To Track and Project Performance Change you Need Count, Count Time, Change Time, and Standard Change Charts*

Og Lindsley**

Tracking, managing, and projecting performance is clear once you get its dimensions straight. Every performance can be counted, has a count time, and a time over which it changes. These are three common dimensions of performance change. To compare the rates of change in different performances you must track what they have in common.

Count

- Every performance you can think of you can **count**.
- Tracking count alone is not enough.
- Tracking performance with only a count is like tracking area with only length.

Count time

- **Count time** (from start to stop of counting) is just as important as the count.
- A count without a time is not only meaningless, it is dangerous when compared with another performance count whose time is also unknown.

Performance

- The **count** divided by the **count time** gives us frequency.
- Frequency is the only universal performance measure.
- Human performance spreads from 1 count a day to over 300 a minute,
- Performance has **two dimensions**: its Count and the Count Time.
- Any two performance frequencies can be compared (anxiety attacks with new product user complaints).

Change time

- Performance frequencies change over the **Change time**.
- Precision Teachers have tracked classroom learning for over 30 years using **Count per day per week**. - the **three dimensions** of performance change.
- The technical term for this change in performance frequency is Celeration.

Standard Change Chart

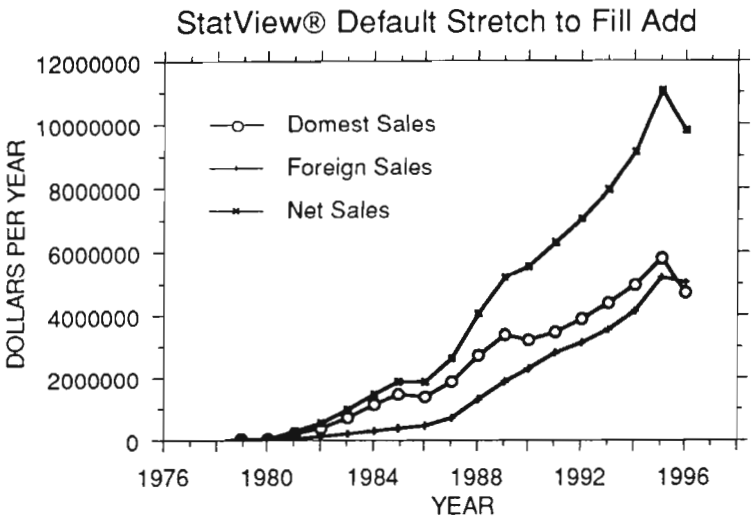
- Performance frequencies change and vary by multiplying and dividing.
- Therefore, they require **multiply scale** charts for straight line projection.
- When the charts have standard slopes, the rate of change is learned and projections in both high and low frequencies can be easily seen..
- Computer charting programs stretch the data cloud to fill the view space as we were taught in school. We call these stretch to fill default charts.
- All Standard Change Charts **have constant slopes** (times 2 corner to corner).
- The technical term for a Standard Change Chart is Standard Celeration Chart.
- The attached sheets compare three different performance change data sets on both add and multiply scale default charts with their Standard Change Charts.

---

*Presented at 35th Annual Conference of The International Society for Performance Improvement, Anaheim, CA on 18 April 1997.

**Chairman of The Lindsley Group
366 N 1600 Road, Lawrence, KS 6604-9199
Tel: 913-887-6869 Fax: 913-887-6779 olindsley@aol.com

2315



To Track and Project Performance Change you Need Count, Count Time, Change Time, and Standard Change Charts.

