

The challenge of innovation

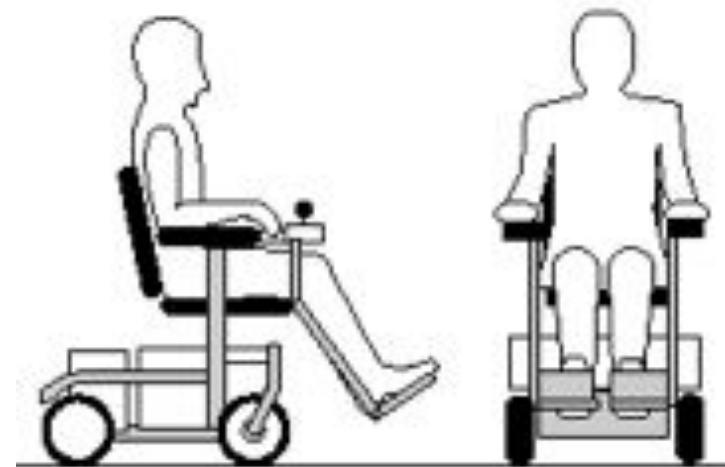


Oser proposer une solution
technologique

Since power wheelchair exist...



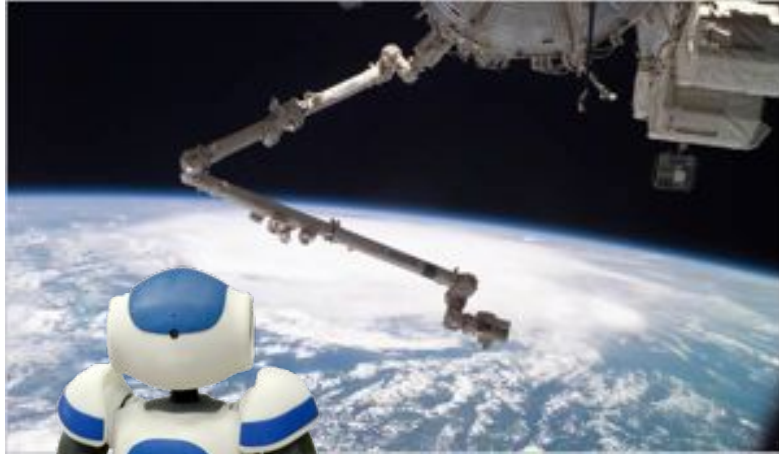
+ Upper body limitation



Power wheelchair for lower body, but nothing for upper body.



In this new millenium...



≠



23^{ème} entretien Jacques Cartier,
Quel processus pour estimer la valeur réelle d'une technologie de la santé?



Kinova innovative solution...JACO

Perform daily activity alone, without any human help.



Netherlands, July 2010* ...



For 26 000 Euro, **Joey** became the first JACO owner.

Now he can :

- Eat
- Open door
- Pick his key
- Help others
- and much more...
- **...alone.**

*Kinova was founded in June 2006



Key factor to success

- Collaborative development
- Market pull
- Early integration of clinical trial
- Significant innovation
- For each market a Champion



Value of JACO

Clinico-economic study of the JACO robotic arm
for powered wheelchair users with
upper-extremity disabilities

NUMBER OF PEOPLE LIVING WITH THE PARTICIPANT (n=31)	
Living alone	48%
1 to 2	42%
3 to 5	6%
More than 5	0%
Living in a specialized center for people with reduced autonomy	3%

*preliminary result

DIAGNOSES (n=31)
Amyotrophic lateral sclerosis
Duchenne muscular dystrophy
Facio-scapulo-humeral (FSH) muscular dystrophy
Juvenile rheumatoid arthritis
Limb-girdle muscular dystrophy (LGMD)
Mitochondrial myopathy
Multiple Sclerosis
Myotonic muscular dystrophy
Quadraplegia
Spastic paraparesis
Spinal cord compression/injury
Spinal muscular amyotrophy
SSH muscular dystrophy
Tetraplegia



How do I get it paid?

Economic issues

Studies on disabilities performed in the United States (Trupin and Yelin 1999; Anderson and Vogel 2002; Dutta et al. 2008) and in Australia (Rowell and Connelly 2008) found that approximately two-thirds of working-age adults with disabilities were not employed and that nearly 80% of them wanted to work (Trupin and Yelin 1999).

- Almost (97%) all participants believed that JACO would represent a significant tool for inspiring them for taking up projects that had been abandoned.
- It is interesting to note that nearly 50% of the participants would be inspired into returning to studies or allowing to take more courses if they had JACO
- Also, 26% would be inspired into returning on the workplace or that it would facilitate their current work.



