# INVESTORS DAY A L L A R





#### **Overview Alliar**

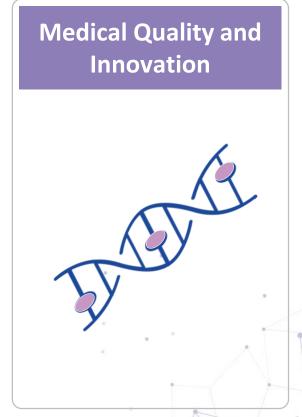
#### Unique Business Model, Fully Integrated and Scalable











# **Alliar's Evolution in 3 Cycles**

#### From M&As to Digital Transformation

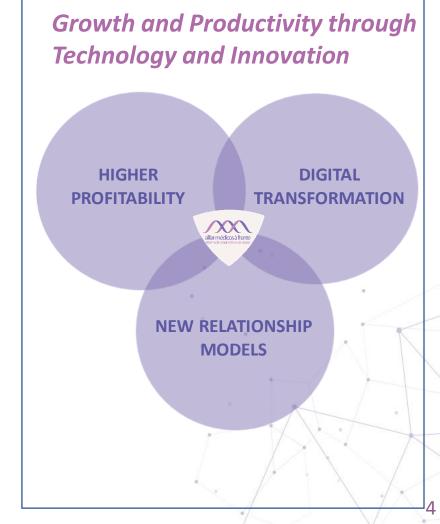


1<sup>st</sup> Cycle: 2011 a 2013





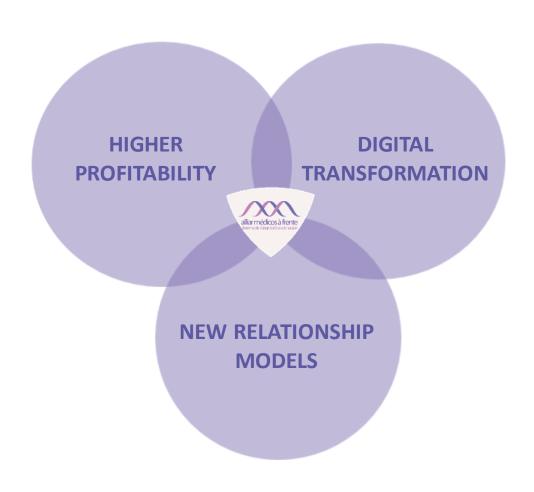
3<sup>rd</sup> Cycle: 2018 ~ 2020



### **Evolution** in the Business Model

Growth and Productivity in the Existing Operations











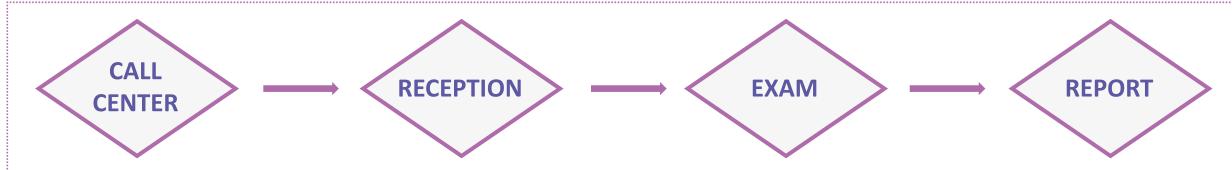








Significant Cost Reductions and a Better Patient Experience – Traditional Model



- Centralized Call Center
- Scheduling Algorithms
- > SOFIA Virtual Agent



- Web Check-In / OCR
- > Automatic approvals

significant time reduction



- Remote Operation
- Quality Increase
- Exam time reduction



- Radiology in the Future:
  - Digital Resolutive Report
  - Integrated Diagnostic

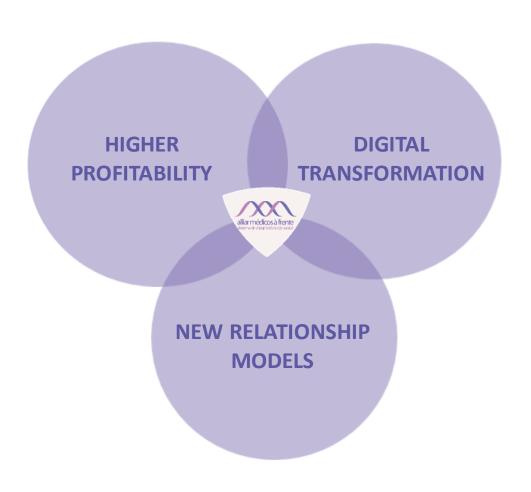


Real Time Management and Monitoring of the Patient Journey

### **Evolution** in the Business Model

Growth and Productivity in the Existing Operations













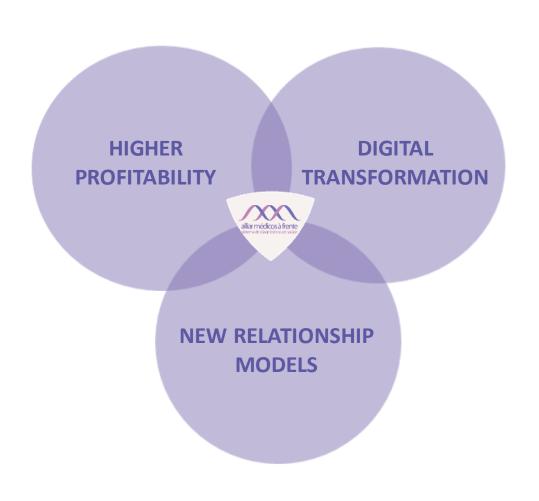




### Revolution in the Business Model

New business model based on Digital Transformation



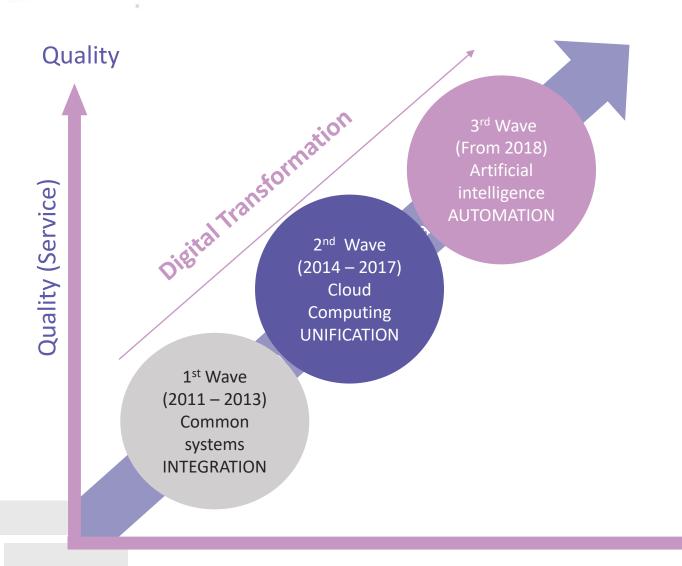




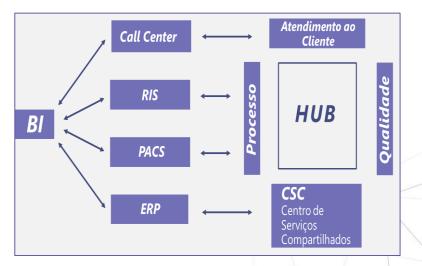








The improvement of quality with efficiency gains are made possible through the technological platform that evolves in 3 waves.



