

**UNIVERSIDAD
PANAMERICANA
CONSULTIG**

AGENDA

1. FACTS & PROBLEMS
2. ANALYSIS
3. ALTERNATIVES & RECOMMENDATIONS
4. IMPLEMENTATION
5. CONCLUSION

FACTS & PROBLEMS

World Population Growth – Need for Buildings & Infrastructure
+2.4 B Growth in the next 30 years

CONSTRUCTION:

Productivity 

Adoption of Technology

- Level of Digitalization: *Second to Last*
- R&D Investment: *Last*
- IT Spending: *Second to Last*

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SWOT: IMPLEMENTATION OF DIGITAL TECHNOLOGY

STRENGTHS

- Up to date
- Competitive
- Efficient process

WEAKNESS

- First Big Investment
- Lack of R&D

OPPORTUNITIES

- Join Ventures

THREATS

- Competition
- Digital era

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HOW WILL DIGITAL TRANSFORMATION AFFECT OUR BUSINESS?

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CUSTOMERS

Demand more digital technology
(risk-averse)

Look for cheaper alternatives (no intermediates), yet prioritize quality

Knowledge accessibility
(prior self and external projects)

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EMPLOYEES

Loyal employees

- Stage 1: Reluctant to change (old practices & job cut speculation)
- Stage 2: Satisfaction (productivity, tech millennials)

Risk

- Millennials & Gen Z tend to be less loyal
- Look for mobility and new challenges... outside?

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PROBLEMS

MAIN:

How to achieve digital GROWTH?

SECONDARY:

How digital transformation affect our business?

How should our design engineering business change its business model?

How do we fund digital investments?

What should we tell investors?

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HOW SHOULD WE CHANGE THE BUSINESS MODEL?

