

2011 Control Wireless Survey

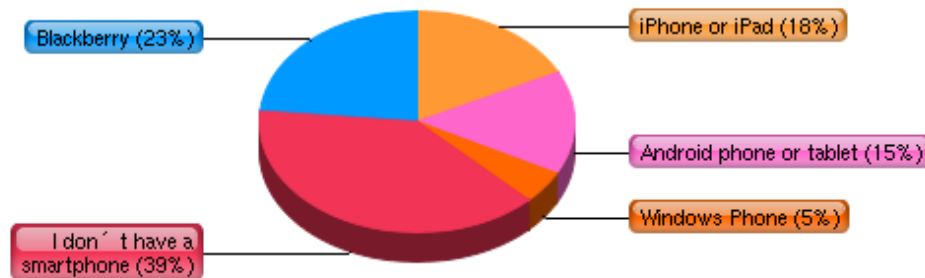
August 02, 2011

The survey was conducted in June of 2011, and received responses from over 900 respondents, of whom 92% were end-users, consulting engineers, A&E or EPC engineers, or system integrators. Responses were essentially similar to ControlGlobal.com's demographics, with somewhat less than 47% from North America (Canada, USA, Mexico), and roughly split 10% EMEA (Europe, Middle East, Africa), 5% Central and South America, and the balance from Asia.

1. Who are you?

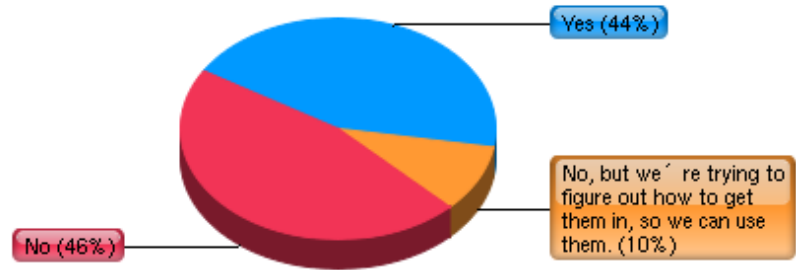
Item	Percent %
End user	66.88%
EPC, A&E, or Consulting Engineer	14.72%
System integrator	10.39%
Vendor	8.01%

2. Do you use a mobile device?



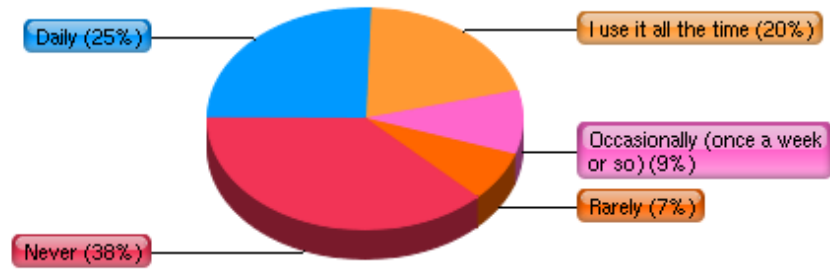
Item	Percent %
I don't have a smartphone	39.02%
Blackberry	23.46%
iPhone or iPad	17.65%
Android phone or tablet	15.10%
Windows Phone	4.76%

