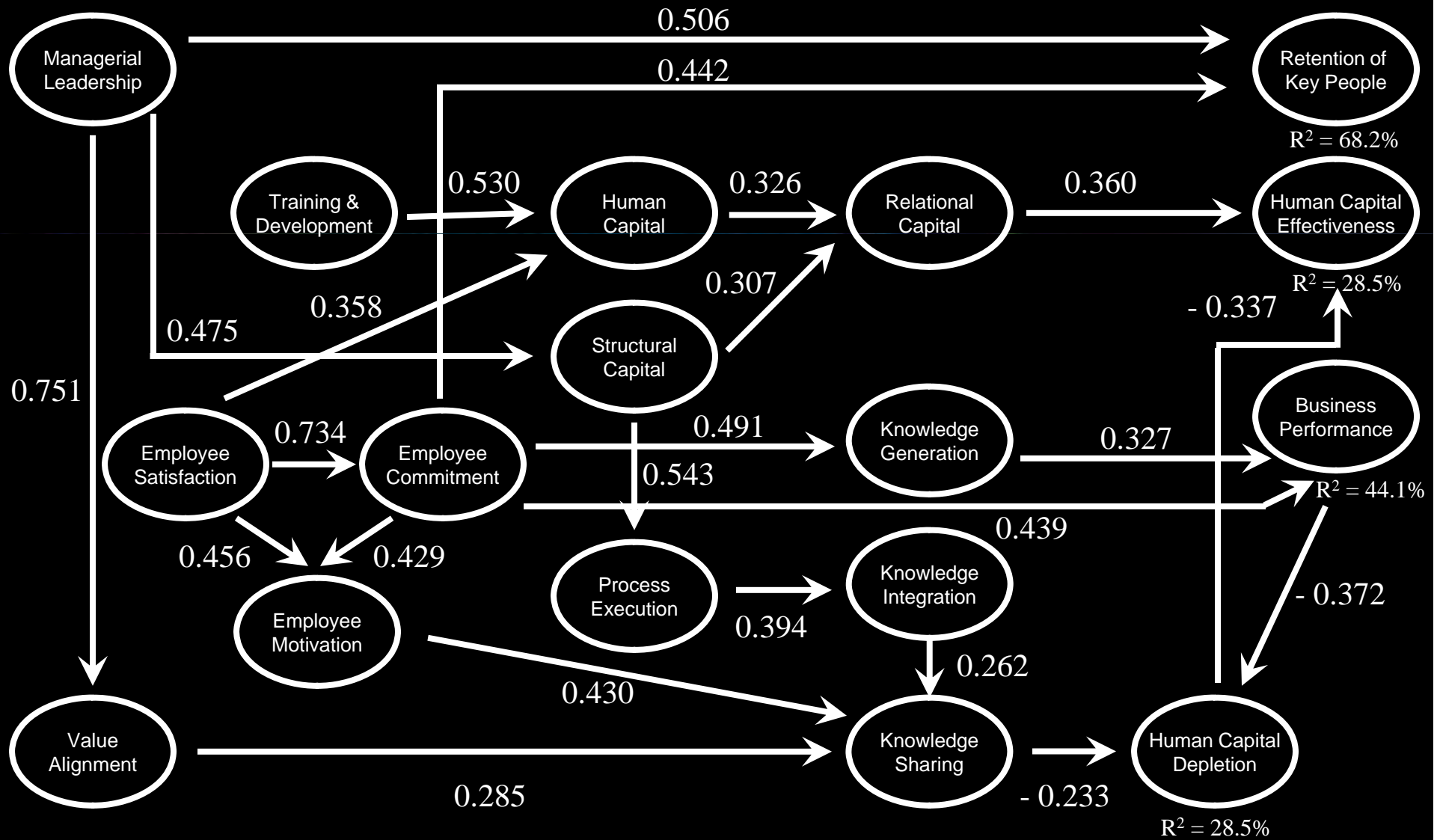
Our Research

This article is based on extensive field research into more than 60 manufacturing and service companies, where we interviewed senior and middle managers about their organizational strategies and performance measurement systems. Since the data obtained from these companies are proprietary, we have kept company names confidential.

In 14 of the companies, we investigated the extent to which nonfi-

Pull together the data. Most companies already track large numbers of nonfinancial measures in their day-to-day operations. So to

CAUSAL MODEL: INSURANCE SECTOR



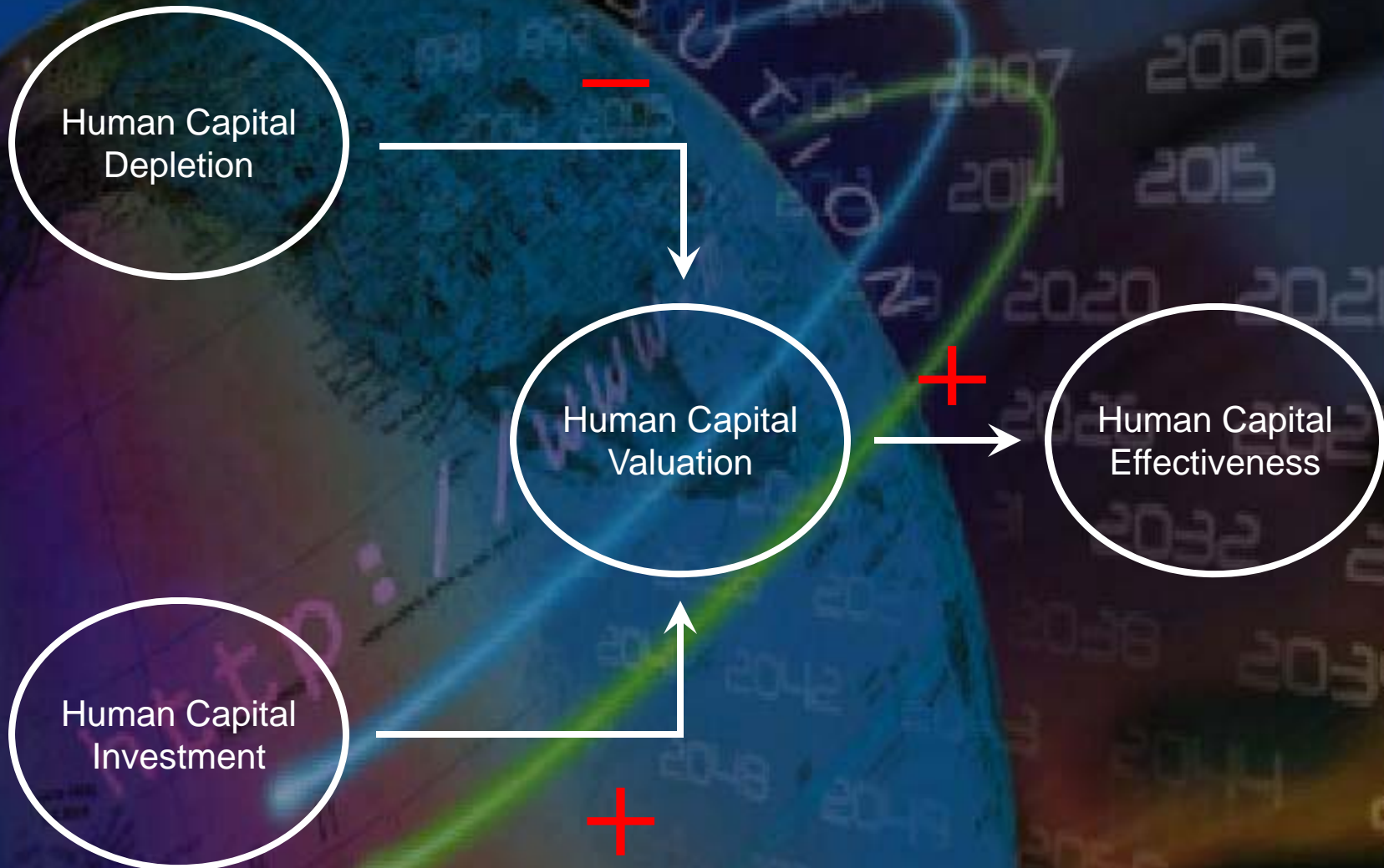


PARTICIPATING ORGANIZATIONS

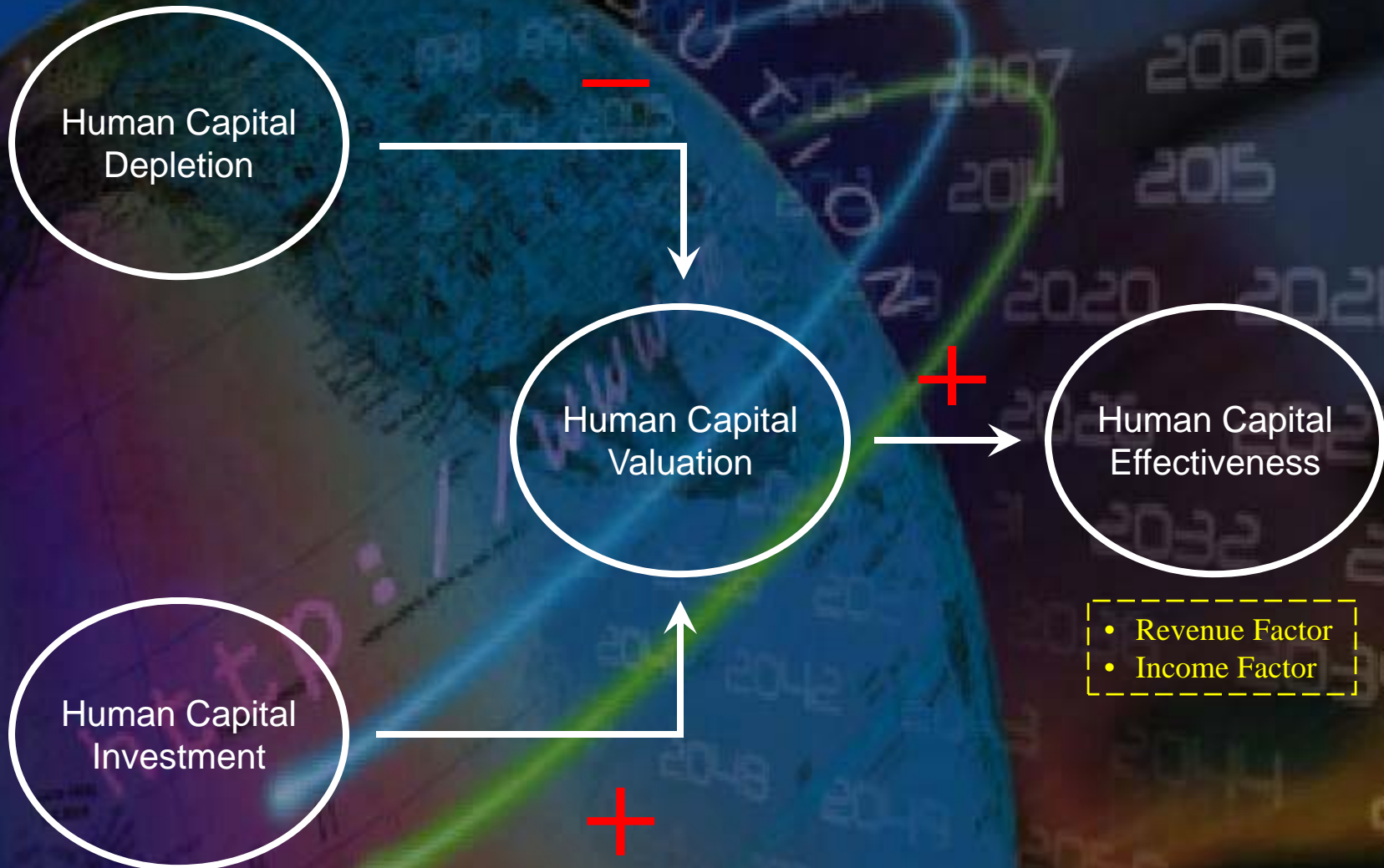
ABN AMRO North America Inc.
Allstate Insurance Company
AMP Australia
AMP UK
Andersen Consulting
Aon
AXA Client Solutions
Blue Cross Blue Shield of Florida
Blue Cross Blue Shield of Illinois / Texas
Blue Cross Blue Shield of North Carolina
CNA Commercial Insurance
Equitax
Farmers Insurance Group

Hartford Financial Services
Hewitt Associates, LLC
Intermountain Health Care
International Monetary Fund
Merrill Lynch
National City Corp.
Northwestern Mutual Life
Penn National Insurance
PNC Bank
Savings Bank of Utica
United Health Group
Zurich U.S.

