



Using Smart Mobile Devices for Selection Assessments: A Smart Idea?

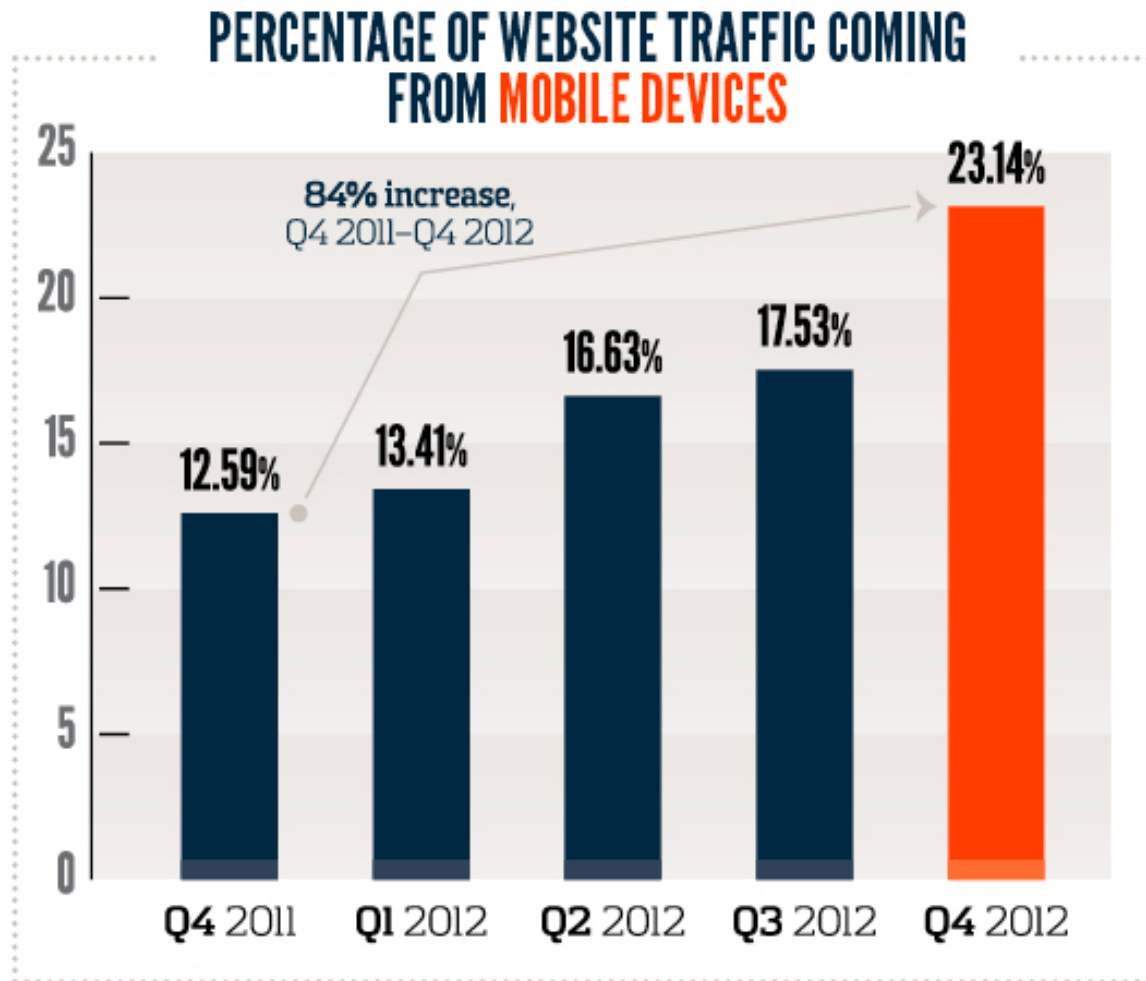
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Mobile is Here to Stay

