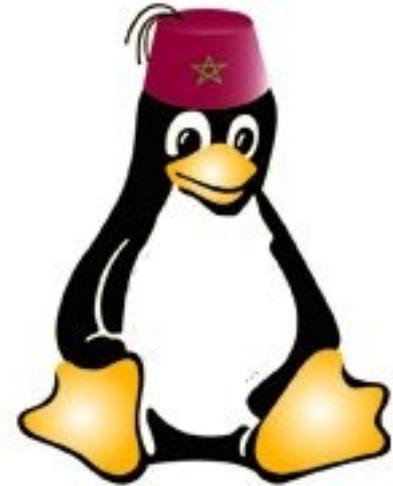


# **Methodology for Establishing a System of Free Software in Health in a Moroccan Care Center**



# PLAN

- Presentation
- Health in morocco
- Methodology
- Keys to success
- Advantages of opensource system
- Moroccan specificities
- Conclusion and perspective

# Who's

- Manager of opensource consulting company
- Licence in management hospital
- SAP functional consultant (fi-co-mm certified)
- Openerp integrator since 2006 in morocco
- Linux expert (LPI level 1 certified)
- Vice president of moroccan society for telemedecin and eHealth (MSFTEH)
- lecturer in several Moroccan universities to promote free software

# Health in morocco

Total population 31,993,000

Gross national income per capita (PPP international \$) 4,190

Life expectancy at birth m/f (years) 71/75

Probability of dying under five (per 1 000 live births) 38

Probability of dying between 15 and 60 years m/f (per 1 000 population) 126/87

Total expenditure on health per capita (Intl \$, 2009) 251

Total expenditure on health as % of GDP (2009) 5.5

. Source: Global Health Observatory

# Methodology

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*Start*

*Modelization*

*Implementation*

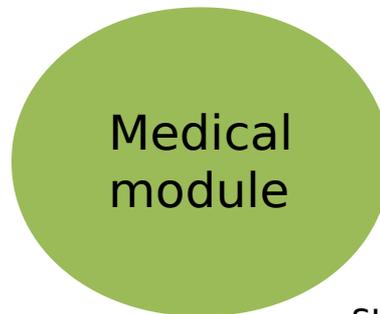
*Evolution and Support*

Hospital Financial  
Administration

Lab  
Administration

Hospitalisation

Patient  
Administration



socioeconomics

lifestyle

surgery

appoin  
tement

# Start

- Specify the functional scope
- Engagement of top management and key users
- Risk management
- Team with responsibilities and roles
- Have an accurate planing

# ***Modelization***

- Fonctionnal perimeters
- Document processes and procedures
- Prototype

# *Implementation*

- Specific developpement , Interfaces and Finally the recovery master data.
- have a tested system
- using the agile method
- Trained user

# ***Evolution and Support***

- Follow-up Post-production
- Ensure the continuation of activity
- Monitoring and control performance
- Update and meet new demands
- Support onsite or online

# Keys to success

- Have Realistic expectations
- Develop a diagnostic review with the internal staff to define and understand the business drivers for the projec
- Focus on business processes and requirements first
- Ensure adequate training and change management

# Advantages of open source

- Lower total cost of ownership
- Providing value-added services
- Reduced dependence on software vendors
- saving public depense

# Moroccan specificities :

## List of the fee schedule published by the Ministry of Health

Menu ✕ Listes des actes medicaux ✕

Désignation :  Acte medicale :

Désignation	Tarif en DH	Acte medicale
Protéine C Réactive(CRP)	30	Actes de biologie medicale
Taux de Prothrombine(TP)	100	Actes de biologie medicale
Temps de Céphaline Activé(TCA)	40	Actes de biologie medicale
Fibrinogène	40	Actes de biologie medicale
Transaminases O (TGO)	40	Actes de biologie medicale
Phosphatases alcalines	50	Actes de biologie medicale
Acide urique	70	Actes de biologie medicale
Césarienne	3000	Actes de chirurgie ou de spécialité
Ligature de varices oesophagiennes	2400	Actes de chirurgie ou de spécialité
Dilatation oesophagienne au ballonnet	2250	Actes de chirurgie ou de spécialité
Polypectomie gastrique	1050	Actes de chirurgie ou de spécialité
Polypectomie colique	1050	Actes de chirurgie ou de spécialité
Traitement hémostatique des uclères hémorragiques par clip ou sclérose	2200	Actes de chirurgie ou de spécialité
Traitement hémostatique par plasma argon colique ou rectal	1300	Actes de chirurgie ou de spécialité
Alcoolisation d'un module hépatique	1000	Actes de chirurgie ou de spécialité

# Arabization

Lab Test Report طلب اختبار Menu

معلومات رئيسية معلومات إضافية

تقرير المختبر

نوع الاختبار: COMPLETE BLOOD COUNT رمز: TEST004

تاريخ التحليل: 13:30:56 06/09/2011

إخصائي علم الأمراض: khadija, Masskoub المريض: khadija, Masskoub

أحمد، بنشكرون الطبيب: احمد, Benchakroun تاريخ طلب: 13:28:45 06/09/2011

حالات الاختبار

اختبار	Séquence	نتيجة	مجموعة عادية	وحدات
Hemoglobin	1	11.0-16.0	11.0-16.0	g/dL
RBC	2	3.5-5.50	3.5-5.50	10 <sup>6</sup> /uL

إدارة استشفاء المرضى Menu

البيانات الإدارية خطة الرعاية

رقم التسجيل: INPAC003 المريض: khadija, Masskoub سرير المستشفى: 320

تاريخ الاستشفاء: 13:38:00 06/13/2011 تاريخ الخروج: 13:38:00 06/17/2011

أحمد، بنشكرون الطبيب المعالج: Cordara, Cameron الجراح المنفذ للعملية: احمد, Benchakroun

نوع القبول: الطوارئ سبب للقبول: Cholera

الغاء:

وضعية شاغر: تأكيد التسجيل

# Conclusion and perspective :

- Upgrading of IT infrastructure is a priority
- A health system must be localized with local specification
- feedback of the deployment of open source health care system can influence decision makers Moroccan
- with moroccan society for telemedecin and eHealth we planish to organise differents workshop over different towns in morocco In opensource health system
- With the arrival of arabic spring we hoped that political decisions will be taken to adopt the open source model in the field of health
- Promote the adoption of open source in service companies

# THANK YOU FOR YOUR ATTENTION

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Twitter # nextma

