

BYOD's FINANCIAL BALANCE SHEET

Tmanco SA – Toni Lazazzera

Geneva, Jan. 23rd 2015



...companies can save as much as \$3,150 per employee per year if they implement a "comprehensive" BYOD program...

Cisco



... a company with 1,000 BYOD devices would pay \$170,000 more on average per year.

Aberdeen



Agenda

- **Introduction Tmanco**
- **Scope & methodology**
 - Which BYOD do we mean ?
 - Know our Telecom Lifecycle to know all costs
- **Analyzing each step of the Telecom Lifecycle**
 - What cost / benefits factors ? What numbers can we estimate ?
 - Interactive session, your input is appreciated to agree on realistic estimates
- **Financial balance sheet**
 - Putting all numbers together
 - How BYOD compares with scenarios Corporate or Corporate+TEM
 - Why TEM impacts the costs and how much ? (real examples)
- **Wrap-up**
 - Roadmap to your own balance sheet
 - References
 - Excel template

Who is Tmanco ?

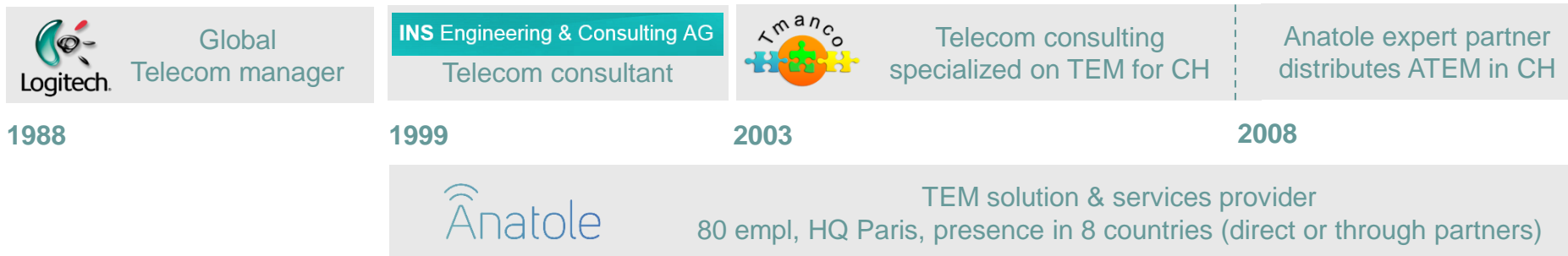
- **Swiss consulting company, founded 2003 by T.Lazazzera**
- **Focus: manage & optimize telecom costs (mainly mobile)**
- **Distributes the Anatole TEM solution**
 - French company, largest TEM provider in EU, 3mio lines managed
 - In Switzerland: >20'000 lines (Geneva airport, DHL, SR-Technics,.....)
 - Typical benefits of TEM: reduction 20-30% of costs + 50% of workload

Experience from the field:

High spend & low visibility = problem & savings potential

Telecom management competence

Tools & consulting to simplify the management & optimize the costs



TEM = High growth market, \$ 750M in 2009 ...\$ 2'000M in 2015 (source: Gartner)
 USA: about 50% of companies using TEM services/tools. EU: only ~10%, high growth

SCOPE

Which BYOD do we mean ?

What type of device ?



With or without SIM card ?



Who owns what ?