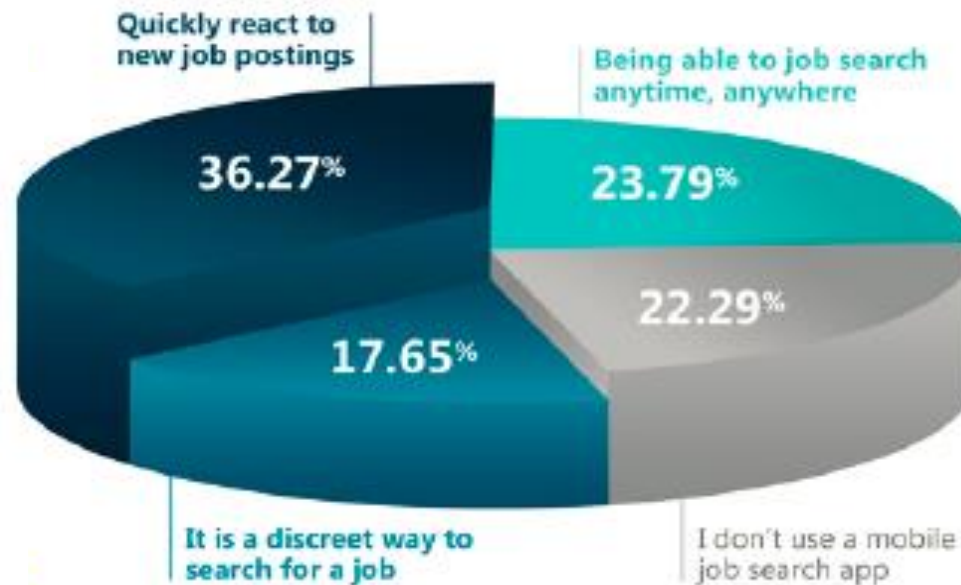
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Mobile is Here to Stay

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77% Job seekers use mobile applications to find and apply for jobs



Mobile is Here to Stay

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- U.S. Department of State developed a mobile website for Foreign Services careers
 - ▣ Application launched in March 2013, with a goal of generating 10,000 downloads within a year.
 - ▣ Exceeded target within 90 days

Demographics of Mobile Users

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Cell Phone and Smartphone Ownership

% of American adults within each group who own a cell phone and the % who own a smartphone

		Cell Phone	Smartphone
All adults (n=2,252)		91%	56%
a	Men (n=1,029)	93 ^b	59 ^b
b	Women (n=1,223)	88	53
Race/ethnicity			
a	White, Non-Hispanic (n=1,571)	90	53
b	Black, Non-Hispanic (n=252)	93	64 ^a
c	Hispanic (n=249)	88	60
Age			
a	18-29 (n=404)	97 ^{cd}	80 ^{bcd}
b	30-49 (n=577)	95 ^{cd}	67 ^{cd}
c	50-64 (n=641)	89 ^d	45 ^d
d	65+ (n=570)	76	18

When are Mobile Assessments Smart?

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- Personality, bio-data assessments: Results found to be invariant across mobile and PC test takers

(Lawrence, et al., 2013)