Og Lindsley, Lindsley Group*

In panel "Perspectives on the Temporal Dimensions of Performance." ISPI Conference, Anaheim, CA 18 April 97

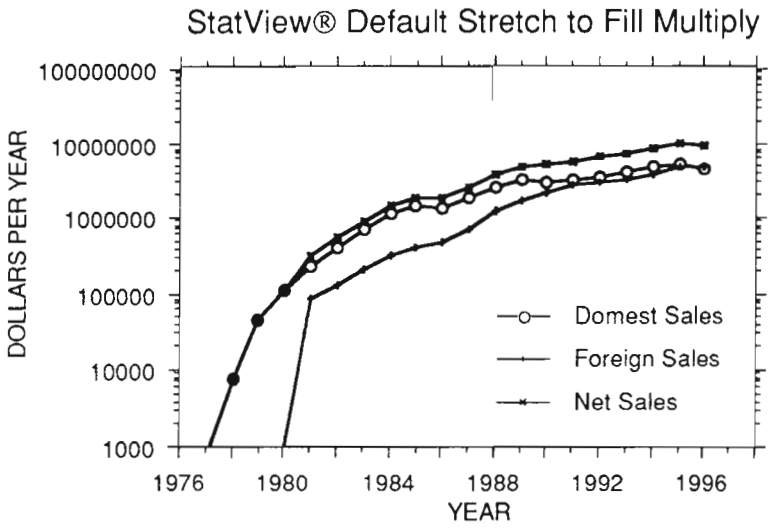
Data sets from Apple Computer Annual Reports.

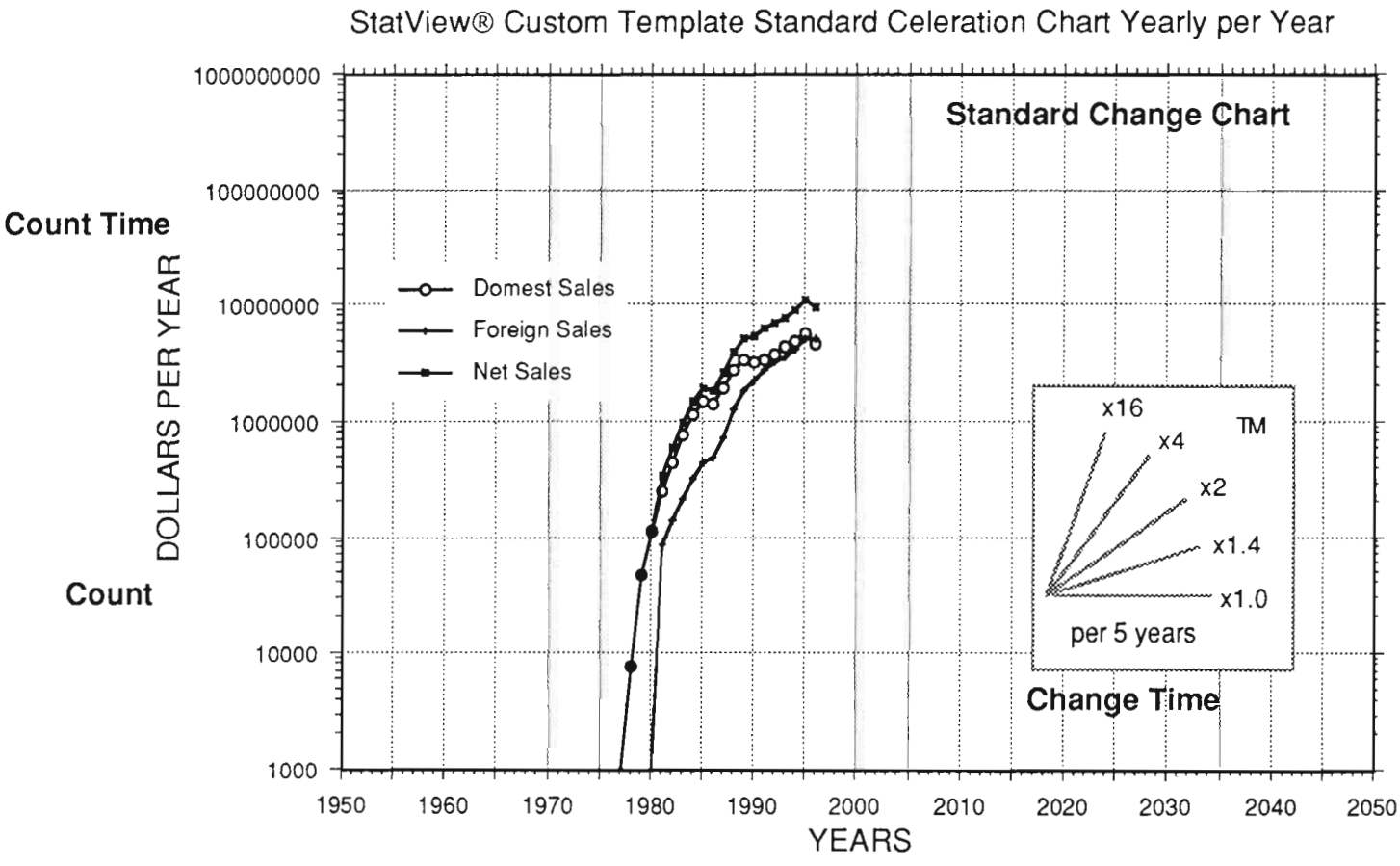
* 366 N 1600 Rd, Lawrence, KS 66049-9199
Tel 913 887 6869 Fax 913 887 6779 olindsley@aol.com