For each scenario, the choice of device may be imposed, limited or free

1) CORPORATE

2) BYOD-CS: with Corporate SIM

3) BYOD-PS: with Personal SIM

Corporate

Personal



We will focus on BYOD with Personal SIM

METHODOLOGY

Know your Telecom Lifecycle to know your costs

Provisioning

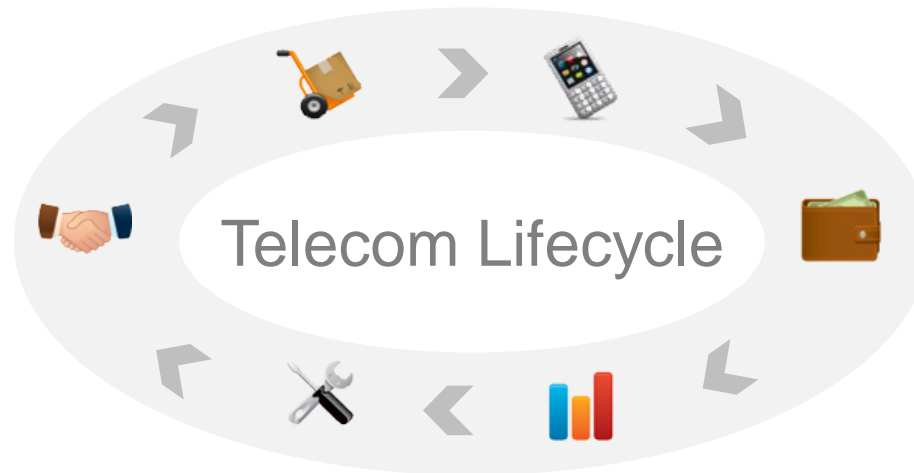
- Devices, SIM cards
- Order, configure
- Repair
- Enduser support

Usage

- Traffic: voice, data, SMS, national,internat., roaming
- Use: prof., private,abuse
- Productivity

Sourcing

- Negotiate
- Tariffs
- New offers



Accounting

- Verify invoice, errors
- Process, pay, dispute
- Allocate to cc
- Charge-back to user

Optimization

- Adjust subscriptions / options
- Take advantage of new offers
- Convergence fix-mob
- Simulations

Monitoring

- Reports
- Analyses, trend
- Control, abuse



Sourcing



CORPORATE

BYOD

\$ Resource to negotiate contract

- Est. 0.05...0.10 FTE

- Challenges: difficult to compare offers, to simulate outcome. Time consuming to run RFP. Complex process to change carrier

\$ Nomore contract to negotiate

\$ Less attractive tariffs because individual consumer contracts. Higher traffic costs.

- Est. mobile invoice ~50% higher

Ref 09 Calculating the true cost of BYOD (Forbes)

The Aberdeen Group argues that telecommunications costs, in particular, can expand with BYOD because companies lose the traditional volume discounts they got when they purchased both devices and service from a single provider. In a report last year, Aberdeen said that a company with 1,000 BYOD devices would pay \$170,000 more on average per year.

Ref 26 The true costs of BYOD (Zdnet)

Consumer tariffs for voice and data for mobile devices can cost up to five times the price of corporate tariffs, according to Richard Absalom, senior analyst for consumer impact with Ovum — which means that letting staff claim expenses for charges on these personal tariffs "can easily negate any savings on the hardware".



Provisioning

CORPORATE

BYOD

\$ Device: order, config, repair, support

\$ SIM: order, terminate, chg options, support

- Est. 1...1.5 FTE to manage 1000 mobiles, 60% of that time for provisioning = 0.6...0.9 FTE

\$ Device purchase

- Est. 200...300 chf (subventioned) every 2 years
100...150 KCHF/yr for 1000 mobiles

\$ Device: nomore order, repair

\$ SIM: nomore activity or support

\$ Support for device diversity and application incompatibilities.

- Est. half of corporate resources, 0.3...0.45 FTE

\$ MDM (mandatory for config & security)

- Est. 3...7 CHF/mob/month

\$ Subvention for device purchase

- Company may pay a subvention to employee for the device. In this example we presume none.

Ref 08 BYOD: If you think you're saving money, think again (CIO)

With BYOD, IT departments are caught between the proverbial rock and hard place: IT doesn't control the actions of the carrier or the devices, yet is still being held responsible to support BYOD employees, even if IT isn't getting additional resources to do so.



Usage

CORPORATE

BYOD

\$ Carrier invoice with attractive corporate tariffs (high volume, negotiation power)

- National, international, roaming, voice, data, sms, professional, private, legitimate, abuse,...
- Est. 100...200 chf/mob/month.
Tot 1'200...2'400 Kchf/yr

\$ Private invoice with less attractive tariffs

- Est. 50% more expensive = 1'800...3'600 Kchf/yr

\$ Reduction of private usage

- Est. 5% of corporate invoice is private, this won't be paid by corporate anymore = 90...180 Kchf/yr

\$ Cost increase for intra-company traffic

- Traffic between own mobiles and from/to fix lines isn't free anymore. Est. 5% = 90...180 Kchf/yr

\$ Increased productivity (hard to estimate)

- Balance sheet will tell how much it should be

\$ Cost of additional risk (hard to estimate)

- More risk with personal devices. See also Ref_23

Ref_09 Calculating the true cost of BYOD (Forbes)

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Ref_09 Calculating the true cost of BYOD (Forbes)

According to a study released last Wednesday by Cisco's Internet Business Solutions Group, U.S. companies can save as much as \$3,150 per employee per year if they implement a "comprehensive" BYOD program ...