Operational efficiency



Our customer has common expectations across different services

#### **Customer Value**

#### **Humanization**



CUSTOMIZATION

The experience must be your way



**PRESTATIVITY** 

No lines, on time exams.



**SIMPLICITY** 

Transparency

The patient who enters our units today has a new relationship with several types of service providers, raising the level of innovation necessary to effectively generate value to the customer

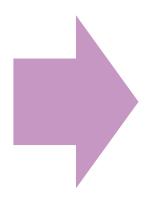
New Service Models -> Revolution in Customer Experience



#### **BEFORE**







#### **TODAY**





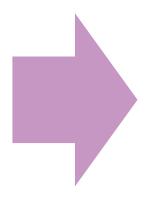




The Revolution in Customer Experience has already started in Alliar

#### BEFORE TODAY













Sofia follows the Patient's Journey from end to end







Scheduling through multiple channels, supported by AI and algorithms that maximize occupation and profitability of the exam slots

**Centralized Contact Center** 

**Multiple Channels** 

**Scheduling** 

**Cost Efficiency and Productivity** 





Call center

Auto scheduling (on line)

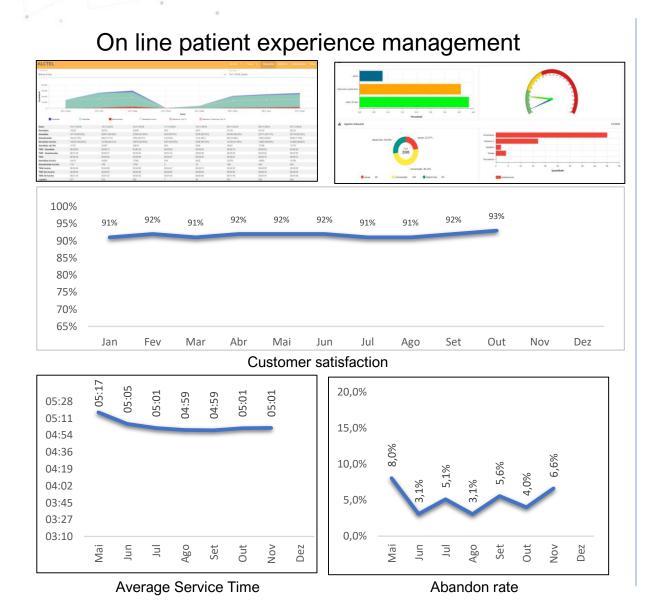
Chat

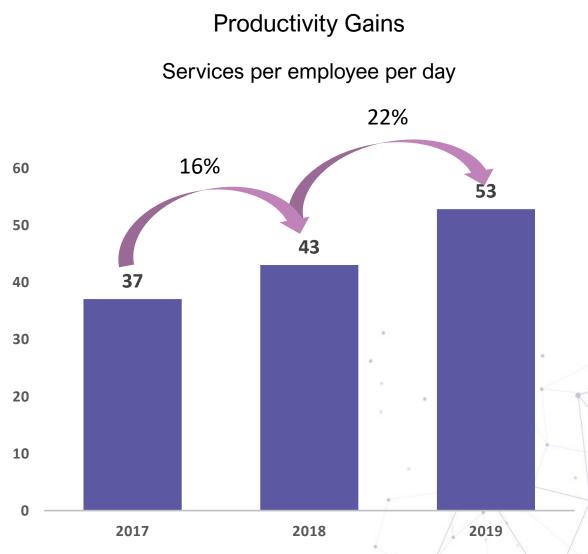
In Person





Scheduling: total operations control and productivity gains

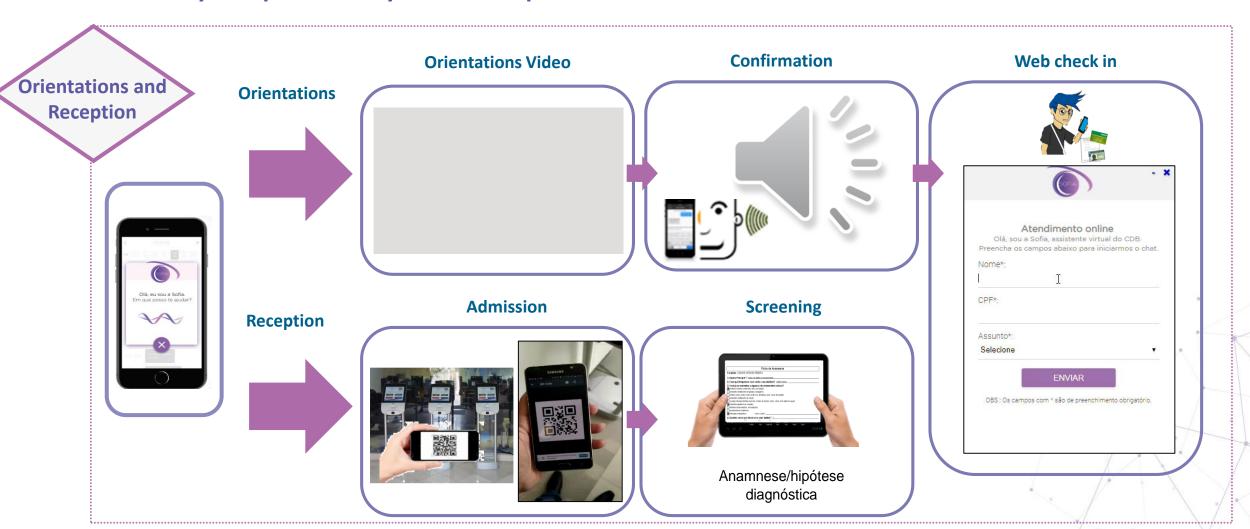








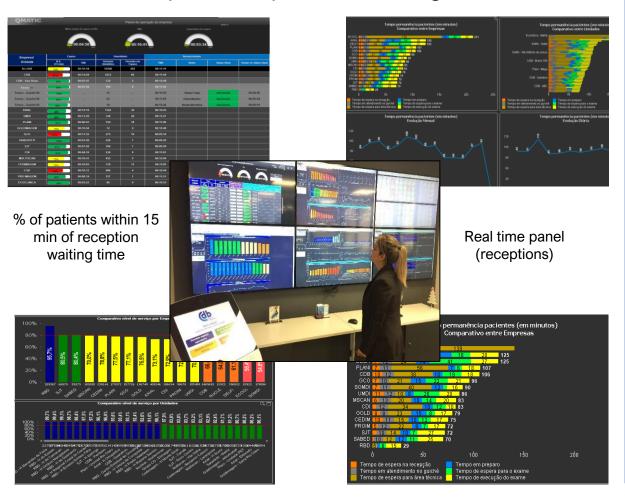
#### **Cost efficiency and productivity in the Receptions**