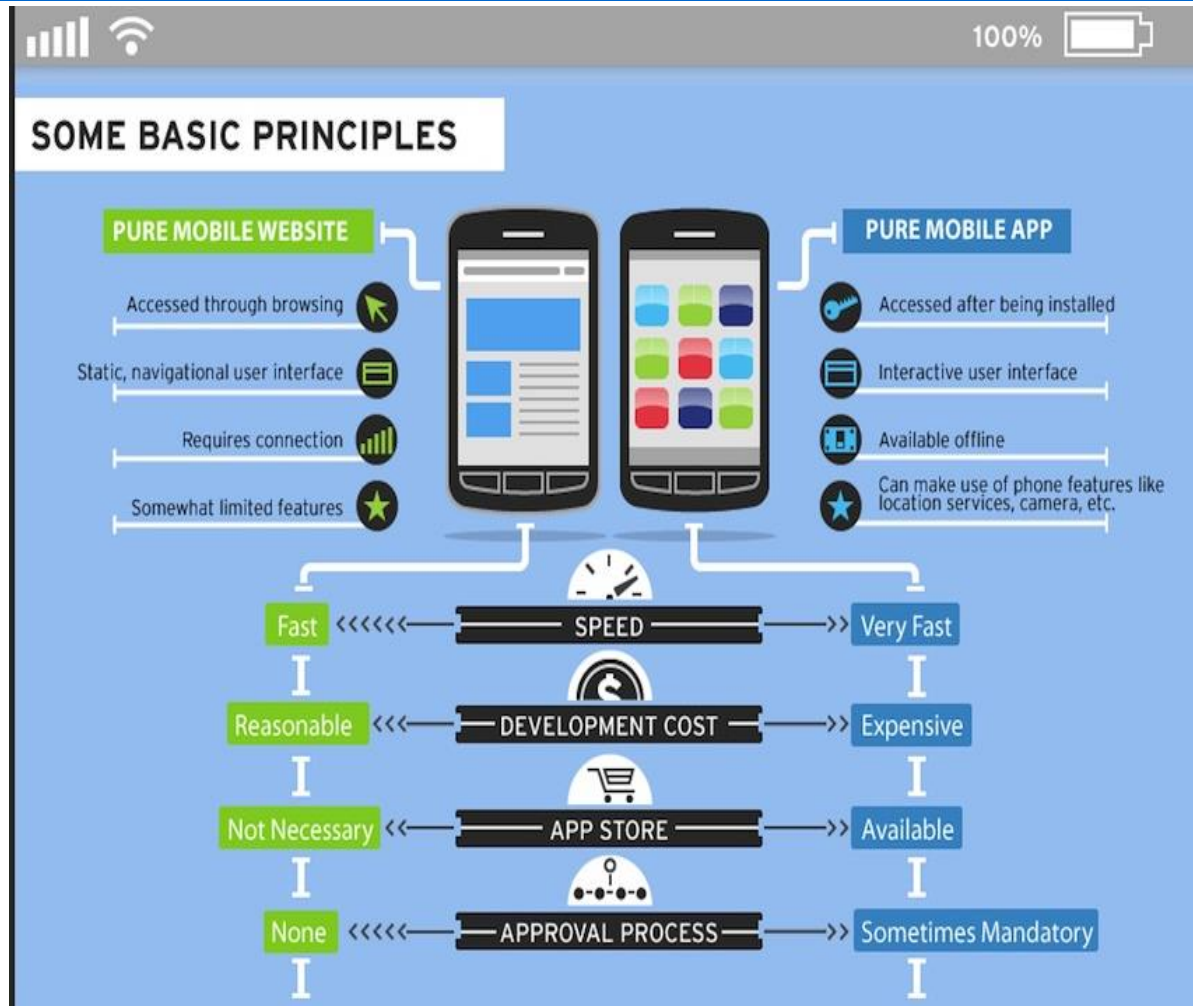
- Cognitive tests: Preliminary research shows that mobile assessment takers score lower as compared to those taking the test on PCs

(Impelman, 2013)

- Untimed assessments

Mobile-Optimization vs. Mobile-Application

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Source: MDG Advertising

Retrieved from: <http://www.mdgadvertising.com/blog/should-you-build-a-mobile-app-or-mobile-website-infographic/>

SkillSurvey Goes Mobile



*Hedricks, Robie & Oswald (2013). Web-based multisource reference checking: An investigation of psychometric integrity and applied benefits. *International Journal of Selection & Assessment*, 21, 99-110.