Ref_24 Aspects légaux du BYOD (SebastienFanti)

Plus de 50% des vols d'ordinateurs portables entraînent un vol de données ... Le coût d'un accès non autorisé à des données obtenues sur des terminaux perdus ou volés oscille entre 3'010 dollars et 179'270 dollars en moyenne...



Accounting



CORPORATE

BYOD

\$ Process & verify invoices. Allocate costs to cost-centers

- Est. 20% of 1...1.5 FTE/1000mob
= 0.2...0.3 FTE

\$ Nomore invoices to process & verify but process & verify users expense-reports

- Est. half of corporate resources: 0.1...0.15 FTE

\$ Stipend or Expense-back prof. usage

- Assuming expense-back: time to fill exp-report, verify, process. Est. total 0.5...1 hr/user/month = 0.5...1% FTE/mob = 5...10 FTE/1000mobiles.
- If stipend (pay fix amount): can be ok for standard situation (national) but not for roaming.
- More about Stipend/Expense-back in Ref_13

Ref 08 BYOD: If you think you're saving money, think again (CIO)

You'll have to tack on the hidden cost of reimbursing BYOD employees. Typically, an employee files a monthly expense report for their wireless bill. A single expense report costs about \$18 to process, says Aberdeen

Ref 10 Lack of Cell Phone Reimbursement Creates Class Action Liability for CA Employers (Forbes)

To the extent employers require employees to use a cell phone for work, employers should consider providing their employees with cell phones and voice/texting plans. In the alternative, employers should implement written policies requiring their employees to track and submit expense reports regarding their work-related cell phone usage so that employees can be reimbursed for the actual cost of such usage. If the actual cost cannot be determined, such as if an employee already has an unlimited minutes/texting personal plan, then the employer will be required to reimburse the employee for a "reasonable percentage" of the personal cell phone bill.



Monitoring



CORPORATE

BYOD

\$ Extract statistics, produce reports, perform analysis

- Est. 10% of 1...1.5 FTE/1000mob
= 0.1...0.15 FTE

\$ Nomore reports/analysis (?)

- Maybe still useful but not mandatory

Ref 25 The real costs associated with BYOD (TechRepublic)

In order to carry out a successful BYOD program, enterprises need to properly understand how to manage their mobile expenses

Ref 08 BYOD: If you think you're saving money, think again (CIO)

BYOD employees often expense their entire wireless bill rather than itemize it. "There's absolutely no visibility into what's personal and what's corporate," Park says. "Even though companies may say they take care of this by putting in a ceiling or fixed expense amount, it doesn't mean they've optimized the cost structure. It just means employees know how high they can go."

Ref 22 BYOD - Who Carries The Can ? (quocirca)

Monitoring and validation is non-existent when it comes to expense-paid mobile bills. Mobile expenditure gets lost and it is almost impossible to provide accurate management information. After all – who is going to go through 1000's of paper bills to check if a user has allocated personal calls correctly or if at all?



Optimization

CORPORATE

BYOD

\$ Fleet optimization to

- adjust subscriptions/options
- terminate unused lines (zombies)

- Est. 10% of 1...1.5 FTE/1000mob
= 0.1...0.15 FTE

- Challenges: complex tariffs, difficult to choose ideal subscription or options

\$ Nomore fleet optimization, done by user

\$ Nomore zombie lines

- Est. 1.5% of yearly spend = 27...54 KCHF/yr
- These are lines nomore in use or assigned to users who are nomore active.

\$ Non-optimum choices cause extra costs

- Choices rely on user, corporate can't see invoices, user may not care about best choice since it's paid by corporate anyway.
Est: 10% of invoice: 180...360 KCHF/yr

Ref 22 BYOD - Who Carries The Can ? (quocirca)

With billing data sent direct to users there is very little organisations can do to analyse billing data without the consent of users – individual billing makes data personal even if there is ultimate corporate liability.

