

# MANY CHANGES, LITTLE FUN

Time to Measure the Value of DevOps



**ADDO**<sup>®</sup>  
ALL DAY DEVOPS

WHOAMI: ANTON (ANT) WEISS

@antweiss

Otomato Software Delivery  
<https://otomato.link>

# EXPERIENCE MATTERS



Devs Get Themselves Stuck in a Toilet,  
Ops Help Them Get Out

# THE MAGIC OF DEVOPS

IT Not Working?

Just Sprinkle Some DevOps On It!

# TIME FOR QUESTIONS

## How Bad Was It Before DevOps?

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Does DevOps Really Work?

How Do We Make DevOps Work?



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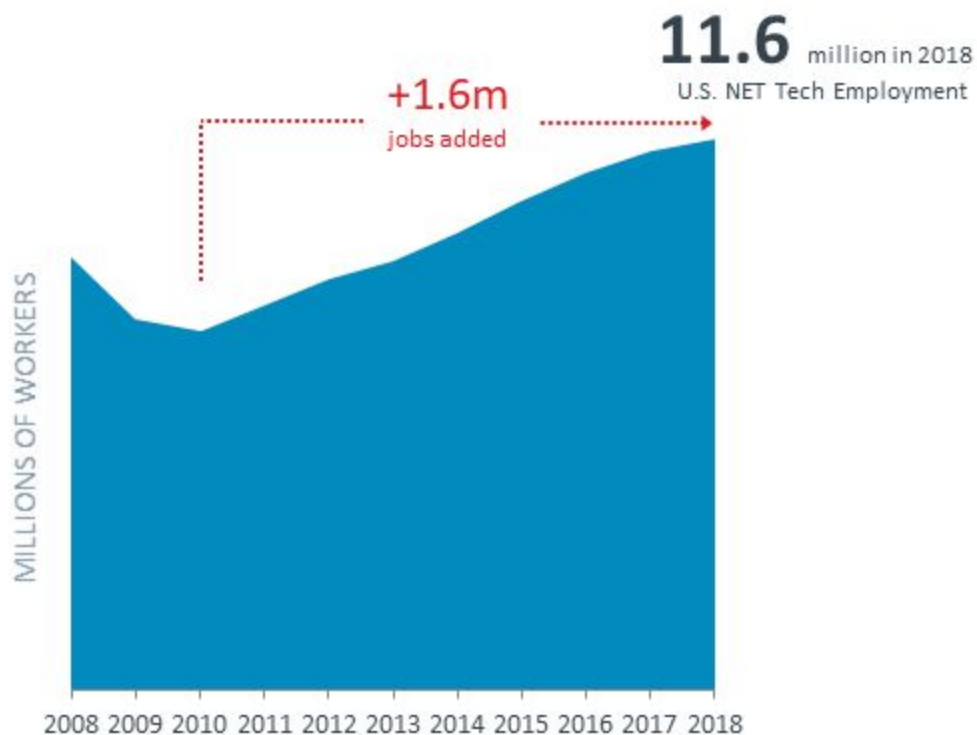
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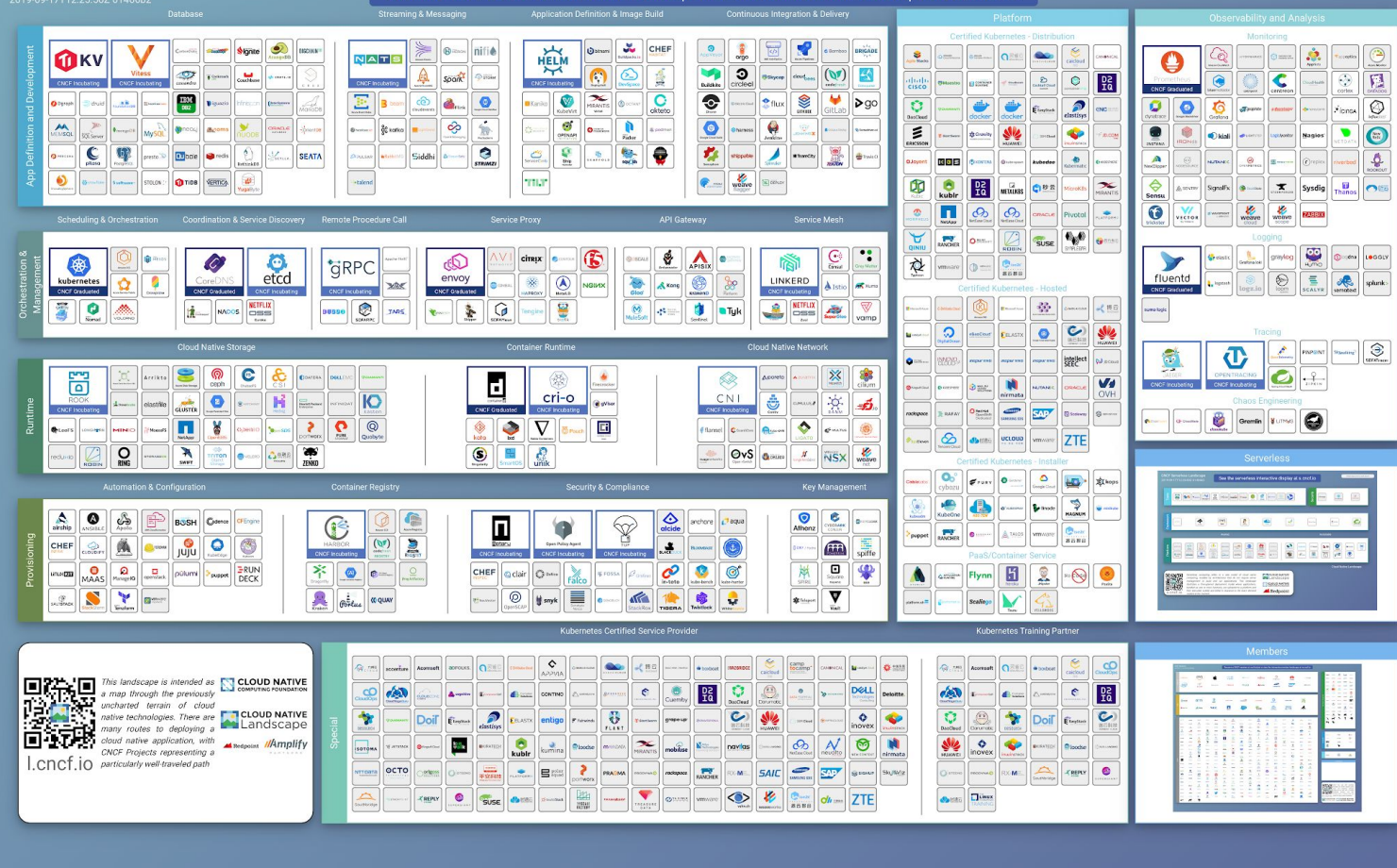
How Do We Make DevOps Work?