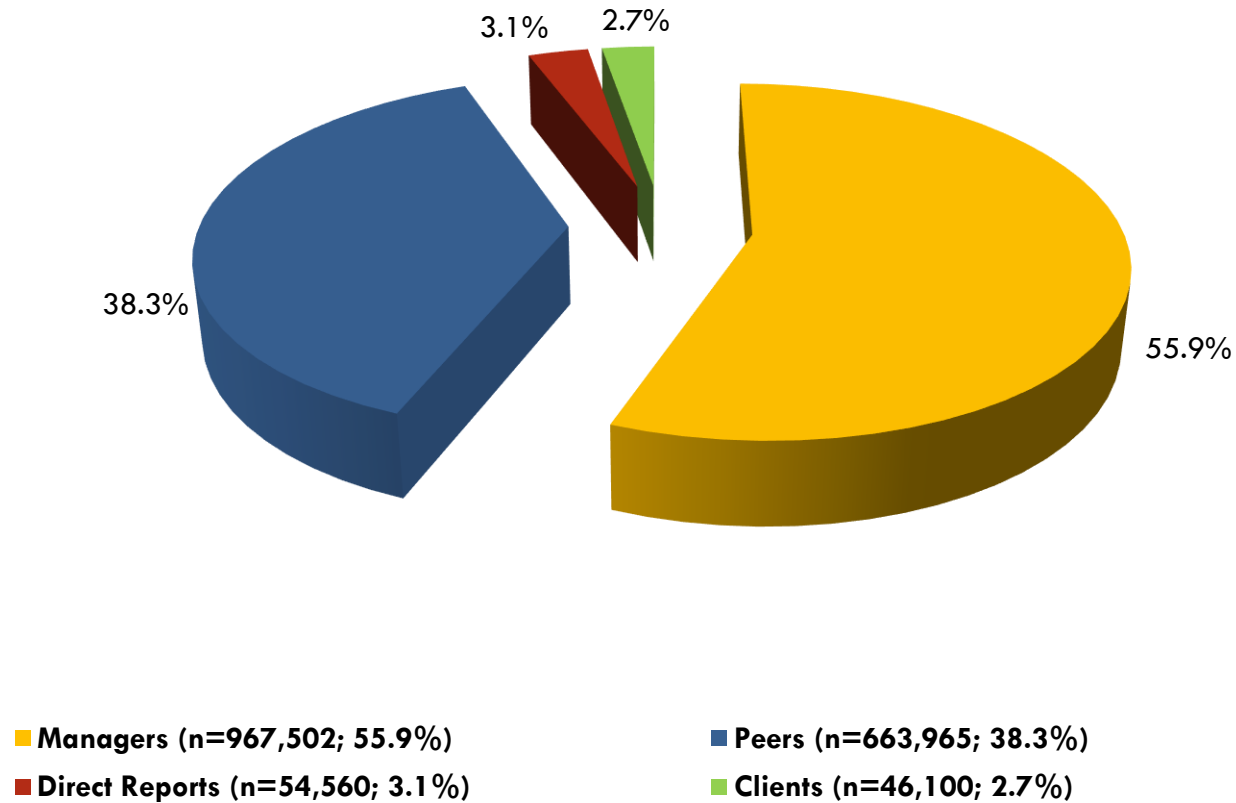
SkillSurvey Candidates and References

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- Over 1 million candidates
- Over 3 million references

Majority of References (N=1.7M) are from Managers*

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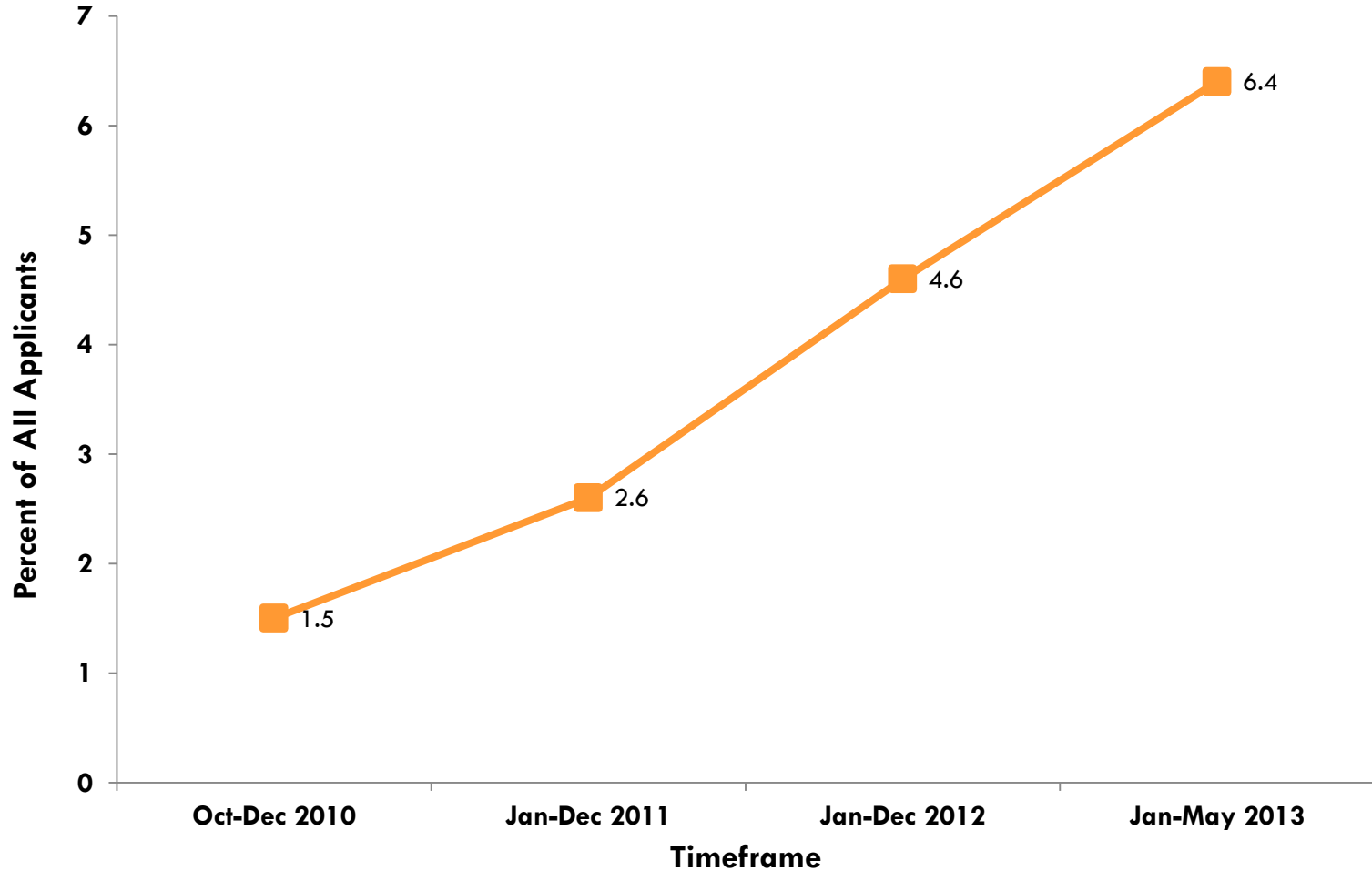