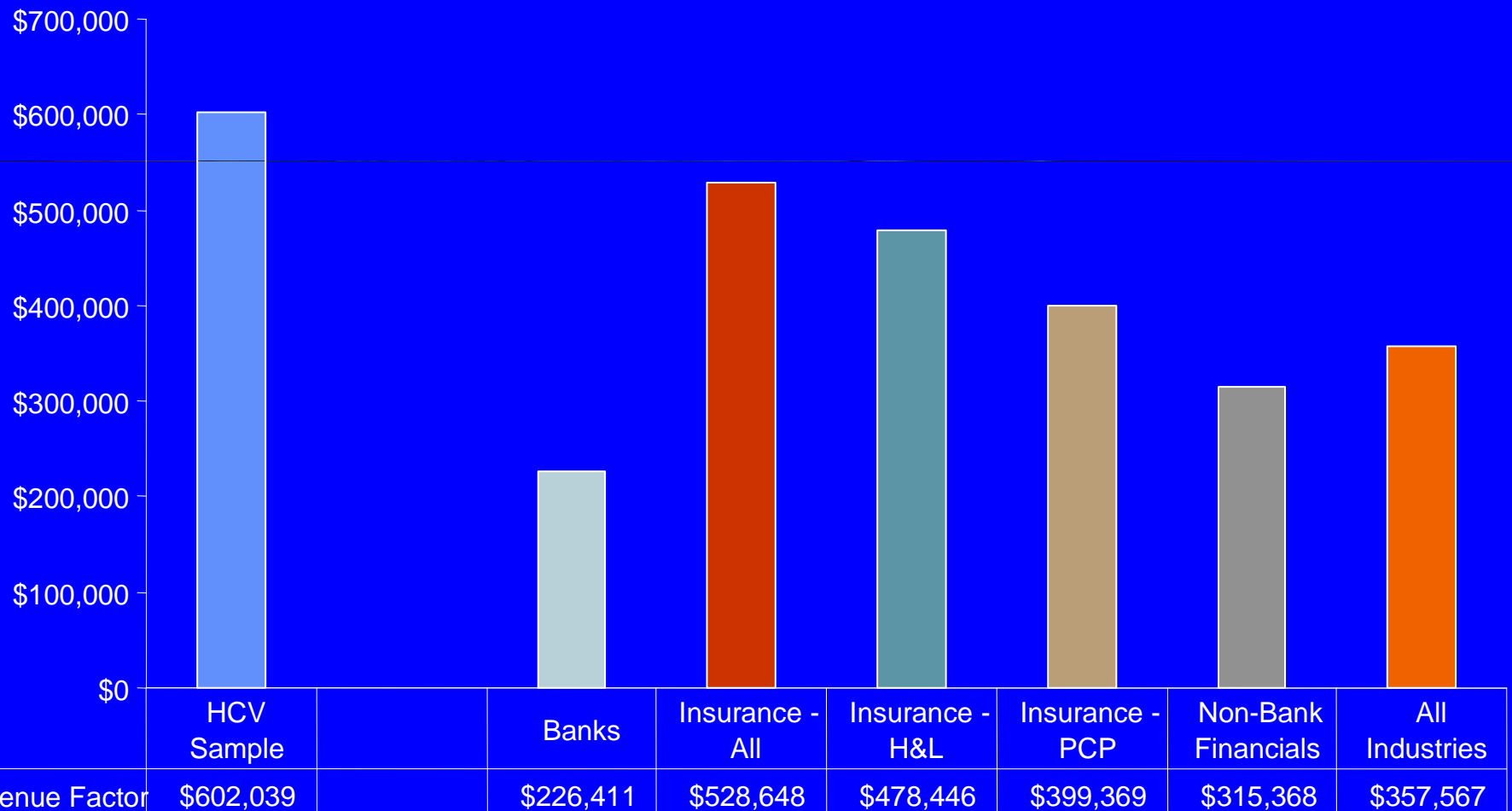
QUANTITATIVE METRIC MODEL



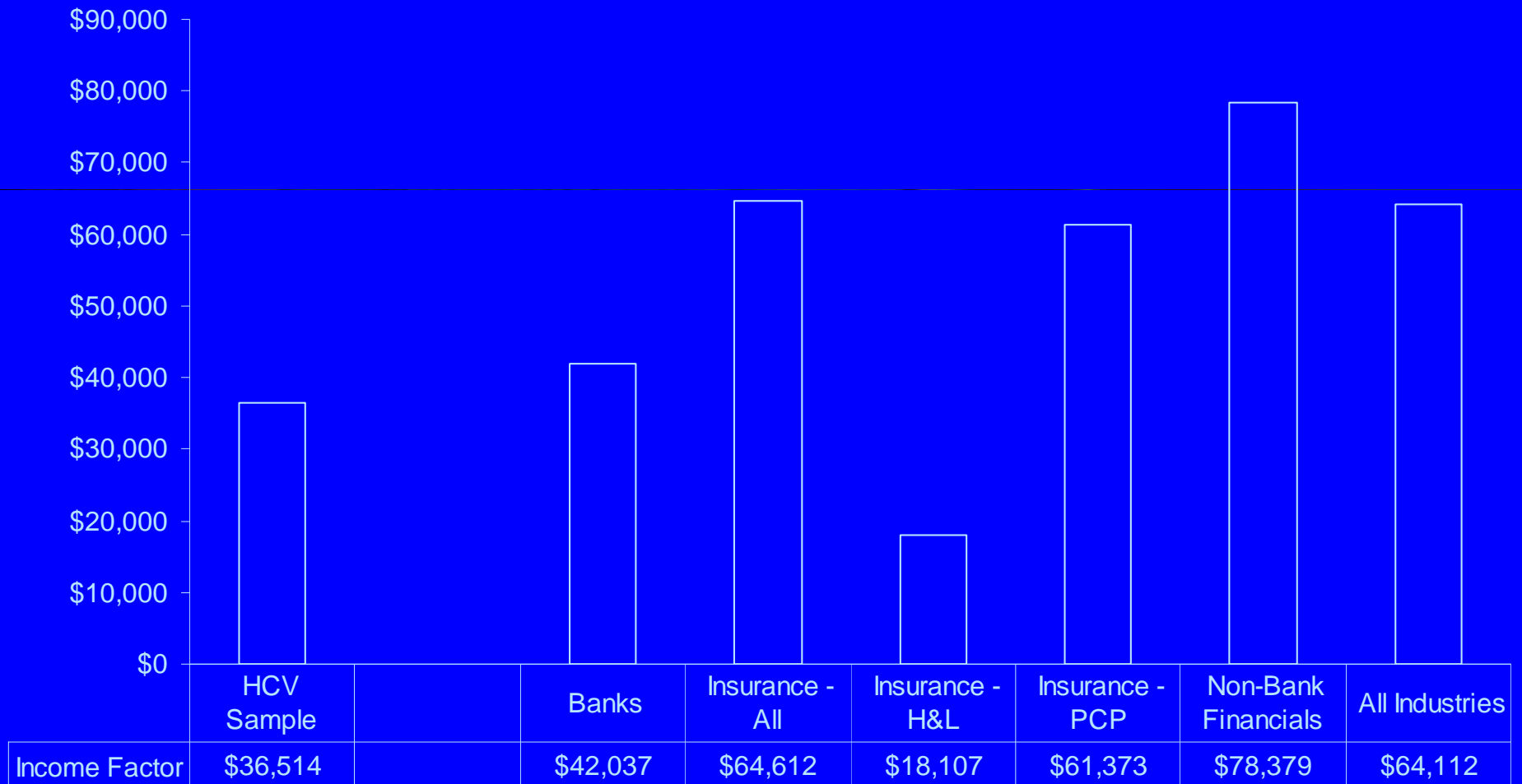
QUANTITATIVE METRIC MODEL



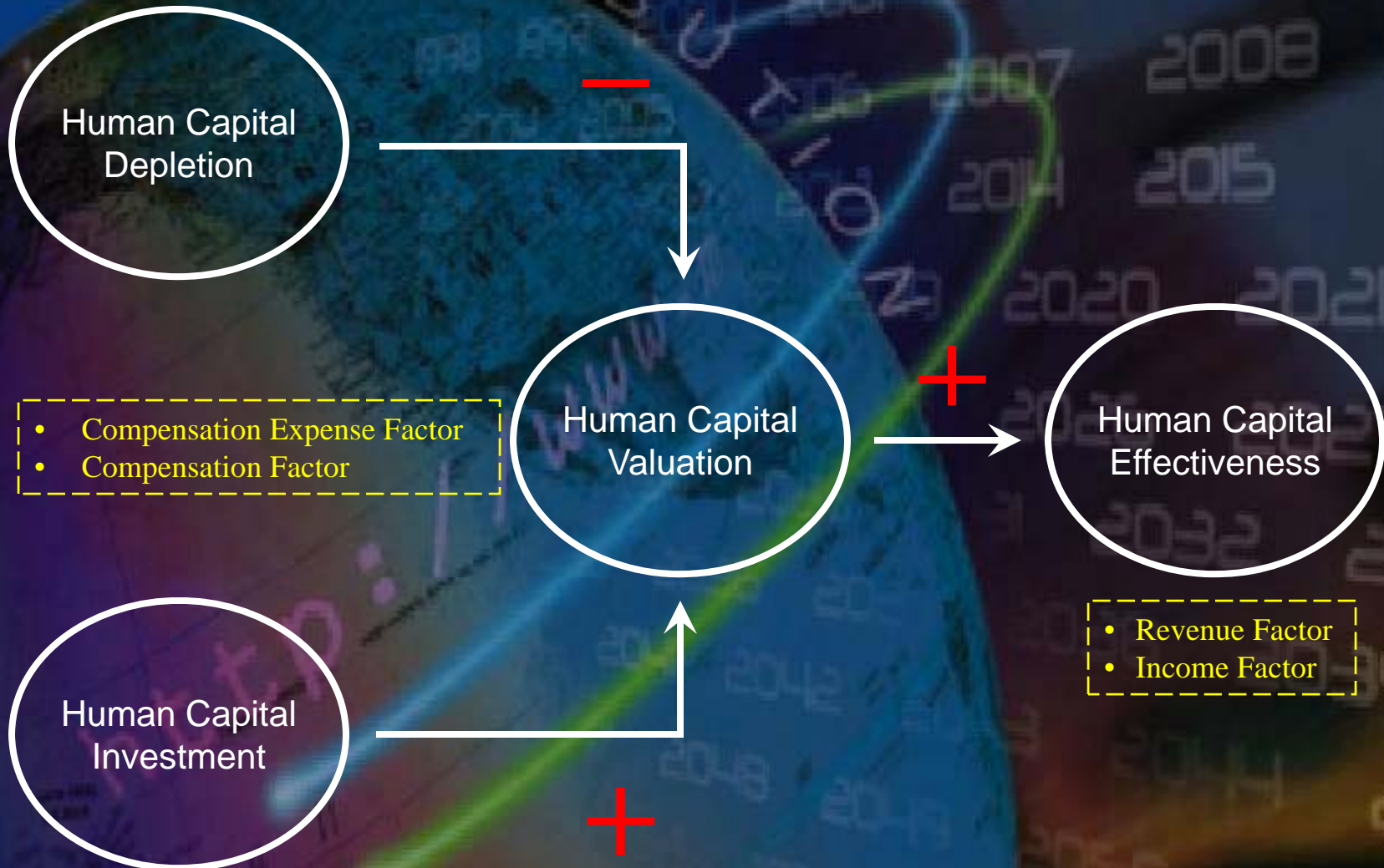
HIC EFFECTIVENESS - REVENUE FACTOR



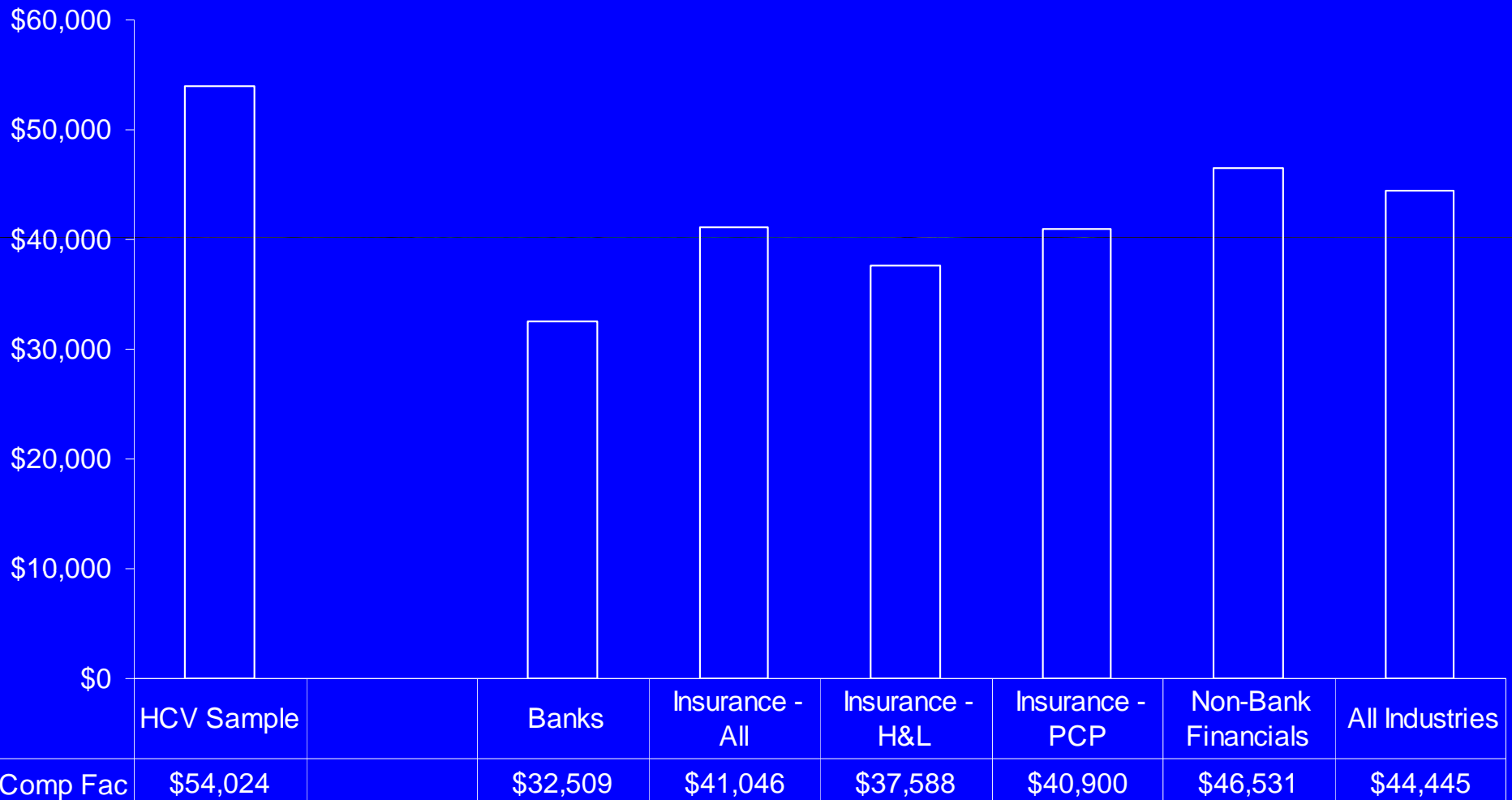
HIC EFFECTIVENESS - INCOME FACTOR



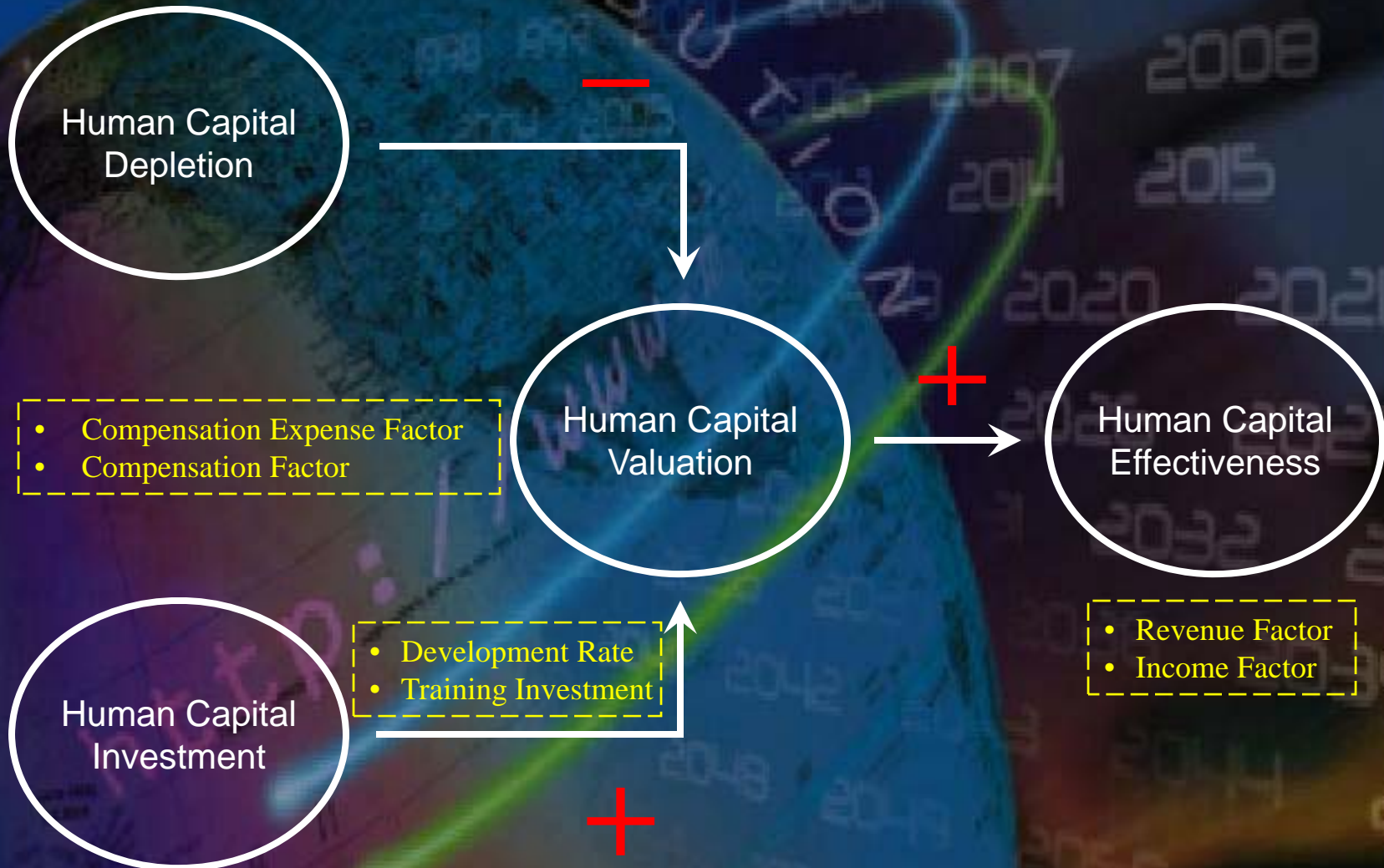