Financial balance sheet

Download Excel template at
<http://www.tmanco.ch/lib/prs-2015-01-ClusisByod.xlsm>

TOTAL = Before productivity gain. FTE costs estimated at 150'000 chf/yr per FTE.

If goal is to reduce costs, consider also:

TELECOM
LIFECYCLE

CORPORATE			
	1.05	1.60	FTE
	158	240	KCHF
	1'300	2'550	KCHF
TOTAL	1'458	2'790	KCHF

BYOD			
	5.50	10.75	FTE
	825	1'613	KCHF
	1'989	3'990	KCHF
TOTAL	2'814	5'603	KCHF
Diff. to corporate	93%	101%	

CORPORATE + TEM			
	0.54	0.83	FTE
	81	125	KCHF
	816	1'572	KCHF
TOTAL	897	1'697	KCHF
Diff. to corporate	-38%	-39%	

Step	Topic	min	max	unit
Sourcing	Contract negotiation	0.05	0.10	FTE
Provisioning	Fleet management	0.60	0.90	FTE
	Device purchase	100	150	KCHF
Usage	Subscriptions+Traffic	1'200	2'400	KCHF
Accounting	Invoice processing	0.20	0.30	FTE
Monitoring	Reports generation	0.10	0.15	FTE
Optimization	Fleet optimization	0.10	0.15	FTE

Topic	min	max	Unit
User support	0.30	0.45	FTE
MDM	36	84	KCHF
Subscriptions+Traffic	1'800	3'600	KCHF
Private usage	-90	-180	KCHF
Intra-company traffic	90	180	KCHF
Expense processing	0.20	0.30	FTE
User expense	5.00	10.00	FTE
Zombie lines	-27	-54	KCHF
Non-optimal choices	180	360	KCHF

Topic	min	max	Unit
Contract negotiation	0.04	0.08	FTE
Fleet management	0.30	0.45	FTE
Device purchase	100	150	KCHF
TEM	14	18	KCHF
Subscriptions+Traffic	1'200	2'400	KCHF
Private usage	-60	-120	KCHF
Invoice processing	0.10	0.15	FTE
Reports generation	0.05	0.08	FTE
Usage policy	-240	-480	KCHF
Fleet optimization	0.05	0.08	FTE
Zombie lines	-18	-36	KCHF
Tariff optimization	-180	-360	KCHF



Will BYOD increase productivity so much to compensate the 1'400...2'800 KCHF/yr extra costs ?
 Instead of BYOD, you could hire 10...20 FTEs with that money ... could that bring more value ?

TEM is about achieving a well-managed corporate environment

THE COSTS AND BENEFITS OF BYOD IN CONTEXT

Mobility Category	Well-Managed Corporate Environment	Poorly-Managed Corporate Environment	BYOD
Device cost	\$4 - \$8 per user per month (based on spending \$100-\$150 per device lasting 18 - 24 months)	\$11 - \$25 per month (based on spending \$200-\$300 per device lasting 12 - 18 months)	No cost, unless the company chooses to subsidize
Voice, Data, Text, and International Roaming	\$60 - \$65 per month per user in a well-managed organization	\$90 to \$120 per user per month in a poorly managed organization	Depends on, reimbursement policy, but often \$75 or higher
Help Desk Cost	\$5 per user per month, including Tier 2 support	\$10+ per user per month for Tier 1 support	No visibility, support often pushed to profit centers
Mobile Developer Costs	Rationalize \$150K per year developer resources based on platform and tools	Hire developers to handle specific platforms without performing cost/benefit analysis	Often unaware of whether developer resources actually help employees or customers
Mobility management software	Have low-cost expense and device management tools, typically \$5-\$10 per device per month.	Incomplete tool deployment or one-time audits with short lifespan before inefficiencies creep in.	May have MDM and should consider expense management solutions.
Productivity Obtained	Based on time to action for corporate supported email, messaging, and applications. Typically in the 1%-2% range.	Based on employee's ability to find and prioritize mobile tools.	Based on employee's judgment.
Reduction of compliance-related fines	Clear benchmarking from year to year showing changes based on policy management.	Dedicated budget allocated to fines expected to occur due to poor management.	Ad hoc compliance issues that cannot be predicted due to lack of management.