3. Do you use your smartphone or tablet at work?



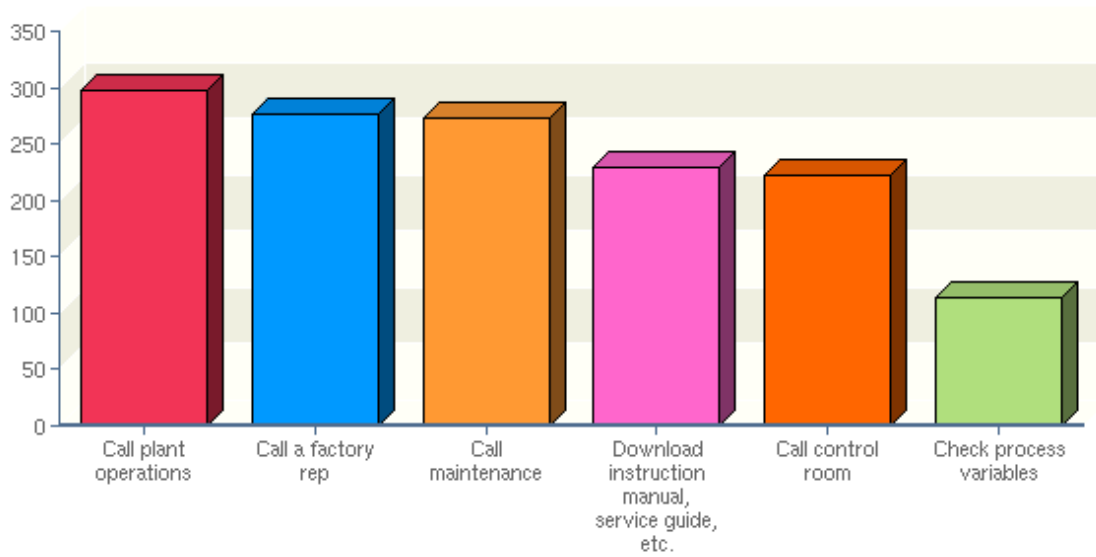
Item	Percent %
No	46.26%
Yes	43.93%
No, but we're trying to figure out how to get them in, so we can use them.	9.81%

4. How often do you use your smartphone or mobile device at work?



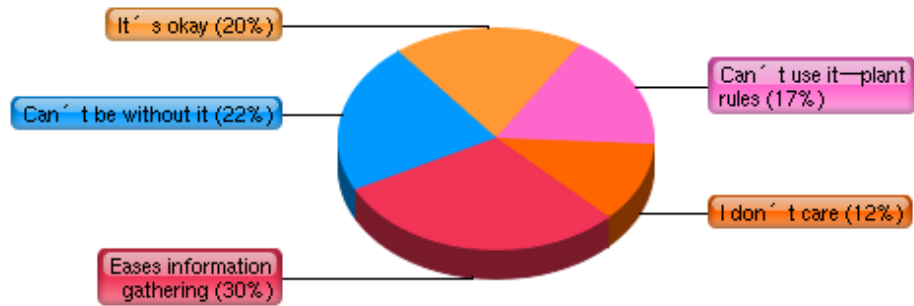
Item	Percent %
Never	37.57%
Daily	25.44%
I use it all the time	20.42%
Occasionally (once a week or so)	9.33%
Rarely	7.23%

5. Why do you use your mobile device or smartphone (at work)? [pick all that apply]



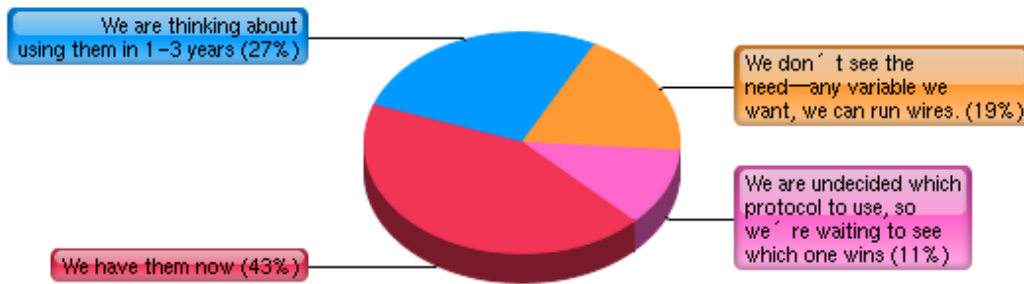
Item	Percent %
Call plant operations	53.42%
Call a factory rep	49.82%
Call maintenance	49.10%
Download instruction manual, service guide, etc.	41.37%
Call control room	40.11%
Check process variables	20.50%