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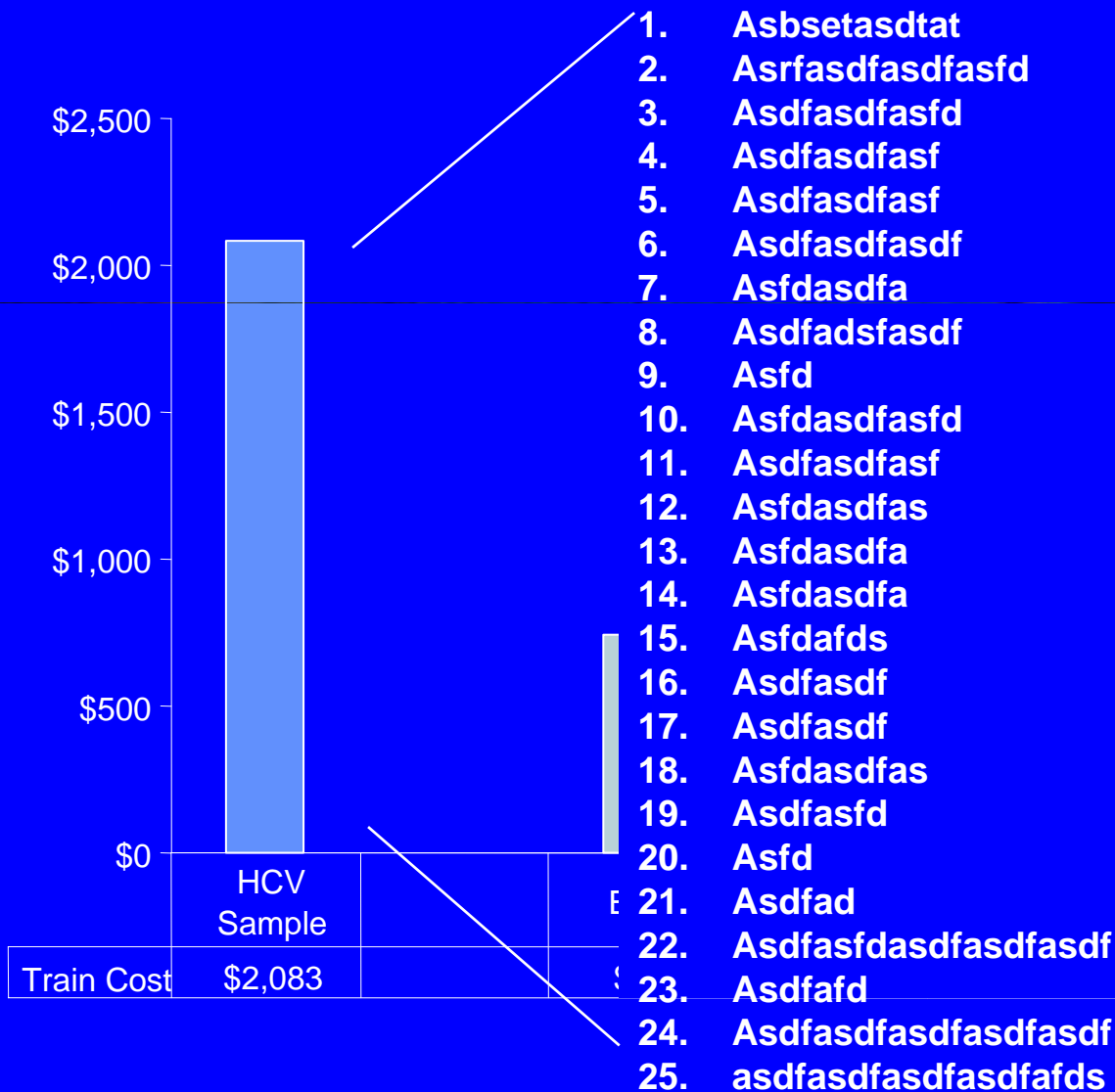
HC VALUATION - COMPENSATION FACTOR



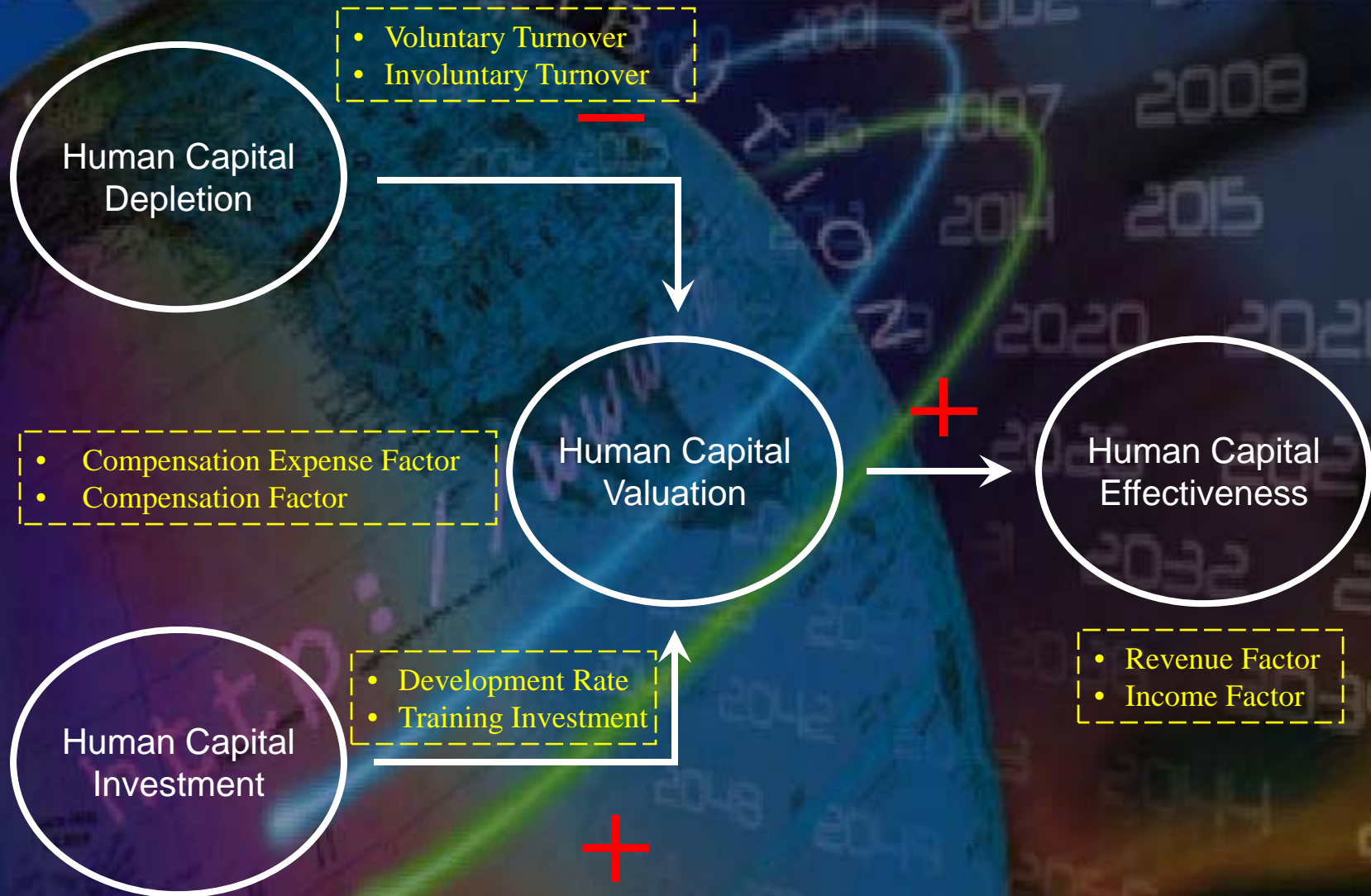
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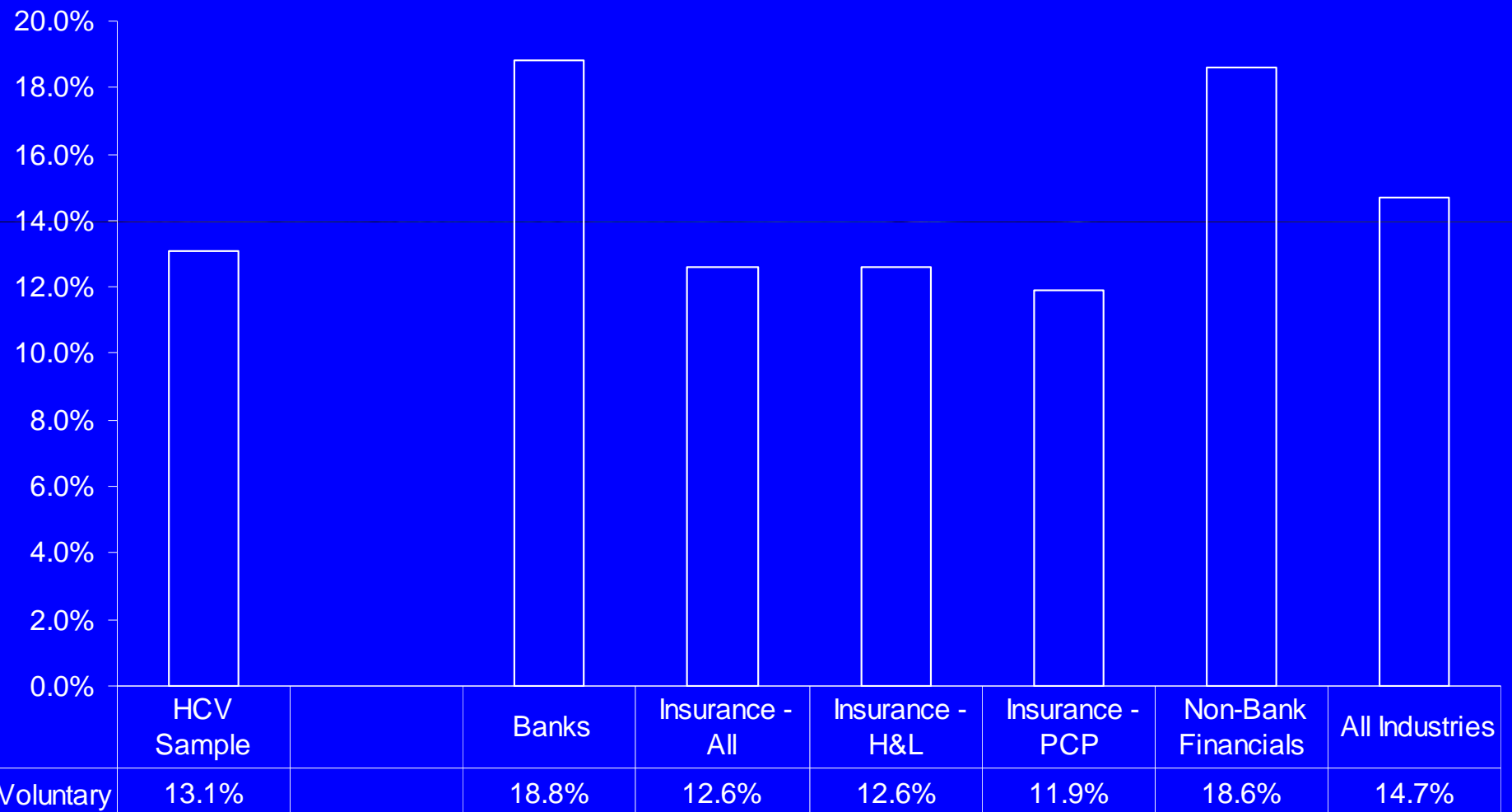
HC INVESTMENT - TRAINING FACTOR