Ref_16 Understanding the hard ROI of BYOD (Nucleus Research)

Why TEM impacts the costs

Provisioning

- Inventory management: lines, devices, users
- One-click ordering, workflow, traceability
- Optimize & standardize processes

Usage

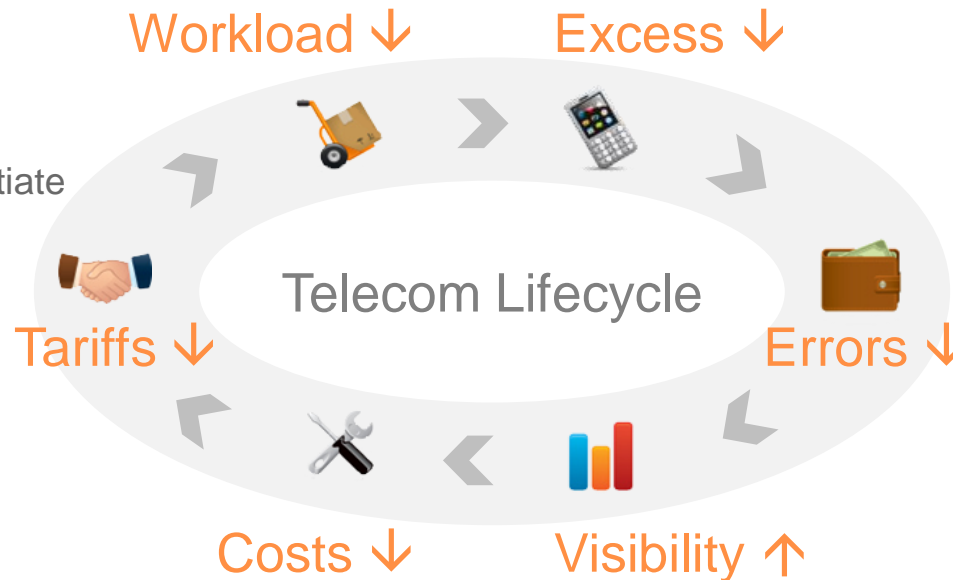
- Define & enforce usage policies
- Increase cost-awareness
- Involve endusers in cost-reductions

Sourcing

- Know your traffic, negotiate where it matters
- Accurate data to estimate outcome
- Information = Power

Accounting

- Cross-check invoices against inventory
- Verify if conditions are correctly applied
- Detect & correct errors immediately (stop cost leakage)



Optimization

- Detect & correct inadequate options
- Evaluate solutions: VoIP, UCC, call-routing,
- Decide with confidence

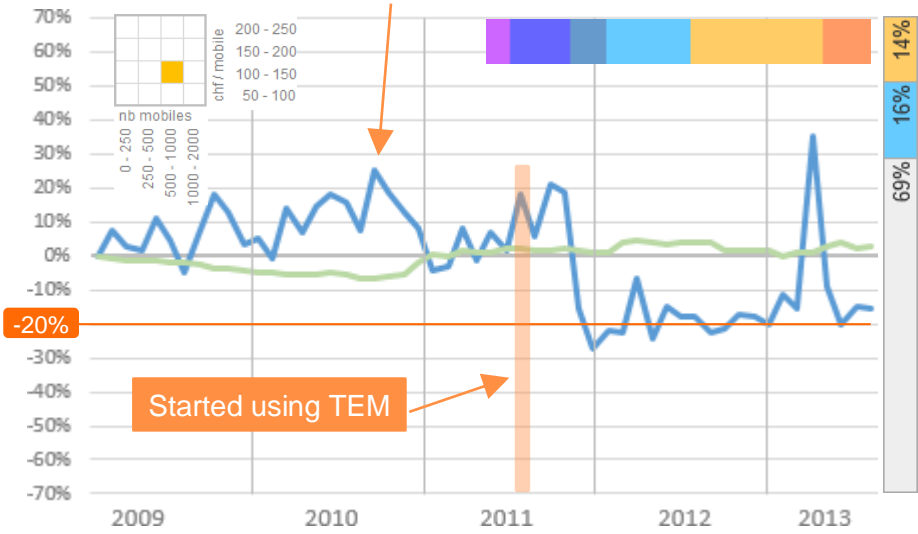
Monitoring

- Automated reports on costs, traffic, trends
- Increase accountability for users & managers
- Move from policeman to business partner