6. How do you rate the value of your mobile device or smartphone in your work?



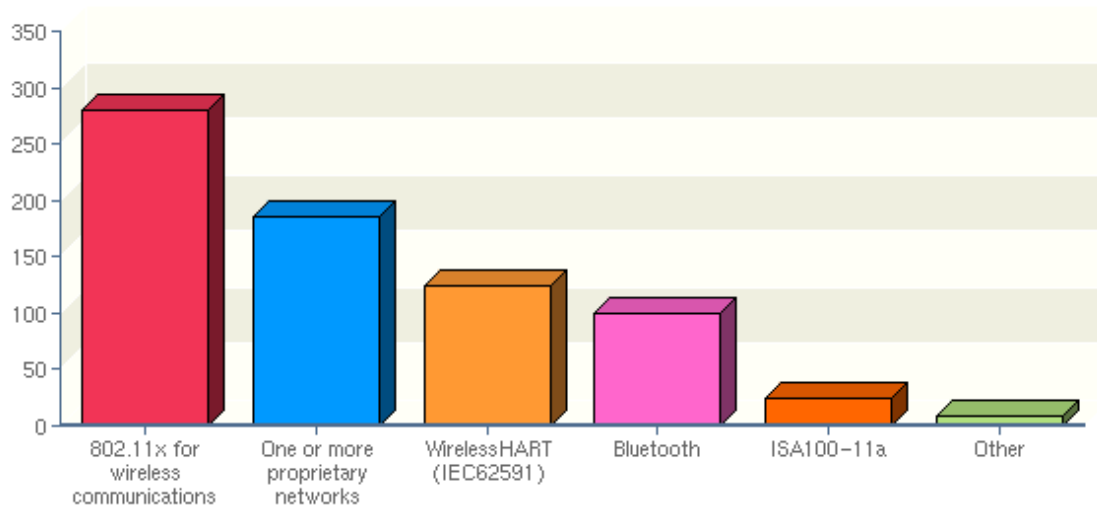
Item	Percent %
Eases information gathering	29.84%
Can't be without it	21.96%
It's okay	19.64%
Can't use it—plant rules	16.93%
I don't care	11.63%

7. Are you planning to use wireless field networks at your plant?



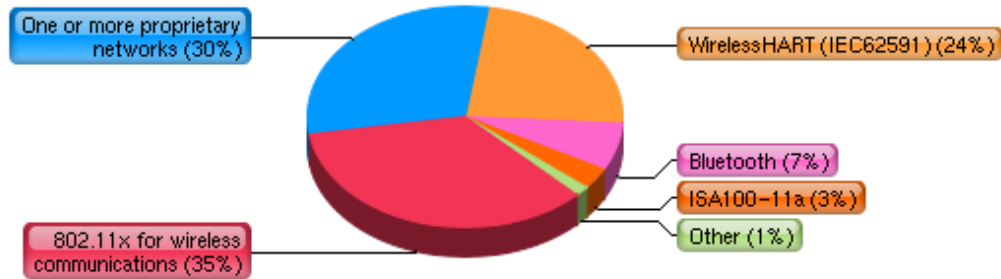
Item	Percent %
We have them now	43.02%
We are thinking about using them in 1-3 years	27.09%
We don't see the need—any variable we want, we can run wires.	18.58%
We are undecided which protocol to use, so we're waiting to see which one wins	11.31%

8. Does your plant use wireless networks now? [select all that apply]



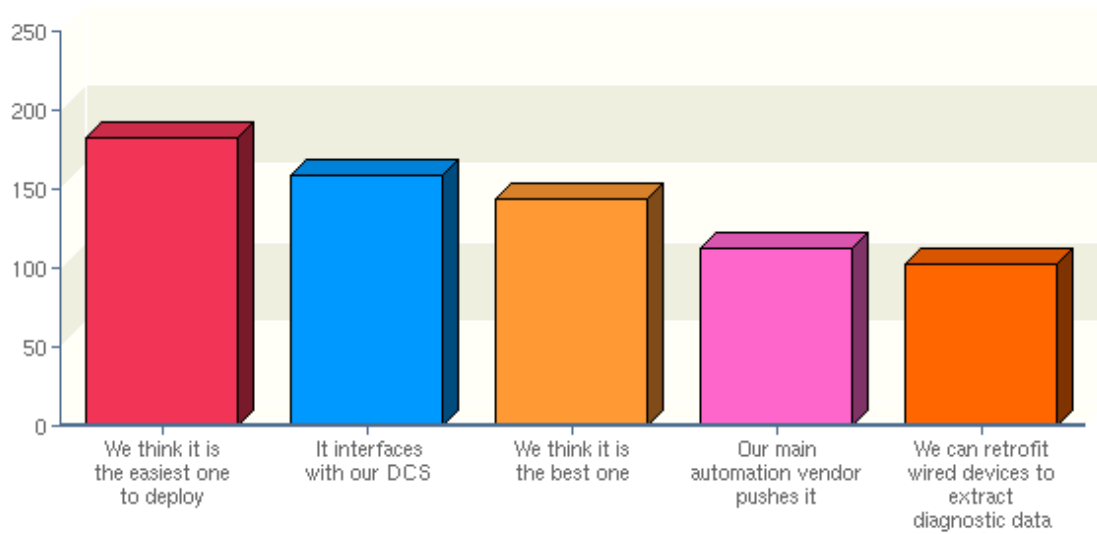
Item	Percent %
802.11x for wireless communications	51.38%
One or more proprietary networks	33.94%
WirelessHART (IEC62591)	22.94%
Bluetooth	18.17%
ISA100-11a	4.40%
Zigbee	1.65%