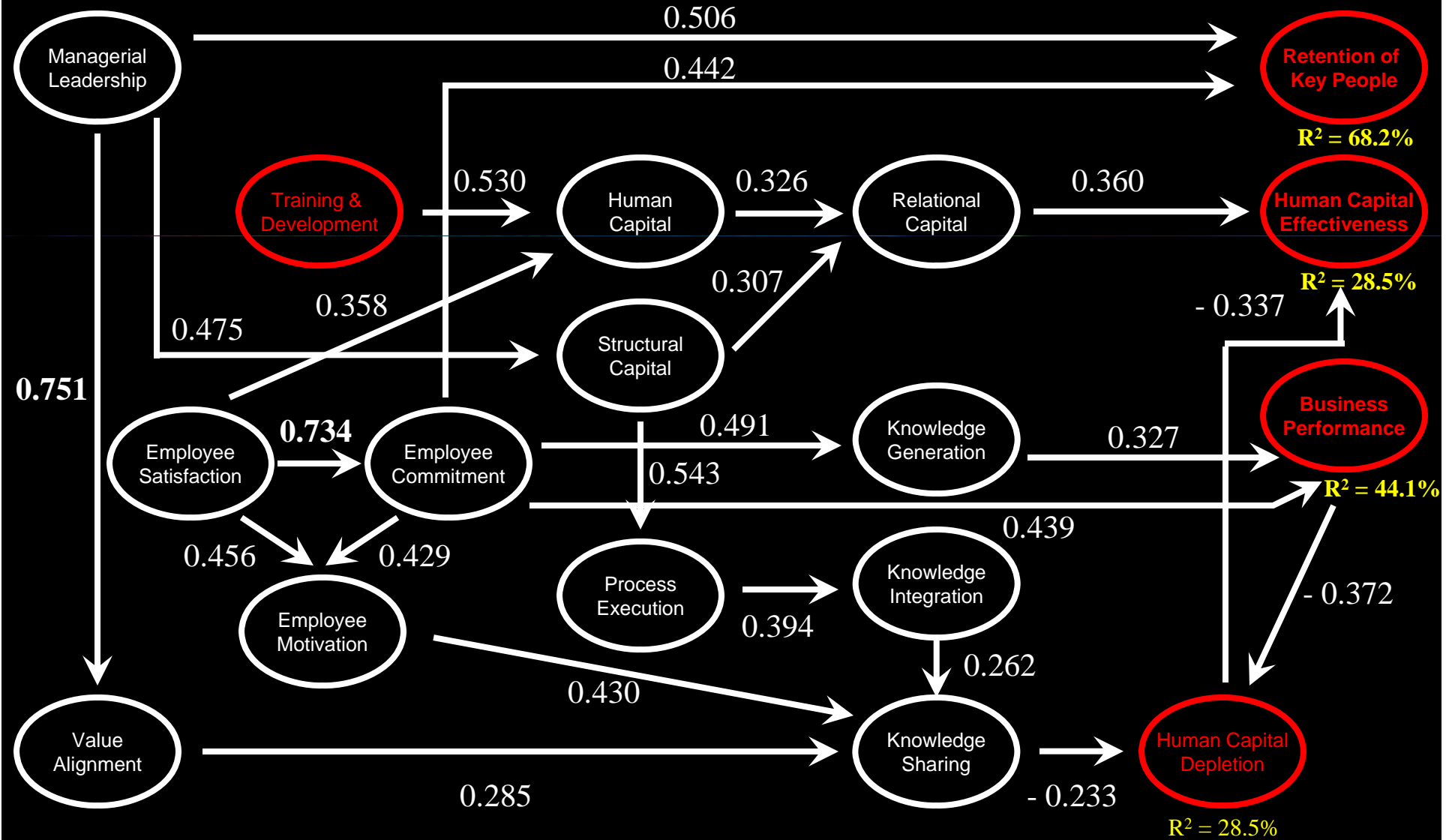
QUANTITATIVE METRIC MODEL



HC DEPLETION - VOLUNTARY TURNOVER



OUTCOME CONSTRUCTS



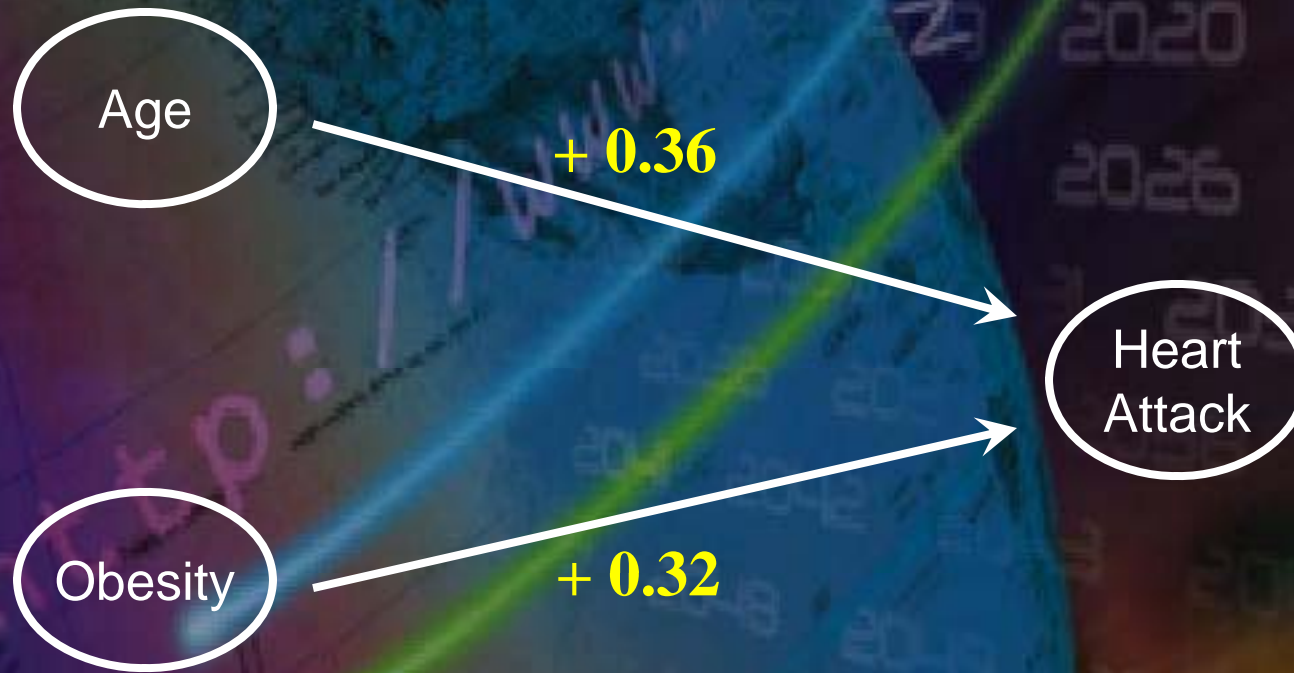
CORRELATION VS PATH ANALYSIS

Correlation between Age and Risk of Heart Attack

+ 0.36 (p < 0.01)

Correlation between Obesity and Risk of Heart Attack

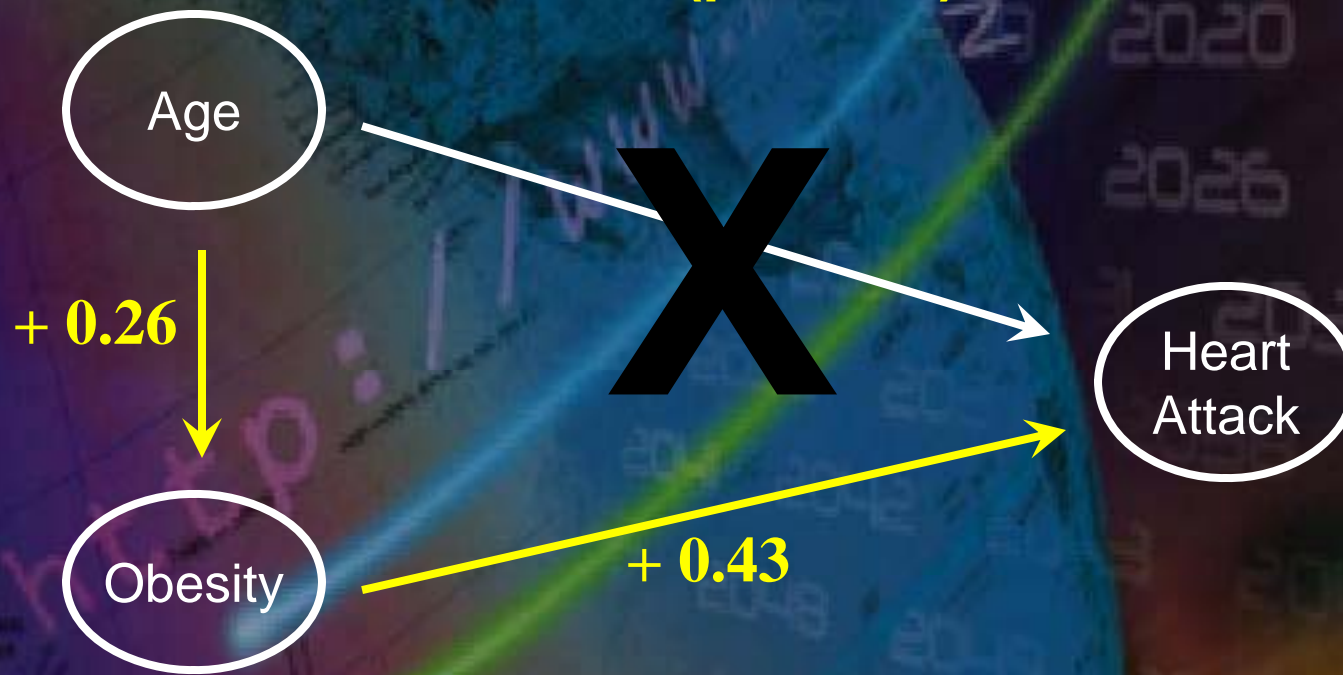
+ 0.32 (p < 0.01)



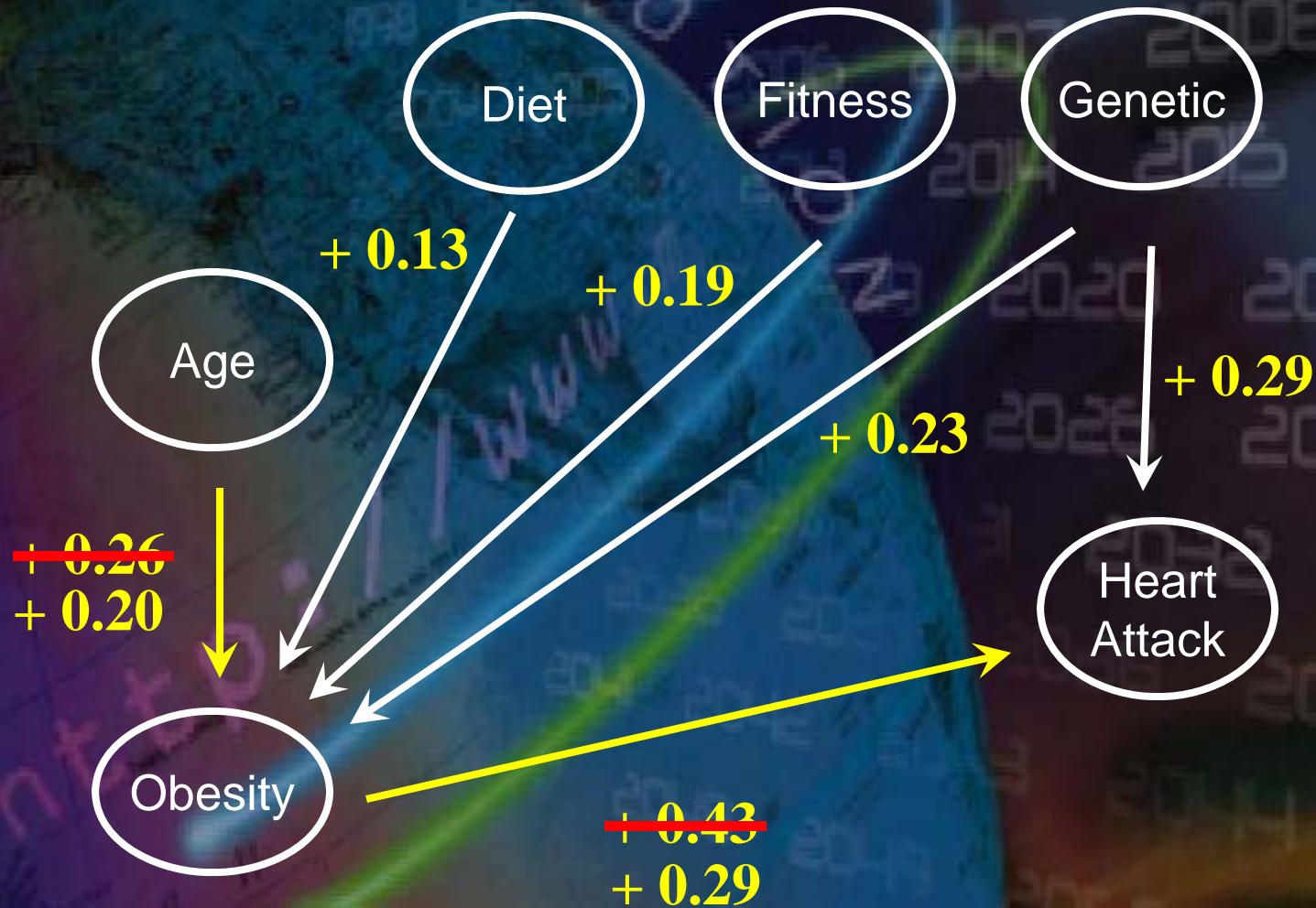
CORRELATION VS PATH ANALYSIS

Path between Age and Obesity
+ 0.26 (p < 0.01)