* Based on references received for 429,444 candidates

Three Main Questions

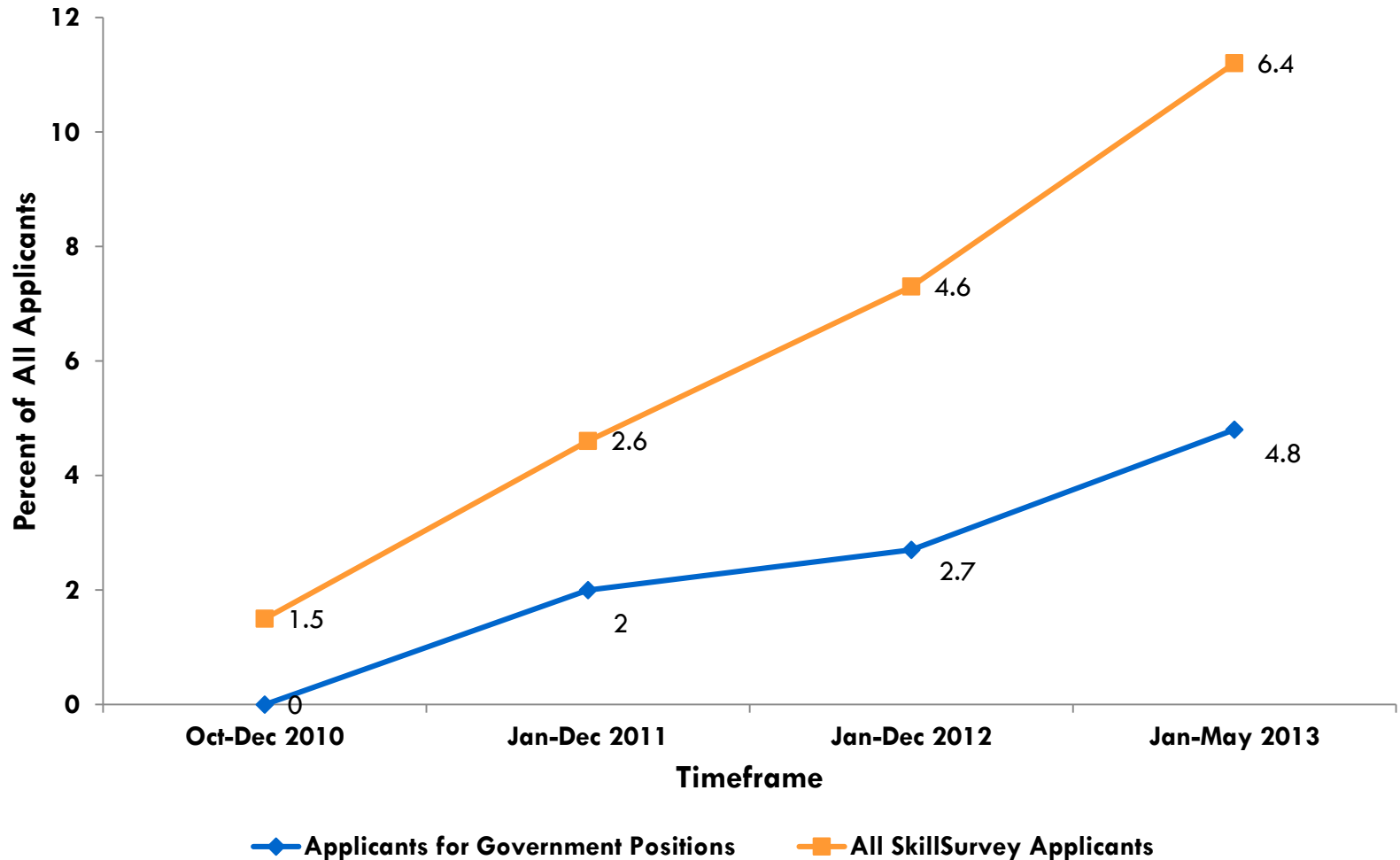
- Will applicants and their references use the mobile-optimized website?
- Will the ability to use mobile devices provide any efficiency gains to the recruitment process?
- Will using the assessment via mobile devices change the assessment results?
 - Similar to the concerns raised about unproctored Internet testing (Tippins, et. al., 2006; Tippins, 2009)