#### Reception: total operations control and productivity gains

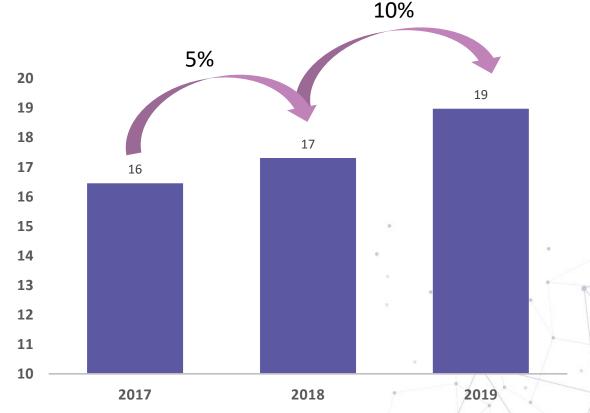
#### On line patient experience management



% os exams started with up to 15 min delay

Total patient time inside our PSCs

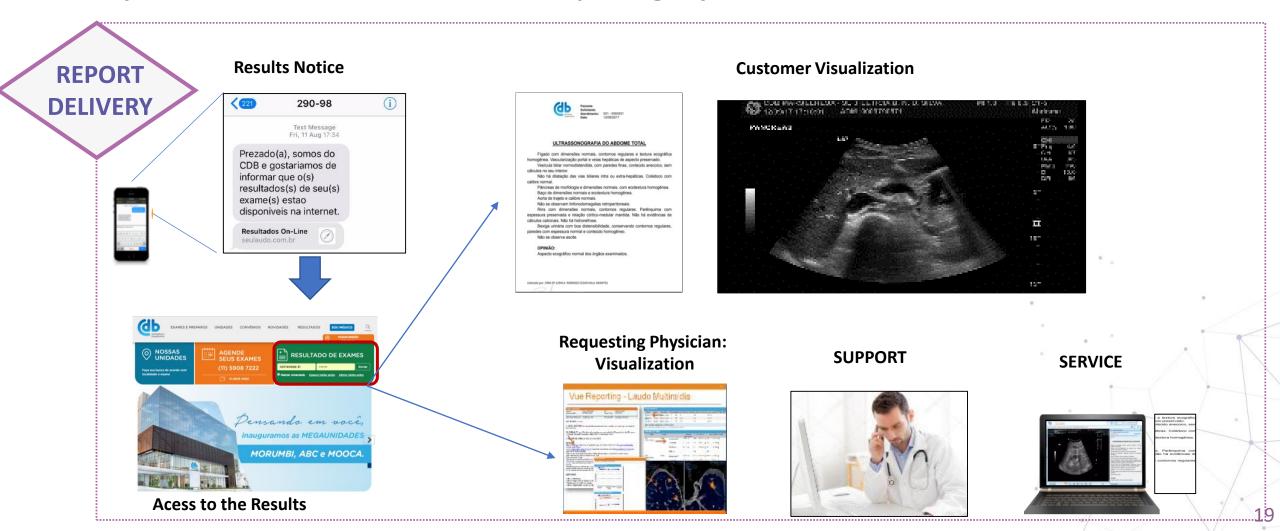
# Productivity Gains Services per employee per day 10%





Reports: customization on the delivery time and easier acess to the reports

#### **Quality Differential and Service Level to the Requesting Physician**

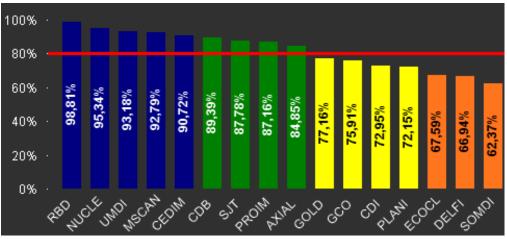




Results: total operations control and productivity gains

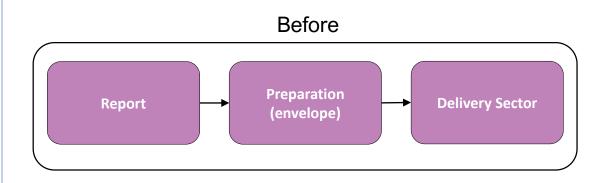
#### On line patient experience management



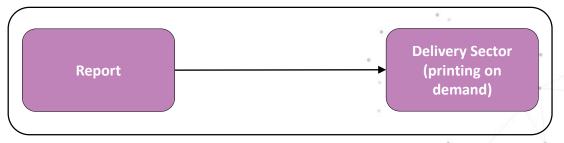


#### % of reports delivered within the expected delivery days

#### **Productivity Gains**



#### Under implementation



10% reduction in the personnel dedicated to preparation (envelope) and delivery sector

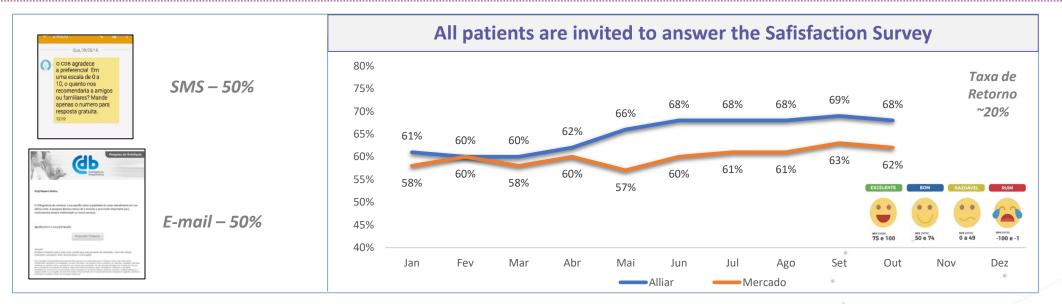


Quality: total control of Patient Satisfaction and continuos improvement in our processes

#### **Patien Satisfaction (NPS)**



NPS ALLIAR



NPS detailed per HMO plan





# **Medical Quality Management**

#### 1st Class Diagnostic Medicine throughout Brazil



#### **KEY-FIGURES**

- 35.000+ Requesting Physicians
- 1.200+ Radiologists
- 60.000+ MRI exams / month
- 40.000+ CT scans / month
- 160.000+ Ultrassound exams / month



# **Technology and Innovation**

#### Automation and AI inside Alliar's platform



#### **Virtual Reports Central and Teleradiology**

- Integrated environment
- Web platform
- High capillarity
- Structured reports and informations
- Clinical information cockpit and patient history
- Special clusters within the regional medical teams

- ✓ The Higher Standards of Quality
- Higher Productivity
- ✓ Exam time reduction
- ✓ Structured Population Health Data

# **Technology and Innovation**

#### Automation and AI inside Alliar's platform

#### **Artificial Intelligence:**

- Relevant patient data extraction and analysis
- Data Lake of exams
- Data analysis on diseases, blood tests and patient profile
- Healthcare Data Company