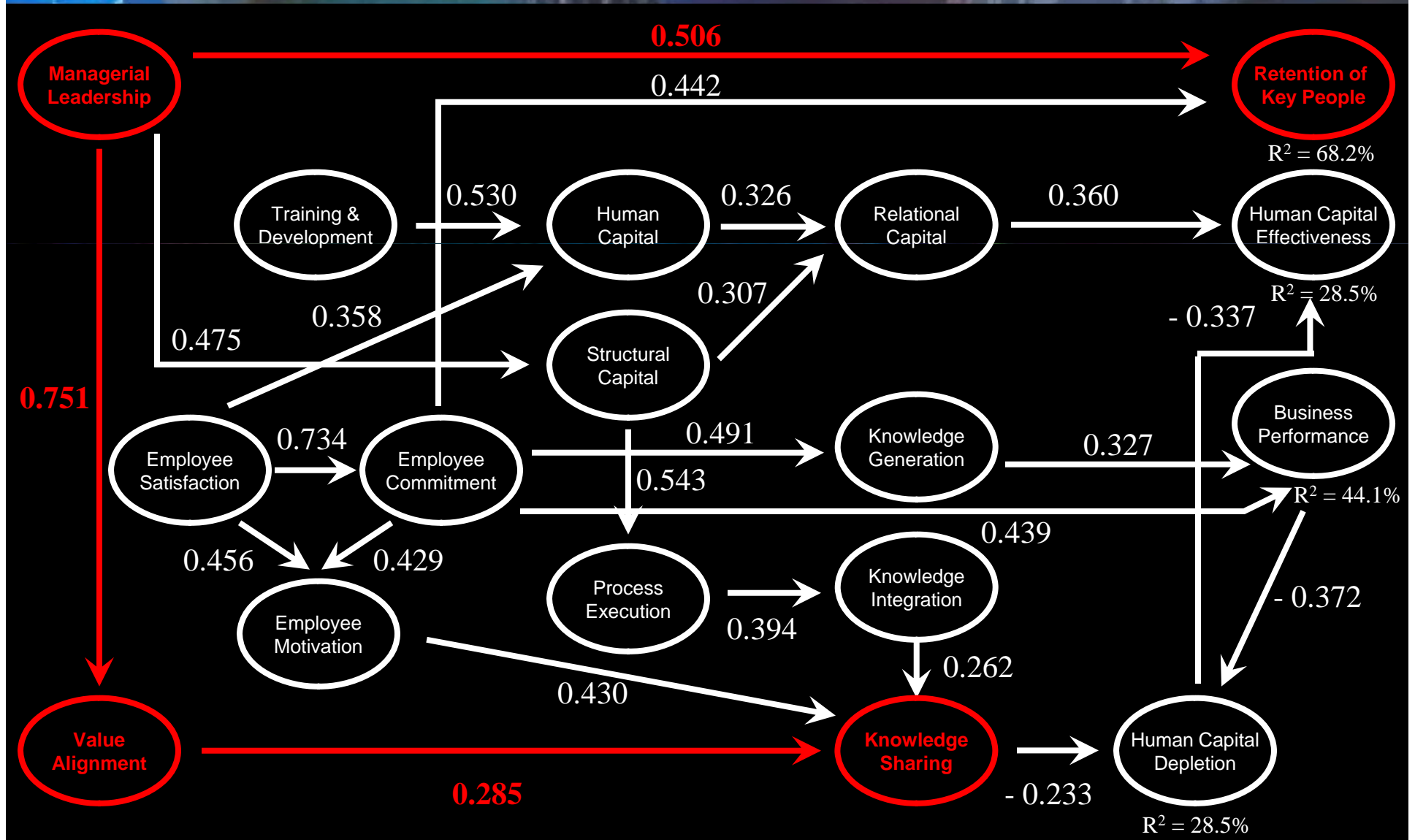
Path between Obesity and Risk of Heart Attack
+ 0.43 (p < 0.01)