Usage: 326% Increase in Applicants Using Mobile Devices to Complete Process



Mobile Use by Government Job Applicants

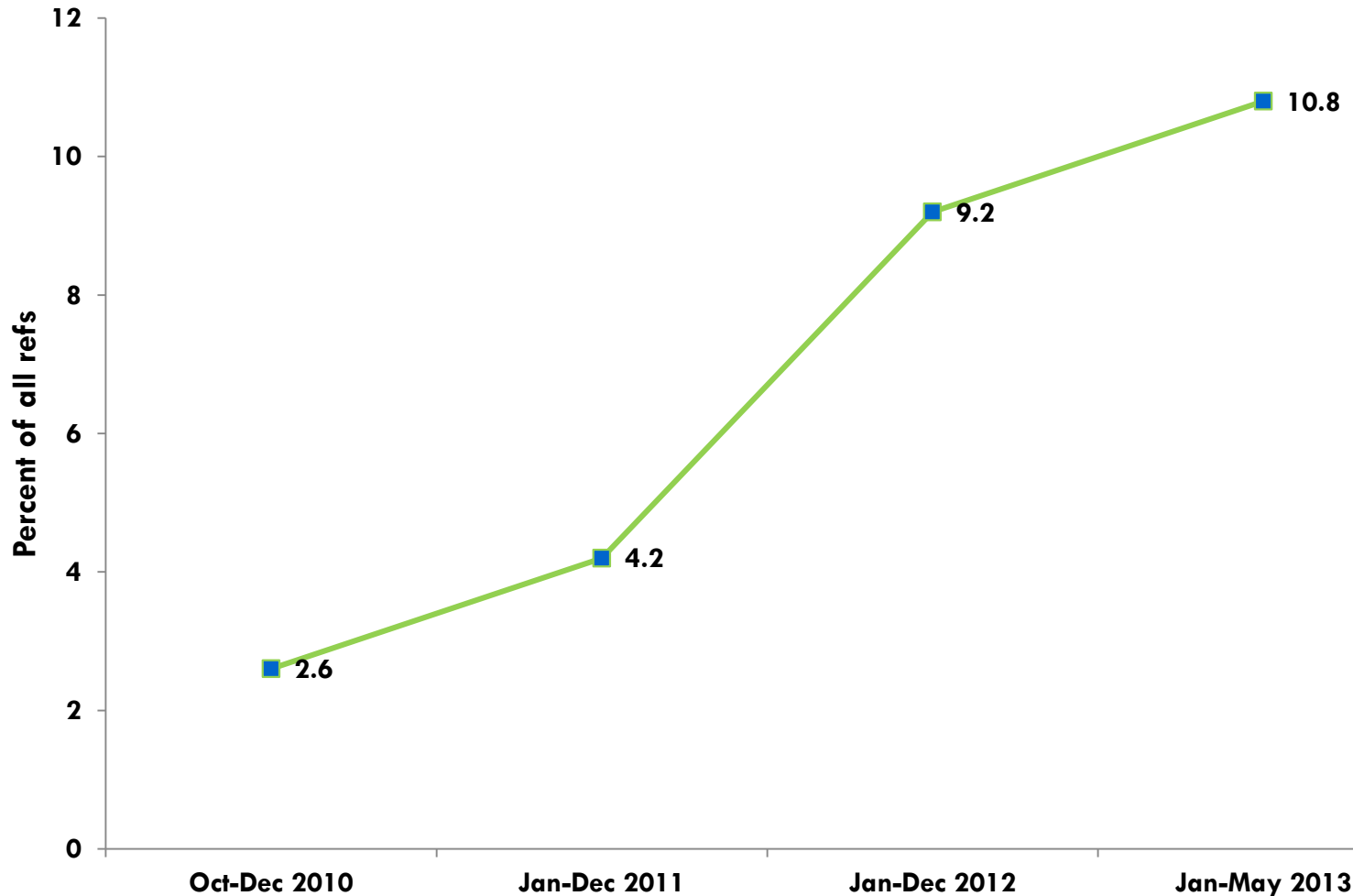
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Mobile Use by the SkillSurvey Applicant Pool