Was All This Worth The Hype?

## Tech Employment: a Major Contributor to Job Growth in the U.S. Economy



Source: CompTIA | U.S. Bureau of Labor Statistics | EMSI




We don't build things to last,  
we build them to change...

# DEVOPS CALMS. OR DOES IT?

- Culture
- Automation
- Lean Practices
- Measurement
- Sharing

CALMS acronym coined by J. Willis and D. Edwards and expanded by J. Humble

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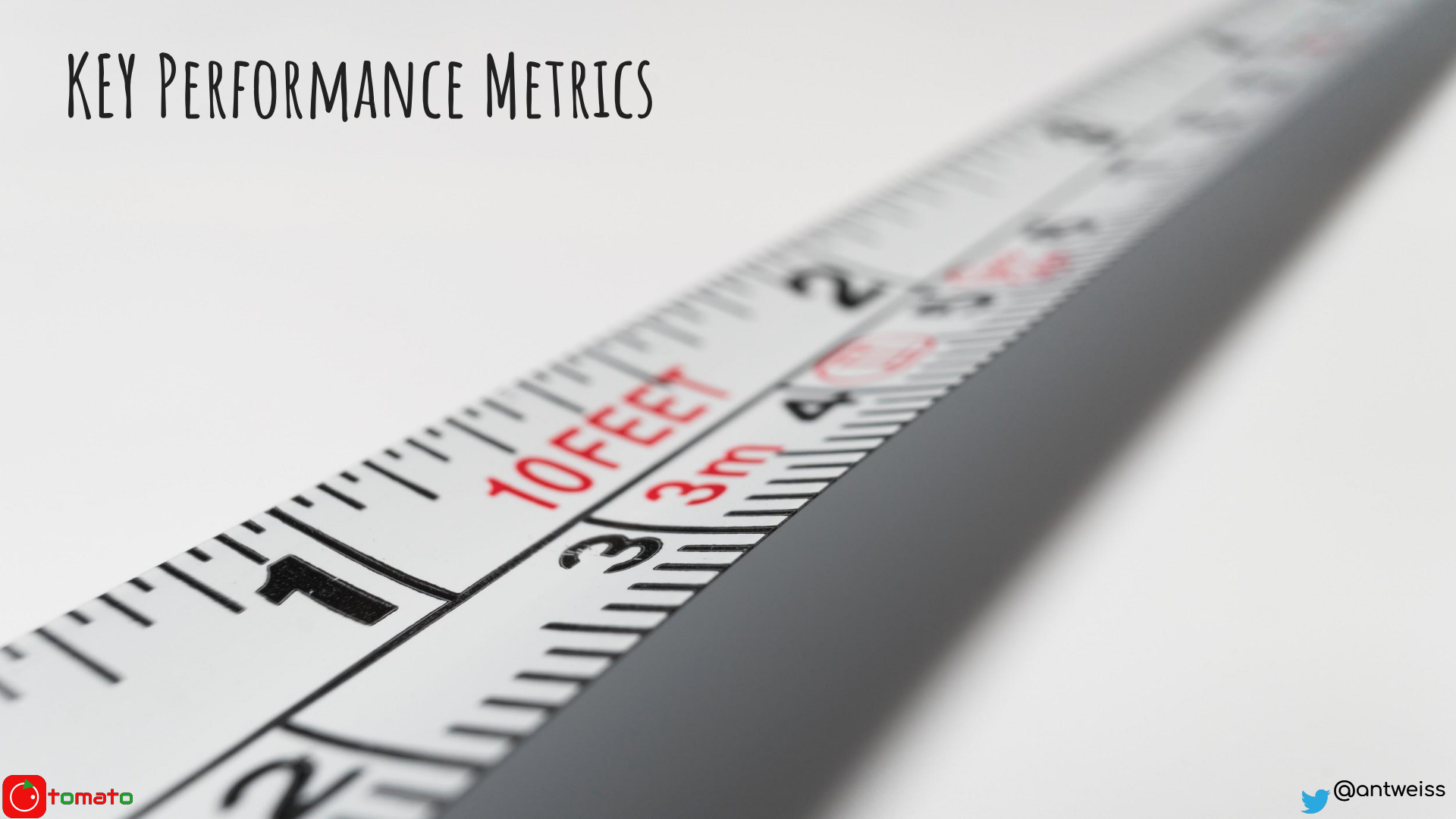
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# #ASODR - ACCELERATE STATE OF DEVOPS REPORT



# KEY PERFORMANCE METRICS



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Throughput

Stability

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- Lead Time for Changes
- Deployment Frequency

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## Throughput

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## Operational

- Availability



Aspect of Software Delivery Performance*	Elite	High	Medium	Low
<b>Deployment frequency</b> For the primary application or service you work on, how often does your organization deploy code to production or release it to end users?	On-demand (multiple deploys per day)	Between once per day and once per week	Between once per week and once per month	Between once per month and once every six months
<b>Lead time for changes</b> For the primary application or service you work on, what is your lead time for changes (i.e., how long does it take to go from code committed to code successfully running in production)?	Less than one day	Between one day and one week	Between one week and one month	Between one month and six months
<b>Time to restore service</b> For the primary application or service you work on, how long does it generally take to restore service when a service incident or a defect that impacts users occurs (e.g., unplanned outage or service impairment)?	Less than one hour	Less than one day <sup>a</sup>	Less than one day <sup>a</sup>	Between one week and one month
<b>Change failure rate</b> For the primary application or service you work on, what percentage of changes to production or released to users result in degraded service (e.g., lead to service impairment or service outage) and subsequently require remediation (e.g., require a hotfix, rollback, fix forward, patch)?	0-15% <sup>b,c</sup>	0-15% <sup>b,d</sup>	0-15% <sup>c,d</sup>	46-60%

# BUDDHA ON Oily



Do not believe in anything simply because you have heard it.