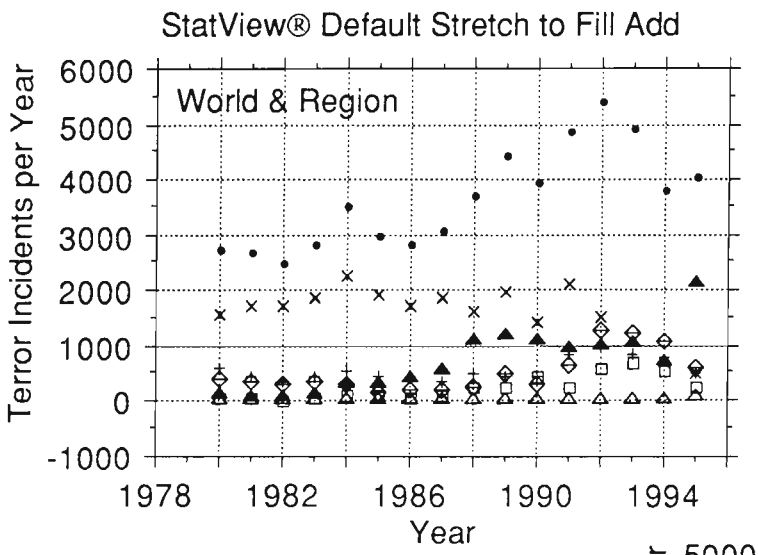
Apple Computer, Inc.

Annual US Domestic, Foreign, and Net sales in dollars from annual reports to stockholders.

Domest Sales
Foreign Sales
Net Sales







To Track and Project Performance Change you Need Count, Count Time, Change Time, and Standard Change Charts.

Og Lindsley, Lindsley Group*

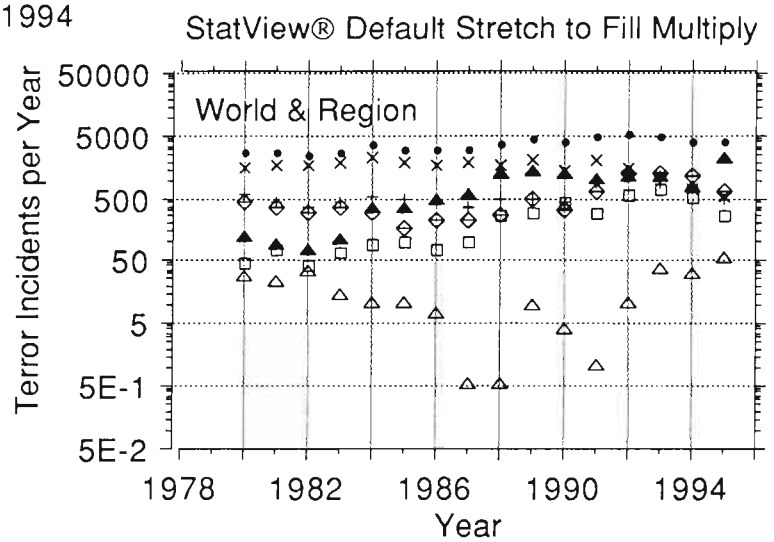
In panel "Perspectives on the Temporal Dimensions of Performance." ISPI Conference, Anaheim, CA 18 April 97