9. If you are actively buying wireless sensors now, which protocol are you using?



Item	Percent %
802.11x for wireless communications	34.94%
One or more proprietary networks	29.92%
WirelessHART (IEC62591)	23.64%
Bluetooth	6.90%
ISA100-11a	3.14%
Zigbee	1.46%

10. Why are you using the protocol you have chosen? (select all that apply)



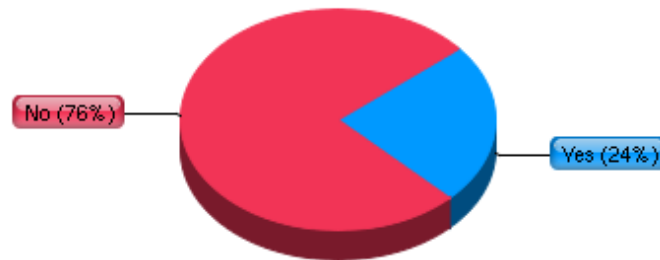
Item	Percent %
We think it is the easiest one to deploy	36.33%
It interfaces with our DCS	31.74%
We think it is the best one	28.74%
Our main automation vendor pushes it	22.36%
We can retrofit wired devices to extract diagnostic data	20.56%

11. What applications are you using wireless sensors and field elements for? (select all that apply)

Item	Percent %
Extending plant information network with traditional sensors	61.22%
Improved maintenance	39.16%
Improved safety (personnel location, etc.)	24.14%
Non-traditional process values	23.38%
SIS and ESD systems	6.46%
none	0.76%
Security	0.38%
transmission of SFOL to other work stations for monitoring real time	0.19%
access to historical data	0.19%
alternative field monitoring infrastructure to control centric platforms	0.19%
APCD requires electronic monitoring	0.19%
As an EPC ,we build plant as per client requirement	0.19%
Barcode information	0.19%
camera	0.19%
communication with ships & barges	0.19%
Corporate mandated	0.19%
cost, adding sensors in remote location in conjunction with solar.	0.19%
data collection and vehicle location information	0.19%
Diagnostics	0.19%
for monitoring only	0.19%
Getting information to-from a mobile crane.	0.19%
guest internet connectivity	0.19%
hart blue tooth modem	0.19%
i'm really not sure as I am not from the IT dept	0.19%
inventory	0.19%
JDE	0.19%
less important process and machine parameters	0.19%
long distance measurement	0.19%
Machine Automation	0.19%
monitoring in remote locations	0.19%
Moving vehicles	0.19%
N/A	0.19%
none plant doesn't use wireless to keep others off the system	0.19%
Not allowed	0.19%
Not sure	0.19%
operator rounds	0.19%
plant location for practicality	0.19%
reduce winstallation wiring	0.19%
Remote HMI and Engineering Stations	0.19%
Remote locations	0.19%
Remote Testing	0.19%
remote values so we dont have to hard wire	0.19%
revealing trapped HART diagnostics	0.19%
rotating device	0.19%
Rotork CVA	0.19%
safety shower activation alarms	0.19%
Scanning labels for shipping	0.19%
See comment below	0.19%
Shop floor tracking	0.19%
Tank gauging	0.19%
Traditional process indications	0.19%
Unique Applications	0.19%
Vibration waveform data	0.19%

Item	Percent %
Warehouse tracking	0.19%
weigh scales	0.19%
wire replacment	0.19%

12. Have you delayed purchasing or installing a wireless field sensor or device network because of the standards controversy?



Item	Percent %
No	76.41%
Yes	23.59%