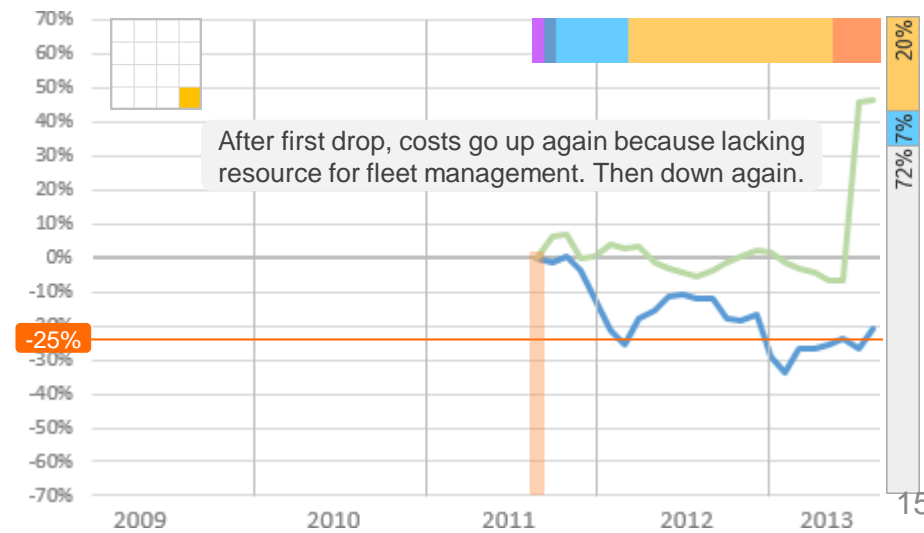
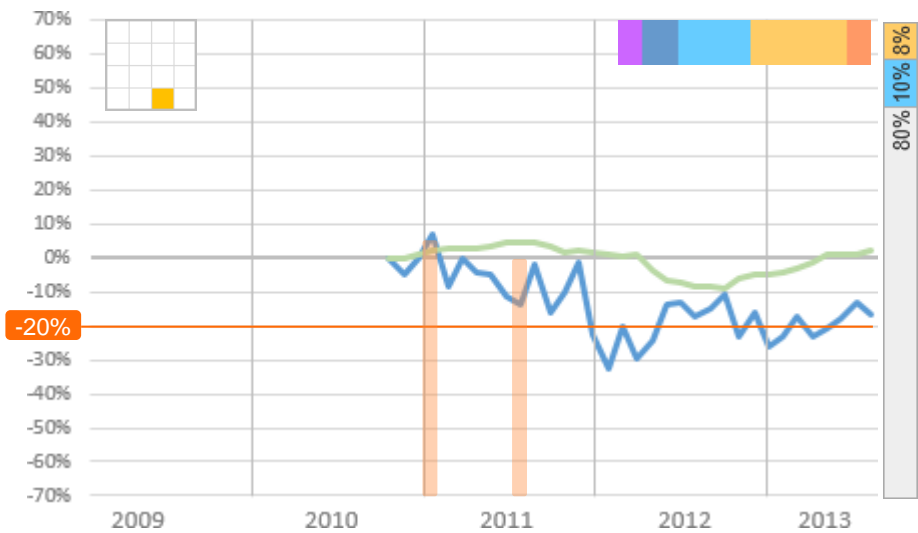
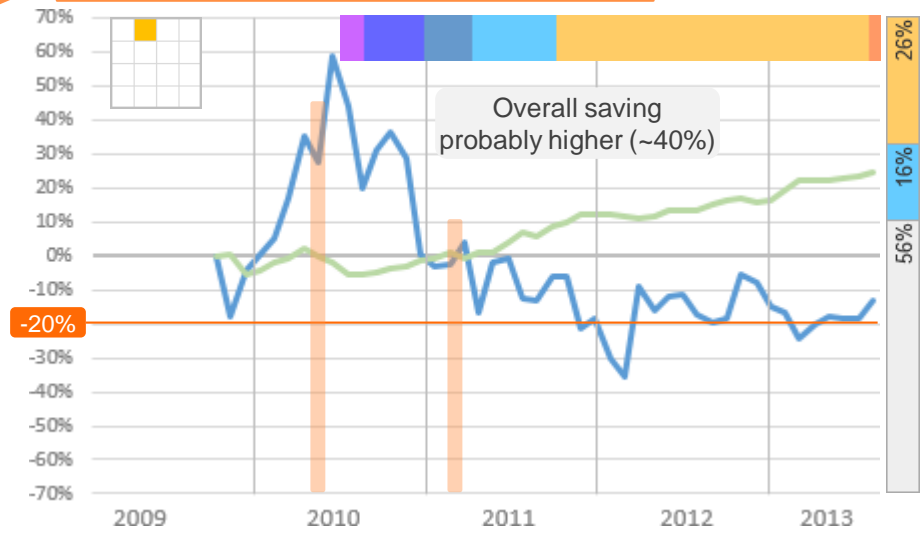
How much TEM impacts the costs