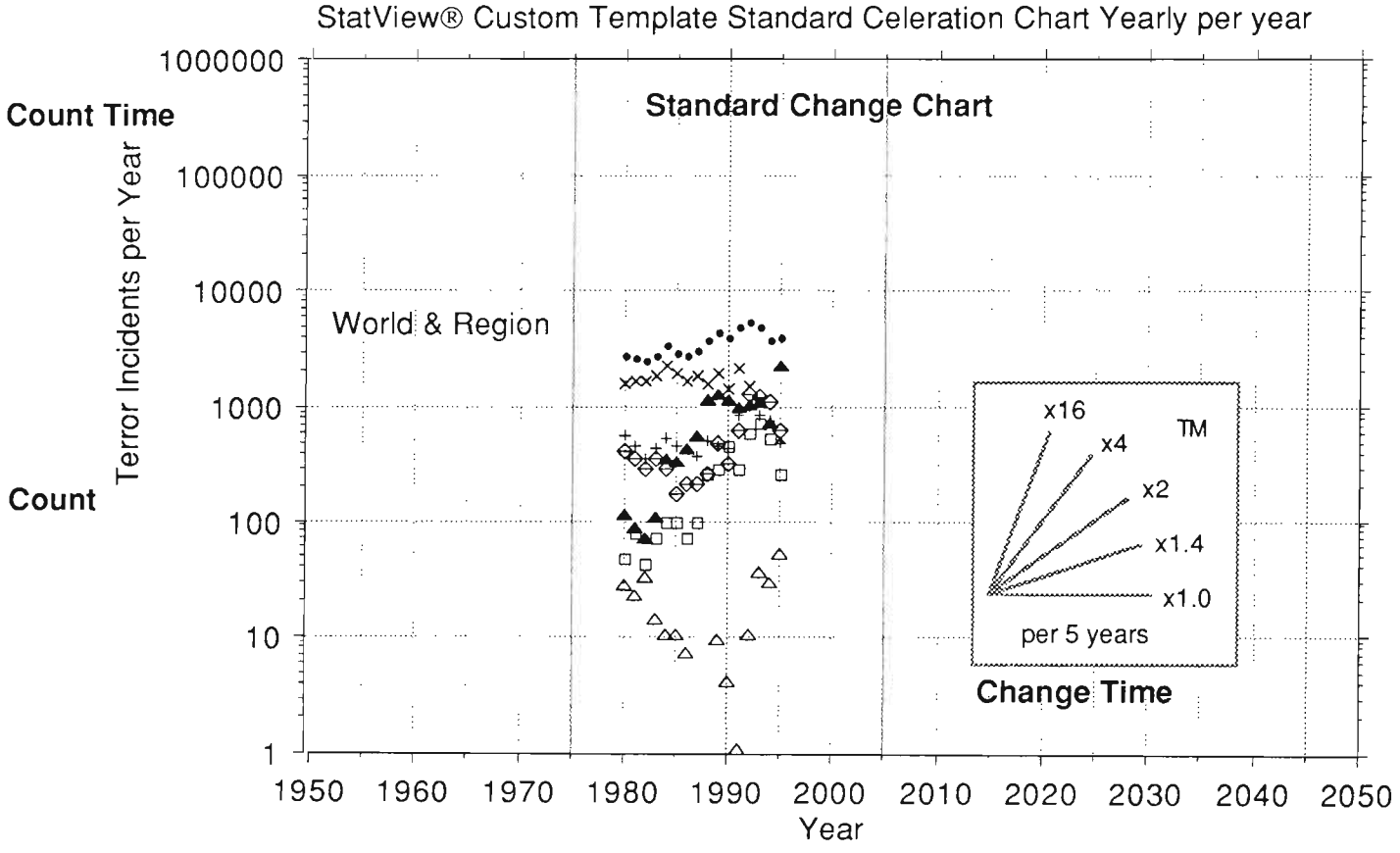
Data Courtesy of Cletis Ramsey, Senior Consultant
Pinkerton Risk Assessment Services
Annual Risk Assessment 1993,1994,1995
Charted by: Steve Graf, Standard Celeration Society
Celeration Fans are trademarks of Ogden R. Lindsley
StatView is a trademark of Abacus Concepts, Inc.