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ALTERNATIVES

Partnerships /
Join Ventures

Equipment
Rental

Smart
Buildings

FACTS & PROBLEMS

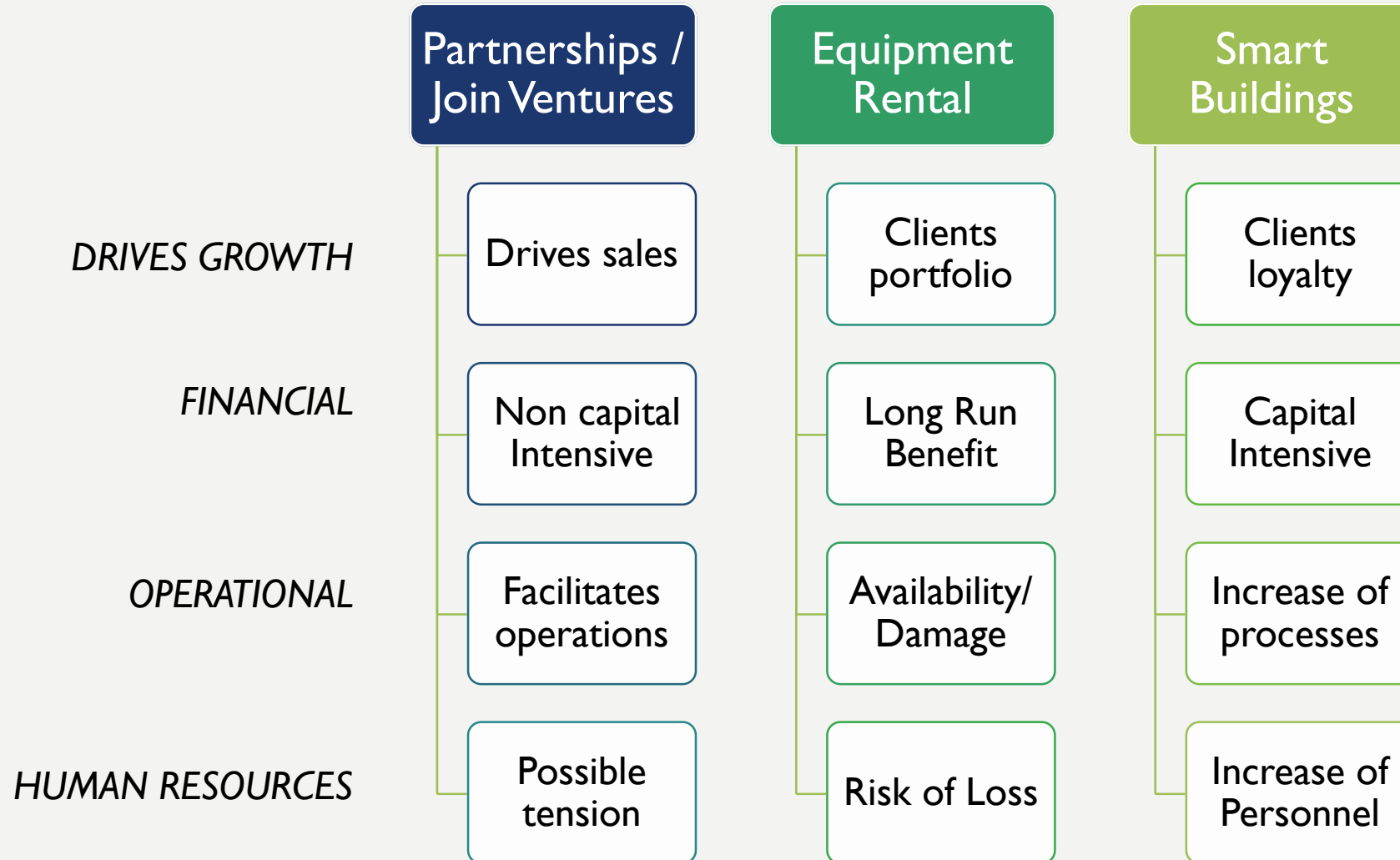
ANALYSIS

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ALTERNATIVES



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ANALYSIS OF ALTERNATIVES

	Partnerships	Rental	Smart Buildings
Drives Growth	Medium	Low	Low
Financial	Low	Medium	Medium
Operational	Low	High	Medium
Human Resources	Medium	High	Low

High

Medium

Low

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SMART BUSINESS

Drives Growth

- Clients Stickiness
- Integral Business
- New clients
- Reputation

Operational

- Increase of process
- More efficient process
- Less Error

Financial

- Investment needed
- High substitution Cost

HR

- Increase of personnel
- More trainings

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ACTION PLAN

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Year 1

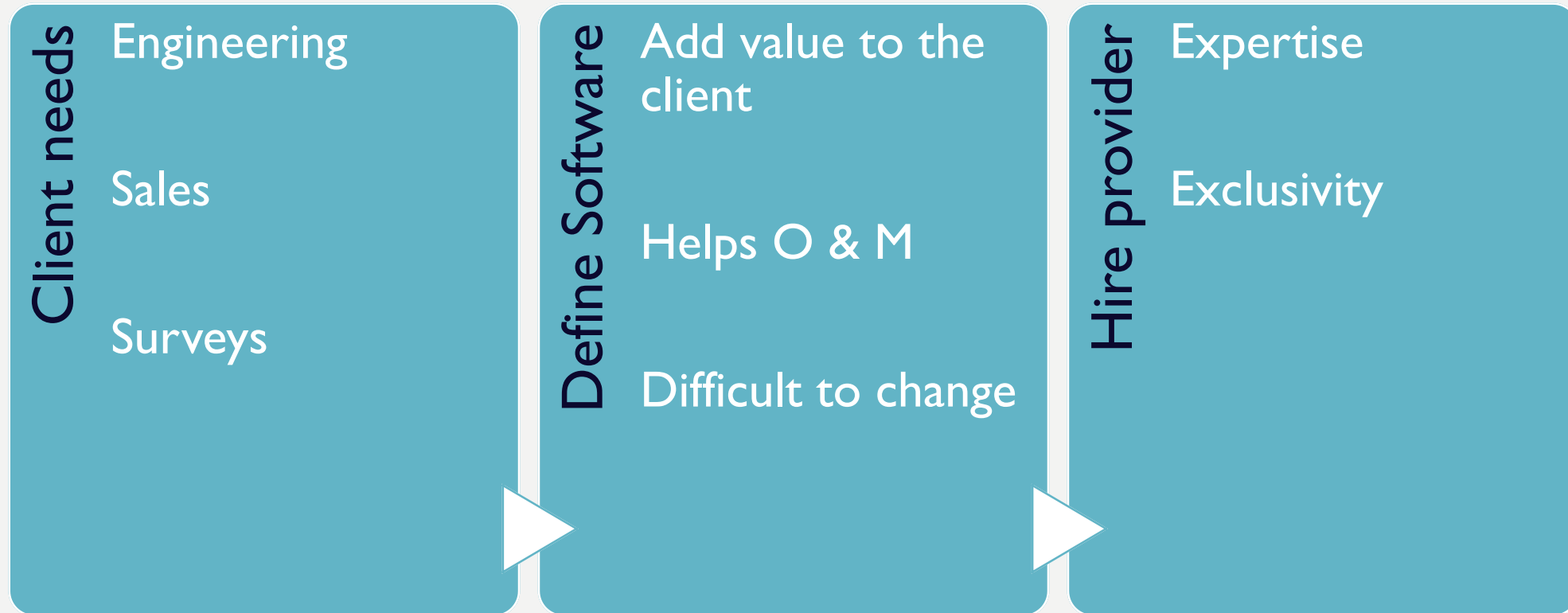
Year 2

Year 3

Year 4

Year 5

SOFTWARE DEVELOPMENT



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Year 1

Year 2

Year 3

Year 4

Year 5

FREE TRIAL

- Target existing clients
- Low operations and maintenance
- Software data collection
- Client feedback