Real examples / Swiss companies

Average spend per month per mobile



Remaining savings potential
Orange = quick-win (choose abo/options)
Blue = long-term (usage policy, awareness)



Roadmap to your own balance sheet and the success of your BYOD project

- **Understand your own Telecom Lifecycle**
 - What steps ? Which actors ? Process ?
 - Other stakeholders, not necessarily active in the process.
- **Interview the actors of all steps, including endusers.**
 - Activities, workload, tools, costs, challenges, risks, opportunities, concerns.
 - Evaluate above parameters with current situation, with BYOD, with other option ?
- **Interview other stakeholders**
 - How would BYOD would change their way of working ? Risks, opportunities ?
 - Impact on their team, workload, budget, productivity ? Supporter or road-blocker ?
- **Consolidate & validate all infos**
 - Costs, benefits, risks, opportunities, ...
 - Make informed decision backed by top management
- **Pilot project**
 - Monitor costs, benefits & risks to ensure they are in-line with previsions
 - Survey all actors & stakeholders again to confirm their OK

References

RefNo	Source	Date	Title	Link
Ref_01	Aberdeen	2012-04	Enterprise Mobility Management 2012	http://content.maas360.com/www/content/ar/Aberdeen_SoMoClo_2012.pdf
Ref_02	Aberdeen	2012-08	BYOD Hidden costs Unseen value	http://blogs.aberdeen.com/communications/byod-hidden-costs-unseen-value/
Ref_03	Aberdeen	2012-11	Enterprise Mobility Management as a service	http://www.aberdeen.com
Ref_04	BizTech	2014-08	How to get a grip on BYOD expenses	http://www.biztechmagazine.com/article/2014/08/how-get-grip-byod-expenses
Ref_05	Capgemini	2013-02	BYOD: It's all about Employee Satisfaction and Productivity, not Costs	http://www.capgemini.com/sites/default/files/resource/pdf/bring_your_own_device_it_s_all_about_employee_satisfaction_and_productivity_not_costs.pdf
Ref_06	CIO	2012-03	The BYOD Sea change has already started	http://www.cio.com/article/2398604/consumer-technology/the-byod-sea-change-has-already-started.html
Ref_07	CIO	2012-03	The BYOD Troubleshoot: Security and Cost-Savings	http://www.cio.com/article/2397667/consumer-technology/the-byod-troubleshoot--security-and-cost-savings.html
Ref_08	CIO	2012-04	BYOD: If you think you're saving money, think again	http://www.cio.com/article/2397529/consumer-technology/byod--if-you-think-you-re-saving-money--think-again.html
Ref_09	Forbes	2013-05	Calculating the true cost of BYOD	http://www.forbes.com/sites/eliseackerman/2013/05/28/calculating-the-true-cost-of-byod/
Ref_10	Forbes	2014-08	Lack of Cell Phone Reimbursement Creates Class Action Liability for CA Employers	http://www.forbes.com/sites/theemploymentbeat/2014/08/18/lack-of-cell-phone-reimbursement-creates-class-action-liability-for-ca-employers/
Ref_11	Gartner	2012-04	CIOs' Next-Generation Mobile Strategy Checklist	https://www.gartner.com/doc/1998618/cios-nextgeneration-mobile-strategy-checklist
Ref_12	Gartner	2014-01	Gartner Worldwide IT Spending Forecast	http://www.gartner.com/newsroom/id/2959717
Ref_13	Good	2011-00	Good Technology State of BYOD Report	https://www.ndm.net/mobile/pdf/Good_Data_BYOD_2011.pdf
Ref_14	Intellia	2013-10	Le BYOD - Est-ce avantageux?	http://www.intelliaconsulting.com/24-infosource-Le_BYOD_-_Est-ce_avantageux_.html?start=1