* 366 N 1600 Rd, Lawrence, KS 66049-9199
Tel 913 887 6869 Fax 913 887 6779 olindsley@aol.com

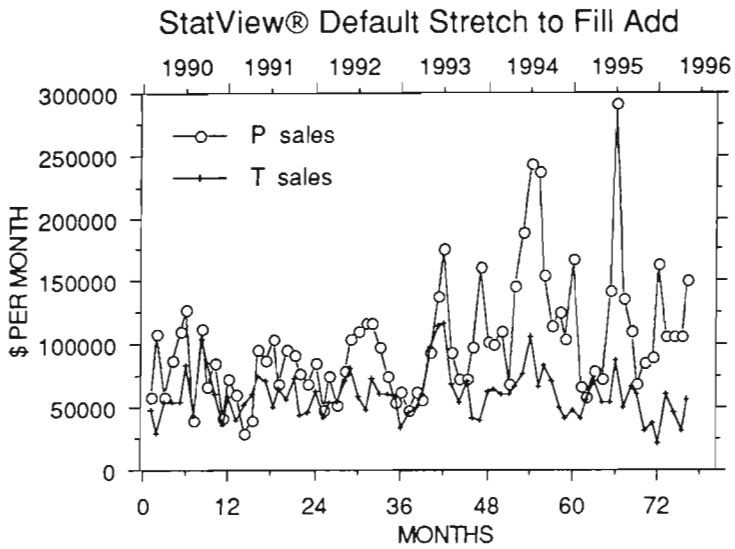
- World Terror Incidents
- Latin America Terror Incidents
- Europe Terror Incidents
- Asia Terror Incidents
- Sub-Saharan Africa Terror Incidents
- Mid-East & N.Africa Terror Incidents
- North America Terror Incidents