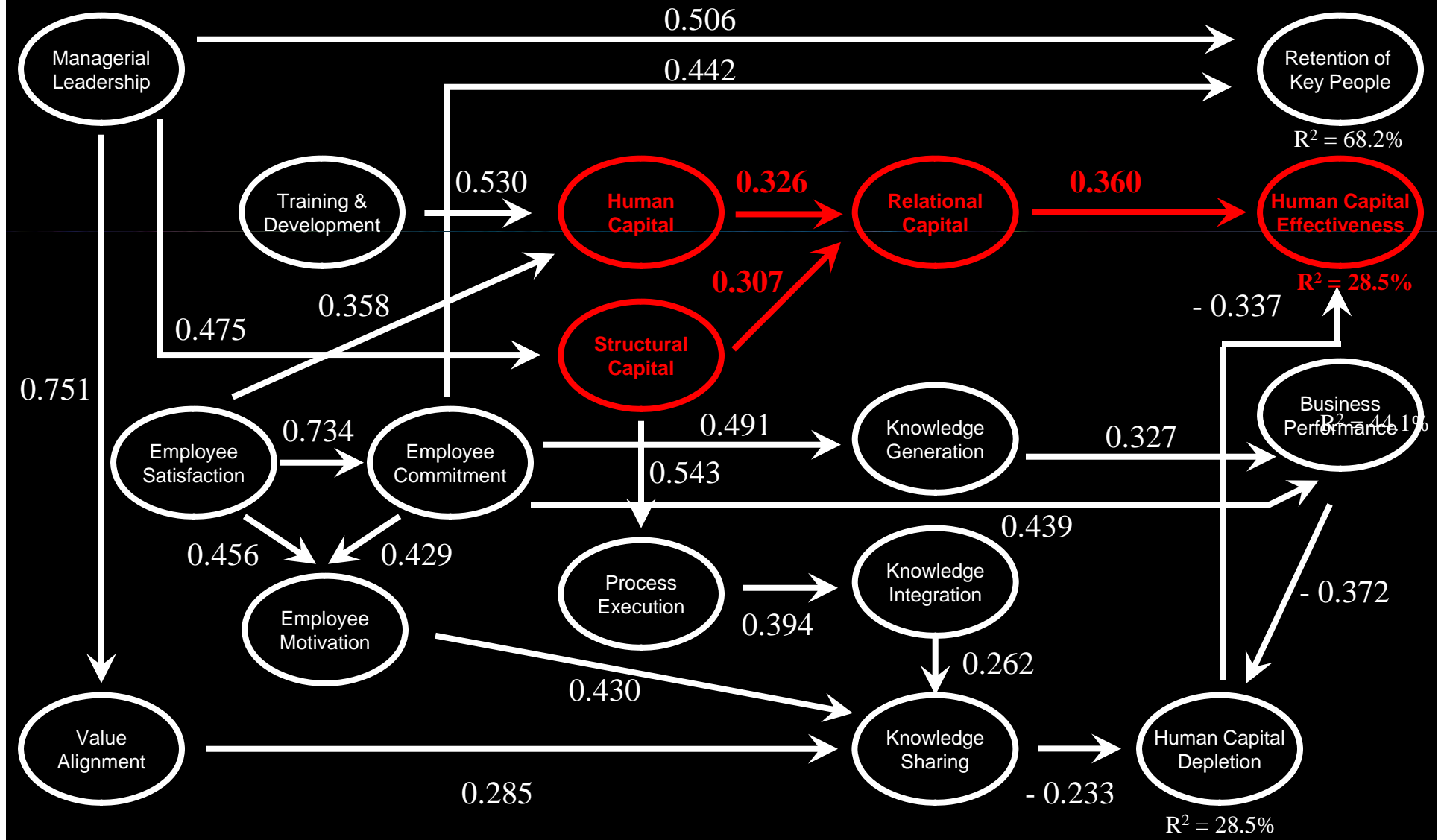
PARSIMONY VS. PREDICTIVE POWER



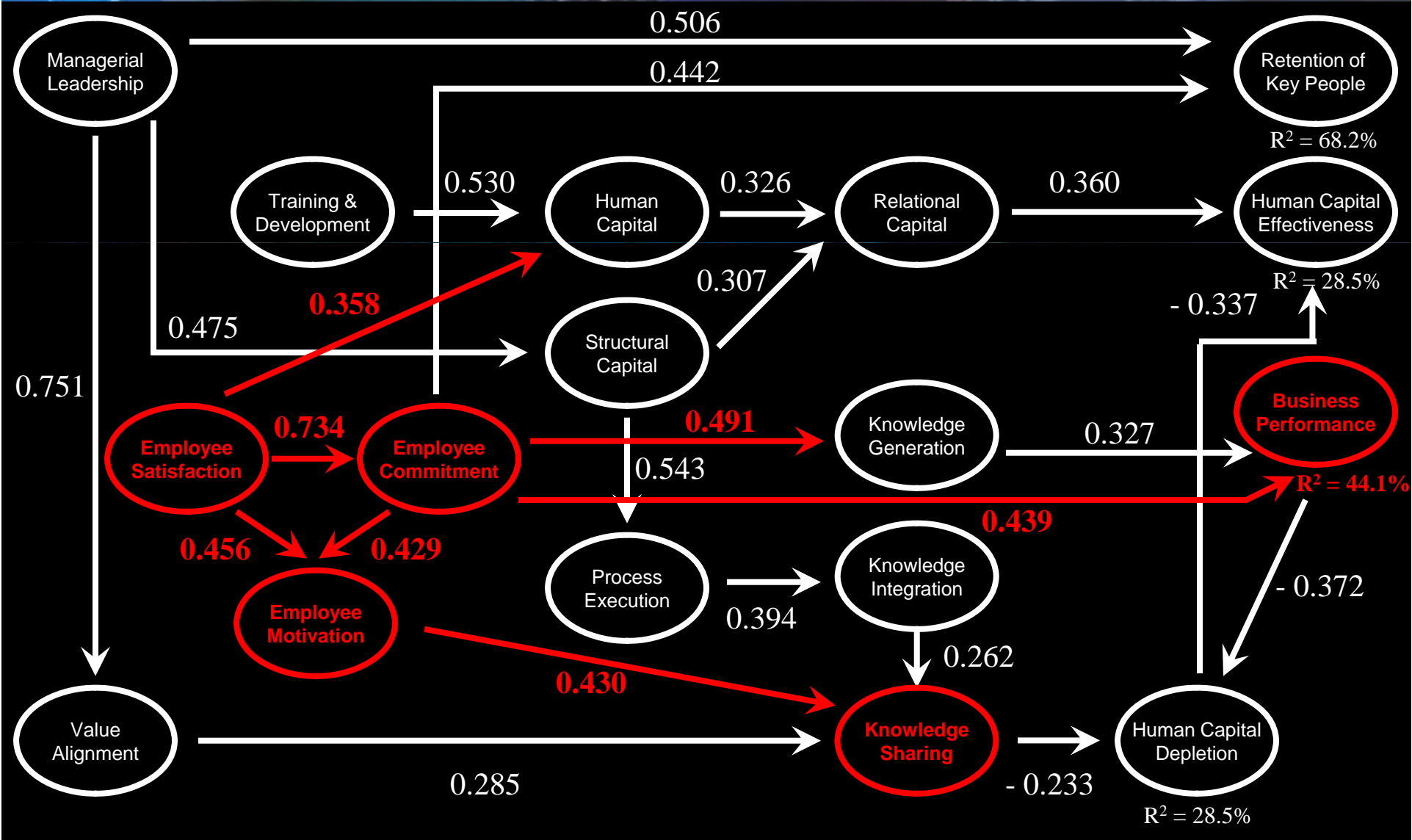
RESEARCH IMPLICATION I



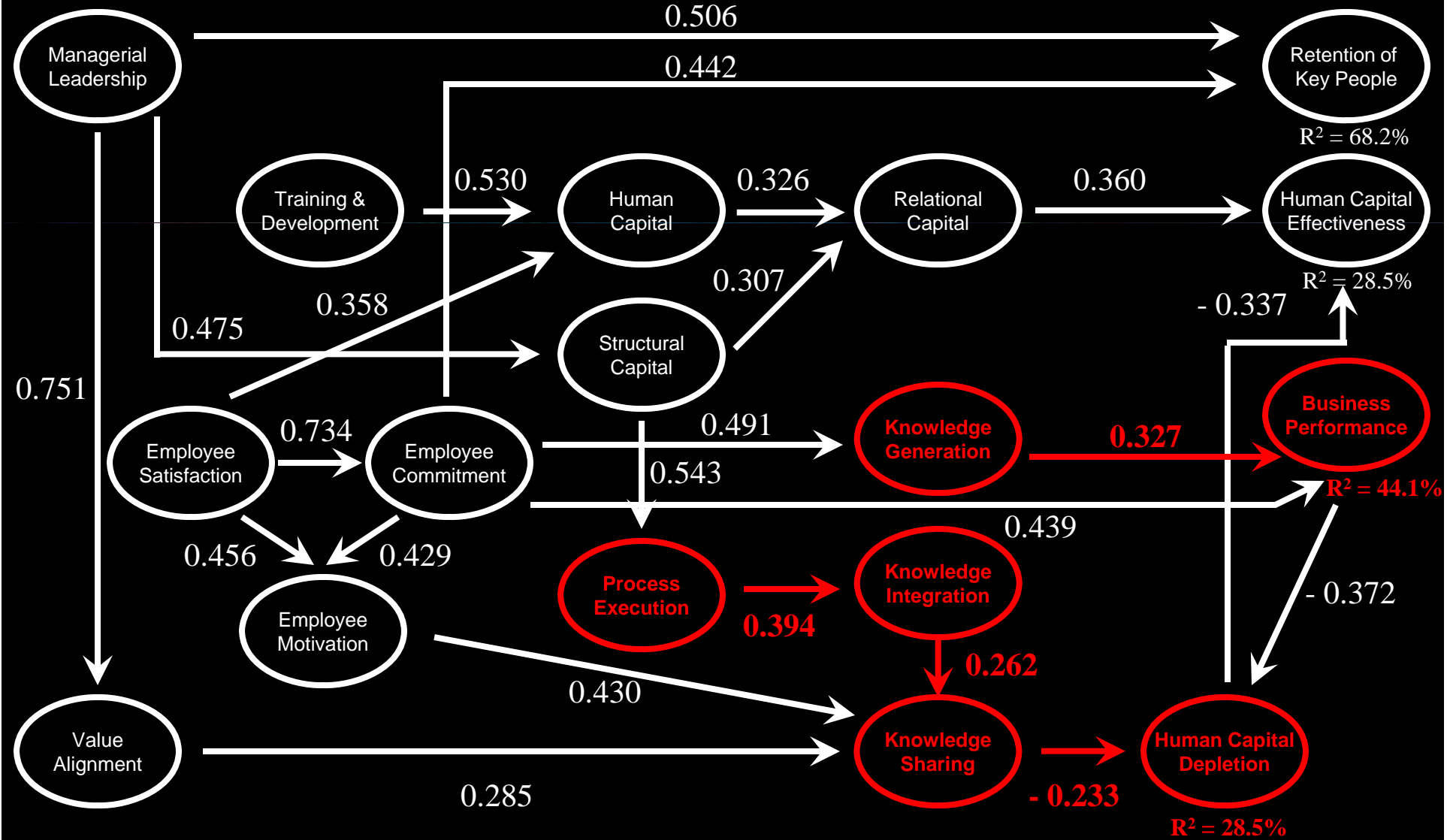
RESEARCH IMPLICATION II



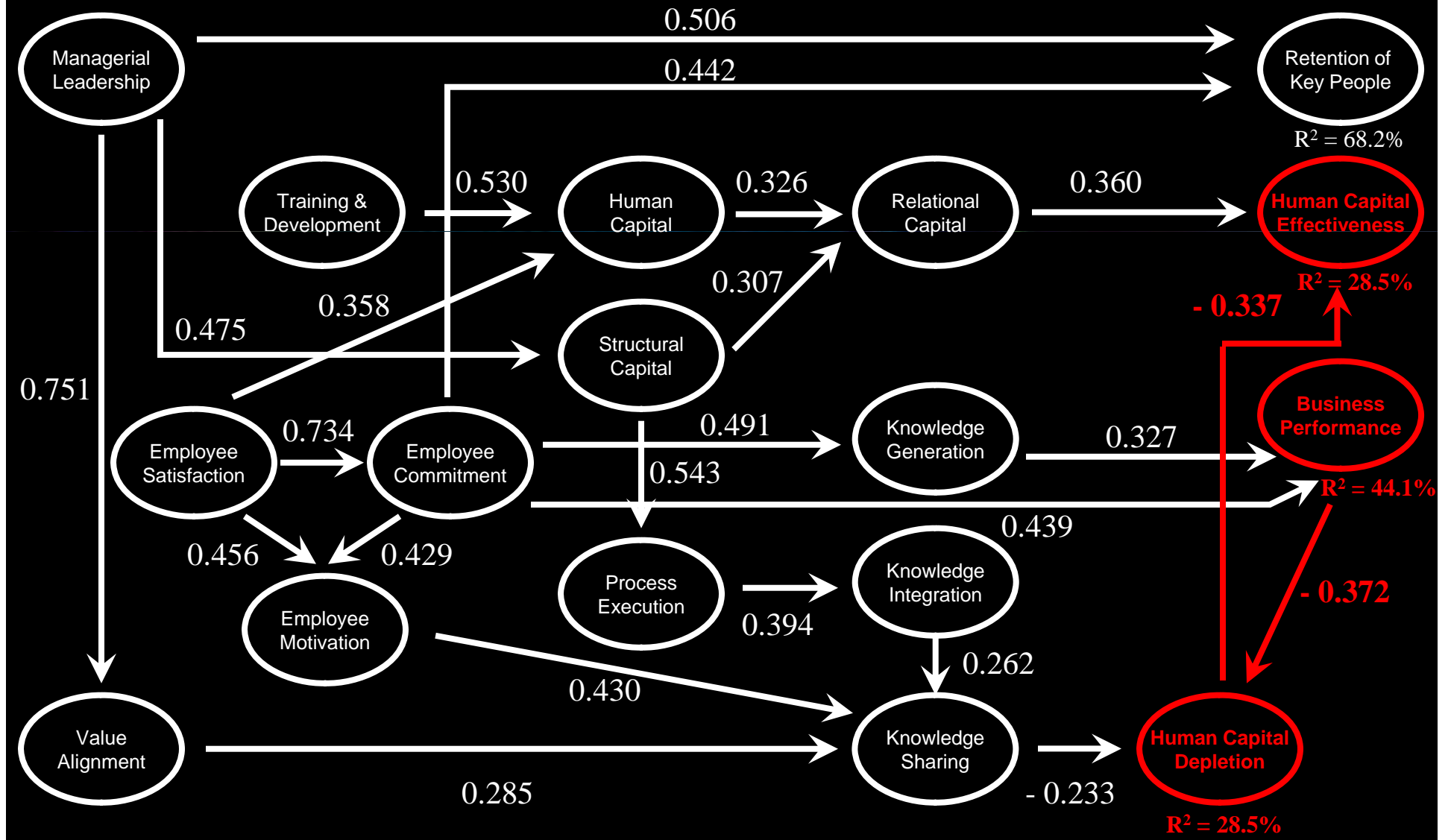
RESEARCH IMPLICATION III



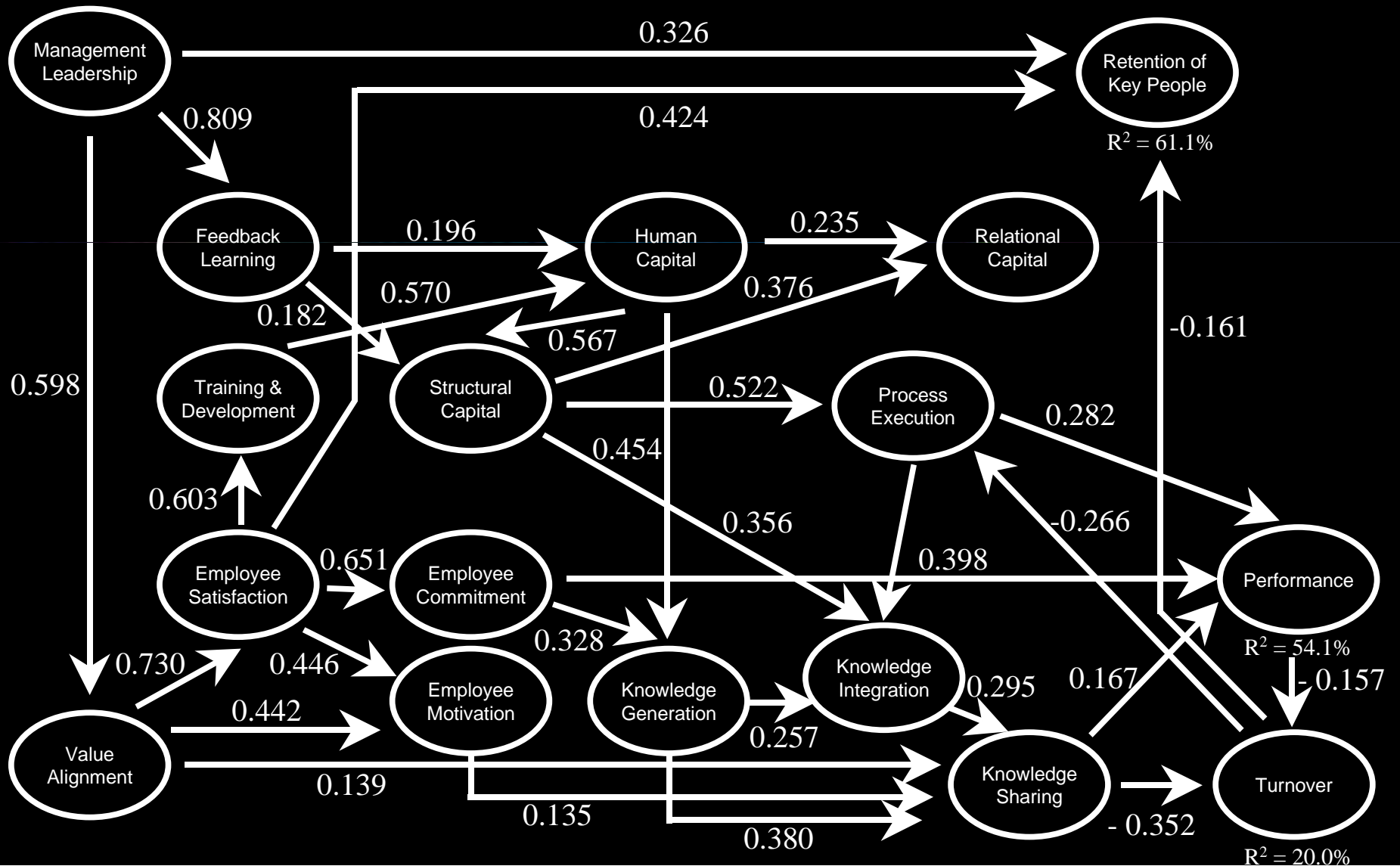
RESEARCH IMPLICATION IV



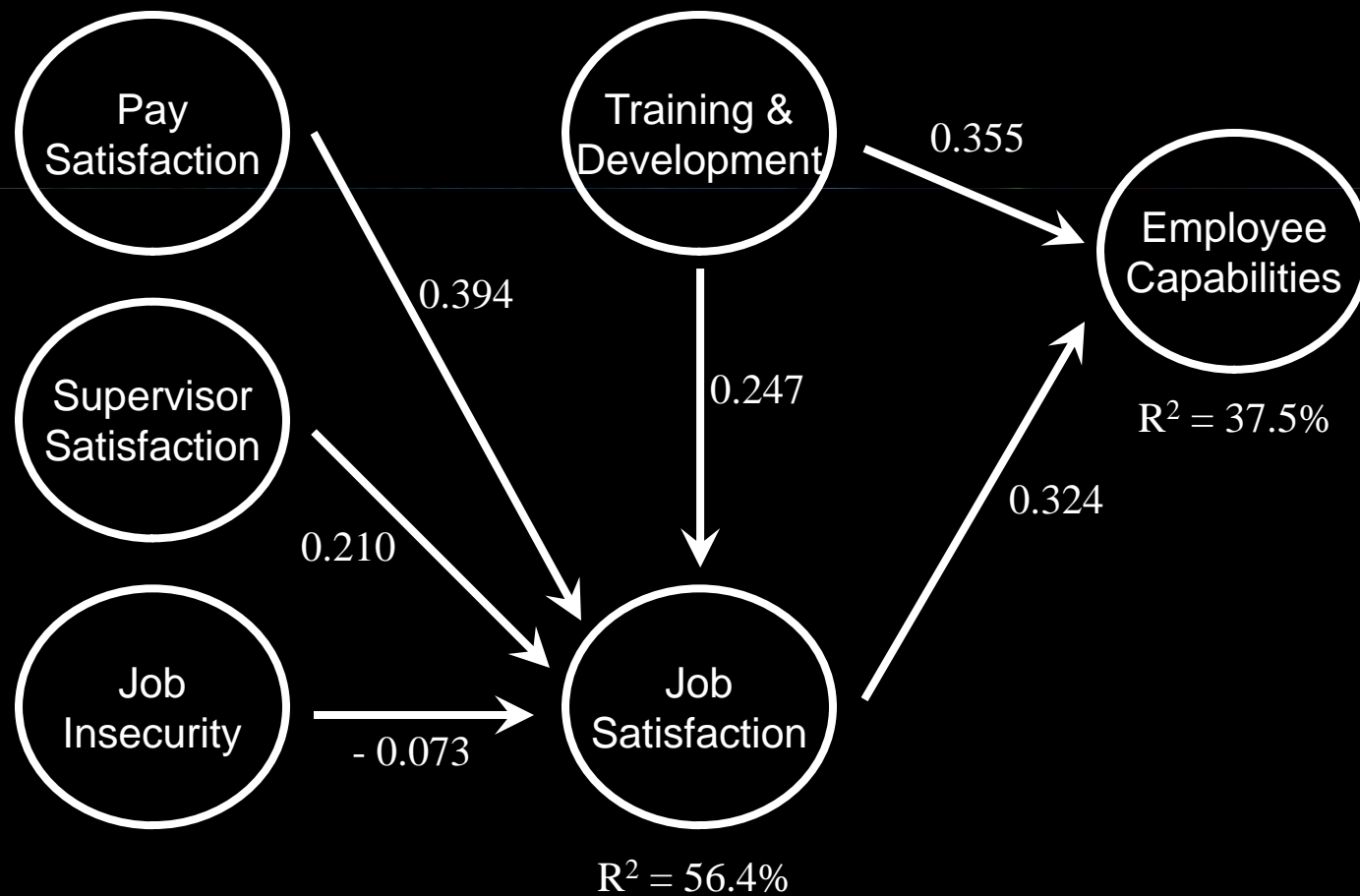
RESEARCH IMPLICATION V



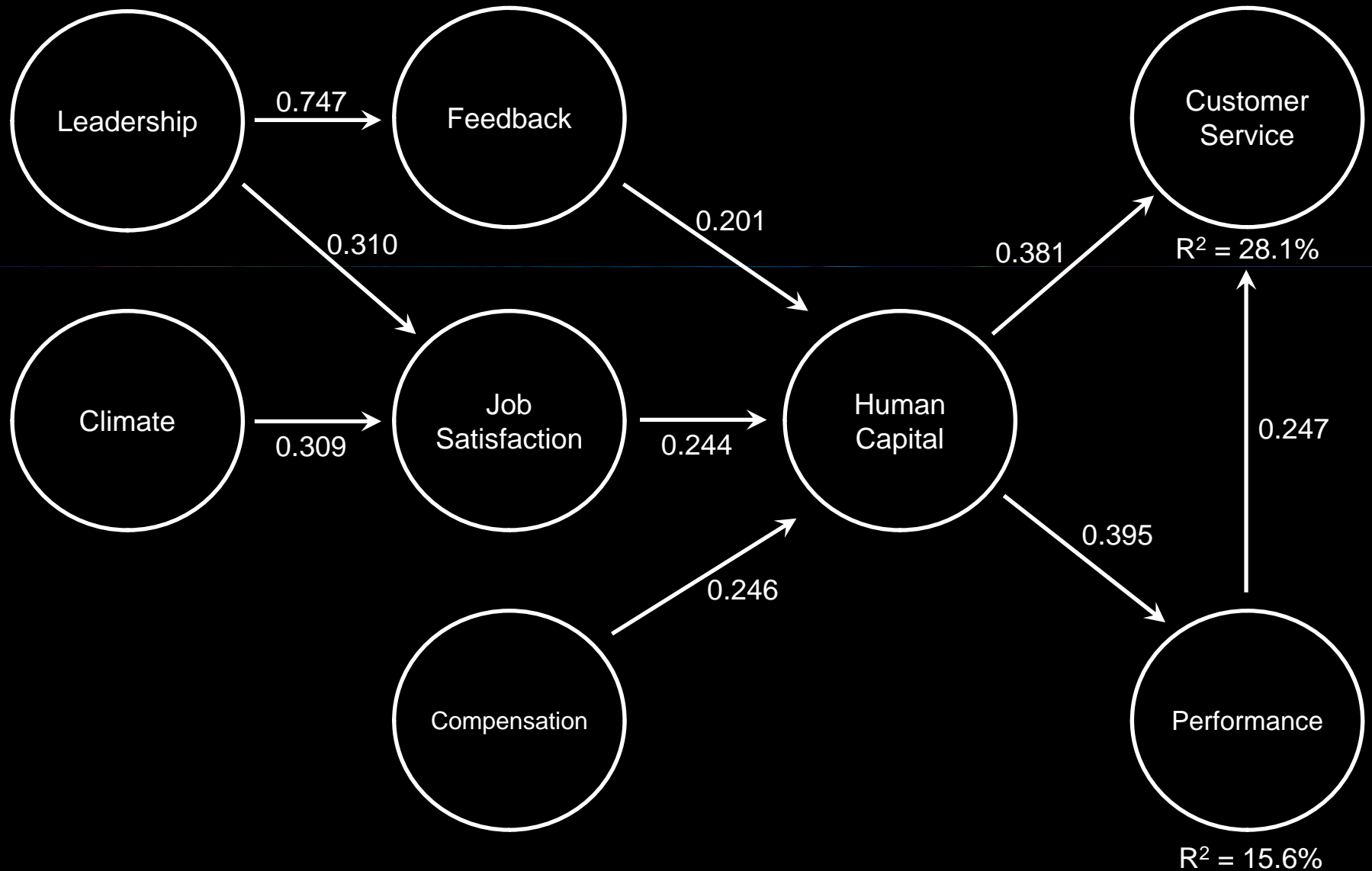
GOVERNMENT - HEALTH CANADA



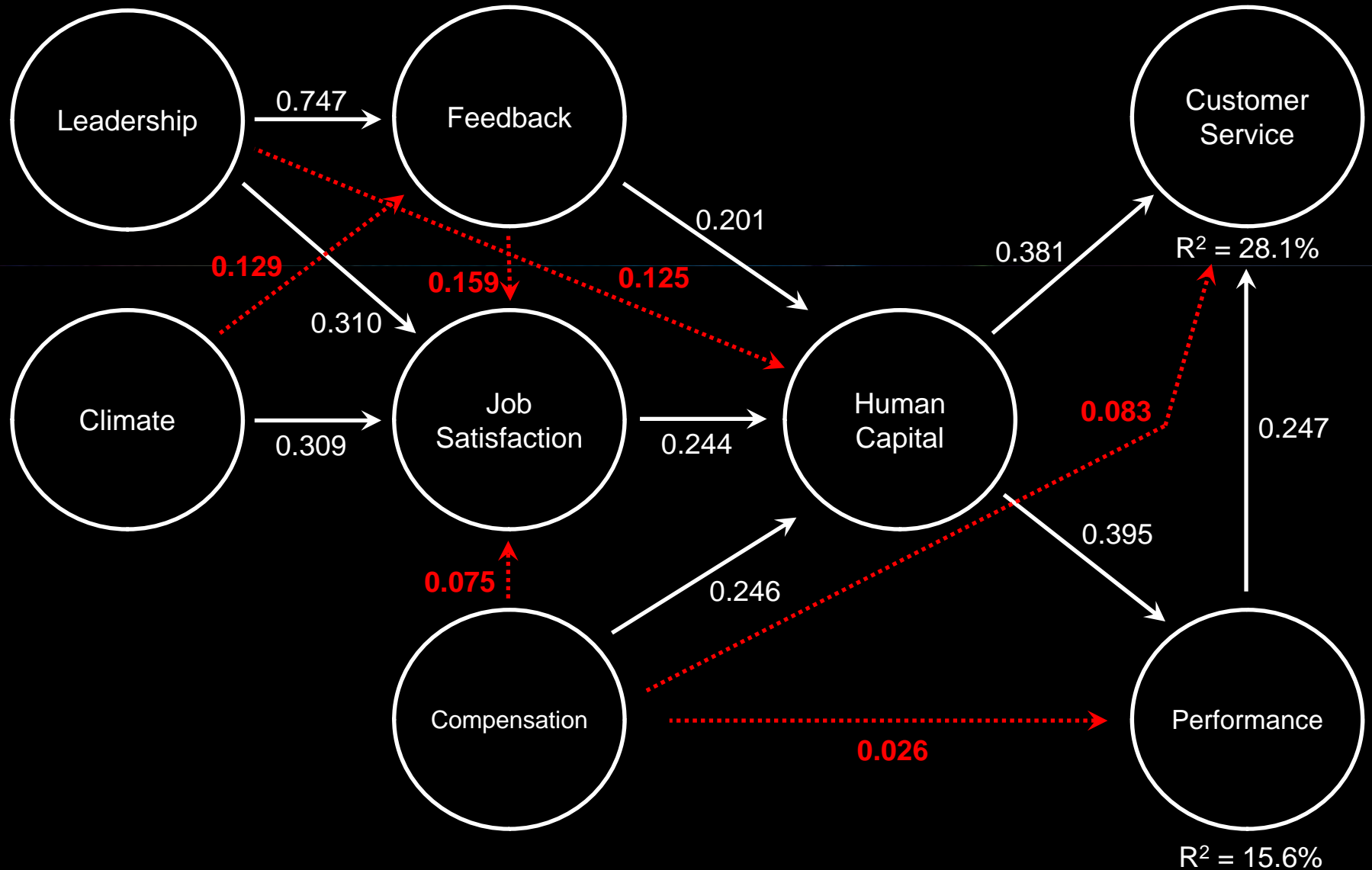
CAUSAL MODEL: ORGANIZATION A



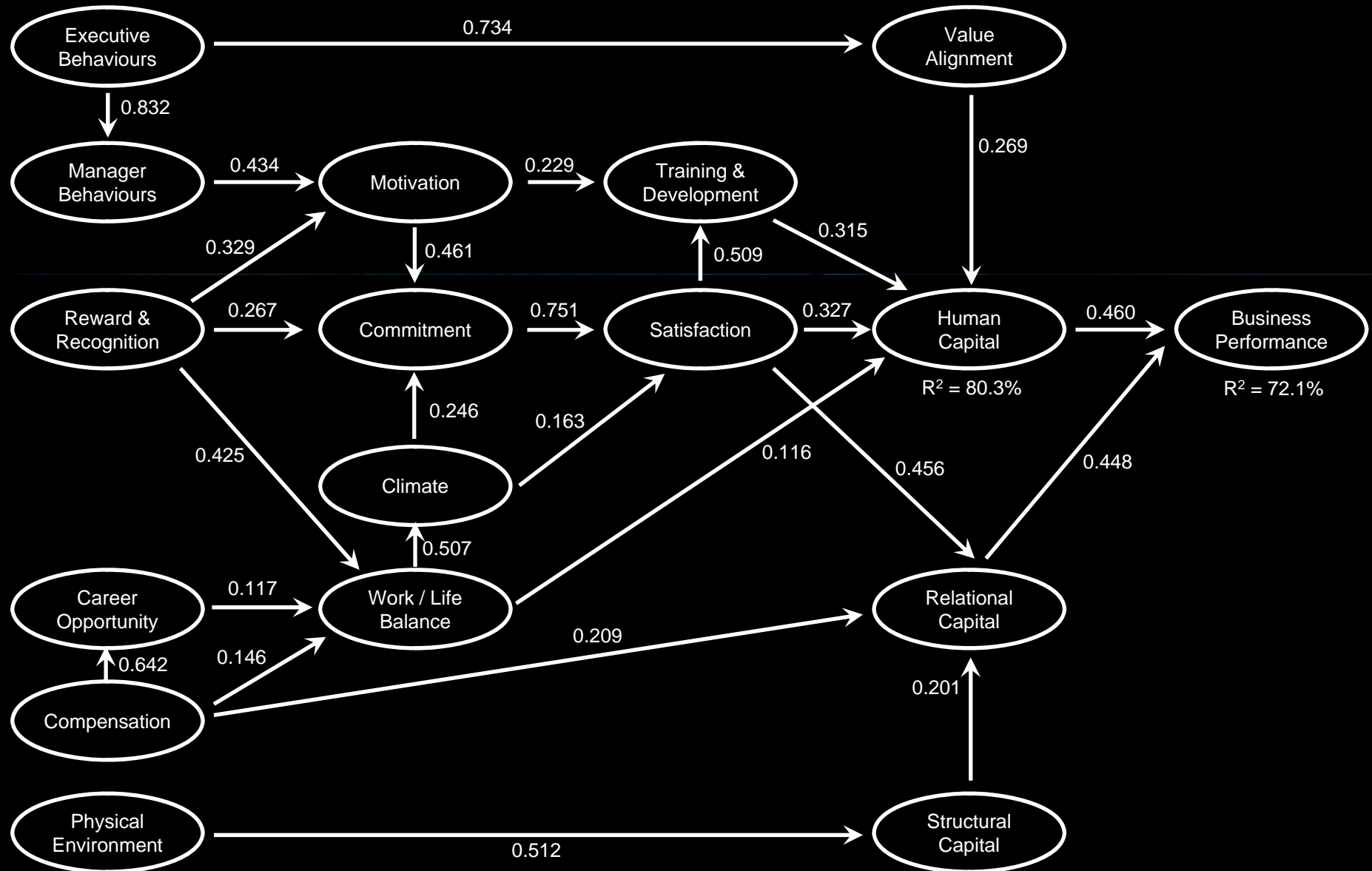
CAUSAL MODEL: ORGANIZATION B



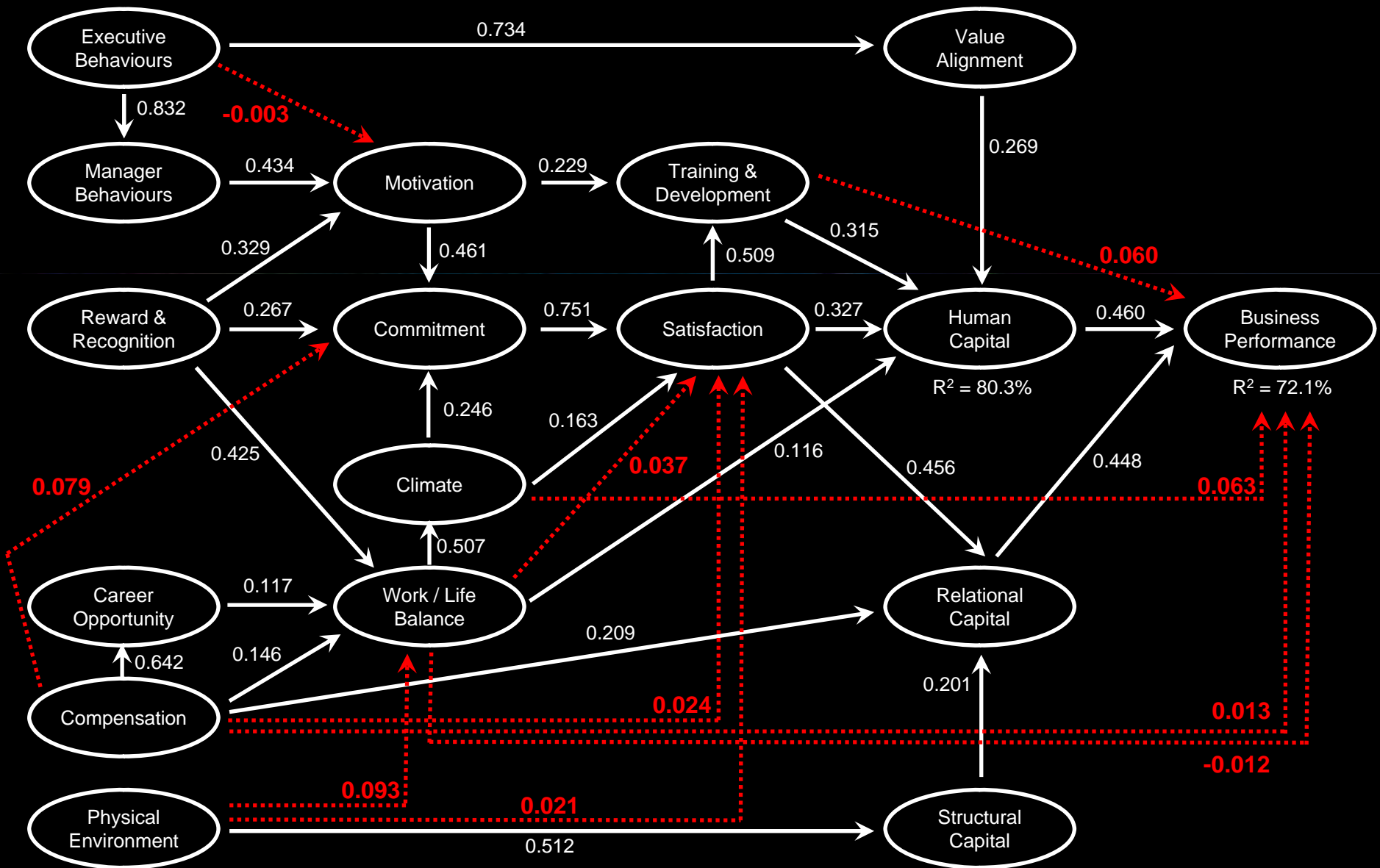
CAUSAL MODEL – MISSING LINKS



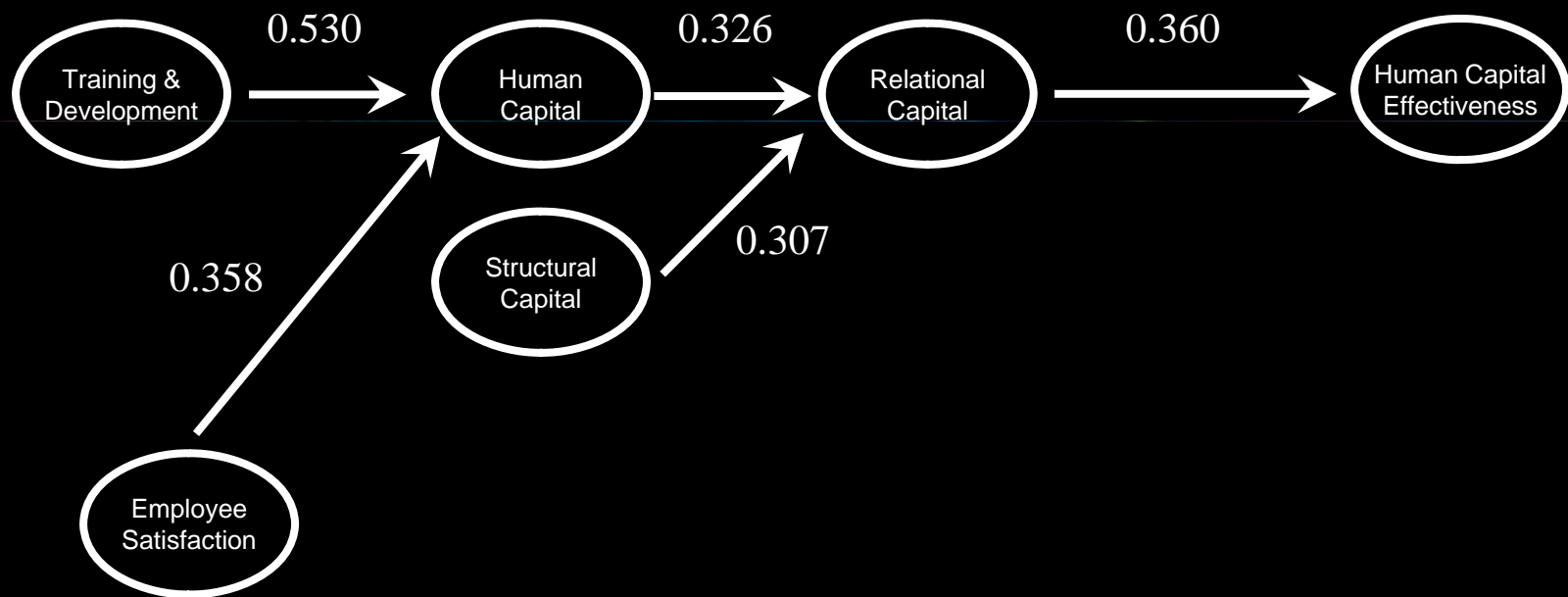
CAUSAL MODEL: ORGANIZATION



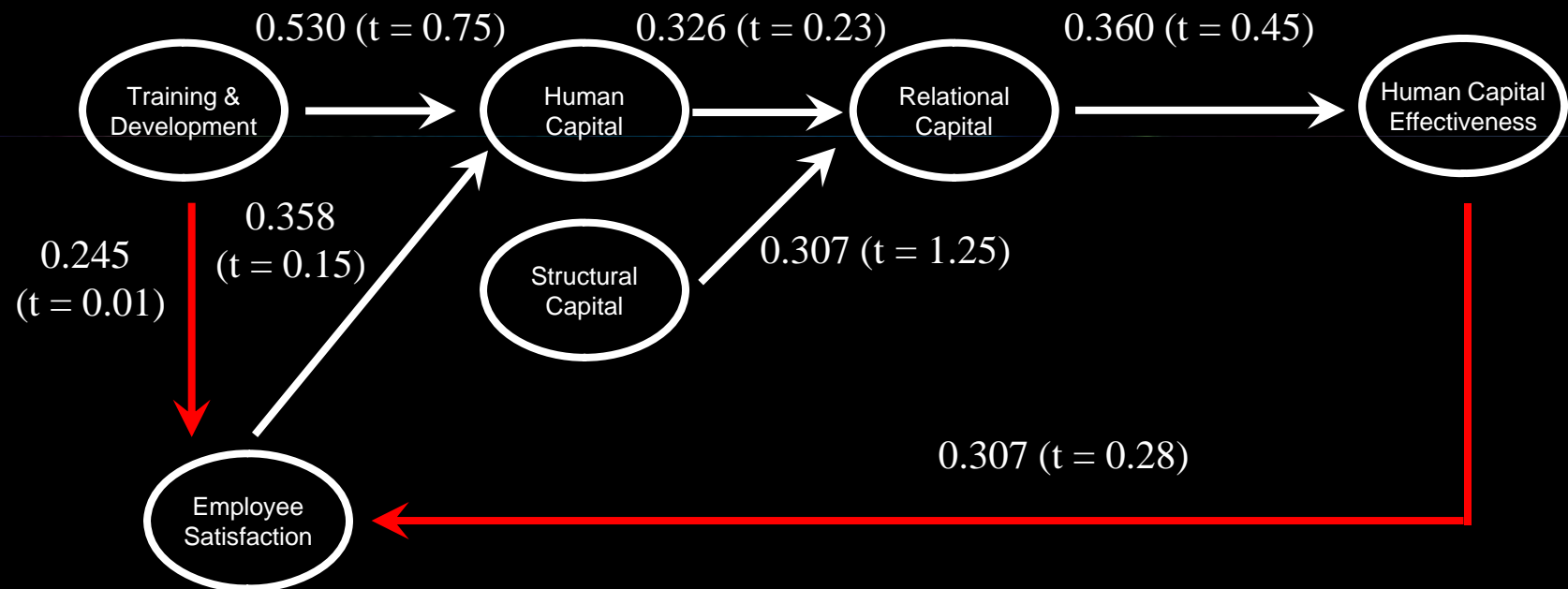
CAUSAL MODEL: MISSING LINKS



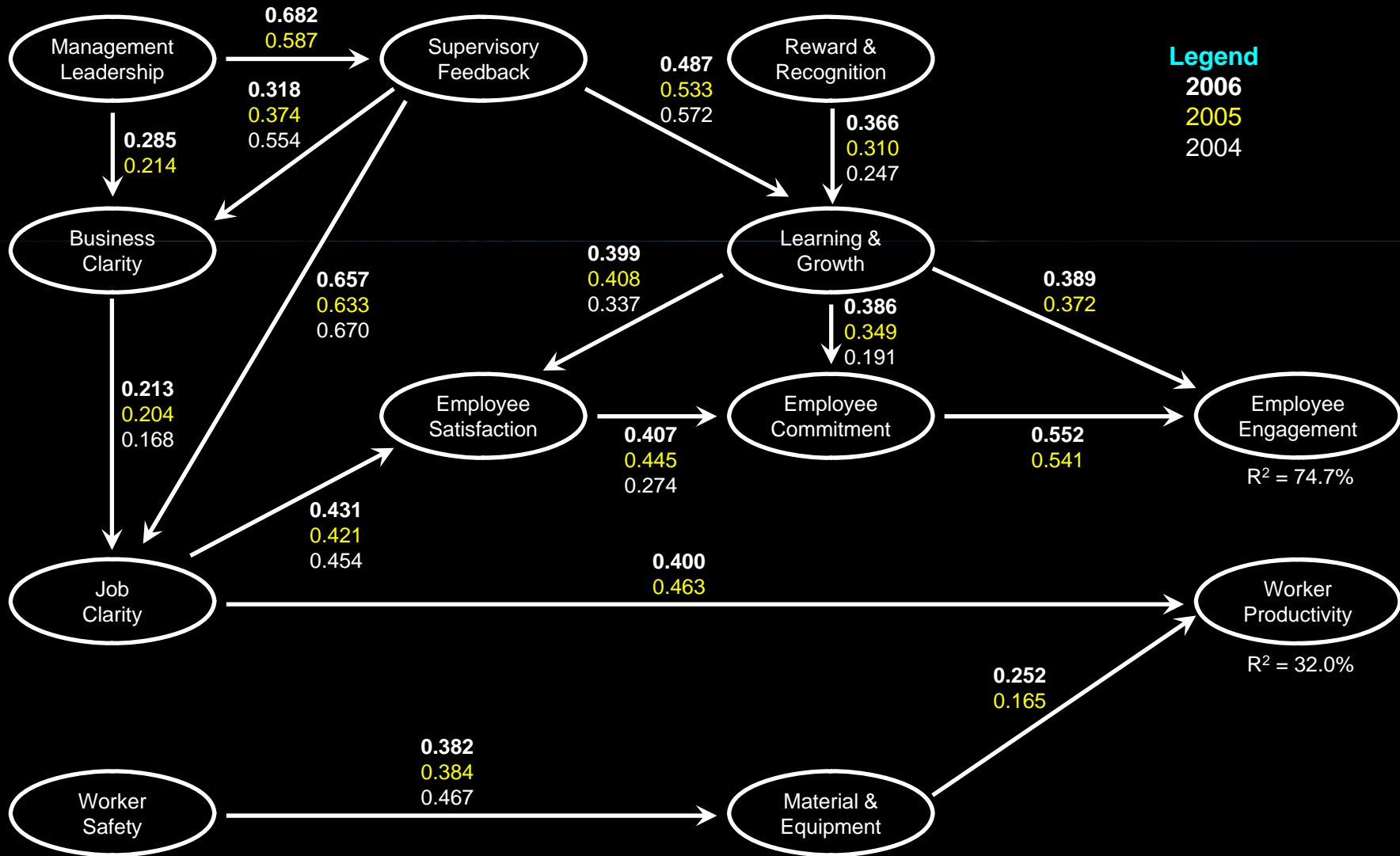
THE POWER OF LONGITUDINALITY



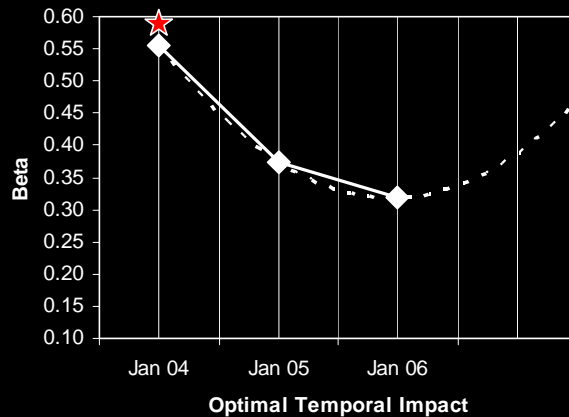
THE POWER OF LONGITUDINALITY



LONGITUDINAL CAUSAL MODEL



MAX / MIN CALCULUS



$$y = 0.062x^2 - 0.366x + 0.858$$

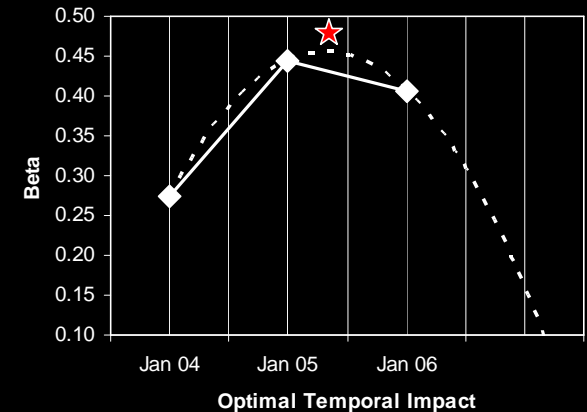
First derivative, $y \rightarrow 0$

$$0 = 2 * 0.062x - 0.366$$

$$0 = 0.124x - 0.366$$

$$X = 2.928$$

Dec. 23, 2005



$$y = -0.1045x^2 + 0.4845x - 0.106$$

First derivative, $y \rightarrow \infty$

$$0 = -2 * 0.1045x + 0.4845$$

$$0 = -0.209x + 0.4845$$

$$X = 2.318$$

April 26, 2005

You Know You Compete on Analytics When...

1. You apply sophisticated information systems and rigorous analysis not only to your core capability but also to a range of functions as varied as marketing and human resources.
2. Your senior executive team not only recognizes the importance of analytics capabilities but also makes their development and maintenance a primary focus.