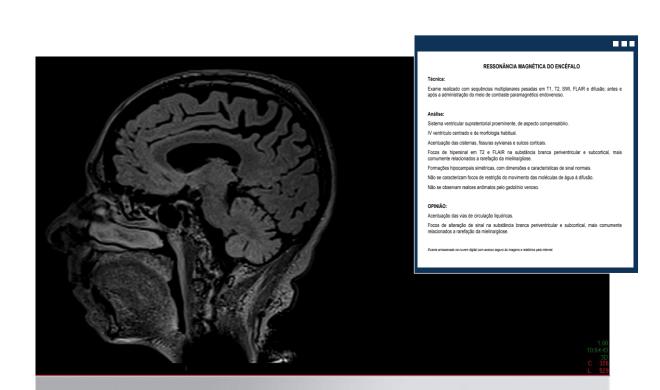




# **Knowledge Diffusion**



#### Medical Quality measured on our Peer Revision Reports Program



✓ Monthly, 2% of MRI and CT scans go to our Peer Revision Reports Program

✓ Anonymized data

✓ Knowledge Diffusion

✓ Medical Quality



# **Value Creation within the Diagnostics**

#### Digital Report - Significant Value to the Requesting Physicians



#### **FROM:**

#### ANGIOTOMOGRAFIA MULTISLICE DA CIRCULAÇÃO CORONARIANA

A presente avaliação foi realizada em equipamento de múltiplos detectores com 256 cortes, através de aquisição submilimétrica, sequencial, isotrópica e volumétrica no plano axial, sincronizados com eletrocardiograma, com a finalidade de demonstrar as artérias coronárias durante a injeção intravenosa de contraste iodado hidrossolúvel não-iônico

Foram também empregados parâmetros de redução de dose.

#### ANÁLISE:

Circulação coronariana com dominância direita.

Tronco da Coronária Esquerda (TCE) com origem no seio coronariano esquerdo, sem redução luminal

Artéria Descendente Anterior (DA) revela curso habitual na superfície epicárdica, no sulco interventricular anterior, atingindo o "apex cordis" sem redução luminal nas suas porções proximal, média e distal. Durante seu trajeto emite ramos septais e diagonais.

Artéria Primeira Diagonal (Dg1) de pequena importância, sem redução luminal. Artéria Segunda Diagonal (Dg2) de moderada importância, sem redução luminal

Artéria Circunflexa (CX) demonstra curso habitual na superfície epicárdica, no sulco atrioventricular esquerdo, sem redução luminal nas suas porções

Artéria Primeira Marginal Obtusa (Mg1) de pequena importância, sem redução luminal.

Artéria Segunda Marginal Obtusa (Mg2) de pequena importância, sem redução luminal

Artéria Coronária Direita (CD) com origem no seio coronariano direito, revelando curso habitual na superfície epicárdica, no sulco atrioventricular direito, sem redução luminal nas suas porções proximal, média e distal.

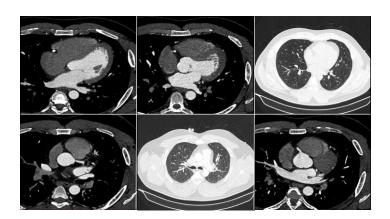
Artéria Descendente Posterior (DP) de moderada importância, ramo da artéria coronária direita, ultrapassando a "crux cordis", sem redução luminal. Artéria Ventricular Posterior (VP) de moderada importância, ramo da artéria coronária direita, revelando curso habitual na superfície epicárdica da parede posteroinferior do ventrículo esquerdo, sem redução luminal.

Coração com coeficientes normais de atenuações aos feixes de raios X.

Situs solitus cordis.

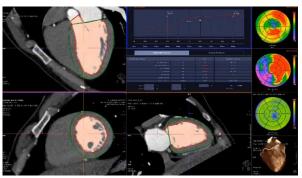
Há concordância venoatrial tanto da circulação pulmonar como da sistêmica.

Câmaras atriais e ventriculares de dimensões preservadas.



#### TO: MULTIMIDIA, INTERACTIVE REPORT





#### ANGIOTOMOGRAFIA MULTISLICE DA CIRCULAÇÃO CORONARIANA

A presente avaliação foi realizada em equipamento de múltiplos detectores com 256 cortes, através de aquisição submilimétrica, sequencial, isotrópica e volumétrica no plano axial, sincronizados com eletrocardiograma, com a finalidade de demonstrar as artérias coronárias durante a injeção intravenosa de

Foram também empregados parâmetros de redução de dose

Circulação coronariana com dominância direita.

Tronco da Coronária Esquerda (TCE) com origem no seio coronariano esquerdo, sem redução luminal

Artéria Descendente Anterior (DA) revela curso habitual na superfície epicárdica, no sulco interventricular anterior, atingindo o "apex cordis" sem redução luminal nas suas porções proximal, média e distal. Durante seu trajeto emite ramos septais e diagonais. Artéria Primeira Diagonal (Dg1) de pequena importância, sem redução luminal. Artéria Segunda Diagonal (Dg2) de moderada importância, sem redução luminal.

Artéria Circunflexa (CX) demonstra curso habitual na superficie epicárdica, no sulco atrioventricular esquerdo, sem redução luminal nas suas porções

Artéria Primeira Marginal Obtusa (Mg1) de pequena importância, sem redução luminal.

Artéria Segunda Marginal Obtusa (Mg2) de pequena importância, sem redução luminal.

Artela Coonsida Dietas (CD) com origem no seio coronaismo direito, revelando curso habitual na superficie epicárdica, no sulco atrioventricular direito, em redução human has suas proches promati, métias de defatal
Artela Descendente Posterior (DP) de moderaria importância, ramo da artelia coronária direita, ultrapassando a "cruz cordis", sem redução luminal
Artela Vantificada Posterior (DP) de moderaria importância, ramo da artelia coronária direita, verelando curso habitual na superficie especiárdica da
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parede posteroinferior do ventrículo esquerdo, sem redução luminal.

Coração com coeficientes normais de atenuações aos feixes de raios X

Situs solitus cordis.

Há concordância venoatrial tanto da circulação pulmonar como da sistêmica

# **Value Creation within the Diagnostics**

Digital Report - Significant Value to the Requesting Physicians



Multimedia interactive report: Bringing back the relationship radiologist and patient

#### **MULTIMEDIA REPORT (QR CODE)**

#### RESSONÂNCIA MAGNÉTICA MULTIPARAMÉTRICA DA PRÓSTATA

#### Contexto clinico

PSA em ascensão (3,9 ng/mL) e histórico familiar positiva.

#### recnica

Realizado em equipamento de 1,5 Tesla pelas técnicas TSE e GRE com imagens multiplanares ponderadas em T1 e T2, antes e após a administração intravenosa de contraste paramagnético.

#### Relatório

Dimensões da próstata: 5,1 x 3,9 x 3,7 cm. Peso estimado em 40,0 gramas

Zona de transição; com dimensões pouco aumentadas e heterogênea por apresentar alguns nódulos de provável hiperplasia, havendo leve proeminência do lobo mediano, que abaula discretamente o assoalho vesical.