Do not believe in anything simply because it is spoken and rumored by many.

Do not believe in anything simply because it is found written in your religious books.

Do not believe in anything merely on the authority of your teachers and elders.

Do not believe in traditions because they have been handed down for many generations.

But after observation and analysis, when you find that anything agrees with reason and is conducive to the good and benefit of one and all, then accept it and live up to it.

# 12 DEVOPS FLOW METRICS

<http://devopsflowmetrics.org>

# VELOCITY METRICS

1. MLT - Mean Lead Time
2. DCR - Daily Change Rate
3. MTTE - Mean Time To Environment
4. MTTD - Mean Time To Detect
5. MTTR - Mean Time To Resolve
6. MTTA - Mean Time To Approve

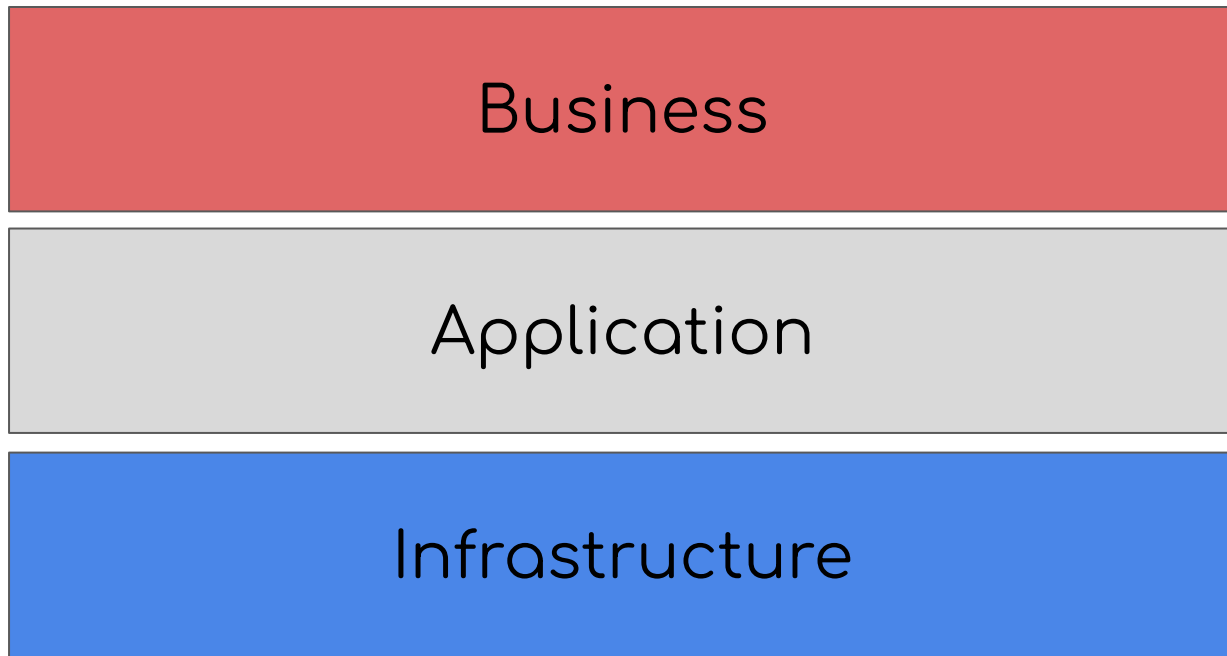
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# QUALITY METRICS

1. BFR - Build Failure Rate
2. DFR - Deployment Failure Rate
3. IRFR - Infrastructure-Related Failure Rate
4. RWR - ReWork Rate
5. ADR - Automated Detection Rate
6. UWR - Unplanned Work Rate