3. You treat fact-based decision making not only as a best practice but also as a part of the culture that's constantly emphasized and communicated by senior executives.
4. You hire not only people with analytical skills but a lot of people with *the very best* analytical skills—and consider them a key to your success.
5. You not only employ analytics in almost every function and department but also consider it so strategically important that you manage it at the enterprise level.
6. You not only are expert at number crunching but also invent proprietary metrics for use in key business processes.
7. You not only use copious data and in-house analysis but also share them with customers and suppliers.
8. You not only avidly consume data but also seize every opportunity to generate information, creating a “test and learn” culture based on numerous small experiments.
9. You not only have committed to competing on analytics but also have been building your capabilities for several years.
10. You not only emphasize the importance of analytics internally but also make quantitative capabilities part of your company's story, to be shared in the annual report and in discussions with financial analysts.

ers. Many analytics competitors are converting their hardware to 64-bit processors that churn large amounts of data quickly.

The Long Road Ahead

Most companies in most industries have excellent reasons to pursue strategies shaped by analytics. Virtually all the organizations we identified as aggressive analytics competitors are clear leaders in their fields, and they attribute much of their success to the masterful exploitation of data. Rising global competition intensifies the need for this sort of proficiency. Western companies unable to beat their Indian or Chinese competitors on product cost, for example, can seek the upper hand through optimized business processes.

Companies just now embracing such strategies, however, will find that they take several years to come to fruition. The organizations in our study described a long, sometimes arduous journey. The UK Consumer Cards and Loans business within Barclays Bank, for example, spent five years executing its plan to apply analytics to the marketing of credit cards and other financial products. The company had to make process changes in virtually every aspect of its consumer business: underwriting risk, setting credit limits, servicing accounts, controlling fraud, cross selling, and so on. On the technical side, it had to integrate data on 10 million Barclaycard customers, improve the



CAUSAL MODEL: NEXT STEPS

- **QUICK WIN:** develop a causal map for your organization derived on already existing survey and human capital data (e.g., Temperature Check, annual employee surveys, human capital metrics)
- Larger sample across many more firms / industry groups / nations (for bench-marking).
- Longitudinal nature of impacts (i.e., time lag effects of constructs)
- Alternative financial capital measures
- Culture integration, post-merger migration
- In-depth intra-unit analysis (i.e., sub-units, branches, locations, subsidiaries, geographical offices)
- Intermediating effects (i.e., fear, trust, empowerment, health, work-life balance, compensation alignment)



THANK YOU!

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- Research / consulting
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“Fun Stuff” “123” for test





Bontis