Zona periférica: com aumento do realce pelo meio de contraste, leve restrição à difusão e redução de sinal em T2, de padrão difuso, podendo representar algum grau de prostatite (incluindo a forma subclinica), apesar de inespecíficos. Não há evidência de nódulos ou áreas focais de restrição à difusão significativa detectáveis ao método (PI-RADS 2).

Cápsula prostática: sem alterações significativas.

<u>Vesículas seminais</u>: com dimensões preservadas, apresentando leve espessamento e aumento do realce parietal difuso e bitateral, achados inespecíficos, mas que podem representar algum grau de vesículite, cuja relevância depende fundamentalmente de correlação clínica.

Linfonodos; ausência de linfonodomegalias

Bexiga: repleção parcial e conteúdo homogêneo, sem alterações detectáveis ao método.

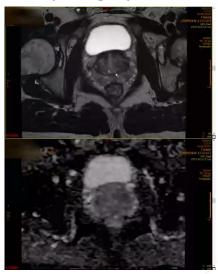
#### Impressão diagnóstica

- Estudo de ressonância magnética da próstata com baixa probabilidade de acometimento neoplásico clinicamente significativo (PI-RADS 2).
- Próstata de dimensões pouco aumentadas, com sinais de leve hiperplasia da glândula central.
- Alterações difusas na zona penférica prostática e nas vesículas seminais, inespecificas, mas que podem representar algum grau de processo inflamatório (prostatite / vesículite), incluindo a forma subclinica.



# Explicações sobre o exame e laudo para o paciente Project: Rads, show your face

#### 2. Requesting Physician

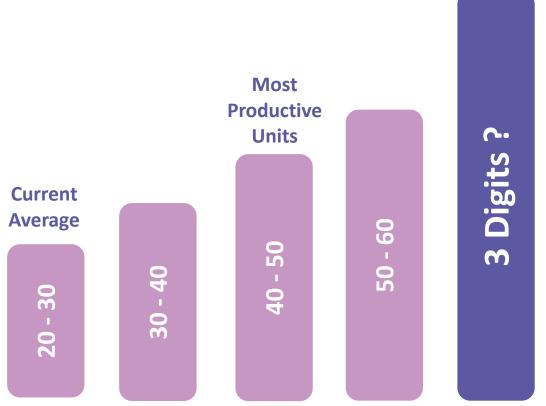


# **New Productivity Frontiers on MRIs**

Faster MRI Exam time with Current Technology







#### **New Frontiers**

- Remote Operation via Command Center
- Standardization and optimization of protocols



Increased quality in the Images and
in the Reports
Higher Offer of Exams
Reduced Investment Required



Demand Management: Commercial

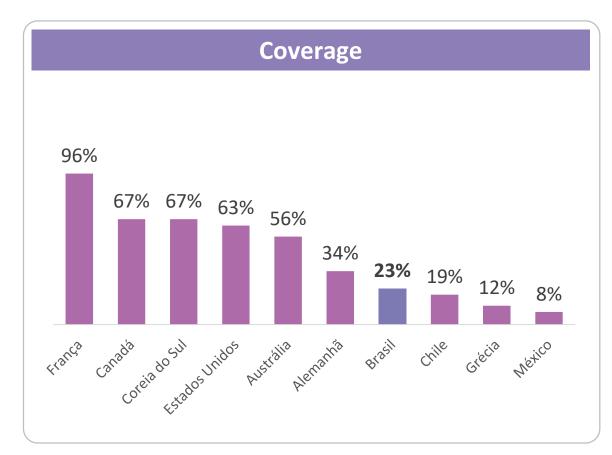
REQUESTING **PATIENTS MARKET PAYERS PHYSICIANS** 

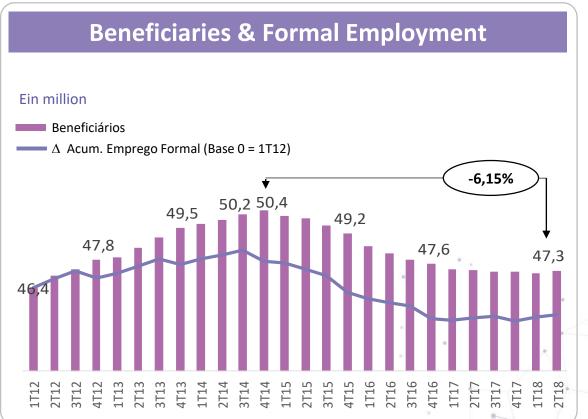
REQUESTING **PATIENTS MARKET PAYERS PHYSICIANS** 

# **Healthcare Coverage and Beneficiaries**



Low Coverage in Brazil and reduction in the number of Beneficiaries (linked to formal employment)





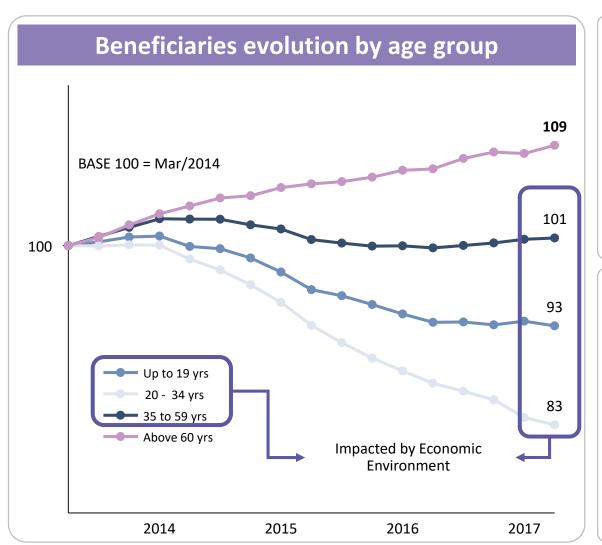
Economic recovery and formal employment will favour the demand

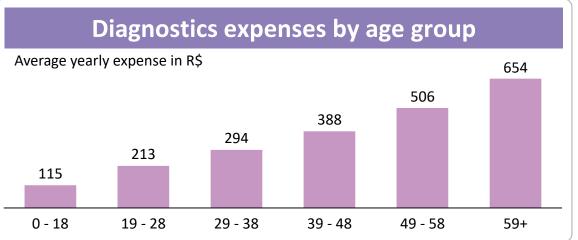
Sources: OCDE 2015, ANS, Caged

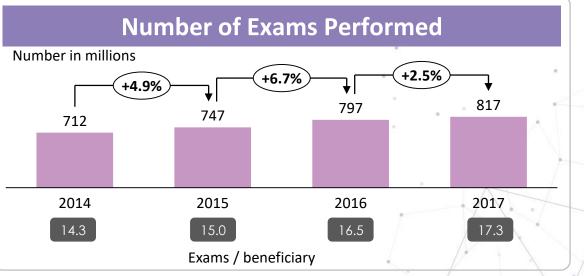
#### **Beneficiaries and the Number of Exams**



Growth in Exams sustained by Ageing Population, despite the decrease in Beneficiaries