<http://devopsflowmetrics.org>

# THE 3 LAYERS OF OBSERVABILITY



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Operational Metrics

Delivery Metrics

# THE 3 LAYERS OF DEVOPS OBSERVABILITY

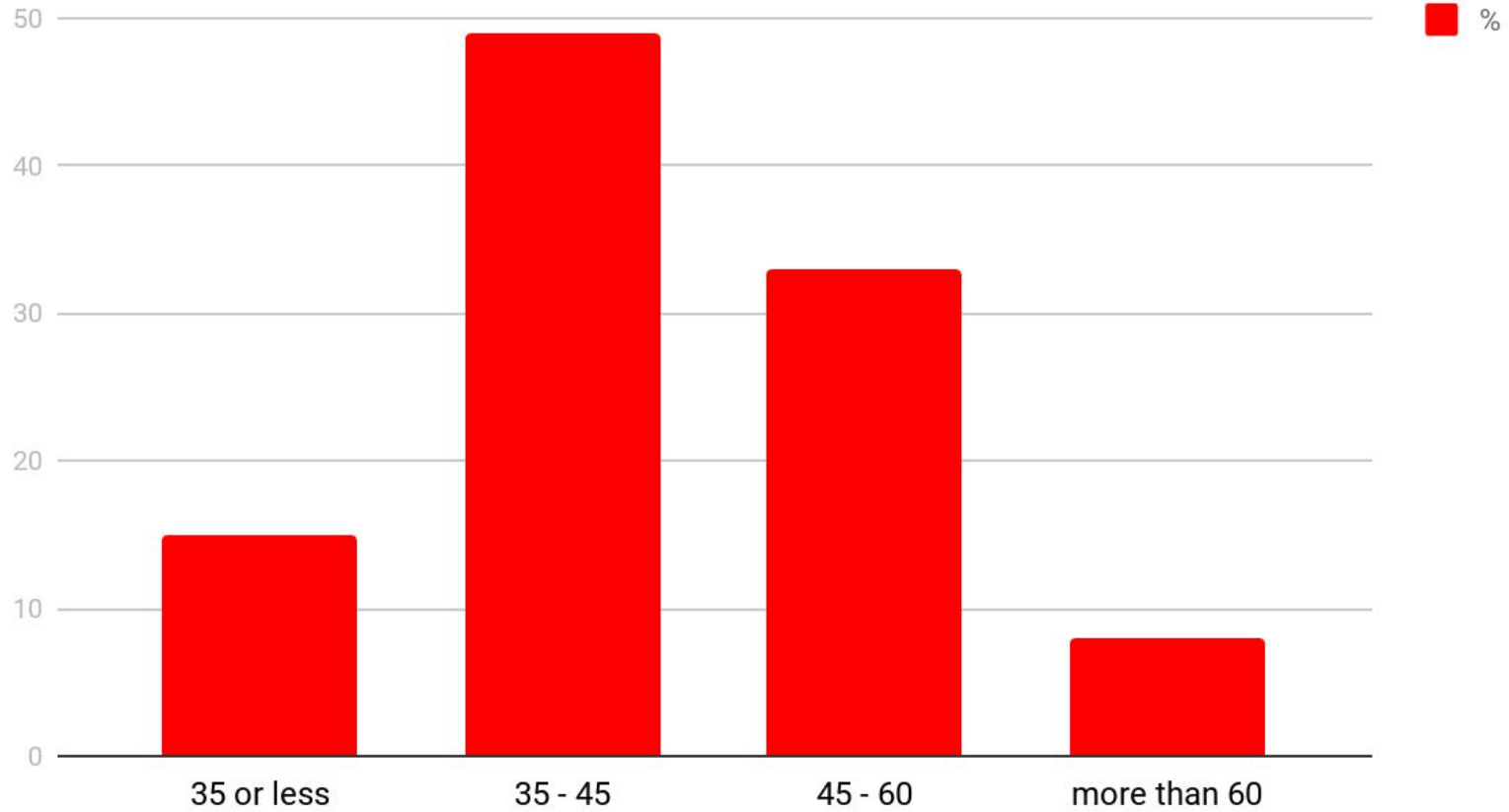
Operational Metrics

People Metrics

Delivery Metrics



# Work Hours Per Week



# WARNING

if you can't measure it, you can't  
manage it


W.E.Deming

# WARNING

It is wrong to suppose that  
if you can't measure it, you can't  
manage it  
– a costly myth.

W.E.Deming

# THANK YOU!

 @antweiss  
@otomato\_sw

<https://otomato.link>

<https://devopstrain.pro>