How do I get it paid?

Economic issues

In Canada, 75-90% of homecare is assured by certain members of the family, mostly women (Le Goff 2002). The economic burden of caregiving to economic activity can be due to the following: loss of income due to resigning from a job, reduced number of worked hours, unexpected leave of absence, or lateness.

Quick ROI, even if only based on attendant cost saving.

Ongoing study includes evaluation of the learning curve and rating in QALY.



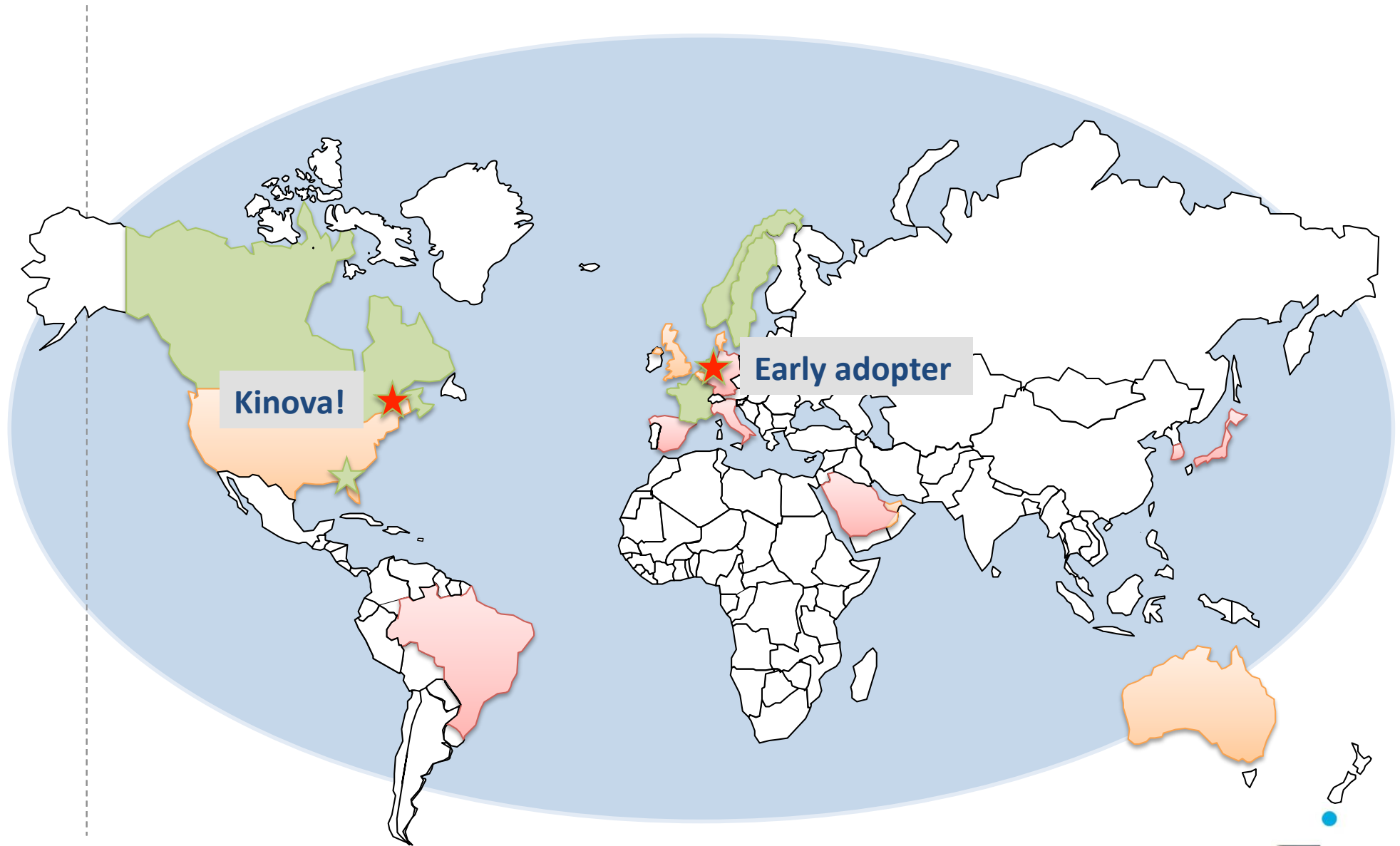
Real value of JACO?