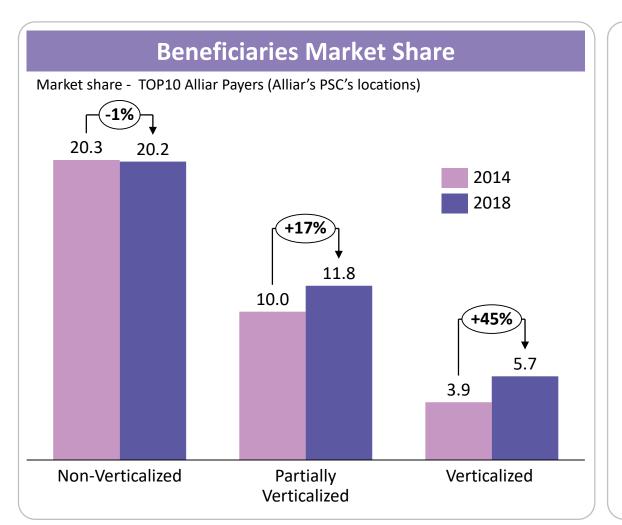


Sources: ANS, Alliar (estimative)

# **Profile Change in the Payers**



Verticalized and Partially Verticalized Players are gaining share



- Vertical model gaining relevance within the health market
- Traditional operators with difficulties in managing claims and significant cost increases (medical inflation)
- Verticalized / partially verticalized model reduces incentive misalignment problems in the health chain
- Alliar has products to operate in all segments

Sources: ANS

REQUESTING **PATIENTS MARKET PAYERS PHYSICIANS** 

#### **Commercial Strategies**

Customized Products to the Payers



#### **Non Verticalized**

Fee for service



Service pack

Price x Volume Negotiation Fixed amount pack

#### **Verticalized**



Taylor made products based on the "Lab-to-Lab" concept in Imaging

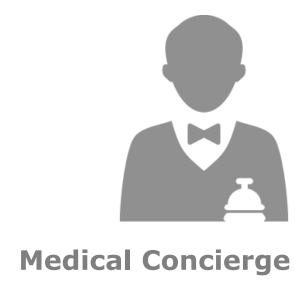
REQUESTING **PATIENTS MARKET PAYERS PHYSICIANS** 



#### **Requesting Physicians**









## Alliar Medical Staff

REQUESTING **PATIENTS MARKET PAYERS PHYSICIANS** 

#### **Commercial Strategies**

#### **Brands Consolidation**











































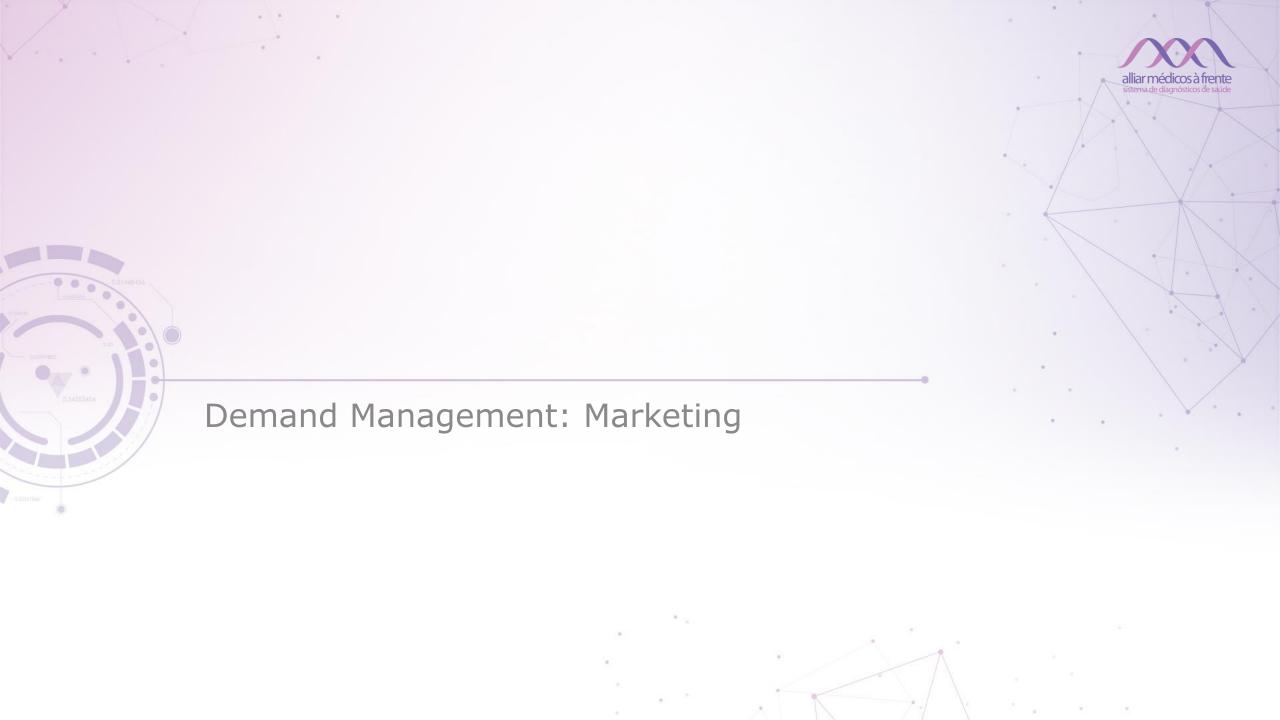












#### Marketing

Incorporating a new strategy: "intelligence"





#### Marketing

Incorporating a new strategy: "intelligence"



## $in \cdot te \cdot li \cdot g \cdot \hat{e} n \cdot ci \cdot a$

INTELLIGENS, ENTIS HARTICIPIO PRESENTE DE INTELLIGO, ERE, PERCERIER COMPREENDER

TECNOLÓGICA
EMOCIONAL
EM INTEGRAR
EM REUNIR TUDO
EM UM SÓ LUGAR
EM ATENDER
EM POSSIBILITAR
EM ENTENDER
EM DIAGNOSTICAR

1. FACULDADE DE CONHECER, COMPREEND

RRENDERS

2. CAPACIDADE DE COMPREENDER E RESOLVER NOVOS PROBLEMAS E CONFLITOS E DE ADAPTAR-SE ANOVAS SITUAÇÕES.

BLEONIUNTO DE FUNÇÕES PSÍQUICAS E EISIOLÓGICAS QUE CONTRIBUEM PARA O CONHECIMENTO, PARA A COMPREENSAO DA NATUREZADAS COISAS E DO SIGNIFICADO DOS FATOS.

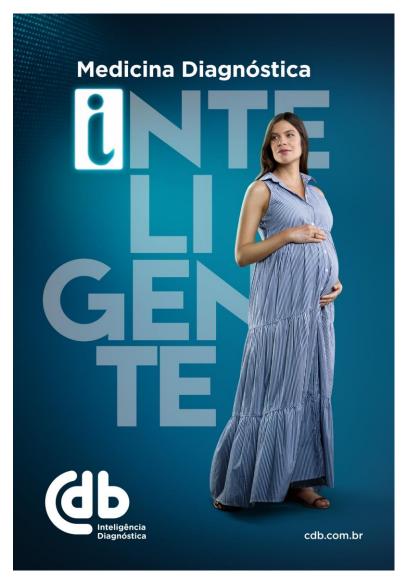
- 4, MODO DE INTERPRETAR INTERPRETAÇÃO
- G, INDIVÍDUO DE GRANDE (NTELIGENCIA SUMIDADE.
- 6. HARMONIA ENTENDIMENTO RECÍPROCO.