- Almost 2 times (1.9) more likely to be **Gen Y** than other generations.
- A slightly higher percentage of **females** (4.7%) than males (3.1%)
- 1.5x more **non-Whites** (5.5%) than Whites (3.7%)
 - ▣ specifically, 6.9% of African American and 5.3% of Hispanic

Usage: 315% Increase in *References* Using Mobile Devices to Complete Assessment



Improve Efficiency: Applicants Using Mobile Devices Respond Faster

	Mobile Applicants (n=17, 937)	PC Applicants (n=415,018)	Summary
Median Applicant response time (business days)	0.42	0.68	Those using mobile responded 38% faster
Median Time until applicant report ready (business days)	1.78	1.94	Reports were ready 8% faster when applicants used mobile



Improve Efficiency: Mobile References Respond Faster (Within Applicant)

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	Mobile Manager Reference	Non-Mobile Manager Reference	Mean Difference	Summary
Median Reference Response Time (Business Days)	.33	.79	-.29**	Mobile references responded more quickly

*n=4,004 applicants

** paired samples t-test; ($t=5.94, p<.01$)

Improve Efficiency: Mobile References Respond Faster (Between Applicants)

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Compared data on applicants who had at least one reference respond via mobile (n=47,373) against a stratified random sample of applicants with no mobile references (n=47,373)

	Applicant had at least 1 Mobile Reference	Applicant had All PC References	Summary
Reference response time	1.11	1.18	Slightly more quickly if using mobile device
Time until report ready (business days)	2.88	2.94	Reports were ready slightly more quickly for applicants with mobile refs

Assessment Results

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- No difference in assessment scores for applicants with no mobile references as compared to applicants with at least one mobile reference
- Open-ended comments:

	Mobile References	Non-Mobile References	Difference	Summary
Percent providing at least one “Strength”	87.6	87.5	-0.1	No difference
Percent providing at least one “Could Improve”	67.5	67.9	-0.2	No difference
Length of Comments: “Strengths “	88.16	132.06	-43.90**	Mobile refs wrote shorter comments
Length of Comments: “Could Improves”	102.45	148.66	-46.21**	

Conclusions

- Mobile devices are being used by job applicants as well as by their references
- Mobile devices have the potential to improve efficiency, with applicants and references providing information more rapidly via mobile devices, as compared to PCs
- Mobile devices do not change the scores that candidates receive on the assessment
 - Length of open-ended comments are impacted, but their substantive nature may not be affected

Future Research

- Conduct studies to analyze the reliability, validity, and compliance of the data gathered via mobile devices (as compared to PC based data)

Questions?



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