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Year 1

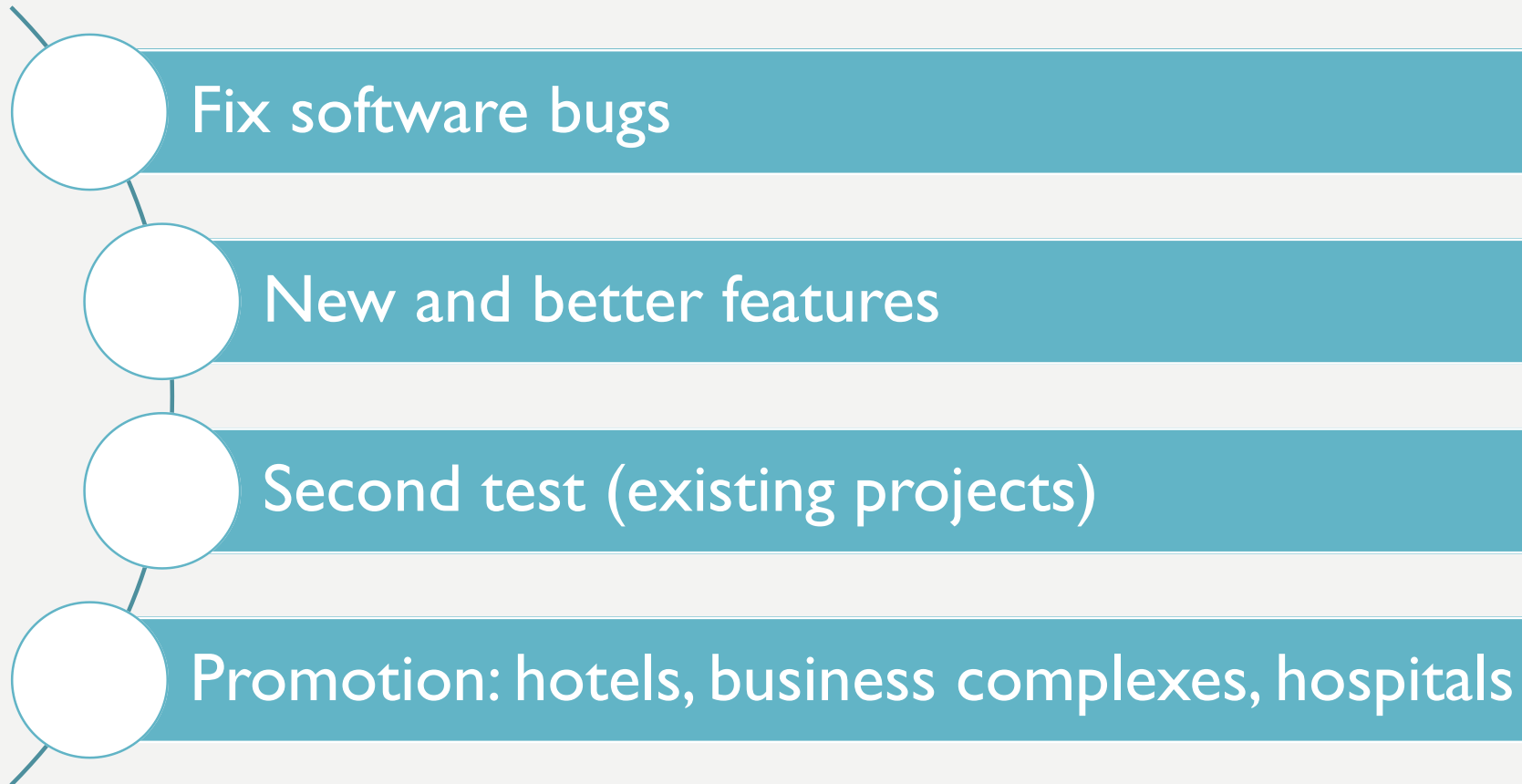
Year 2

Year 3

Year 4

Year 5

VERSION 2.0



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Year 1

Year 2

Year 3

Year 4

Year 5

GO BIG



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Year 1

Year 2

Year 3

Year 4

Year 5

GO BROAD

Start developing alternatives

- **Construction & Maintenance**

- Bridges
- Airports
- Train Stations
- Stadiums

- **Big data analysis**

- Users habits and preferences
- Open businesses
- Intelligent space planning

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RISK & MITIGATION

	RISK	MITIGATION
1	Delivery & Satisfaction	Previous analysis & Agreements w Suppliers
2	Not interested clients	Showroom creation for live experience
3	Obsolete technology, Delivery & Satisfaction	Look for different suppliers, Previous analysis & Agreements
4	Not interested, finding new Troubles	Simulations
5	Finding New troubles, finding clients	Simulation, Offer service in the company's other Business units

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FINANCIAL ANALYSIS

- **Sources of funds**
 - Operating cash flows
 - Engineering, Design and Project Management (EDPM)
 - Revenue = \$3.12 Billions
 - EBIT Margin = 11% (\$343 Millions)
 - Dividends from existing concessions and Capital Investments
 - 15 Investments in 5 countries = \$191 Millions

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- **Uses of Funds**

- Digital Investments
- Dividend Payments (30% payout ratio)
- Share Buy Back
 - Undervalued (P/E multiple x5.1 P/E vs x12.5 peers)

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