#### Marketing











# 







#### Strategy 2019

## TRADITIONAL MEDIA

## DIGITAL MEDIA



#### Strategy 2019



#### **Digital Strategy to our Products and Services**











### Carlos Araújo

Strategic Projects Management

#### **Efficiency and Profitability Opportunities**





Cathegories		% Saving	Starting From
Clinical Analysis	Phase 1	20%	Jan/2018
	Phase 2	7%	Jan/2019
Contrasts		21%	Dec/2018
Films		22%	Jun/2018
Medical material		19%	Aug/2018
Cleaning		5%	Aug/2018
Internet links		5%	Oct/2018
Energy		9%	Apr/2019
TOTAL		17%	

#### **Efficiency and Profitability Opportunities**

Make vs. Buy Decision on Clinical Analysis



#### Own-Lab?





Make vs. Buy Decision

#### **New Growth Avenues**

#### Solutions Developed according to the Customer Needs





• **Dedicated Team** - New Company with own CEO and management structure

• Value Creation according to the Customer Needs

 Full Remote Diagnostics Solution, based on the "Lab-to-Lab" concept in Imaging



#### **Customized Products**

#### **INTEGRATED PLATFORM**

COMMAND CENTER



**PROTOCOLS** 



TELE RADIOLOGY



CALL CENTER



SSC



**SYSTEMS** 



**EQUIPMENT MAINTENANCE**AND BUYING TERMS



i

**COST REDUCTION** 



**PROFITABILITY** 



**QUALITY INCREASE** 



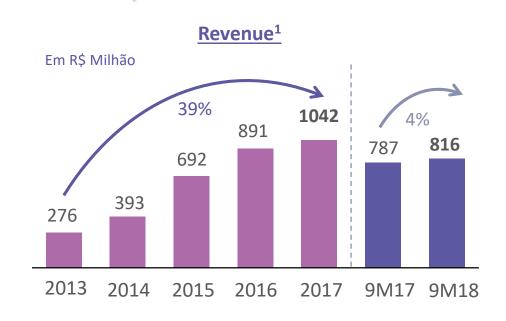
**ACESS TO TECHNOLOGY** 

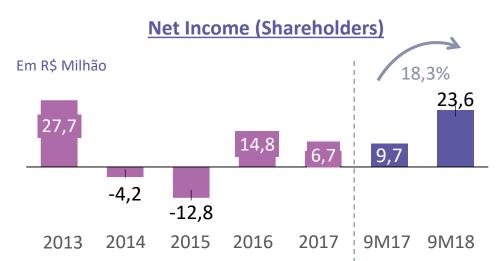


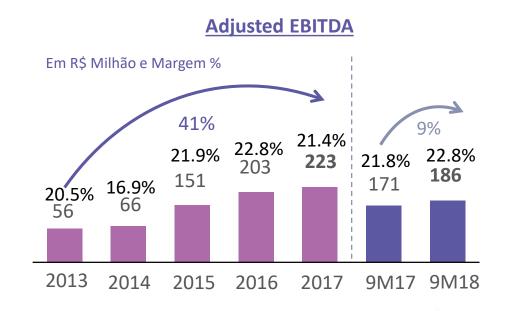
#### **Maturation and Profitability**

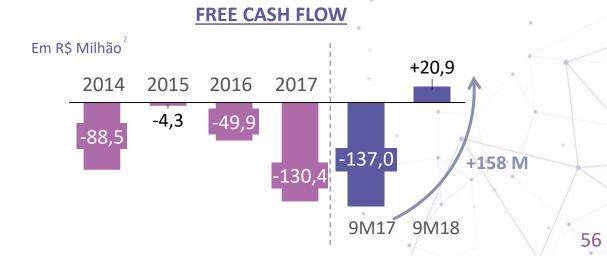
#### New Strategy starts to reflect on Alliar's Results