16 years in 7 regions = 112 data points





File Code: OL StatVD3-3Vd Wrld&RegnTerr ISPI97

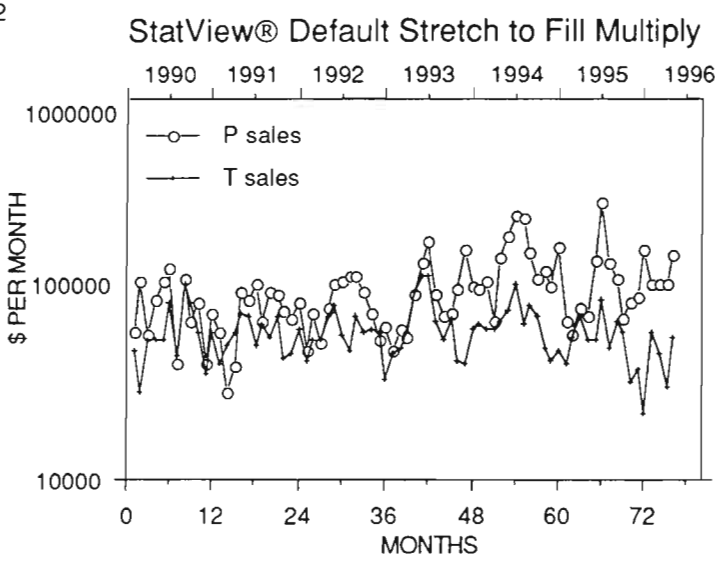
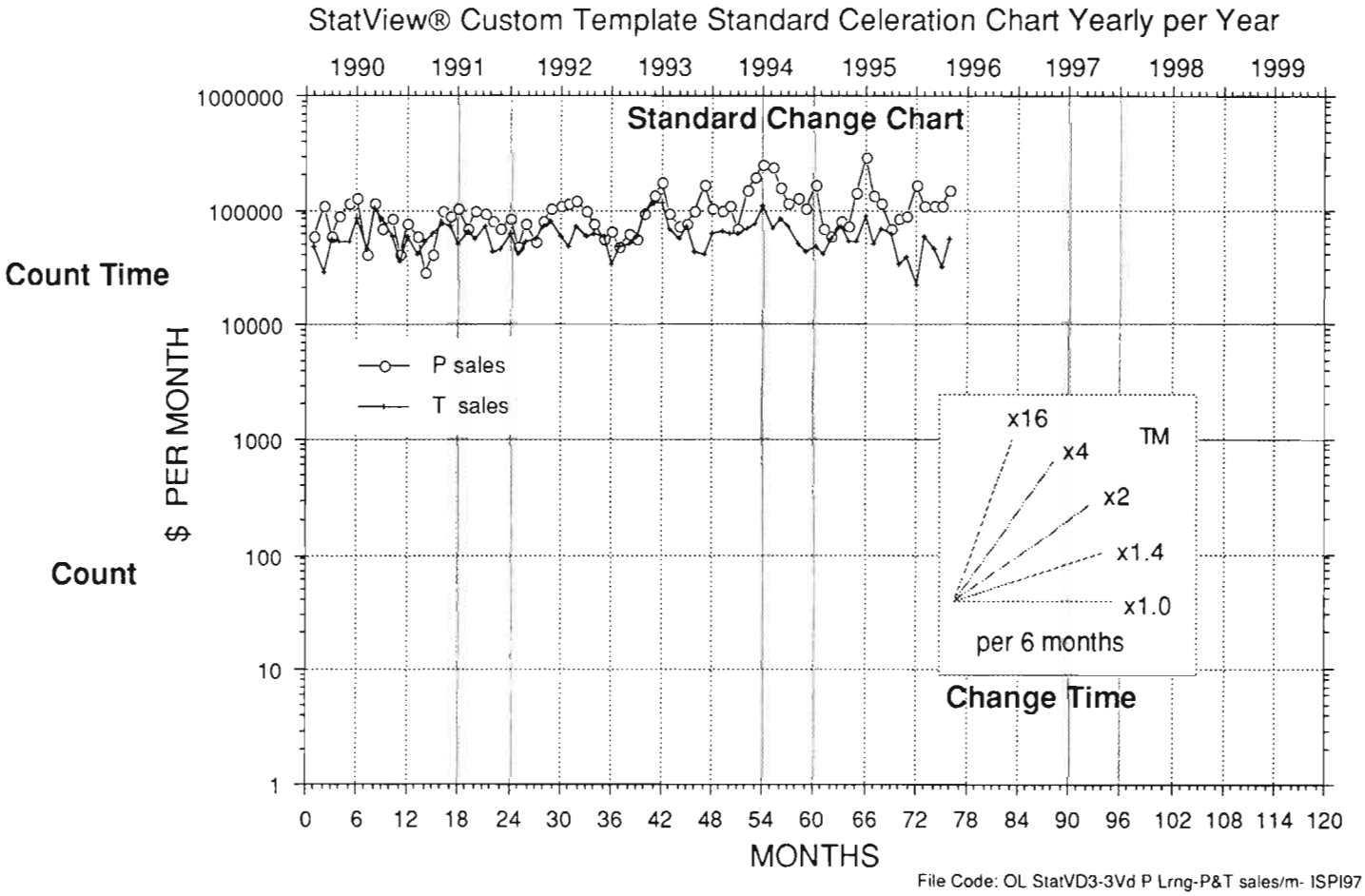


To Track and Project Performance Change you Need Count, Count Time, Change Time, and Standard Change Charts.
Og Lindsley, Lindsley Group*

In panel "Perspectives on the Temporal Dimensions of Performance." ISPI Conference, Anaheim, CA 18 April 97

Data courtesy of P Learning, Inc.

* 366 N 1600 Rd, Lawrence, KS 66049-9199
Tel 913 887 6869 Fax 913 887 6779 olindsley@aol.com

P Learning Sales per Month

P Learning Inc. is a small 32 employee corporation which does 2 to 3 million a year manufacturing and distributing adult learning materials.
P Learning's two major product lines are P sales and T sales.