BEFORE	AFTER
CAN'T EAT ALONE	CAN PREPARE SIMPLE MEAL
A DOOR IS A WALL	BEHIND EACH DOOR NEW OPPORTUNITY
FRIENDS COME TO YOUR HOUSE TO HELP YOU	YOU CAN WELCOME YOUR FRIENDS WITH TEA
PURSUING STUDY IS A COMPLEX PROCESS	IT'S STILL COMPLEX, BUT A LITTLE LESS...
MOSTLY PASSIVE	YOU HAVE THE CHOICE TO BE ACTIVE

First thing most kids use JACO for is to tease their friends and give someone an object.



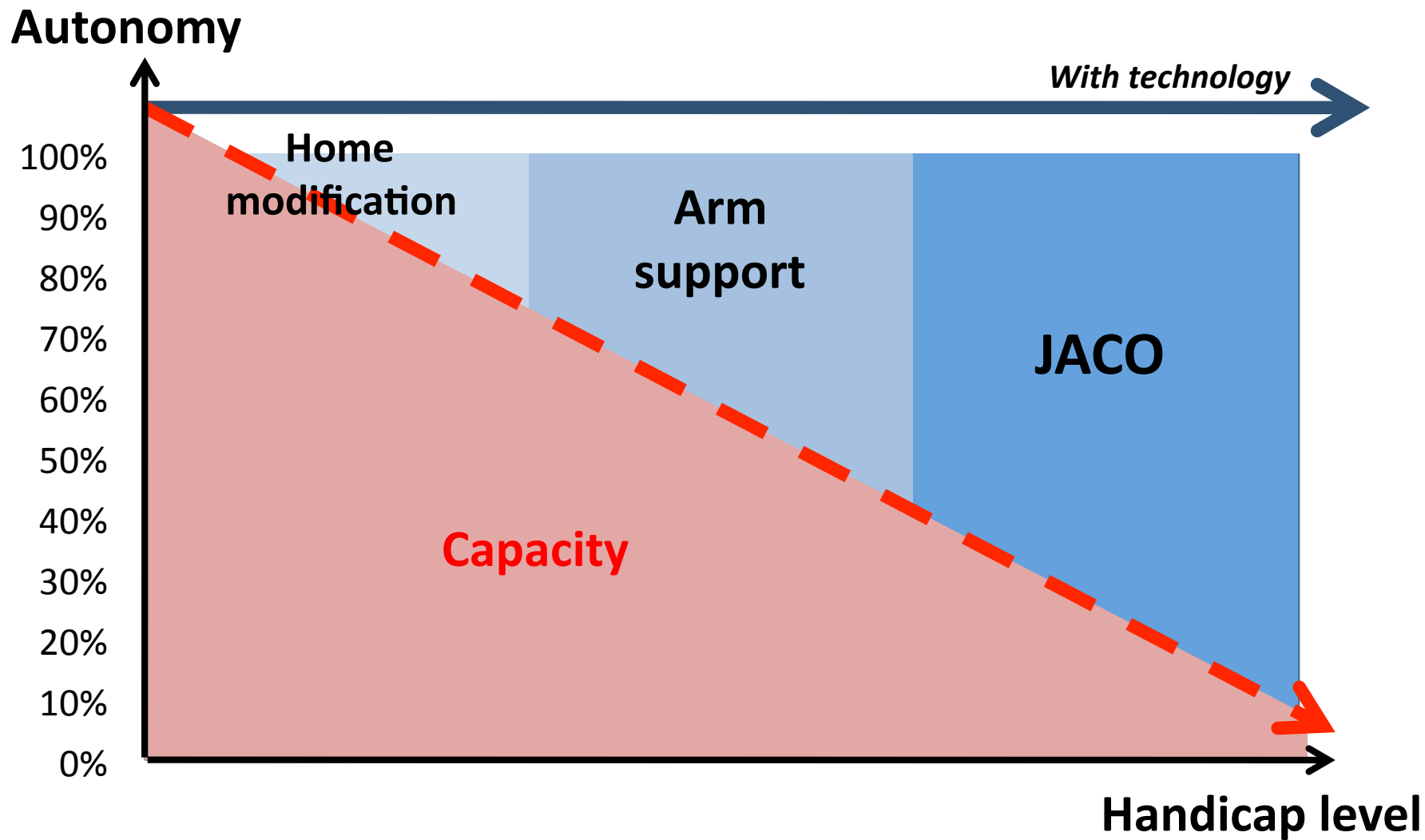
Kinova's playground



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Looking forward



Wish list

- ✓ We are specialised in R & D, healthcare system is not, please use us!
- ✓ One stop shop specialised for medical device, very different from pharmaceutical industry.
- ✓ Benchmarking



Thank you!