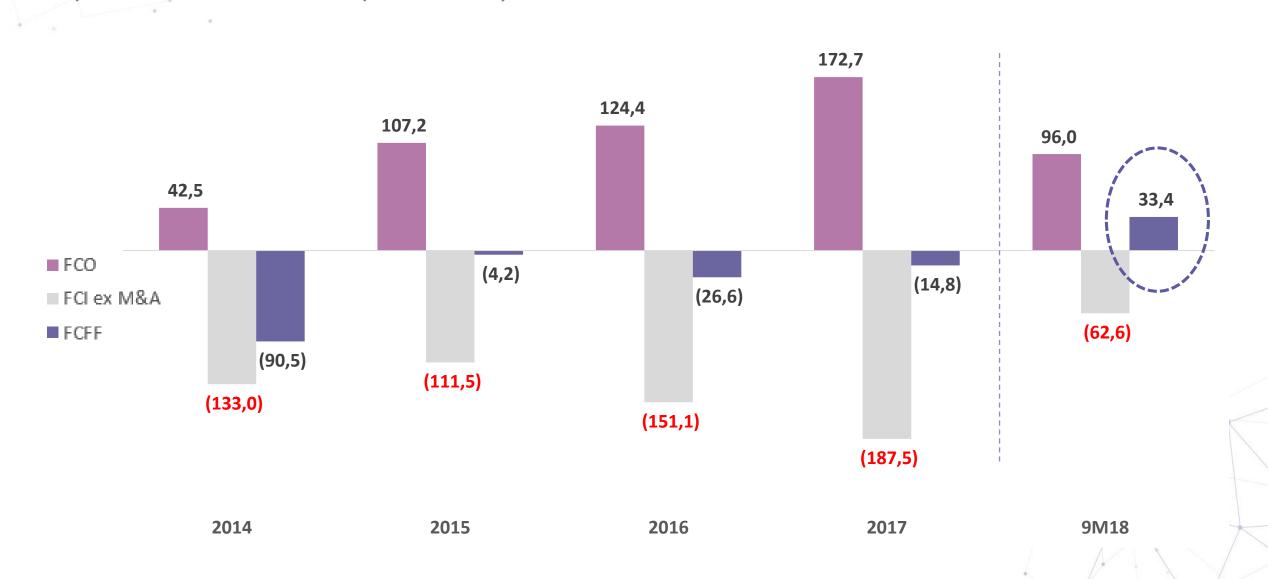




#### **Cash Generation**



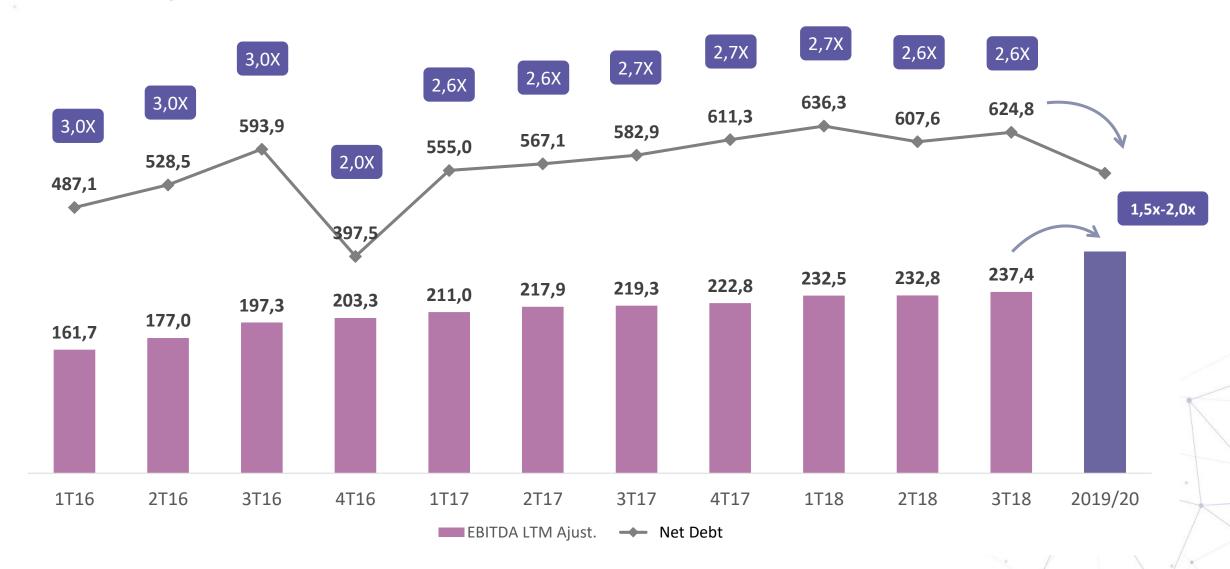
CapEx Reduction with Important Improvement in Cash Generation



#### **Financial Leverage**

*Target Net Debt/EBITDA < 2x* 

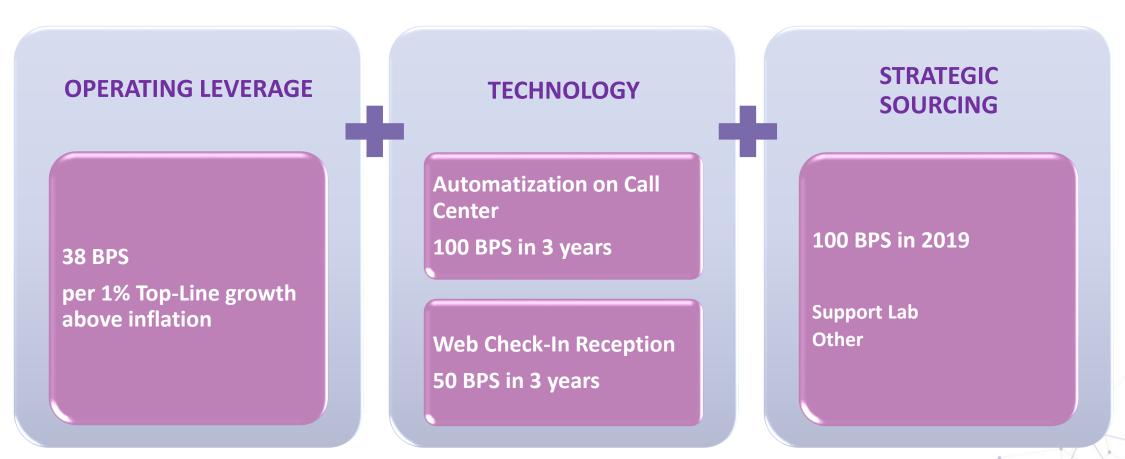




#### **Operational Results - EBITDA**



Significant Improvements in EBITDA Margins based on initiatives already implemented or ongoing (Current Technology)



>250 BPS in Opportunities in the coming years (ex operating leverage)

#### **Effective Tax Rate**



Tax Rate Reduction unlocking Bottom Line value



In addition to IOE to shareholders post-incorporations

#### **Digital Transformation and the New Alliar**

Big transformation ongoing: Asset Light Model







ASSET LIGHT MODEL



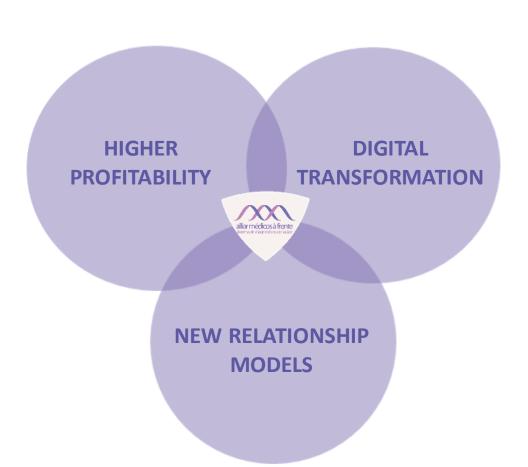
ROIC, PROFITABILITY & COMPETITIVITY



#### Revolution in the Business Model

New business model based on Digital Transformation























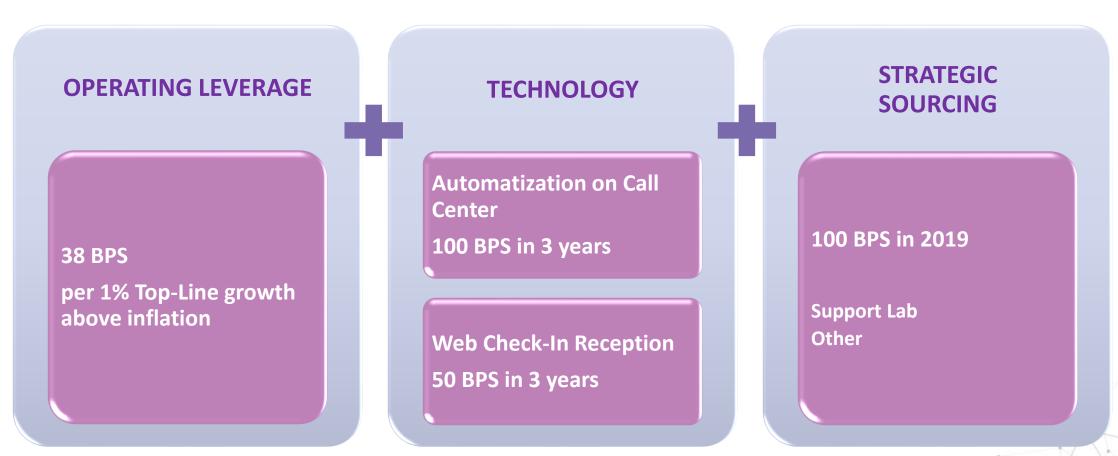


Inteligência Diagnóstica Remota

#### **Operational Results - EBITDA**



Significant Improvements in EBITDA Margins based on initiatives already implemented or ongoing (Current Technology)



>250 BPS in Opportunities in the coming years (ex operating leverage)



## Q&A