Ref_15	ITRnews.com	2012-12	Les 10 principaux coûts cachés du BYOD pour votre réseau	http://www.itrnews.com/articles/137394/10-principaux-couts-caches-byod-reseau.html
Ref_16	Nucleus Research	2013-04	Understanding the hard ROI of BYOD	https://nucleusresearch.com/research/single/understanding-the-hard-roi-of-byod/
Ref_17	Orange Business	2012-03	BYOD et les risques en terme de sécurité	http://www.orange-business.com/fr/blogs/usages-dentreprise/mobilite/infographie-byod-et-les-risques-en-terme-de-securite
Ref_18	Osiatis	2013-02	BYOD - Menace ou opportunité pour la DSI ?	http://osiatis-preprod.as44099.com/medias/upload/files/fr_FR/2013---livre-blanc---byod---osiatis-1360578654.pdf
Ref_19	PCWorld	2011-12	Pros and Cons of BYOD to work	http://www.pcworld.com/article/246760/pros_and_cons_of_byod_bring_your_own_device_.html
Ref_20	PCWorld	2013-05	Half of companies will require BYOD by 2017	http://www.pcworld.com/article/2036980/half-of-companies-will-require-byod-by-2017-gartner-says.html
Ref_21	quocirca	2010-09	Taming the mobile tiger	http://quocirca.com/content/taming-mobile-tiger
Ref_22	quocirca	2013-11	BYOD - Who Carries The Can ?	http://quocirca.com/content/byod-who-carries-can-0
Ref_23	quocirca	2014-05	Getting to Grips with BYOD	http://quocirca.com/content/getting-grips-byod
Ref_24	SebastienFanti	2013-09	Aspects légaux du byod	http://www.slideshare.net/sfanti/epfl-aspects-lgaux-du-byod
Ref_25	TechRepublic	2012-05	The real costs associated with BYOD	http://www.techrepublic.com/blog/tech-decision-maker/the-real-costs-associated-with-byod-are-enterprises-prepared/
Ref_26	ZDnet	2013-06	The true costs of BYOD	http://www.zdnet.com/article/revealed-the-true-costs-of-byod/
Ref_27	ZDnet	2013-08	The challenge of mobility and the cost of BYOD fleets	http://www.zdnet.com/article/the-challenge-of-mobility-and-the-cost-of-byod-fleets/
Ref_28	Tmanco	2015-01	The BYOD financial balance sheet (this presentation + Excel template)	http://www.tmanco.ch/clusis2015

post-scriptum

BYOD represents a financial risk

- **BYOD may double your mobile costs ... if not more**
 - That's before counting the productivity gain and the potential cost of security flaws
 - Be careful to not over/under-estimate these factors, easy to bias the result so it matches what we want. Costs will come ... Productivity may not !
- **Magnitude can impact the balance sheet of your business**
 - Telecom spend accounts for ~43% of IT spend (Gartner, Jan. 12th 2015)
 - Mobile costs account for a large portion of Telecom spend.
- **Be prepared to avoid surprise and financial risk**
 - Don't be caught by surprise, have answers for objectors, it's hard to step back
- **The challenge: who really cares for the big picture ?**
 - IT or security only see and control a limited portion of all costs / risks.
 - Who really cares for costs, productivity & risks that span multiple departments ? (sourcing, IT, endusers, managers, accounting, controlling, ...)
- **Evaluating costs should be the very first step to BYOD**
 - If BYOD is a clear financial winner, ways exist to address security issues.
 - If costs are a clear showstopper, why bother about security & tools ?

Luck is what happens
when preparation
meets opportunity

Seneca



Are you prepared
for BYOD ?

Thanks for your attention